XJ ------ AUDIO SYSTEMS 8F - 1

AUDIO SYSTEMS

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GENERAL INFORMATION

INTRODUCTION

Following are general descriptions of the major components used in both the standard and optional factory-installed audio systems. Refer to 8W-47 Audio System in Group 8W - Wiring Diagrams for complete circuit descriptions and diagrams.

NOTE: This group covers both Left-Hand Drive (LHD) and Right-Hand Drive (RHD) versions of this model. Whenever required and feasible, the RHD versions of affected vehicle components have been constructed as mirror-image of the LHD versions. While most of the illustrations used in this group represent only the LHD version, the diagnostic and service procedures outlined can generally be applied to either version. Exceptions to this rule have been clearly identified as LHD or RHD, if a special illustration or procedure is required.

DESCRIPTION AND OPERATION

RADIO

Available factory-installed radio receivers for this model include an AM/FM (RAL sales code), an AM/FM/cassette (RAS sales code), and an AM/FM/CD/cassette/3-band graphic equalizer (RAZ sales code). All factory-installed radio receivers are stereo Electronically Tuned Radios (ETR) and include an electronic digital clock function.

For more information on radio features, setting procedures, and control functions refer to the owner's manual in the vehicle glove box.

IGNITION-OFF DRAW FUSE

All vehicles are equipped with an Ignition-Off Draw (IOD) fuse that is removed when the vehicle is shipped from the factory. This fuse feeds various accessories that require battery current when the ignition switch is in the Off position, including the clock and radio station preset memory functions. The fuse is removed to prevent battery discharge during vehicle storage.

When removing or installing the IOD fuse, it is important that the ignition switch be in the Off position. Failure to place the ignition switch in the Off position can cause the radio display to become scrambled when the IOD fuse is removed and replaced. Removing and replacing the IOD fuse again, with the ignition switch in the Off position, will correct the scrambled display condition.

The IOD fuse should be checked if the radio station preset memory or clock functions are erratic or inoperative. The IOD fuse is located in the Power Distribution Center (PDC). Refer to the PDC label for IOD fuse identification and location.

SPEAKER

The standard equipment speaker system includes two 13.3 centimeter (5.25 inch) diameter full-range speakers. Each speaker is mounted to the front lower inner door panel behind the door trim panel.

The sound bar option adds two 13.3 centimeter (5.25 inch) diameter full-range speakers to the standard speaker system, for a total of four speakers. Each of the additional speakers is mounted behind a grille located on the outboard ends of the sound bar, which is located on the headliner just forward of the upper liftgate opening reinforcement near the rear of the vehicle cargo area.

DESCRIPTION AND OPERATION (Continued)

The premium speaker option upgrades all of the speakers to Infinity models, and includes a 100 watt Infinity amplifier. Each front door has two separate Infinity speakers: a woofer mounted low in the door, and a tweeter mounted behind the door flag trim panel. Infinity coaxial speakers are mounted in the sound bar. The Infinity amplifier is mounted to the floor pan under the left rear seat cushion.

ANTENNA

All models use a fixed-length stainless steel rodtype antenna mast, installed at the right front fender of the vehicle. The antenna mast is connected to the center wire of the coaxial antenna cable, and is not grounded to any part of the vehicle.

To eliminate static, the antenna base must have a good ground. The coaxial antenna cable shield (the outer wire mesh of the cable) is grounded to the antenna base and the radio chassis.

The antenna coaxial cable has an additional disconnect, located near the right cowl side panel behind the instrument panel. This additional disconnect allows the instrument panel assembly to be removed and installed without removing the radio.

The factory-installed Electronically Tuned Radios (ETRs) automatically compensate for radio antenna trim. Therefore, no antenna trimmer adjustment is required or possible when replacing the receiver or the antenna.

RADIO NOISE SUPPRESSION

Radio Frequency Interference (RFI) and Electro-Magnetic Interference (EMI) noise suppression is accomplished primarily through circuitry internal to the radio receivers. These internal suppression devices are only serviced as part of the radio receiver.

