

# AUDIO SYSTEM

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### RADIOS

For operation of the factory installed standard and optional radios, refer to the Operating Instructions Manual supplied with the vehicle.

All vehicles are equipped with an Ignition-Off Draw Connector which, is used when the vehicles are originally shipped from the factory. This connector, which is located near the battery, helps to prevent battery discharge during storage. For specific connector type and location, refer to Wiring Diagrams.

This connector is part of the radio memory circuitry and should be checked if the memory of time or radio station programming is inoperative.

### INTERFERENCE ELIMINATION

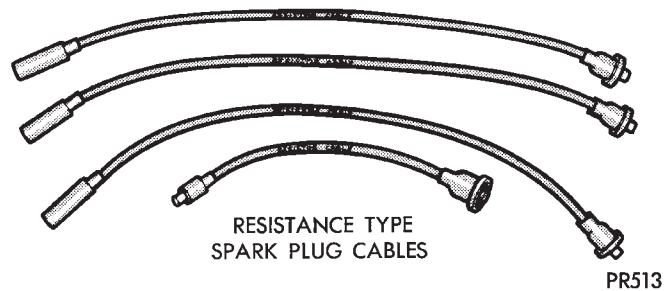
Some components on the vehicle are equipped with a radio capacitor, to suppress radio frequency interference (static).

Capacitors are mounted in various locations, on the generator (either internal or external), internal to the instrument cluster, and internal to the windshield wiper motor.

Ground straps are mounted from radio chassis to cowl, engine to cowl, across engine mount on right hand side. On vehicles with air conditioning there is a strap from evaporator valve to cowl. These ground straps should be securely tightened to assure good metal to metal contact. Ground straps conduct very

small high frequency electrical signals to ground and require clean large surface area contact.

Radio resistance type spark plug cables in the high tension circuit of the ignition system complete the interference suppression (Fig. 1).



**Fig. 1 Resistance Type Spark Plug Cables**

If radio noises are evident, be sure the capacitor lead wires are making good contact on their respective terminals and are securely mounted. Faulty or deteriorated spark plug wires should be replaced.

### AUDIO DIAGNOSTIC TEST PROCEDURES

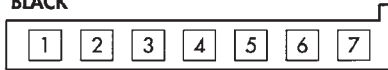
Whenever a audio malfunction occurs, first verify that the radio wire harness is properly connected to all connectors before starting normal diagnosis and repair procedures. Refer to Audio Diagnostic Charts and/or Radio Connector Circuit Chart (Fig. 2).



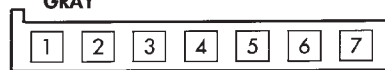
AM/FM STEREO—CASSETTE TAPE

RADIO CONNECTORS

BLACK



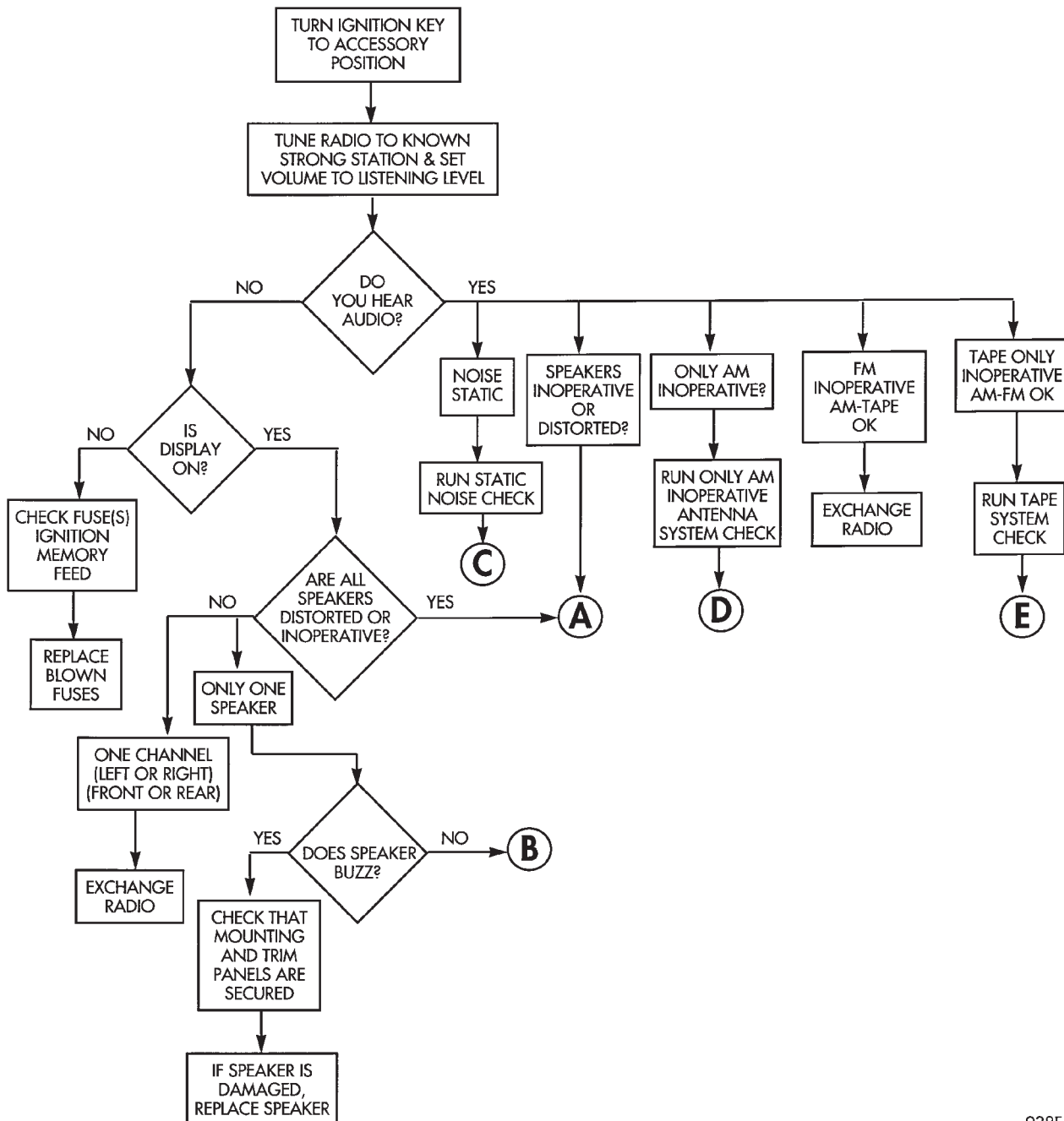
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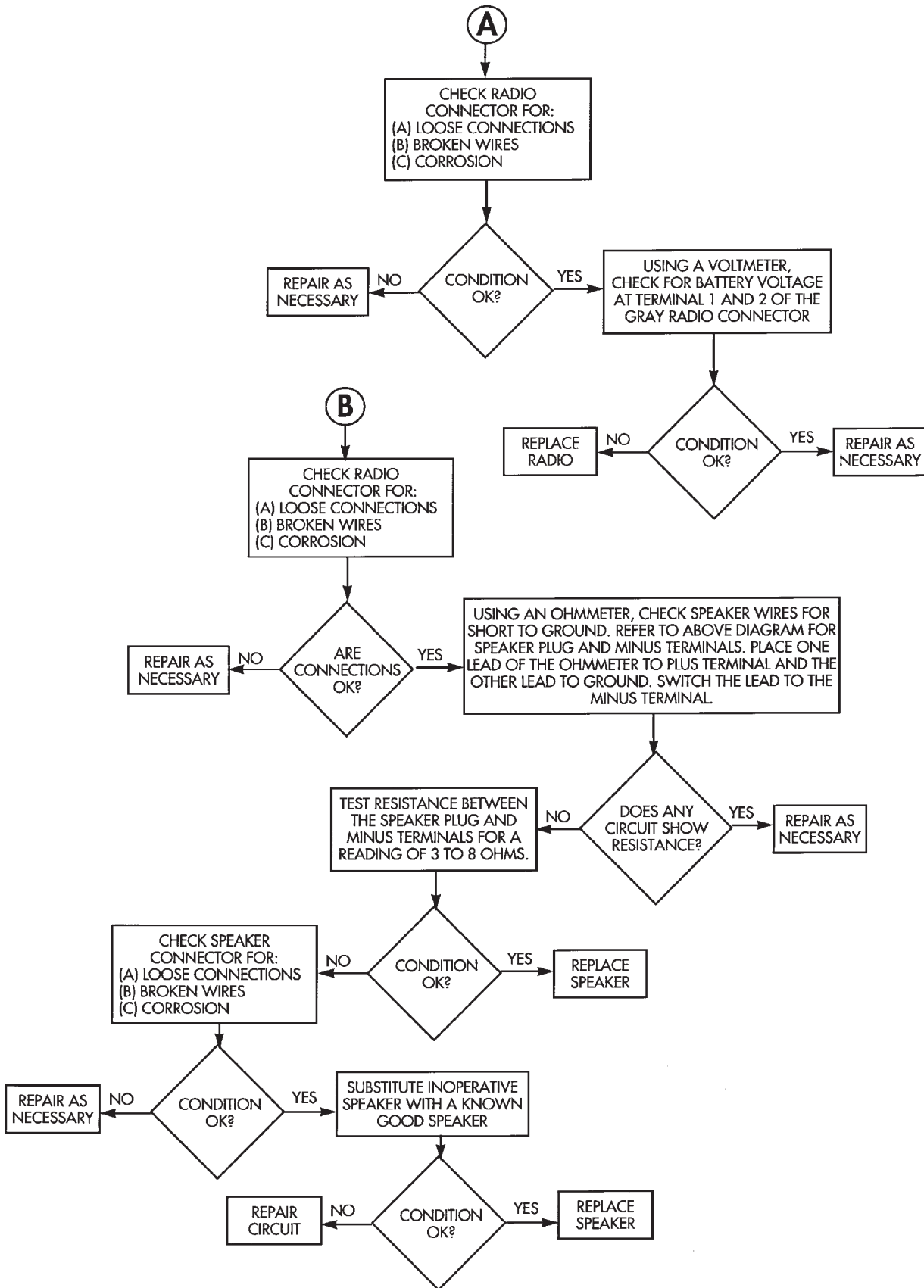
LEGEND:

