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## SECTION 9F

# AUDIO SYSTEMS

**CAUTION:** *Disconnect the negative battery cable before removing or installing any electrical unit or when a tool or equipment could easily come in contact with exposed electrical terminals. Disconnecting this cable will help prevent personal injury and damage to the vehicle. The ignition must also be in B unless otherwise noted.*

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## DESCRIPTION AND OPERATION

### STEREO CASSETTE AM/FM RADIO WITH CD CHANGER AND RDS/AUDIO SECURITY SYSTEM

The stereo digital logic cassette AM/FM radio with electronic tape ejection and the stereo digital logic cassette AM/FM radio with a CD changer located under the front seat (LH) are optional equipment.

The radio data system (RDS) uses a single button to select a specific radio station once it is set to the listener's preference.

The audio security system is activated whenever the audio system circuit is disconnected from the battery. A four-digit security code must be entered in order for the audio system to be functional once again. The security code is stamped on a card located in the vehicle (usually in the glove box). One of the following security code entering procedures can be followed.

#### With RDS

1. With the ignition switch in the I or II position, turn the radio ON. At this time, "CODE" will be shown on the radio display.
2. Press the P-UP button until the correct first digit is shown on the display.
3. Press the P-DN button to move over to the second digit and then press P-UP once again to enter the correct second digit.
4. Use steps two and three to enter the third and fourth digits using the same method.
5. After entering the correct four-digit security code, press the TP button. "CODE OK" will briefly appear on the radio display, and the system is ready for use.

#### Wrong Code

If the wrong code is entered, "ERROR 1" will appear on the display. After this, "CODE" will appear once again, and the correct security code can be entered. The time

between each new coding attempt is doubled; a total of ten coding attempts can be made.

### FRONT AND REAR SPEAKERS

All audio systems use four speakers: two speakers mounted in the front doors and two speakers mounted in the rear parcel side shelf.

### ROOF ANTENNA

Roof antenna is located on the roof and is designed to separate the antenna pole from the antenna base. The antenna pole should be removed to prevent the painting damage before washing the vehicle. The roof antenna cannot be adjusted.

### TAPE PLAYER AND CASSETTE CARE

The head and the capstan are the two parts of the tape player that should be cleaned. This service should be performed every 100 hours of cassette operation.

In order to clean the head and the capstan, use a cotton swab dipped in rubbing alcohol.

A cassette cleaning kit may also be used to clean the head and the capstan. Follow the cleaning kit instructions to clean the tape player.

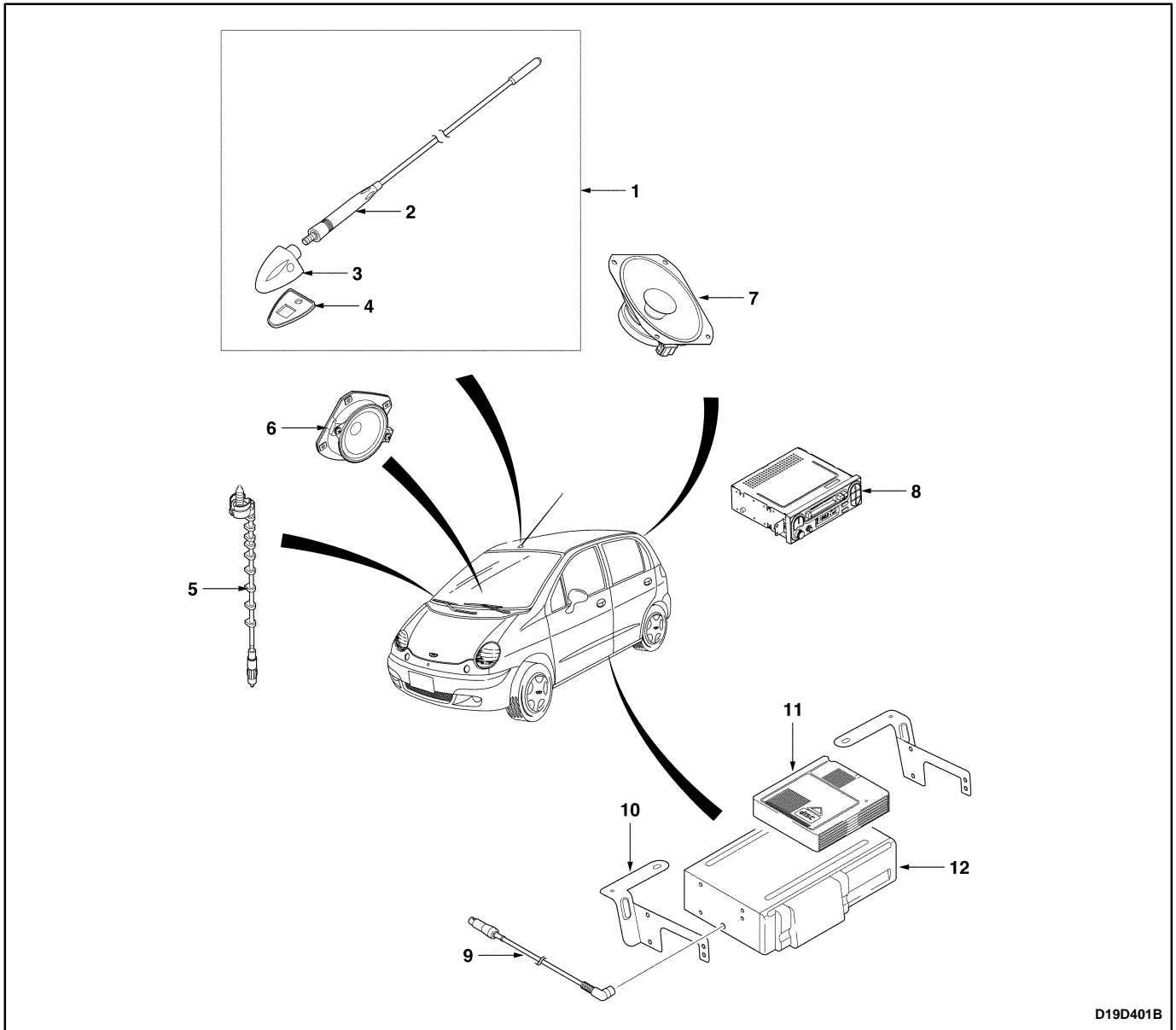
Do not touch the tape head with magnetized tools. If the head becomes magnetized, it will degrade cassettes played in the player. No service is performed on the cassettes. The cassette manufacturer handles warranties of the cassettes. Store cassettes away from extreme heat and direct sunlight.