External suppression devices that are serviced, and should be checked in the case of RFI or EMI noise complaints, include the following:

- Radio antenna base ground
- Radio chassis ground wire, strap, or bracket
- Engine-to-body ground strap (if the vehicle is so equipped)
- Cab-to-bed ground strap (if the vehicle is so equipped)
- Heater core ground strap (if the vehicle is so equipped)
 - Resistor-type spark plugs
- Radio suppression-type secondary ignition wiring.

In addition, if the source of RFI or EMI noise is identified as a component on the vehicle (i.e., generator, blower motor, etc.), the ground path for that component should be checked. If excessive resistance is found in that circuit, repair that circuit as required before considering any component replacement.

If the source of the noise is identified as two-way mobile radio or telephone equipment, check the equipment installation for the following:

- Power connections should be made directly to the battery, and fused as closely to the battery as possible.
- The antenna should be mounted on the roof or toward the rear of the vehicle. Remember that magnetic antenna mounts on the roof panel can adversely affect the operation of an overhead console compass, if the vehicle is so equipped.
- The antenna cable should be fully shielded coaxial cable, should be as short as is practical, and should be routed away from the factory-installed vehicle wire harnesses whenever possible.
- The antenna and cable must be carefully matched to ensure a low Standing Wave Ratio (SWR).

Fleet vehicles are available with an extra-cost RFI-suppressed Powertrain Control Module (PCM). This unit reduces interference generated by the PCM on some radio frequencies used in two-way radio communications. However, this unit will not resolve complaints of RFI in the commercial AM or FM radio frequency ranges.

DIAGNOSIS AND TESTING

AUDIO SYSTEM

WARNING: ON VEHICLES EQUIPPED WITH AIRBAGS, REFER TO GROUP 8M - PASSIVE RESTRAINT SYSTEMS BEFORE ATTEMPTING ANY STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

AUDIO SYSTEM DIAGNOSIS

CONDITION	POSSIBLE CAUSE	CORRECTION
NO AUDIO.	 Fuse faulty. Radio connector faulty. Wiring faulty. Ground faulty. Radio faulty. Speakers faulty. 	 Check radio fuses in fuseblock module. Replace fuses, if required. Check for loose or corroded radio connector. Repair, if required. Check for battery voltage at radio connector. Repair wiring, if required. Check for continuity between radio chassis and a known good ground. There should be continuity. Repair ground, if required. Exchange or replace radio, if required. See speaker diagnosis, in this group.
NO DISPLAY.	 Fuse faulty. Radio connector faulty. Wiring faulty. Ground faulty. Radio faulty. 	1. Check radio fuses in fuseblock module. Replace fuses, if required. 2. Check for loose or corroded radio connector. Repair, if required. 3. Check for battery voltage at radio connector. Repair wiring, if required. 4. Check for continuity between radio chassis and a known good ground. There should be continuity. Repair ground, if required. 5. Exchange or replace radio, if required.
CLOCK WILL NOT KEEP SET TIME.	 Fuse faulty. Radio connector faulty. Wiring faulty. Ground faulty. Radio faulty. 	1. Check ignition-off draw fuse. Replace fuse, if required. 2. Check for loose or corroded radio connector. Repair, if required. 3. Check for battery voltage at radio connector. Repair wiring, if required. 4. Check for continuity between radio chassis and a known good ground. There should be continuity. Repair ground, if required. 5. Exchange or replace radio, if required.
POOR RADIO RECEPTION.	Antenna faulty. Ground faulty. Radio faulty.	 See antenna diagnosis, in this group. Repair or replace antenna, if required. Check for continuity between radio chassis and a known good ground. There should be continuity. Repair ground, if required Exchange or replace radio, if required.