- 1 - RIGHT REAR SPEAKER RETURN (-)
- 2 - LEFT REAR SPEAKER RETURN (-)
- 3 - RIGHT FRONT SPEAKER FEED (+)
- 4 - LEFT FRONT SPEAKER FEED (+)
- 5 - RIGHT REAR SPEAKER FEED (+)
- 6 - LEFT REAR SPEAKER FEED (+)
- 7 - AMP ON-OFF SIGNAL/ANT UP SIGNAL

- 1 - BATTERY — (MEMORY)
- 2 - ACCESSORY — (SWITCHED B+)
- 3 - DIMMER — (PANEL, LAMPS, VARIABLE)
- 4 - MARKER — (HEAD/PARK LAMPS)
- 5 - RIGHT FRONT SPEAKER RETURN (-)
- 6 - LEFT FRONT SPEAKER RETURN (-)
- 7 - RADIO MUTE

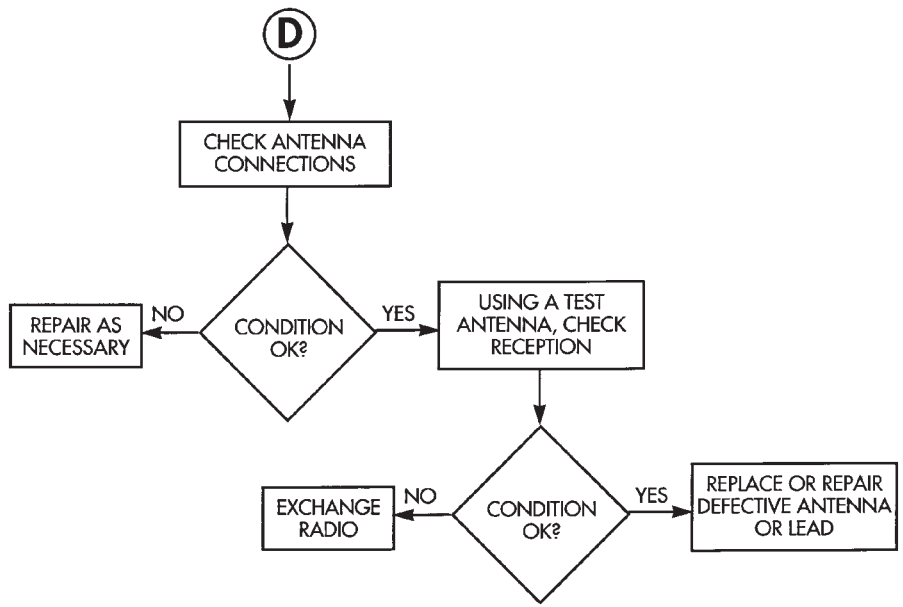
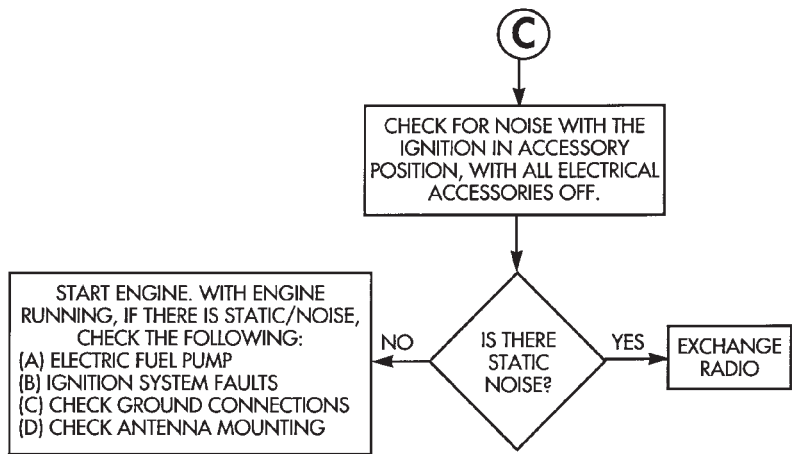


