# AUDIO SYSTEM

## CONTENTS



## GENERAL INFORMATION

### INTRODUCTION

Operating instructions for the factory installed audio systems can be found in the Owner's Manual provided with the vehicle.

The vehicles are equipped with an Interior (Ignition Off Draw) fuse in the Power Distribution Center located in the engine compartment. After the Interior (IOD) fuse or battery has been disconnected the clock will require resetting.

**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, RHD, or Export if a special illustration or procedure is required.**

## DESCRIPTION AND OPERATION

### INTERFERENCE ELIMINATION

The radio utilizes a ground wire plugged on to a blade terminal and is bolted to the radio chassis. Both connector and terminal should be securely attached. The engine has two separate ground straps to suppress ignition noise which may interfere with radio reception.

- Left engine mount clip on strap
- Engine to shock tower reinforcement

Inductive type spark plug cables in the high tension circuit of the ignition system complete the interference suppression. Faulty or deteriorated spark plug wires should be replaced.

## DIAGNOSIS AND TESTING

### AUDIO DIAGNOSTIC TEST PROCEDURES

**CAUTION: The CD player will only operate between approximate temperatures of -23°C and +65°C (-10°F and +145°F).**

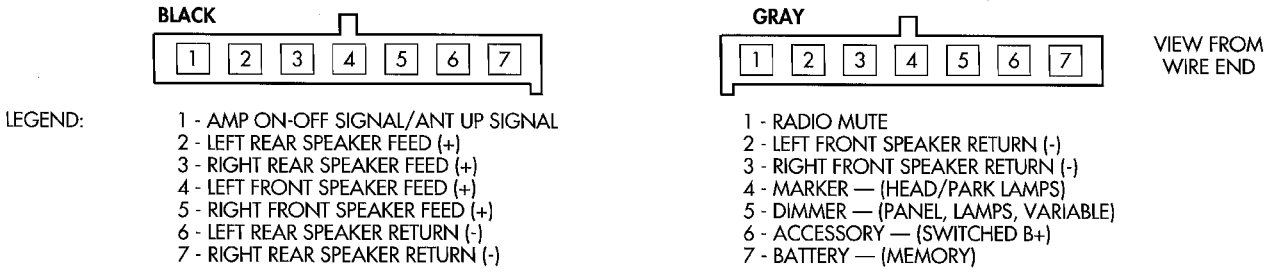
Whenever a radio malfunction occurs;
(1) First check FUSES:
(a) Power Distribution Center (PDC), Interior lamp fuse, M1 - Radio Memory Feed
(b) Fuse Block:
(I) Fuse 12, Illumination in the fuse block
(II) Fuse 16, Ignition feed in the fuse block

**NOTE: The vehicles are shipped with the INTERIOR LAMP fuse disconnected.**

(2) Verify, the radio wire harness are properly connected before starting normal diagnosis and repair procedures. Refer to Audio Diagnostic Charts and/or Group 8W, Wiring Diagrams, Radio Section.

DIAGNOSIS AND TESTING (Continued)