CONDITION	POSSIBLE CAUSE	CORRECTION
NO AUDIO.	 Fuse faulty. Radio connector faulty. Wiring faulty. Ground faulty. Radio faulty. Speakers faulty. 	 Check radio fuses in fuseblock module. Replace fuses, if required. Check for loose or corroded radio connector. Repair, if required. Check for battery voltage at radio connector. Repair wiring, if required. Check for continuity between radio chassis and a known good ground. There should be continuity. Repair ground, if required. Exchange or replace radio, if required. See speaker diagnosis, in this group.
NO/POOR TAPE OPERATION.	 Faulty tape. Foreign objects behind tape door. Dirty cassette tape head. Faulty tape deck. 	 Insert known good tape and test operation. Remove foreign objects and test operation. Clean head with Mopar Cassette Head Cleaner. Exchange or replace radio, if required.
NO COMPACT DISC OPERATION	 Faulty CD. Foreign material on CD. Condensation on CD or optics. Faulty CD player. 	Insert known good CD and test operation. Clean CD and test operation. Allow temperature of vehicle interior to stabilize and test operation. Exchange or replace radio, if required.

RADIO

For circuit descriptions and diagrams, refer to 8W-47 - Audio System in Group 8W - Wiring Diagrams.

WARNING: ON VEHICLES EQUIPPED WITH AIRBAGS, REFER TO GROUP 8M - PASSIVE RESTRAINT SYSTEMS BEFORE ATTEMPTING ANY STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

CAUTION: The speaker output of the radio is a "floating ground" system. Do not allow any speaker lead to short to ground, as damage to the radio may result.

- (1) Check the fuse(s) in the junction block and the Power Distribution Center (PDC). If OK, go to Step 2. If not OK, repair the shorted circuit or component as required and replace the faulty fuse(s).
- (2) Check for battery voltage at the fuse in the PDC. If OK, go to Step 3. If not OK, repair the open circuit to the battery as required.
- (3) Turn the ignition switch to the On position. Check for battery voltage at the fuse in the junction block. If OK, go to Step 4. If not OK, repair the open circuit to the ignition switch as required.
- (4) Turn the ignition switch to the Off position. Disconnect and isolate the battery negative cable. Remove the radio as described in this group, but do not unplug the radio wire harness connectors. Check for continuity between the radio chassis and a good ground. There should be continuity. If OK, go to Step 5. If not OK, repair the open radio chassis ground circuit as required.
- (5) Connect the battery negative cable. Turn the ignition switch to the On position. Check for battery voltage at the fused ignition switch output circuit

cavity of the left (gray) radio wire harness connector. If OK, go to Step 6. If not OK, repair the open circuit as required.

(6) Turn the ignition switch to the Off position. Check for battery voltage at the fused B(+) circuit cavity of the left (gray) radio wire harness connector. If OK, replace the faulty radio. If not OK, repair the open circuit to the Ignition-Off Draw (IOD) fuse as required.

SPEAKER

For circuit descriptions and diagrams, refer to 8W-47 - Audio System in Group 8W - Wiring Diagrams.

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CAUTION: The speaker output of the radio is a "floating ground" system. Do not allow any speaker lead to short to ground, as damage to the radio may result.

- (1) Turn the ignition switch to the On position. Turn the radio on. Adjust the balance and fader controls to check the performance of each individual speaker. Note the speaker locations that are not performing correctly. Go to Step 2.
- (2) Turn the radio off. Turn the ignition switch to the Off position. Disconnect and isolate the battery negative cable. Remove the radio as described in this group. If the vehicle is equipped with the Infinity speaker package, also unplug the wire harness connectors at the amplifier. Check both the speaker feed (+) circuit and return (-) circuit cavities for the inoperative speaker location(s) at the radio wire harness connectors for continuity to ground. In each case, there should be no continuity. If OK, go to Step 3. If not OK, repair the shorted speaker circuit(s) as required.
- (3) If the vehicle is equipped with the Infinity speaker package, go to Step 6. If the vehicle is equipped with the standard speaker system, check the resistance between the speaker feed (+) circuit and return (-) circuit cavities of the radio wire harness connectors for the inoperative speaker location(s). The meter should read between 2 and 12 ohms (speaker resistance). If OK, go to Step 4. If not OK, go to Step 5.