AM/FM STEREO—CASSETTE TAPE CONTINUED

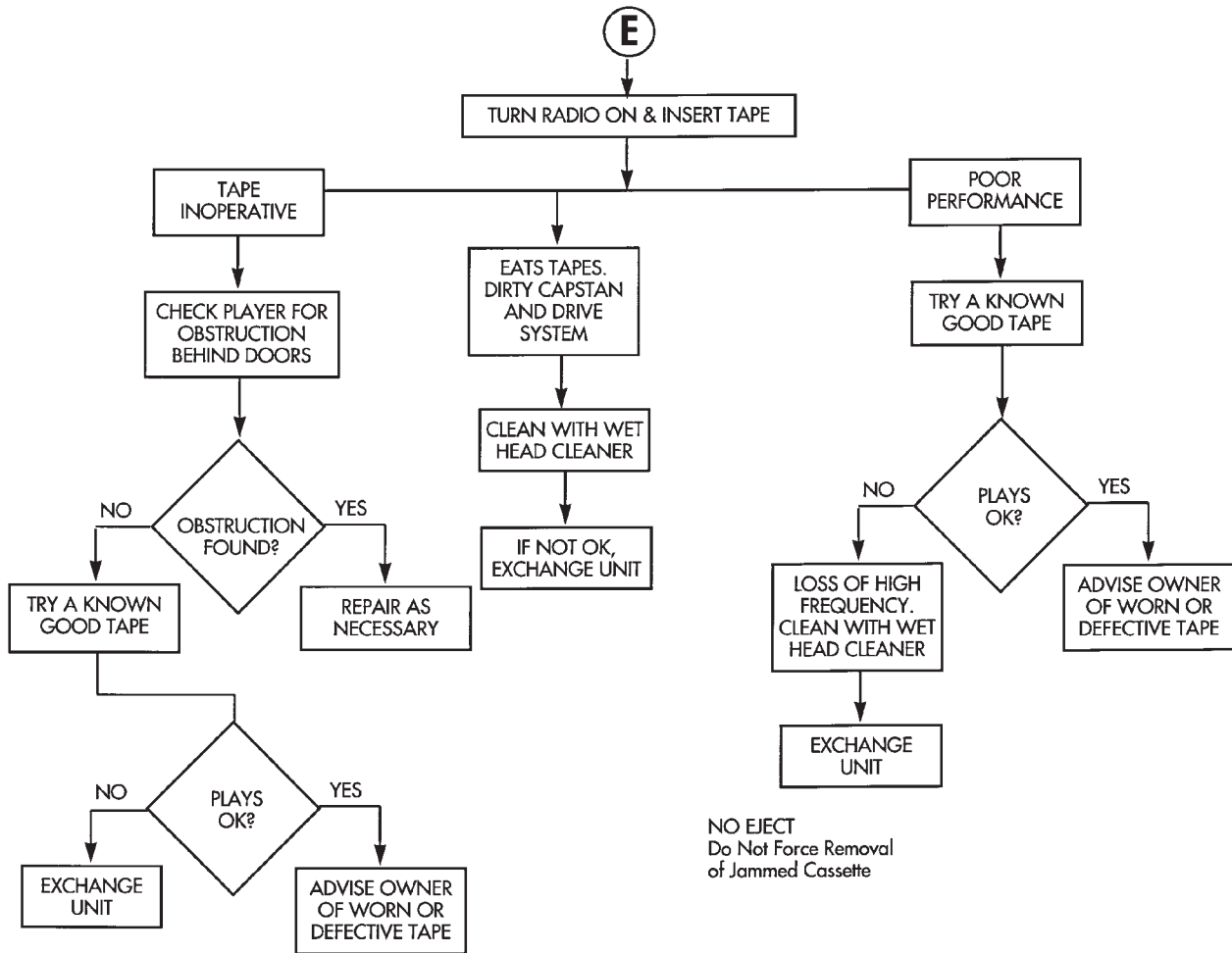




AM/FM STEREO—CASSETTE TAPE CONTINUED



AM/FM STEREO—CASSETTE TAPE CONTINUED

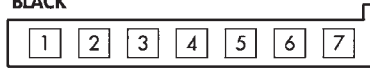




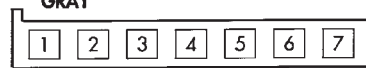
INFINITY

RADIO CONNECTORS

BLACK



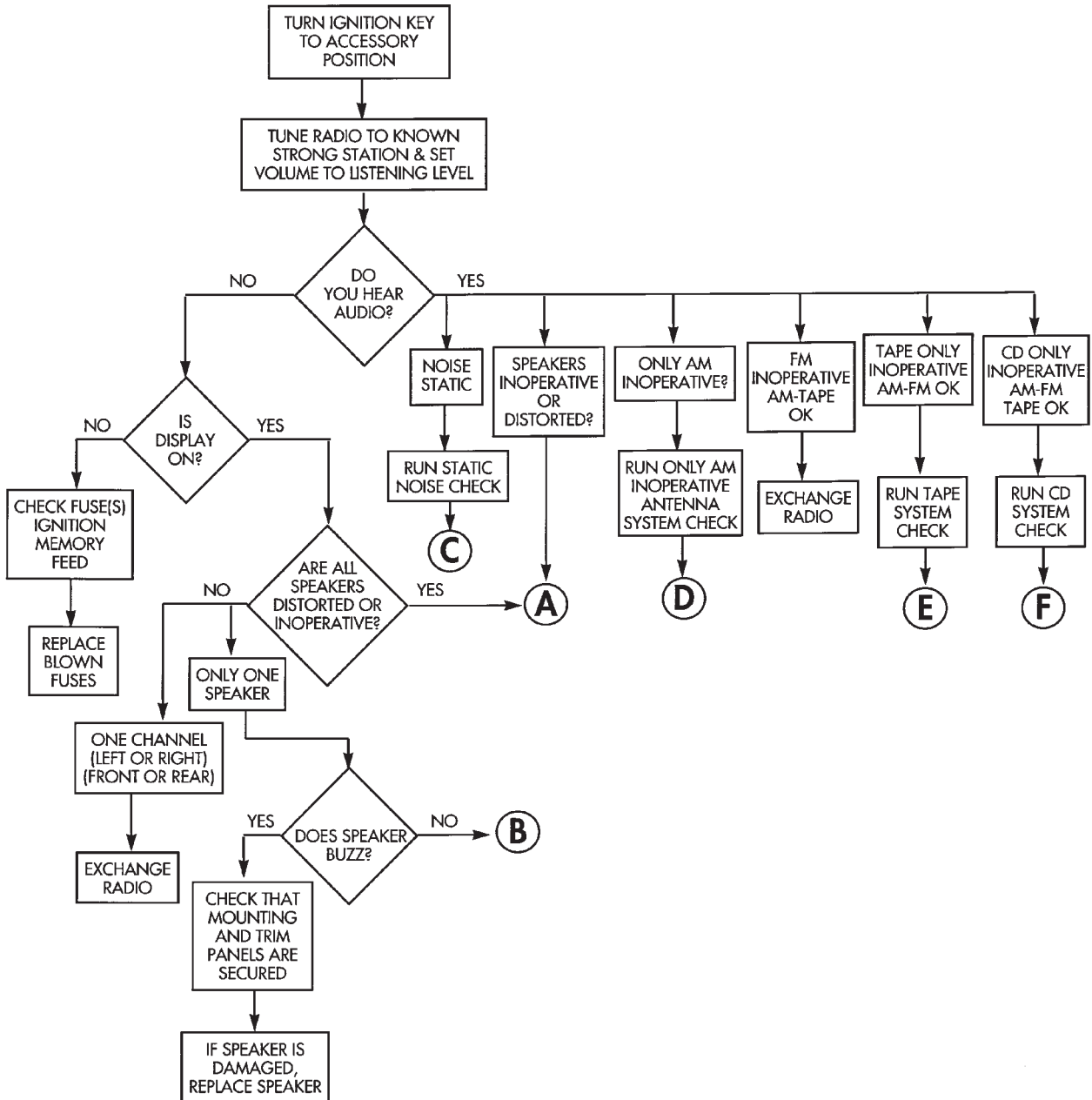
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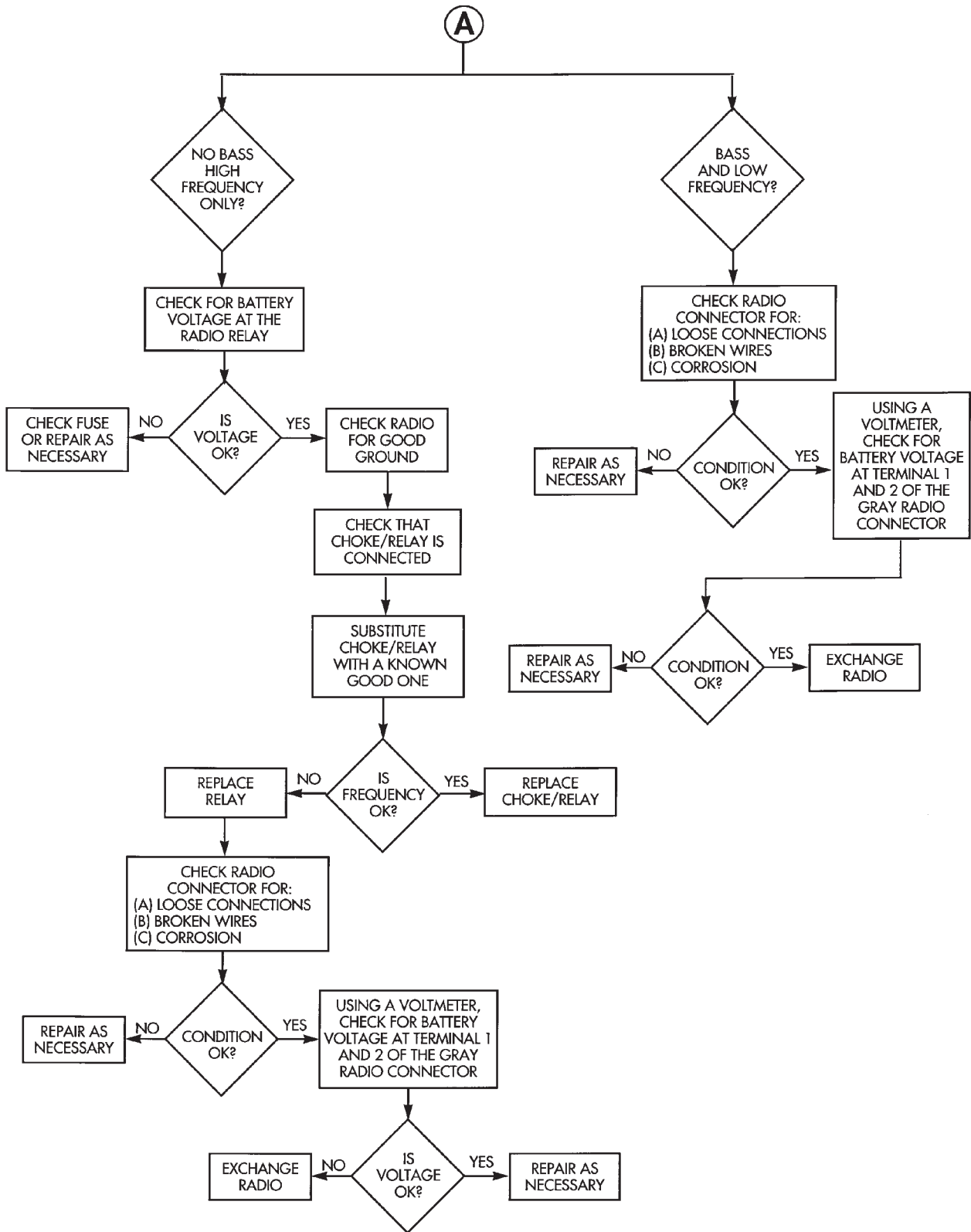