### COMPACT DISC CARE

Handle discs carefully. Store the discs in protective cases away from the sun, heat, and dust. If the surface is soiled, dampen a clean, soft cloth in a solution of mild neutral detergent and wipe the disc clean. Mini discs (about 3 inches in diameter), will not eject and should not be used.

# COMPONENT LOCATOR

## AUDIO SYSTEMS



D19D401B

1. Roof Antenna Assembly
2. Roof Antenna Pole
3. Roof Antenna Base
4. Roof Antenna Frame
5. Roof Antenna Cable
6. Front Speaker

7. Rear Speaker
8. Audio
9. CD Changer Cable
10. CD Changer Bracket
11. CD Changer Magazine
12. CD Changer

# DIAGNOSTIC INFORMATION AND PROCEDURES

## AUDIO SYSTEM

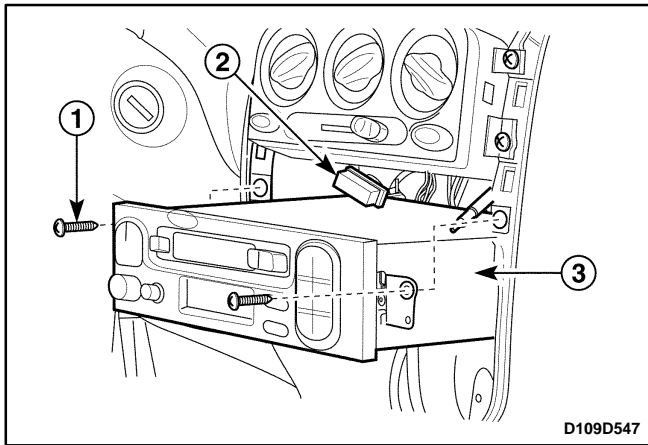
Condition	Probable Cause	Correction
Audio System Inoperative	<ul style="list-style-type: none"> <li>● The power supply circuit to the fuse Ef2 is open circuit or short circuit.</li> </ul>	<ul style="list-style-type: none"> <li>● Repair or Replace the power supply wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>● The fuse Ef2 is blown.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the fuse.</li> </ul>
	<ul style="list-style-type: none"> <li>● The circuit between the fuse Ef2 and the fuse F11 is open or short.</li> </ul>	<ul style="list-style-type: none"> <li>● Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>● The fuse F6 or the fuse F11 is blown.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the fuse.</li> </ul>
	<ul style="list-style-type: none"> <li>● The audio system circuit to the fuse F6 or the fuse F11 is open circuit or short circuit.</li> </ul>	<ul style="list-style-type: none"> <li>● Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>● Poor ground G201.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>● Audio system is out of order.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the audio system.</li> </ul>
Cassette Player Inoperative, AM/FM Functions OK	<ul style="list-style-type: none"> <li>● Bad-quality tape.</li> </ul>	<ul style="list-style-type: none"> <li>● Do not use a bad-quality tape.</li> </ul>
	<ul style="list-style-type: none"> <li>● The cassette player destroy a good-quality tape.</li> </ul>	<ul style="list-style-type: none"> <li>● Clean the cassette player head, the capstan, and the drive system.</li> </ul>
	<ul style="list-style-type: none"> <li>● Obstructions behind the tape door.</li> </ul>	<ul style="list-style-type: none"> <li>● Remove the obstruction using gentle force.</li> </ul>
	<ul style="list-style-type: none"> <li>● Cassette player is out of order.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the audio system.</li> </ul>
FM Does Not Work, AM and Cassette OK	<ul style="list-style-type: none"> <li>● Audio system is out of order.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the audio system.</li> </ul>