- (4) Install a known good radio. Connect the battery negative cable. Turn the ignition switch to the On position. Turn on the radio and test the speaker operation. If OK, replace the faulty radio. If not OK, turn the radio off, turn the ignition switch to the Off position, disconnect and isolate the battery negative cable, remove the test radio, and go to Step 5.
- (5) Unplug the speaker wire harness connector at the inoperative speaker. Check for continuity between the speaker feed (+) circuit cavities of the radio wire harness connector and the speaker wire harness connector. Repeat the check between the speaker return (–) circuit cavities of the radio wire harness connector and the speaker wire harness connector. In each case, there should be continuity. If OK, replace the faulty speaker. If not OK, repair the open circuit(s) as required.
- (6) For each inoperative speaker location, check for continuity between the speaker feed (+) circuit cavities of the radio wire harness connectors and the amplifier wire harness connectors. Repeat the check for each inoperative speaker location between the speaker return (–) circuit cavities of the radio wire harness connectors and the amplifier wire harness connectors. In each case, there should be continuity. If OK, go to Step 7. If not OK, repair the open circuit as required.
- (7) Check for continuity between the two ground circuit cavities of the amplifier wire harness connector and a good ground. There should be continuity. If OK, go to Step 8. If not OK, repair the open circuit(s) as required.
- (8) Check the amplifier fuse in the junction block. If OK, go to Step 9. If not OK, repair the shorted circuit or component as required and replace the faulty fuse.
- (9) Check for battery voltage at the amplifier fuse in the junction block. If OK, go to Step 10. If not OK, repair the open circuit to the PDC as required.
- (10) Install the radio. Connect the battery negative cable. Check for battery voltage at the two fused B(+) circuit cavities of the amplifier wire harness connector. If OK, go to Step 11. If not OK, repair the open circuit to the fuse in the junction block as required.
- (11) Turn the ignition switch to the On position. Turn the radio on. Check for battery voltage at the radio 12 volt output circuit cavity of the amplifier wire harness connector. If OK, go to Step 12. If not OK, repair the open circuit to the radio as required.
- (12) Turn the radio off. Turn the ignition switch to the Off position. Disconnect and isolate the battery negative cable. For each inoperative speaker location, check both the amplified feed (+) circuit and the amplified return (-) circuit cavities of the amplifier wire harness connectors for continuity to ground. In each case there should be no continuity. If OK, go to

Step 13. If not OK, repair the short circuit as required.

(13) For each inoperative speaker location, check the resistance between the amplified feed (+) circuit and the amplified return (–) circuit cavities of the amplifier wire harness connectors. The meter should read between 2 and 12 ohms (speaker resistance). If OK, replace the faulty amplifier. If not OK, go to Step 14.

(14) Unplug the speaker wire harness connector at the inoperative speaker. Check for continuity between the amplified feed (+) circuit cavities of the speaker wire harness connector and the amplifier wire harness connector. Repeat the check between the amplified return (-) circuit cavities of the speaker wire harness connector and the amplifier wire harness connector. In each case there should be continuity. If OK, replace the faulty speaker. If not OK, repair the open circuit as required.

ANTENNA

WARNING: ON VEHICLES EQUIPPED WITH AIRBAGS, REFER TO GROUP 8M - PASSIVE RESTRAINT SYSTEMS BEFORE ATTEMPTING ANY STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

The following four tests are used to diagnose the antenna with an ohmmeter:

- Test 1 Mast to ground test
- **Test 2** Tip-of-mast to tip-of-conductor test
- Test 3 Body ground to battery ground test
- Test 4 Body ground to coaxial shield test.

The ohmmeter test lead connections for each test are shown in Antenna Tests (Fig. 1).

NOTE: This model has a two-piece antenna coaxial cable. Tests 2 and 4 must be conducted in two steps to isolate a coaxial cable problem; from the coaxial cable connection under the right end of the instrument panel near the right cowl side panel to the antenna base, and then from the coaxial cable connection to the radio chassis connection.