LEGEND:

- 1 - RIGHT REAR SPEAKER RETURN (-)
- 2 - LEFT REAR SPEAKER RETURN (-)
- 3 - RIGHT FRONT SPEAKER FEED (+)
- 4 - LEFT FRONT SPEAKER FEED (+)
- 5 - RIGHT REAR SPEAKER FEED (+)
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- 1 - BATTERY — (MEMORY)
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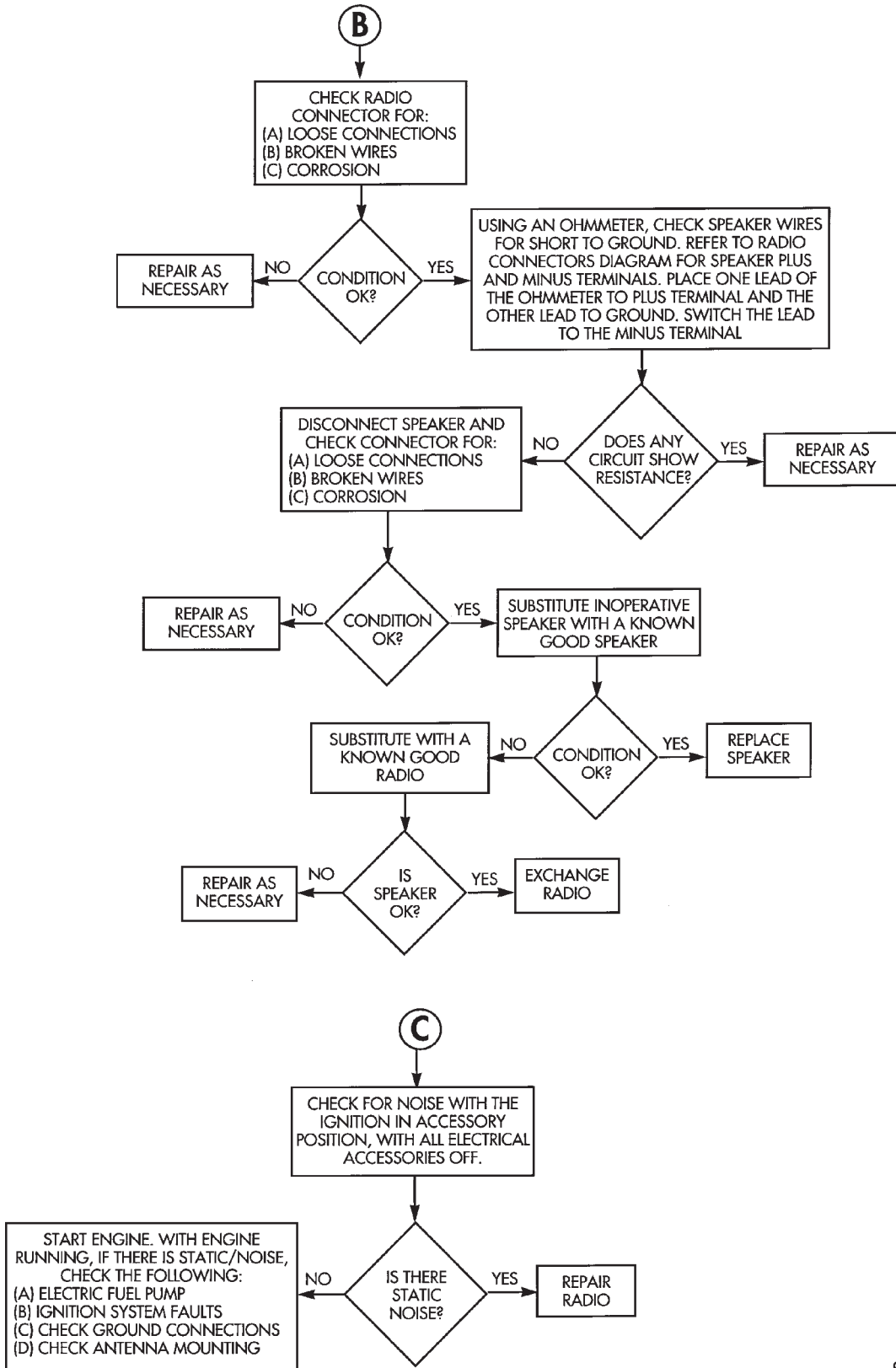