AM Radio Does Not Work, FM and Cassette OK	<ul style="list-style-type: none"> <li>● AM radio reception is poor (Using a test antenna, test the AM radio reception).</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the audio system.</li> </ul>
	<ul style="list-style-type: none"> <li>● AM radio reception is good (Using a test antenna, test the AM radio reception).</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the antenna cable between the audio system and the antenna.</li> </ul>
Front Speakers Distorted or Inoperative	<ul style="list-style-type: none"> <li>● Damage, rattles, or vibration of the speaker and the door area.</li> </ul>	<ul style="list-style-type: none"> <li>● Make the necessary repairs to secure the component causing the distortion.</li> </ul>
	<ul style="list-style-type: none"> <li>● The circuit between the front speaker connector and the radio connector is open circuit or short circuit.</li> </ul>	<ul style="list-style-type: none"> <li>● Repair or Replace the wiring harness.</li> </ul>
	<ul style="list-style-type: none"> <li>● The connection of the front speaker connector and the audio connector is poor.</li> </ul>	<ul style="list-style-type: none"> <li>● Confirm the connection.</li> </ul>
	<ul style="list-style-type: none"> <li>● Front speaker is out of order.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the front speaker.</li> </ul>
	<ul style="list-style-type: none"> <li>● Audio system is out of order.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace the audio system.</li> </ul>
Rear Speakers Distorted or Inoperative	<ul style="list-style-type: none"> <li>● Damage, rattles, or vibration of the rear speaker and the rear parael side shelf.</li> </ul>	<ul style="list-style-type: none"> <li>● Make the necessary repairs to secure the component causing the distortion.</li> </ul>
	<ul style="list-style-type: none"> <li>● The circuit between the rear speaker connector and the radio connector is open circuit or short circuit.</li> </ul>	<ul style="list-style-type: none"> <li>● Repair or Replace the wiring harness.</li> </ul>

**AUDIO SYSTEM (Cont'd)**

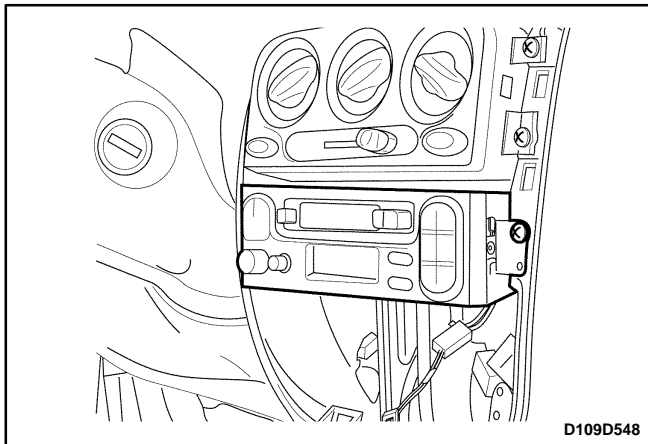
<b>Condition</b>	<b>Probable Cause</b>	<b>Correction</b>
Rear Speakers Distorted or Inoperative	<ul style="list-style-type: none"><li>• The connection of the rear speaker connector and the audio connector is poor.</li></ul>	<ul style="list-style-type: none"><li>• Confirm the connection.</li></ul>
	<ul style="list-style-type: none"><li>• Rear speaker is out of order.</li></ul>	<ul style="list-style-type: none"><li>• Replace the rear speaker.</li></ul>
	<ul style="list-style-type: none"><li>• Audio system is out of order.</li></ul>	<ul style="list-style-type: none"><li>• Replace the audio system.</li></ul>