TEST 1

Test 1 determines if the antenna mast is insulated from the base. Proceed as follows:

(1) Unplug the antenna coaxial cable connector from the radio chassis and isolate.

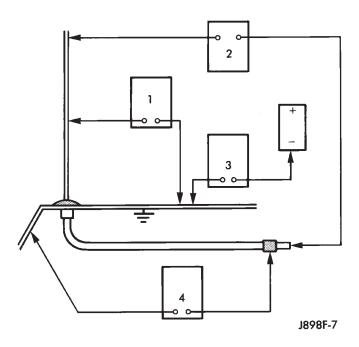


Fig. 1 Antenna Tests

- (2) Connect one ohmmeter test lead to the tip of the antenna mast. Connect the other test lead to the antenna base. Check for continuity.
- (3) There should be no continuity. If continuity is found, replace the faulty or damaged antenna base and cable assembly.

TEST 2

Test 2 checks the antenna for an open circuit as follows:

- (1) Unplug the antenna coaxial cable connector from the radio chassis.
- (2) Connect one ohmmeter test lead to the tip of the antenna mast. Connect the other test lead to the center pin of the antenna coaxial cable connector.
- (3) Continuity should exist (the ohmmeter should only register a fraction of an ohm). High or infinite resistance indicates damage to the base and cable assembly. Replace the faulty base and cable, if required.

TEST 3

Test 3 checks the condition of the vehicle body ground connection. This test should be performed with the battery positive cable removed from the battery. Disconnect both battery cables, the negative cable first. Reconnect the battery negative cable and perform the test as follows:

- (1) Connect one ohmmeter test lead to the vehicle fender. Connect the other test lead to the battery negative post.
 - (2) The resistance should be less than one ohm.
- (3) If the resistance is more than one ohm, check the braided ground strap connected to the engine and

the vehicle body for being loose, corroded, or damaged. Repair the ground strap connection, if required.

TEST 4

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Test 4 checks the condition of the ground between the antenna base and the vehicle body as follows:

- (1) Connect one ohmmeter test lead to the vehicle fender. Connect the other test lead to the outer crimp on the antenna coaxial cable connector.
 - (2) The resistance should be less then one ohm.
- (3) If the resistance is more then one ohm, clean and/or tighten the antenna base to fender mounting hardware.

RADIO FREQUENCY INTERFERENCE

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Inspect the ground connections at the following:

- Blower motor
- Electric fuel pump
- Generator
- Ignition module
- Wiper motor
- Antenna coaxial ground
- Radio ground
- Body-to-engine braided ground strap (if the vehicle is so equipped).

Clean, tighten, or repair the connections as required.

Also inspect the following secondary ignition system components, as described in Group 8D - Ignition Systems:

- Spark plug wire routing and condition
- Distributor cap and rotor
- Ignition coil
- · Spark plugs.

Reroute the spark plug wires or replace the faulty components as required.

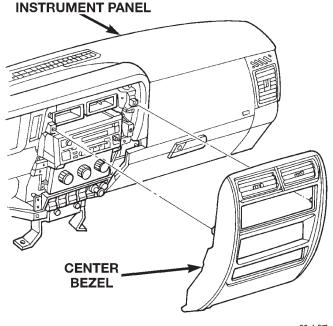
REMOVAL AND INSTALLATION

RADIO

WARNING: ON VEHICLES EQUIPPED WITH AIRBAGS, REFER TO GROUP 8M - PASSIVE RESTRAINT SYSTEMS BEFORE ATTEMPTING ANY STEERING WHEEL, STEERING COLUMN, OR

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- (1) Disconnect and isolate the battery negative cable
- (2) Using a trim stick or another suitable wide flat-bladed tool, gently pry the instrument panel center bezel away from the instrument panel to release the six snap clip retainers (Fig. 2).



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Fig. 2 Center Bezel Remove/Install

- (3) Remove the center bezel from the vehicle.
- (4) Remove the two screws from the front of the radio that secure it to the instrument panel (Fig. 3).