INFINITY CONTINUED



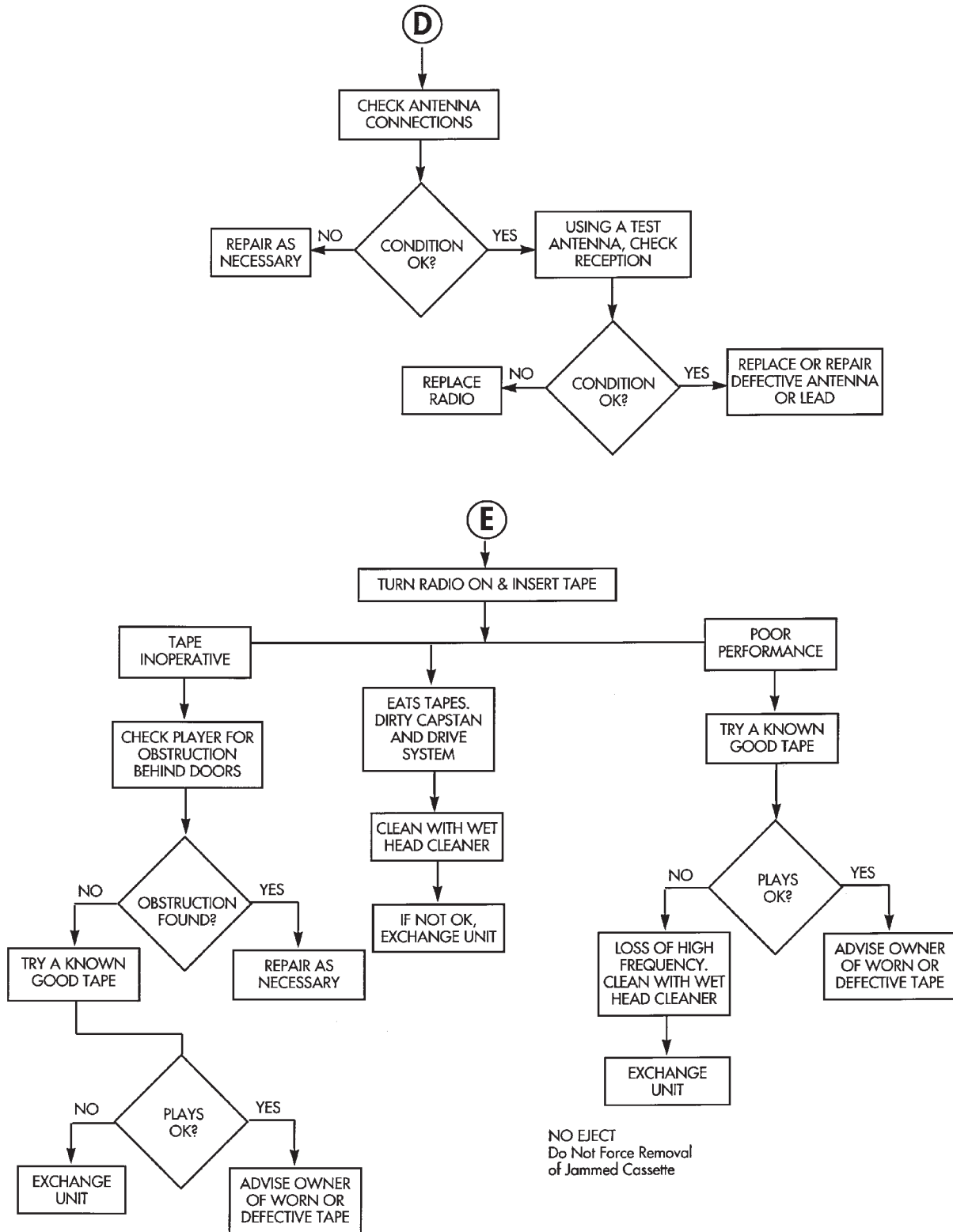


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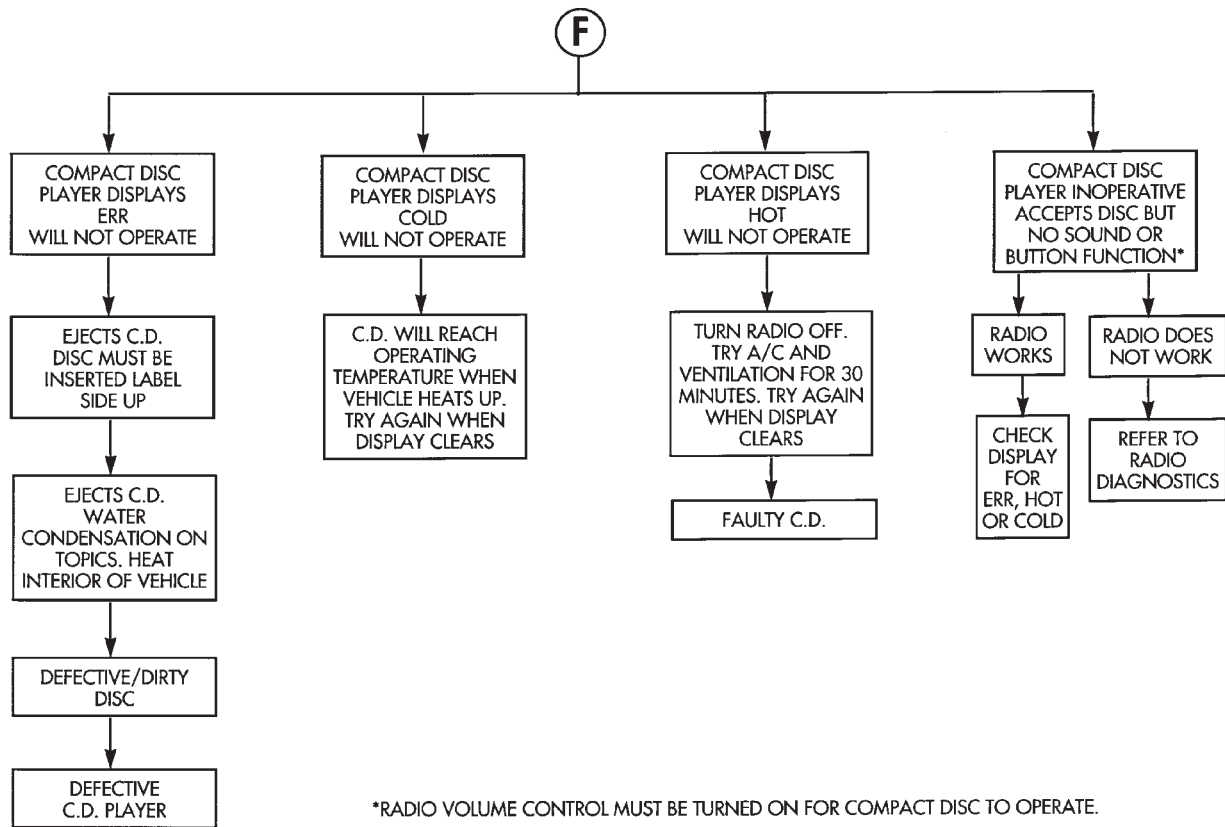