# REPAIR INSTRUCTIONS

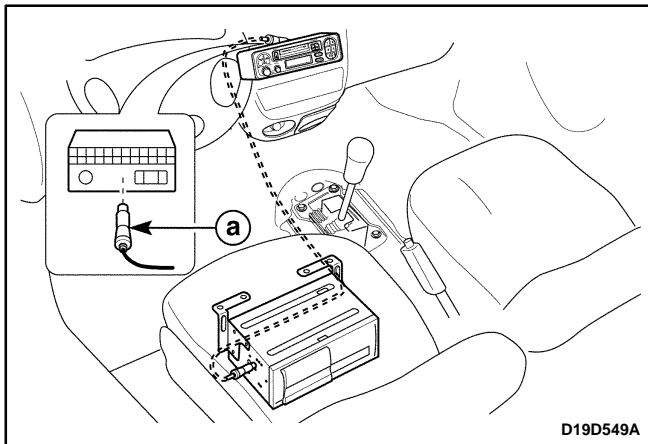
## ON-VEHICLE SERVICE



D109D547



D109D548



D19D549A

### AUDIO SYSTEM

#### Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the instrument cluster trim panel from the instrument panel. Refer to *Section 9E, Instrument/Driver Information*.
3. Remove the audio system from the instrument panel.
  - Remove the screws (1).
  - Disconnect the electrical connector and the antenna cable (2).
  - Remove the audio system (3).

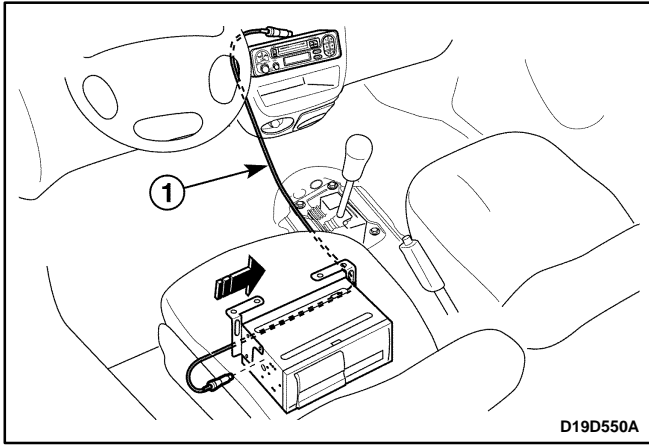
#### Installation Procedure

1. Connect the electrical connector and the antenna cable.
2. Install the audio system with the screws.
3. Install the instrument cluster trim panel. Refer to *Section 9E, Instrument/Driver Information*.
4. Connect the negative battery cable.

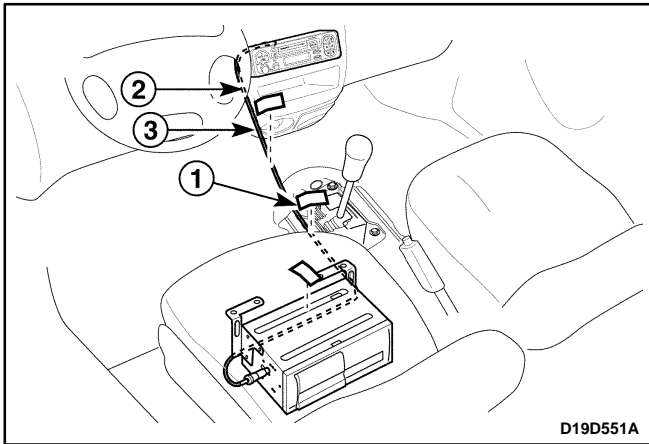
### CD CHANGER

#### Removal Procedure

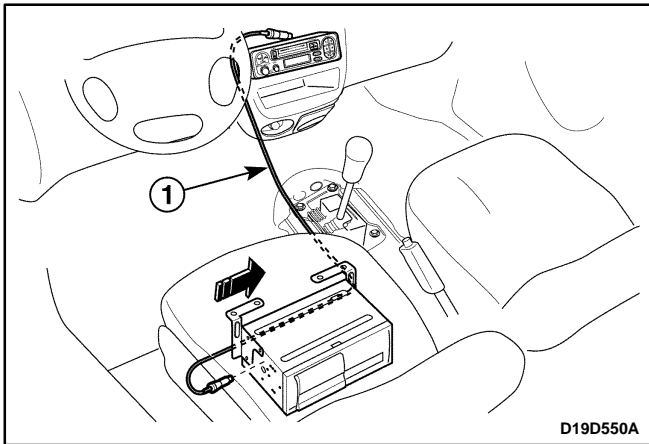
1. Disconnect the negative battery cable.
2. Remove the audio system from the instrument panel. Refer to "Audio System" in this section.
3. Remove the floor console. Refer to *Section 9G, Interior Trim*.
4. Disconnect the CD changer electrical connector from the audio system.
  - a. CD changer electrical connector.