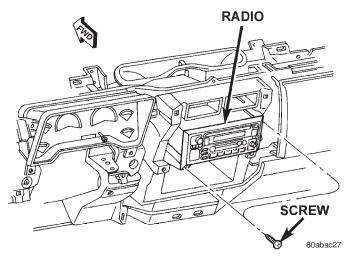


Fig. 3 Radio Remove/Install

REMOVAL AND INSTALLATION (Continued)

(5) Pull the radio out from the instrument panel far enough to unplug the wire harness connectors and the antenna coaxial cable connector (Fig. 4).

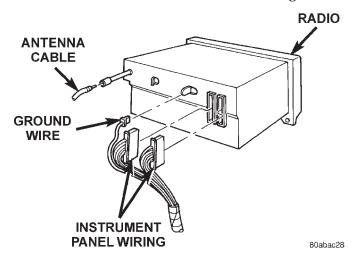


Fig. 4 Radio Connections - Typical

- (6) Remove the radio from the vehicle.
- (7) Reverse the removal procedures to install. Tighten the radio mounting screws to 5 N·m (45 in. lbs.).

AMPLIFIER

- (1) Disconnect and isolate the battery negative cable.
- (2) Disengage the rear seat cushion latch by pulling upward on the release strap. Tilt the seat cushion forward.
- (3) Lift the carpeting on the rear floor pan under the left end of the seat cushion as required to access the amplifier.
- (4) Unplug the two wire harness connectors from the amplifier (Fig. 5).

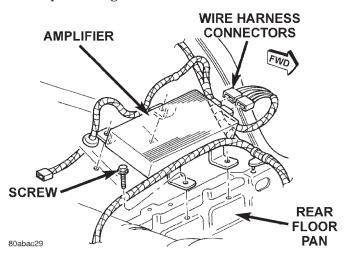


Fig. 5 Amplifier Remove/Install

(5) Remove the four screws that secure the amplifier to the rear floor pan.

- (6) Remove the amplifier from the vehicle.
- (7) Reverse the removal procedures to install. Tighten the amplifier mounting screws to 2.8 N·m (25 in. lbs.).

SPEAKER

FRONT DOOR

LOWER

- (1) Disconnect and isolate the battery negative cable.
- (2) If the vehicle is so equipped, remove the manual window regulator crank handle with a removal tool (Fig. 6).

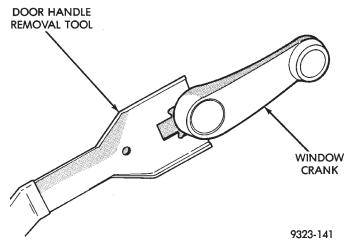


Fig. 6 Window Regulator Crank Handle Remove - Typical

(3) Remove the screws that secure the door trim panel to the inner door panel (Fig. 7) or (Fig. 8).

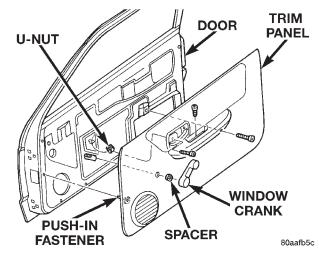


Fig. 7 Front Door Trim Panel Remove/Install - Manual Window

(4) Using a trim stick or another suitable wide flat-bladed tool, gently pry the trim panel away from

REMOVAL AND INSTALLATION (Continued)

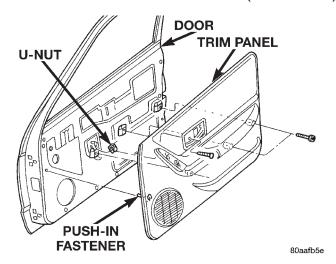


Fig. 8 Front Door Trim Panel Remove/Install - Power Window

the door around the perimeter to release the trim panel retainers.

NOTE: To aid in the removal of the trim panel, start at the bottom of the panel.