INFINITY CONTINUED





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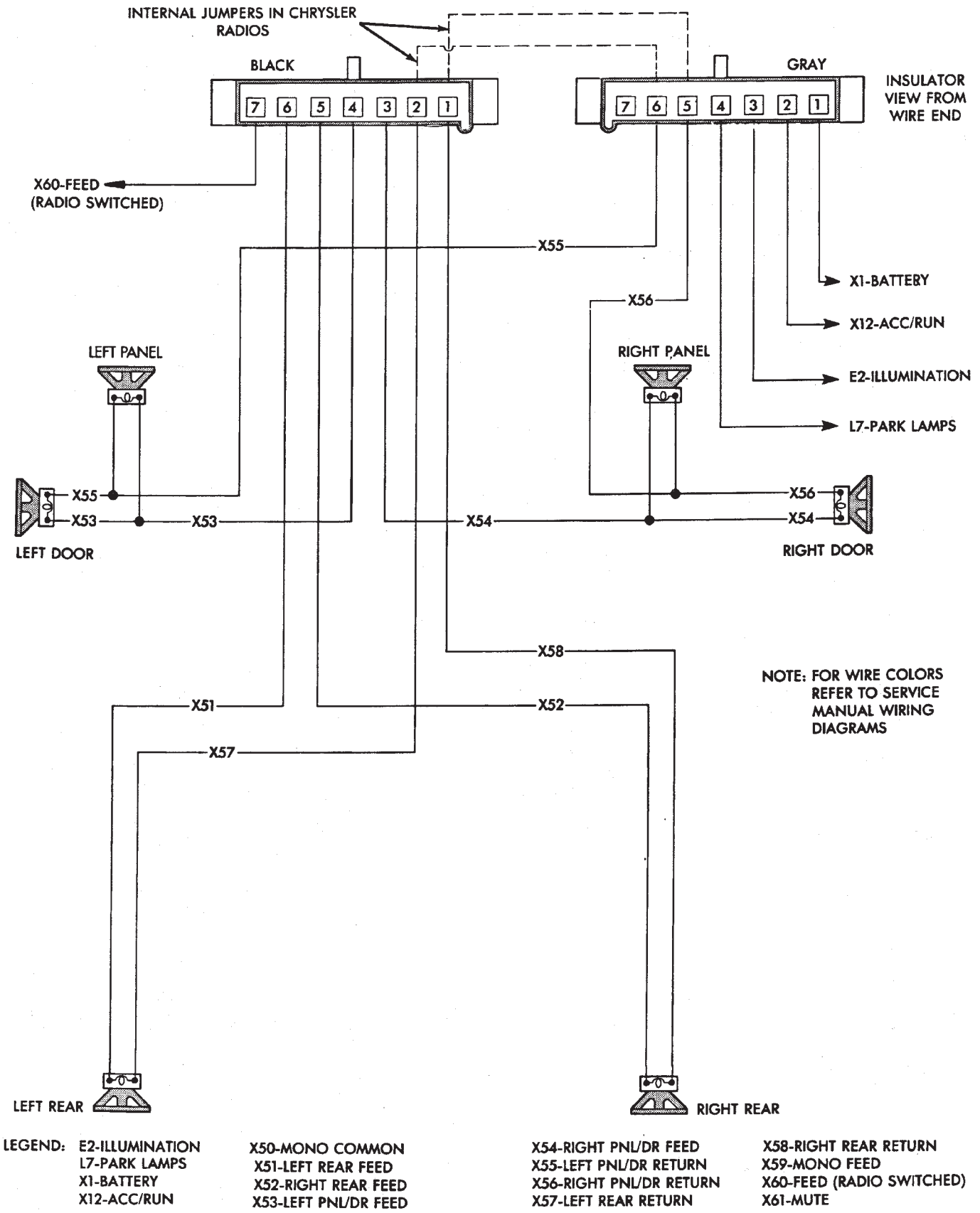
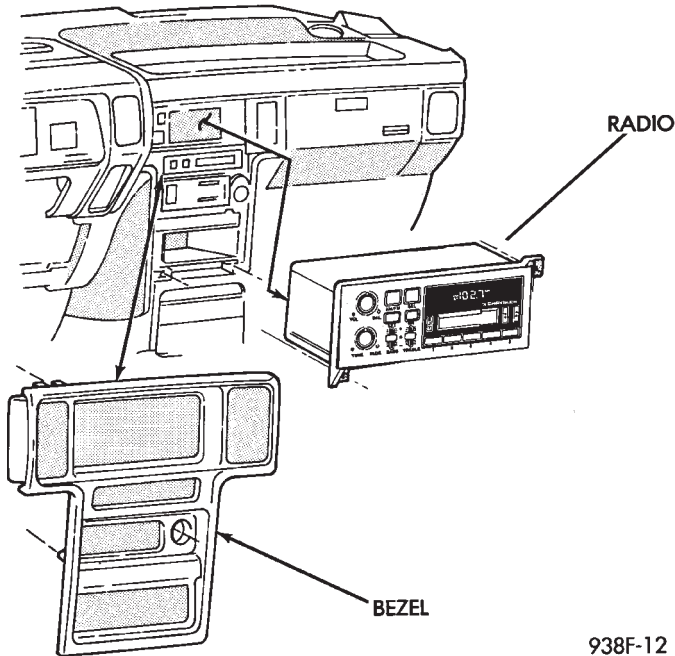


Fig. 2 Radio Connector Circuit

**RADIO REPLACEMENT**

(1) Remove bezel by opening glove box and prying behind the bezel (Fig. 3).



**Fig. 3 Radio and Bezel**

(2) Remove two screws that attach the radio to the panel.

- (3) Remove the ground strap screw.
- (4) Remove the antenna plug.
- (5) Remove the two wiring connectors.
- (6) For installation reverse above procedures.