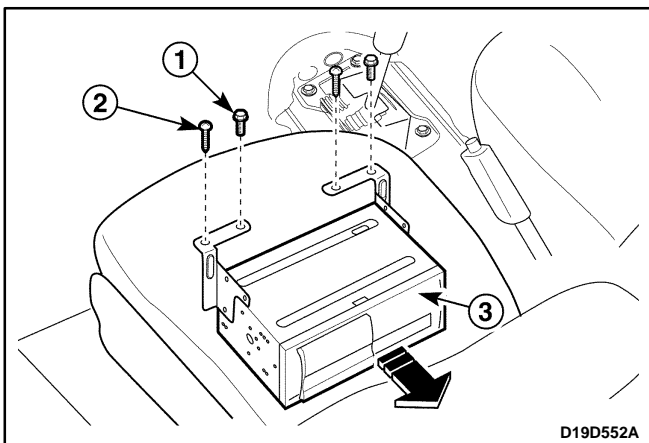
5. Disconnect the CD changer electrical connector from the CD changer (1).



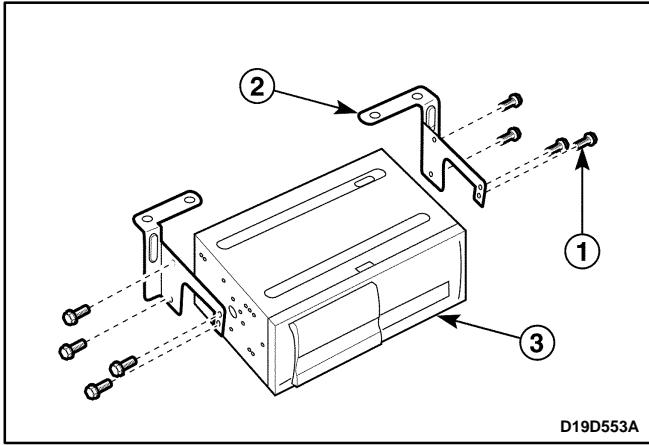
6. Remove the sponge pads and the clip.
  - Remove the sponge pads retaining the CD changer cable (1).
  - Remove the clip retaining tie-bar (2).
  - Remove the clip retaining instrument panel wiring harness (3).



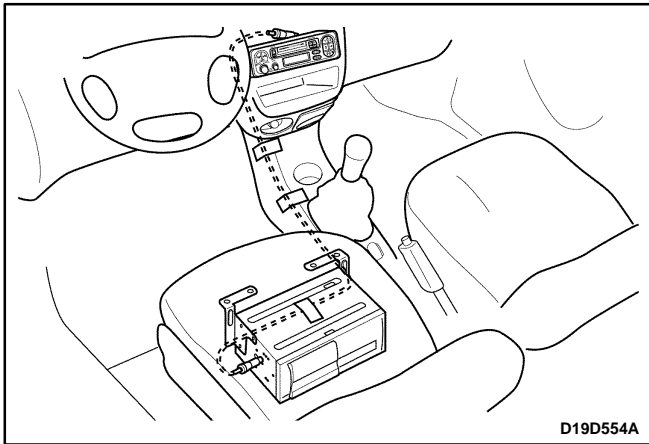
7. Remove the CD changer cable.
  - Remove the CD changer cable (1).



8. Remove the CD changer assembly.
  - Remove the CD changer bracket mounting bolts (1).
  - Remove the CD changer bracket mounting screws (2).
  - Remove the CD changer assembly (3).

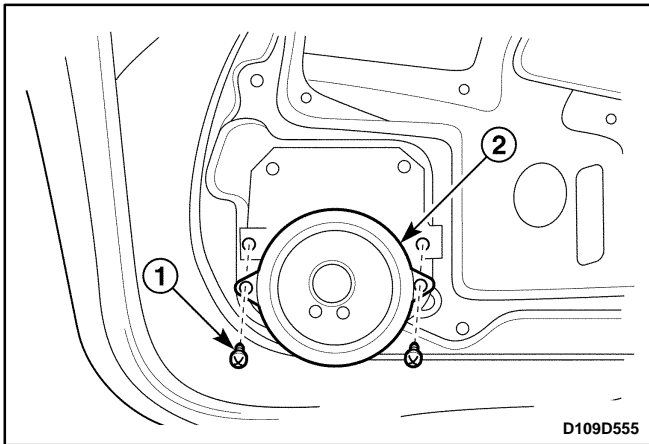


9. Separate the CD changer and the CD changer bracket.
  - Remove the bolts from the CD changer bracket (1).
  - Remove the CD changer bracket (2).
  - Remove the CD changer (3).