- (5) Lift the door trim panel upwards and away from the door to disengage the top of the panel from the inner belt weatherstrip.
- (6) Pull the door trim panel away from the inner door far enough to access the inside door latch release and lock linkage rods near the back of the inside door remote control.
- (7) Unsnap the plastic retainer clips from the inside door remote control ends of the latch release and lock linkage rods, and remove the rod ends from the inside door remote control.
- (8) If the vehicle is so equipped, unplug the wire harness connectors from the door power switch module or, on the driver side only, the power mirror switch.
- (9) Remove the front door trim panel from the vehicle.
- (10) Remove the two screws that secure the speaker to the lower front corner of the inner door panel (Fig. 9).
- (11) Pull the speaker away from the inner door panel far enough to unplug the speaker wire harness connector.
 - (12) Remove the speaker from the door.
 - (13) Reverse the removal procedures to install.

UPPER

- (1) Remove the front door trim panel as described under Lower Front Door Speaker, in this group.
- (2) Remove the one screw that secures the door flag trim to the inner door panel (Fig. 10).

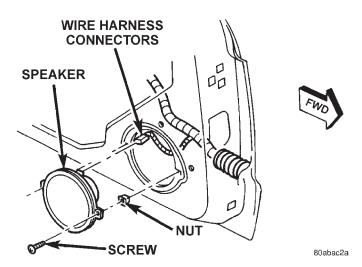


Fig. 9 Front Door Lower Speaker Remove/Install

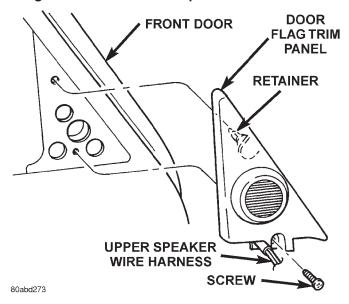


Fig. 10 Front Door Flag Trim Panel Remove/Install

- (3) Using a trim stick or another suitable wide flat-bladed tool, gently pry the door flag trim away from the inner door to release the trim panel retainer.
- (4) Unplug the upper speaker wire harness connector.
- (5) Unsnap the speaker from the retainers molded into the back side of the door flag trim panel.
 - (6) Reverse the removal procedures to install.

SOUND BAR

- (1) Remove the sound bar from the vehicle as described in this group.
- (2) From the inside of the sound bar, straighten the tabs that secure the speaker grille to the sound bar (Fig. 11).
- (3) From the outside of the sound bar, remove the speaker grille.

REMOVAL AND INSTALLATION (Continued)

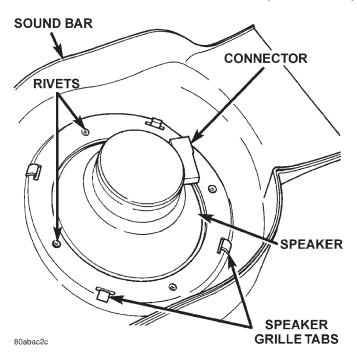


Fig. 11 Sound Bar Speaker Remove/Install - Typical

- (4) Carefully drill out the rivets that secure the speaker to the sound bar.
 - (5) Remove the speaker from the sound bar.
- (6) Reverse the removal procedures to install. Use new rivets installed from the inside of the sound bar to secure the speaker.

SOUND BAR

- (1) Disconnect and isolate the battery negative cable.
- (2) If the vehicle is so equipped, remove the cargo compartment-mounted spare tire.
- (3) Remove the liftgate opening upper garnish moulding and the liftgate pillar trim panels. Refer to Group 23 Body for the procedures.
- (4) Remove the lens from the cargo lamp housing (Fig. 12).
- (5) If the vehicle is so equipped, remove the rear roof side rail-mounted assist handles.
- (6) Remove the screws that secure the rear roof side rail garnish moldings.
- (7) Remove the left and right rear roof side rail garnish moldings.
- (8) Remove and discard the two push nut retainers from the studs inside the front and rear of the cargo lamp housing.
- (9) Lower the sound bar far enough to unplug the wire harness connectors from both speakers and the cargo lamp.
- (10) Remove the adhesive tape that secures the wire harness to the inside of the sound bar.
 - (11) Remove the sound bar from the vehicle.