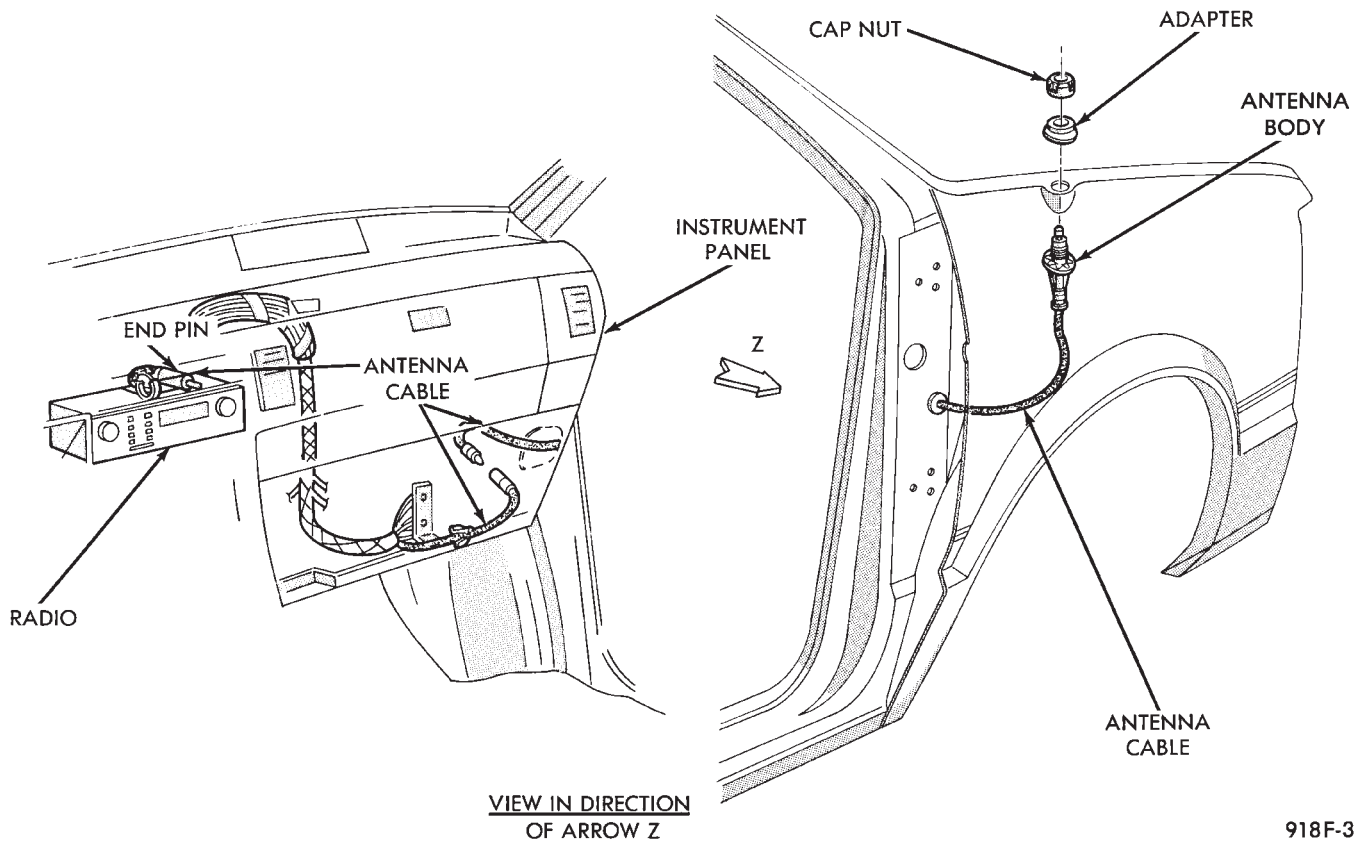
**MANUAL ANTENNAS****TESTING**

Antenna performance may be tested by substituting a known good antenna. It is also possible to check short or open circuits with an ohmmeter or continuity light once the antenna cable is disconnected from the radio as follows:

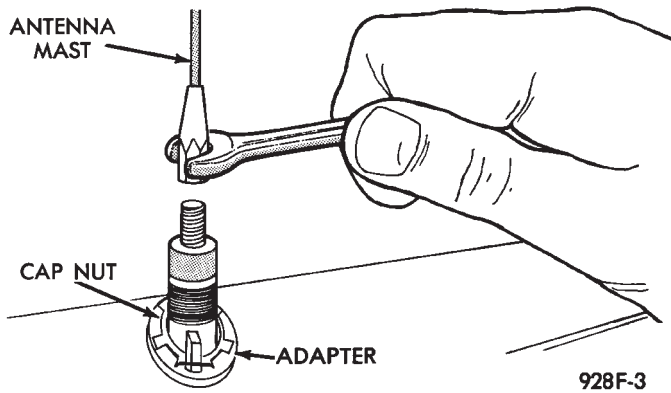
- (1) Continuity should be present between the antenna mast and radio end pin of antenna cable plug (Fig. 4).
- (2) No continuity should be observed between the ground shell of the connector and radio end pin.
- (3) Continuity should be observed between the ground shell of the connector and the mounting hardware on the vehicle fender.

**REMOVAL**

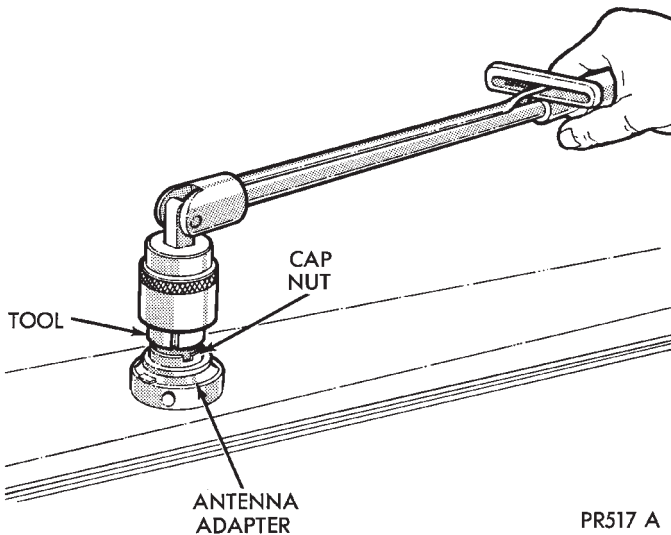
- (1) Remove side cowl cover and disconnect antenna cable by pulling apart.
- (2) Remove antenna mast by unscrewing mast from antenna body (Fig. 5).
- (3) Remove cap nut with Antenna Nut Wrench C-4816 (Fig. 6).



**Fig. 4 Radio Antenna Cable**



**Fig. 5 Antenna Mast Removal & Installation**



**Fig. 6 Removing or Tightening Antenna Cap Nut**

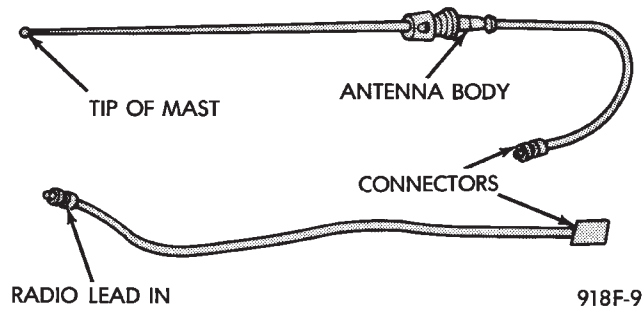
- (4) Remove antenna adapter (Fig. 6).
- (5) From under fender remove antenna lead and body assembly (Fig. 4).