### Installation Procedure

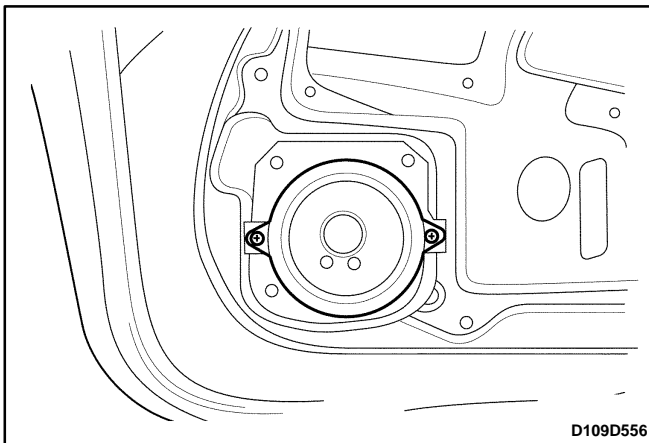
1. Install the CD changer bracket to the CD changer with the bolts.
2. Mount the CD changer assembly under the Driver's seat with the bolts and the screws.
3. Arrange the CD changer cable with the sponge pads and the clip.
4. Connect the CD changer electrical connectors.
5. Install the floor console. Refer to *Section 9G, Interior Trim*.
6. Install the Audio System to the instrument panel. Refer to "Audio System" in this section.
7. Connect the negative battery cable.



### FRONT SPEAKERS

#### Removal Procedure

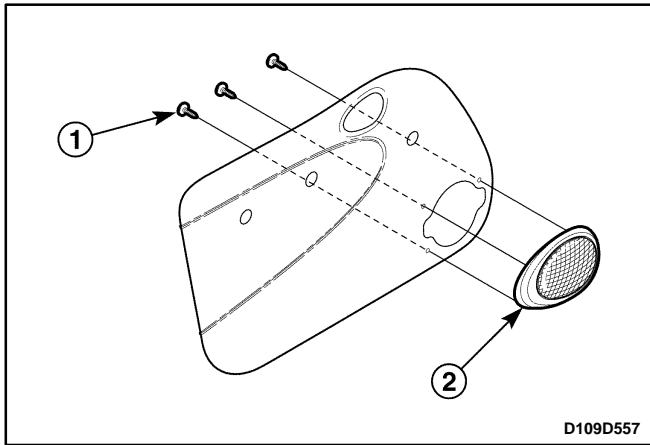
1. Disconnect the negative battery cable.
2. Remove the door seal trim. Refer to *Section 9P, Doors*.
3. Remove the speaker.
  - Remove the screws (1).
  - Disconnect the electrical connector.
  - Remove the speaker (2).



#### Installation Procedure

1. Connect the electrical connector.
2. Install the speaker with the screws.
3. Install the door seal trim. Refer to *Section 9P, Doors*
4. Connect the negative battery cable.