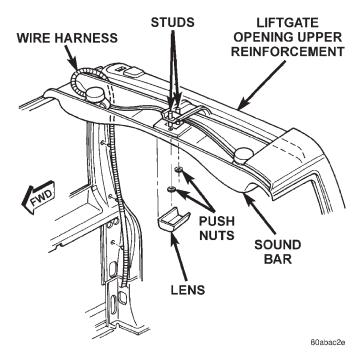


Fig. 12 Sound Bar Remove/Install

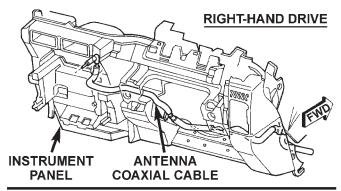
(12) Reverse the removal procedures to install. Use two new push nuts on the studs in the cargo lamp housing when reinstalling the sound bar.

ANTENNA

WARNING: ON VEHICLES EQUIPPED WITH AIRBAGS, REFER TO GROUP 8M - PASSIVE RESTRAINT SYSTEMS BEFORE ATTEMPTING ANY STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

- (1) Disconnect and isolate the battery negative cable.
- (2) Remove the right front fender inner splash shield. Refer to Group 23 Body for the procedures.
- (3) Reach under the right end of the instrument panel to unplug the coaxial cable connector (Fig. 13). Unplug the connector by pulling it apart while twisting the metal connector halves. Do not pull on the cable.
- (4) Unscrew the antenna mast from the antenna body (Fig. 14).
- (5) Remove the antenna cap nut and adapter using an antenna nut wrench (Special Tool C-4816) (Fig. 15).
- (6) Lower the antenna body and cable assembly through the fender far enough to access the antenna body by reaching up into the rear of the right front

REMOVAL AND INSTALLATION (Continued)



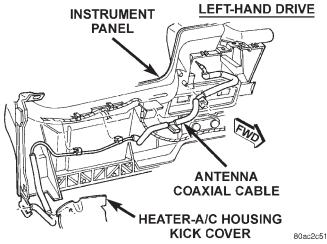


Fig. 13 Antenna Cable Routing

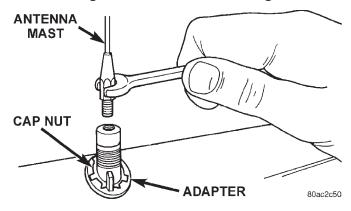


Fig. 14 Antenna Mast Remove/Install - Typical

fender wheel opening between the right cowl side outer panel and the fender (Fig. 16).

- (7) Disengage the coaxial cable grommet from the hole in the right cowl side outer panel.
- (8) Pull the coaxial cable out through the right cowl side outer panel.
- (9) Remove the antenna body and cable from the vehicle.

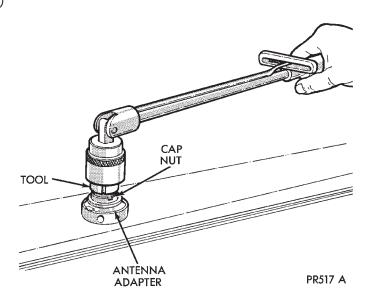


Fig. 15 Antenna Cap Nut and Adapter Remove/ Install - Typical

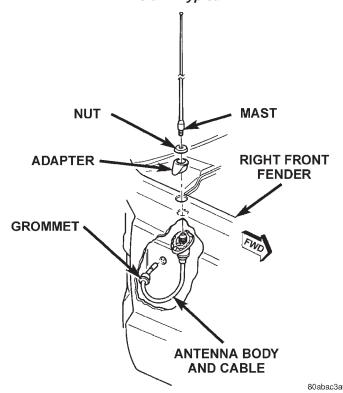


Fig. 16 Antenna Mounting

(10) Reverse the removal procedures to install. Tighten the antenna cap nut to 8 N·m (70 in. lbs.). Tighten the antenna mast to 3.3 N·m (30 in. lbs.).