**INSTALLATION**

- (1) Install antenna body and cable from underneath fender (Fig. 4).
- (2) Install adapter and cap nut. Tighten cap nut to 14 N•m (125 in. lbs.) torque with Antenna Nut Wench C-4816.
- (3) Install antenna mast into antenna body until sleeve bottoms on antenna body.
- (4) Route cable through body hole, make sure the grommet is seated to the body plug in cable to connector.

**BENCH TEST FOR ANTENNA MALFUNCTION**

- It is also possible to check short or open circuits with an ohmmeter or continuity light once the antenna has been removed from the vehicle.
- (1) Continuity should be present between the tip of the mast and radio end pin (Fig. 7).
  - (2) No continuity should be observed between the ground shell of the connector and radio end pin.



**Fig. 7 Antenna Bench Test Points**

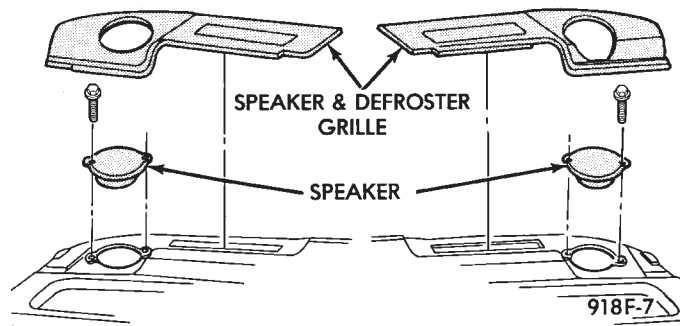
- (3) Continuity should be observed between the ground shell of the connector and the mounting hardware.

**Wiggle cable over its entire length to reveal intermittent short or open circuits during steps (1), (2) and (3).**

**SPEAKERS**

**FRONT INSTRUMENT PANEL SPEAKER REPLACEMENT**

- (1) Remove speaker and defroster grille by pushing forward until the back edge is clear of the pad and carefully pry up to disengage rearward surface.
- (2) When grille is free of engagement slide grille rearward to release contact with three clips at forward edge of instrument panel (Fig. 8).



**Fig. 8 Front Speaker System**

- (2) Remove two screws that retain the speaker.
- (3) Remove the speaker and disconnect the wiring connector.
- (3) For installation reverse above procedures. When installing grille, ensure that all forward clips engage before setting rear edge in to place.

**FRONT DOOR SPEAKERS REPLACEMENT**

- (1) Carefully pry at top outboard corners of grille with a blunt edge pry tool to disengage two clips.
- (2) Pull top of grille rearward and lift up to disengage two plastic hooks on grille from door trim panel.
- (2) Remove four speaker mounting screws. Lift up speaker and disconnect wire connector. Remove speaker.

(3) For installation reverse above procedures.

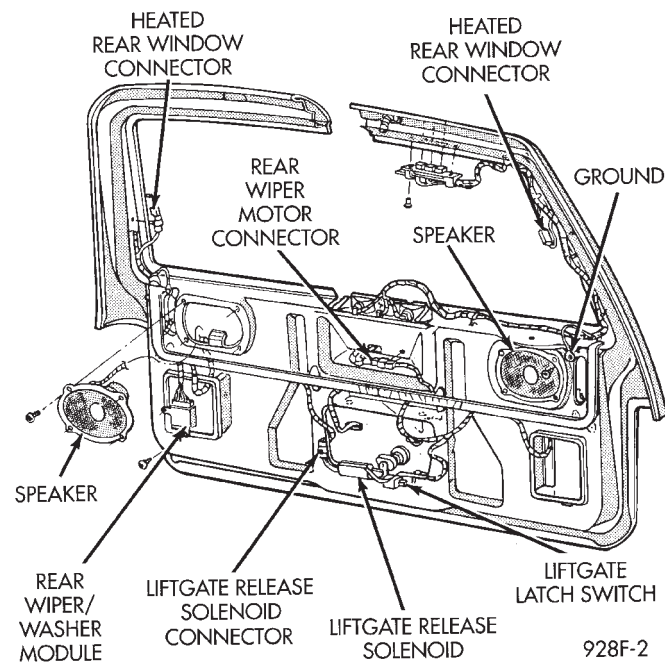
### REAR SPEAKERS REPLACEMENT

(1) Carefully pry outward in two slots located along bottom edge of grille to disengage two clips.

(2) Pull bottom edge away from trim and down to disengage two plastic hooks on grille from trim panel.

(3) Remove wire connector if grille is equipped with integral courtesy lamp.

(4) Remove four screws attaching speaker to door (Fig. 9).



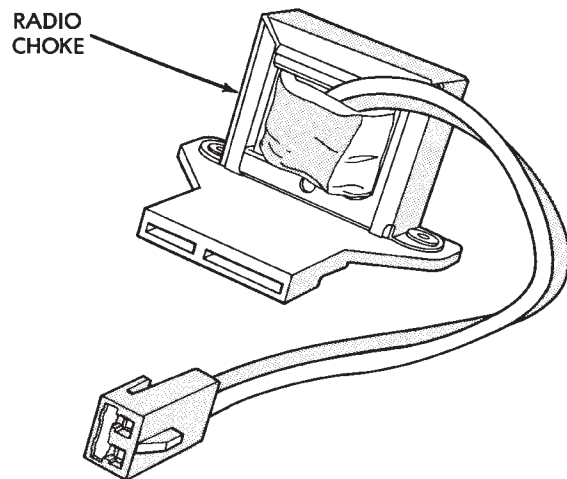
**Fig. 9 Rear Speaker System**

(5) Disconnect speaker wire connector and remove speaker.

(6) For installation reverse above procedures.

### RELAY/CHOKE—INFINITY SPEAKERS

If the audio system is lacking bass response, check for continuity across relay and choke connectors. If no continuity Replace Relay/Choke Assembly (Fig. 10). The Relay/Choke is located under the left side of the Instrument Panel on the Dimmer Module bracket.



**Fig. 10 Relay/Choke—Infinity Speaker**

### COMPACT DISC PLAYER

**WARNING: USE OF THE CONTROLS, ADJUSTMENTS, OR SERVICE PROCEDURES NOT SPECIFIED HERE OR IN THE OWNER MANUAL MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. REPAIR PROCEDURES SHOULD ONLY BE PERFORMED BY A TRAINED TECHNICIAN.**

### DIAGNOSIS TEST

Power to the compact disc player is supplied by the radio through the CD interface cable. The compact disc player will only work with the radio system turned ON. When a compact disc is inserted with the label side facing up, the disc is automatically loaded and will begin to play.

The CD player may eject the disc with a display of E under the following conditions:

- The surface of the disc is dirty or wet
- The disc was inserted with the label side facing down
- The disc is defective
- The CD player may skip or mute while playing a disc under severe vibration conditions example pot holes, railroad tracks, etc.
- If the CD player becomes too hot at temperatures above 60°C (140 °F) the CD player will shut down with a display of HOT until it cools down. Refer to the Audio Diagnostic Charts.

### COMPACT DISC PLAYER REPLACEMENT

Refer to Radio Replacement