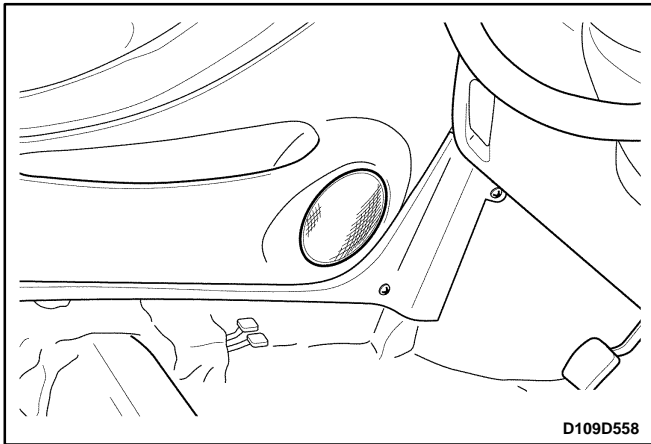


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## FRONT SPEAKER COVERS

### Removal Procedure

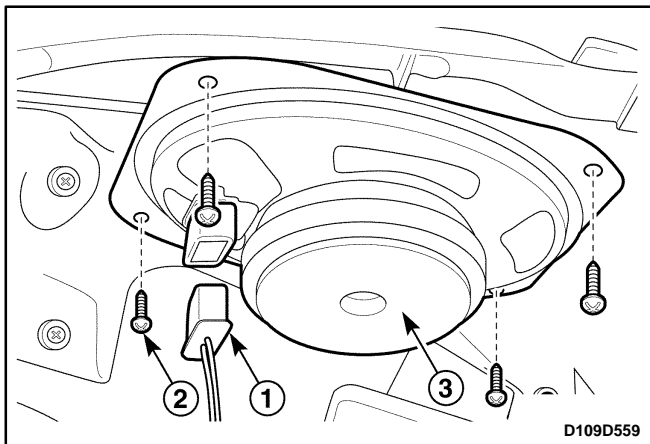
1. Remove the door trim panel. Refer to *Section 9G, Interior Trim*.
2. Remove the speaker cover from the door trim panel.
  - Remove the screws (1).
  - Remove the speaker cover (2).



D109D558

### Installation Procedure

1. Install the speaker cover to the door trim panel with the screws.
2. Install the door trim panel. Refer to *Section 9G, Interior Trim*.

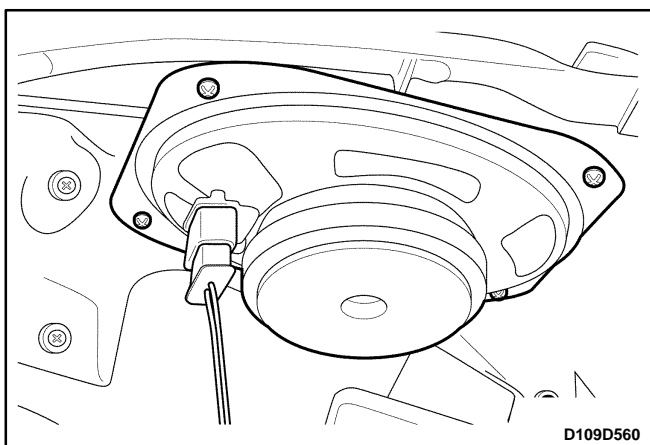


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## REAR SPEAKERS

### Removal Procedure

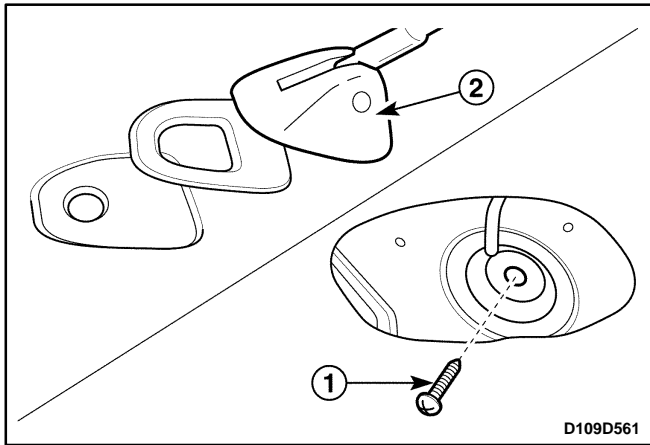
1. Disconnect the negative battery cable.
2. Open the tailgate.
3. Remove the rear speaker from the rear parcel side shelf.
  - Disconnect the electrical connector (1).
  - Remove the screws (2).
  - Remove the rear speaker (3).



D109D560

### Installation Procedure

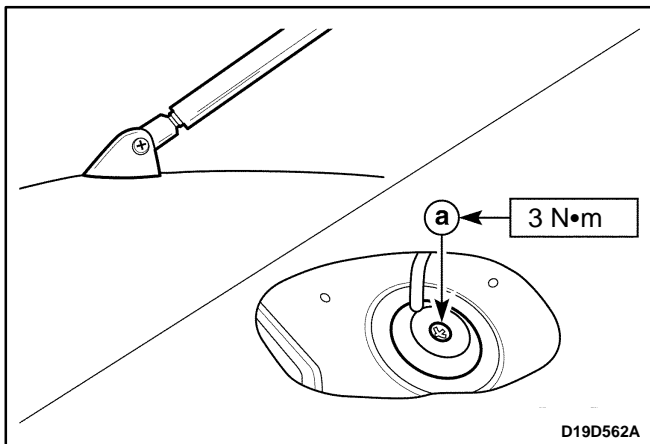
1. Install the rear speaker to the rear parcel side shelf with the screws.
2. Connect the electrical connector.
3. Connect the negative battery cable.



## ROOF ANTENNA

### Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the interior courtesy lamp. Refer to *Section 9B, Lighting Systems*.
3. Remove the roof antenna.
  - Remove the screw from the vehicle inside (1).
  - Remove the roof antenna (2).



### Installation Procedure

1. Install the roof antenna with the screw.

#### Tighten

Tighten the roof antenna retaining screw to 3 N•m (27 lb-in).

- a. Roof antenna retaining screw.
2. Install the interior courtesy lamp. Refer to *Section 9B, Lighting Systems*.
3. Connect the negative battery cable.

# SPECIFICATIONS

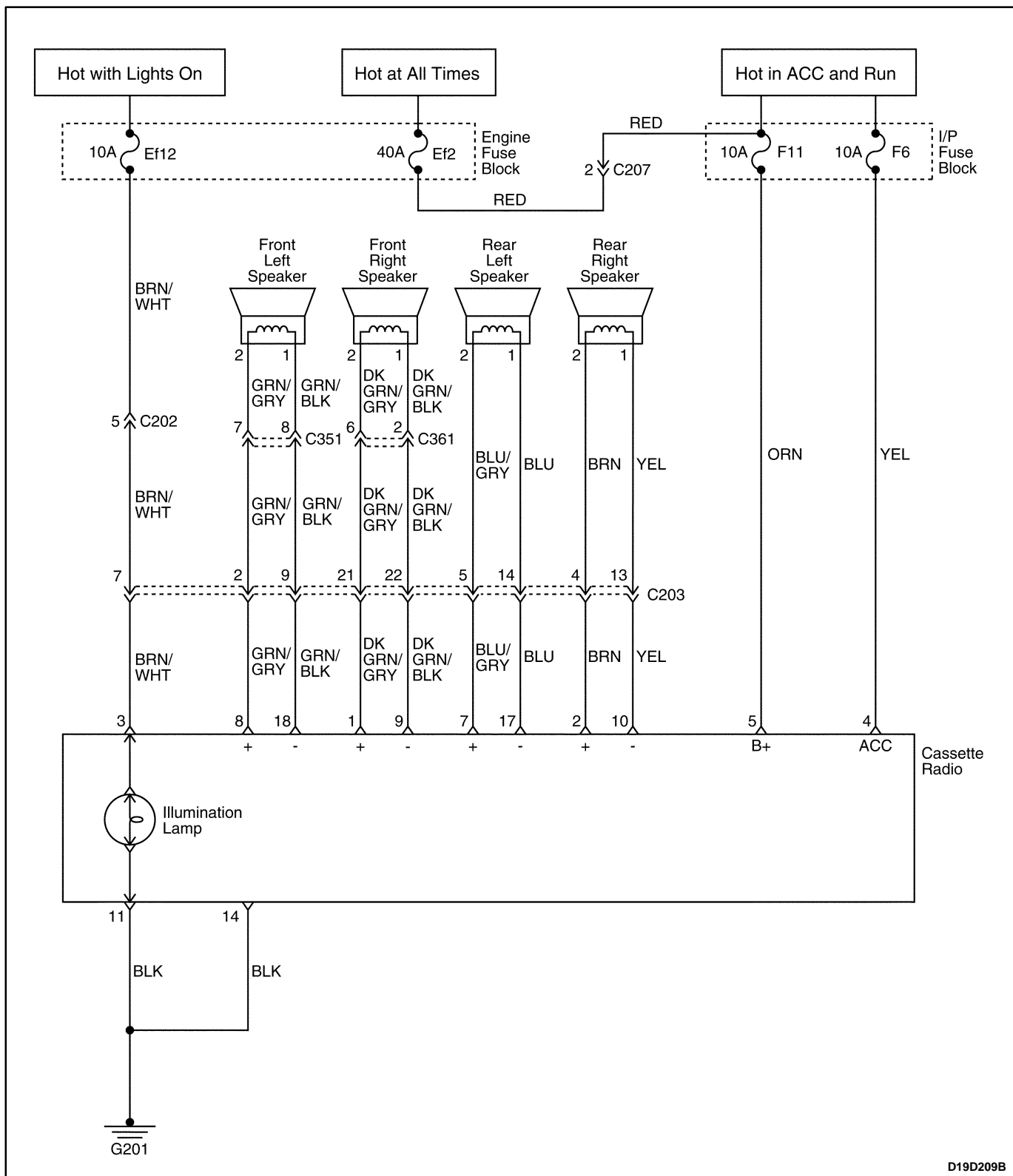
## FASTENER TIGHTENING SPECIFICATIONS

Application	N•m	Lb-Ft	Lb-In
Roof Antenna Retaining Screw	3	–	27

# SCHEMATIC AND ROUTING DIAGRAMS

## AUDIO SYSTEM CIRCUIT

(Left-Hand Drive Shown, Right-Hand Drive Similar)



D19D209B