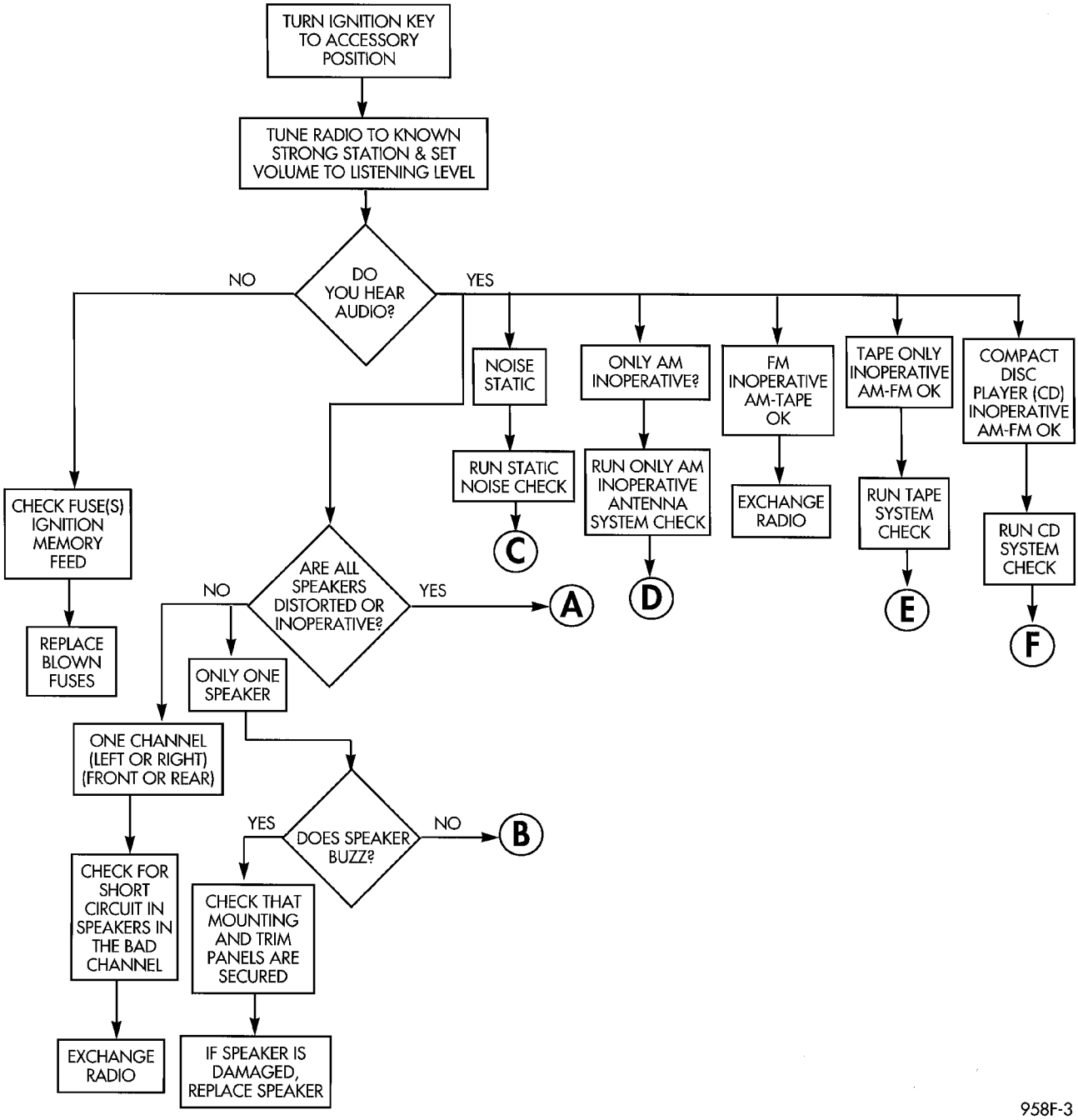
**RADIO CONNECTORS**




LEGEND:

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

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

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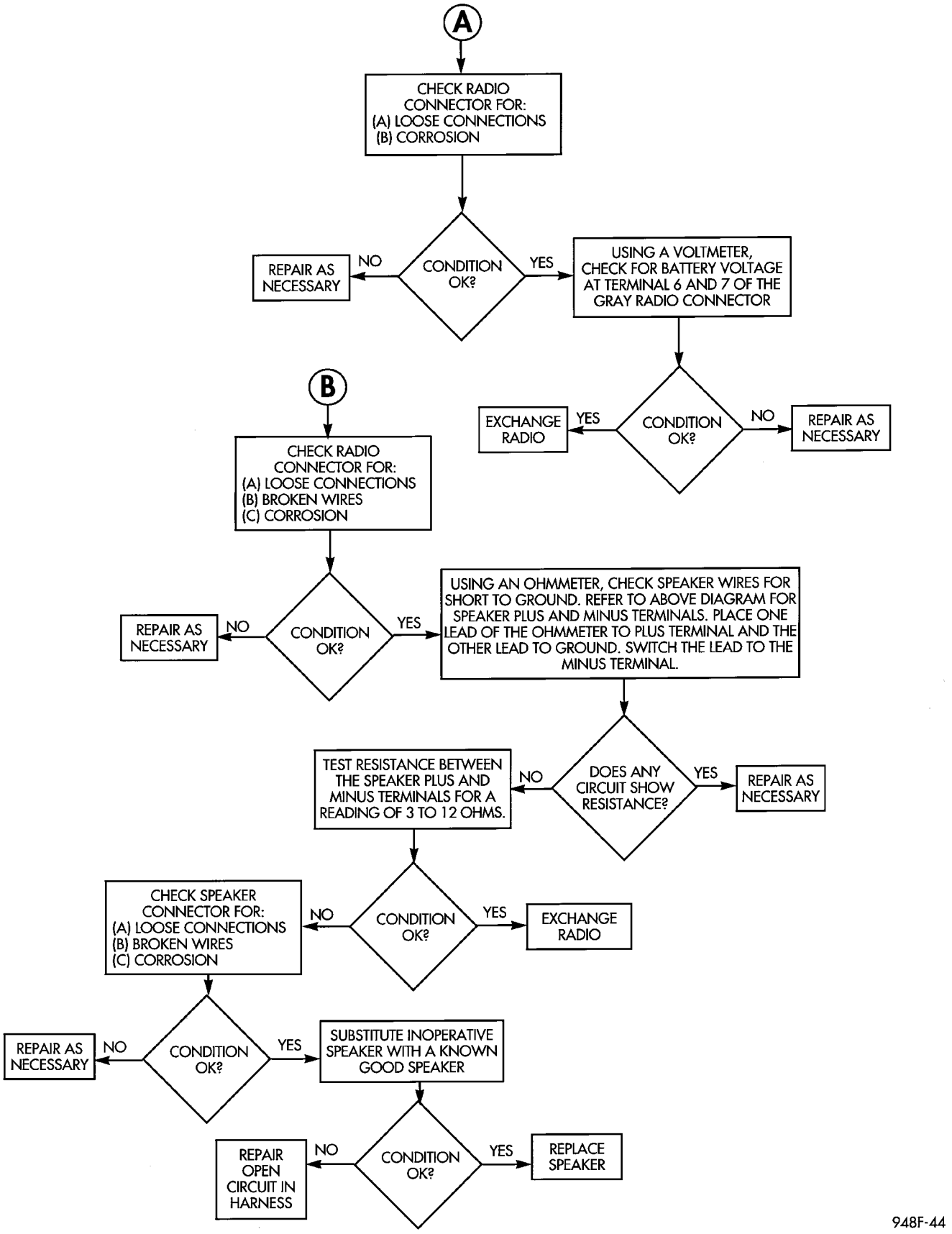
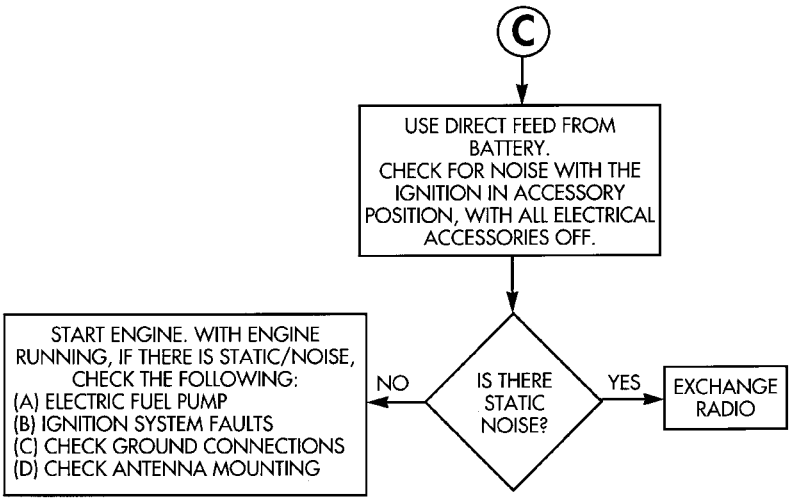
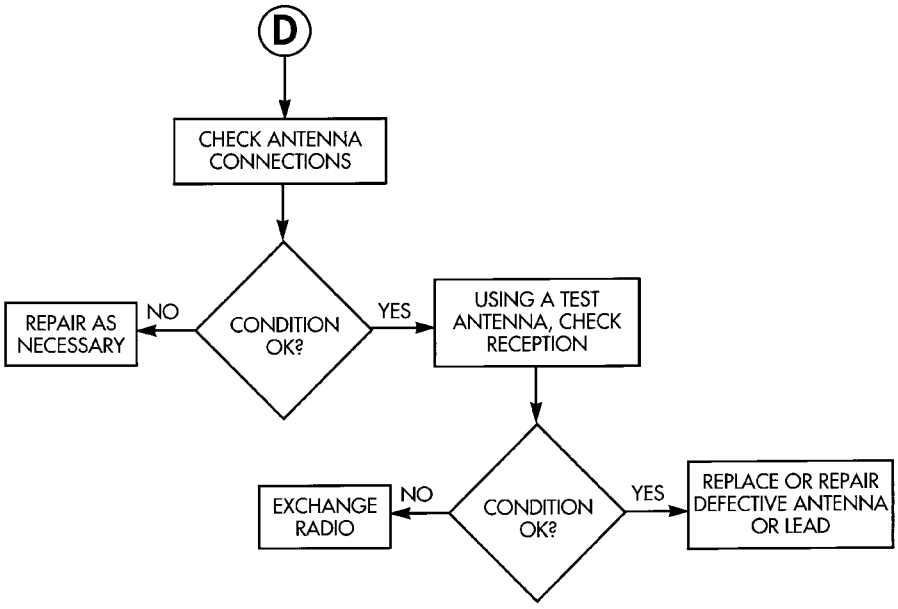
DIAGNOSIS AND TESTING (Continued)




***AM/FM STEREO CONTINUED***

DIAGNOSIS AND TESTING (Continued)

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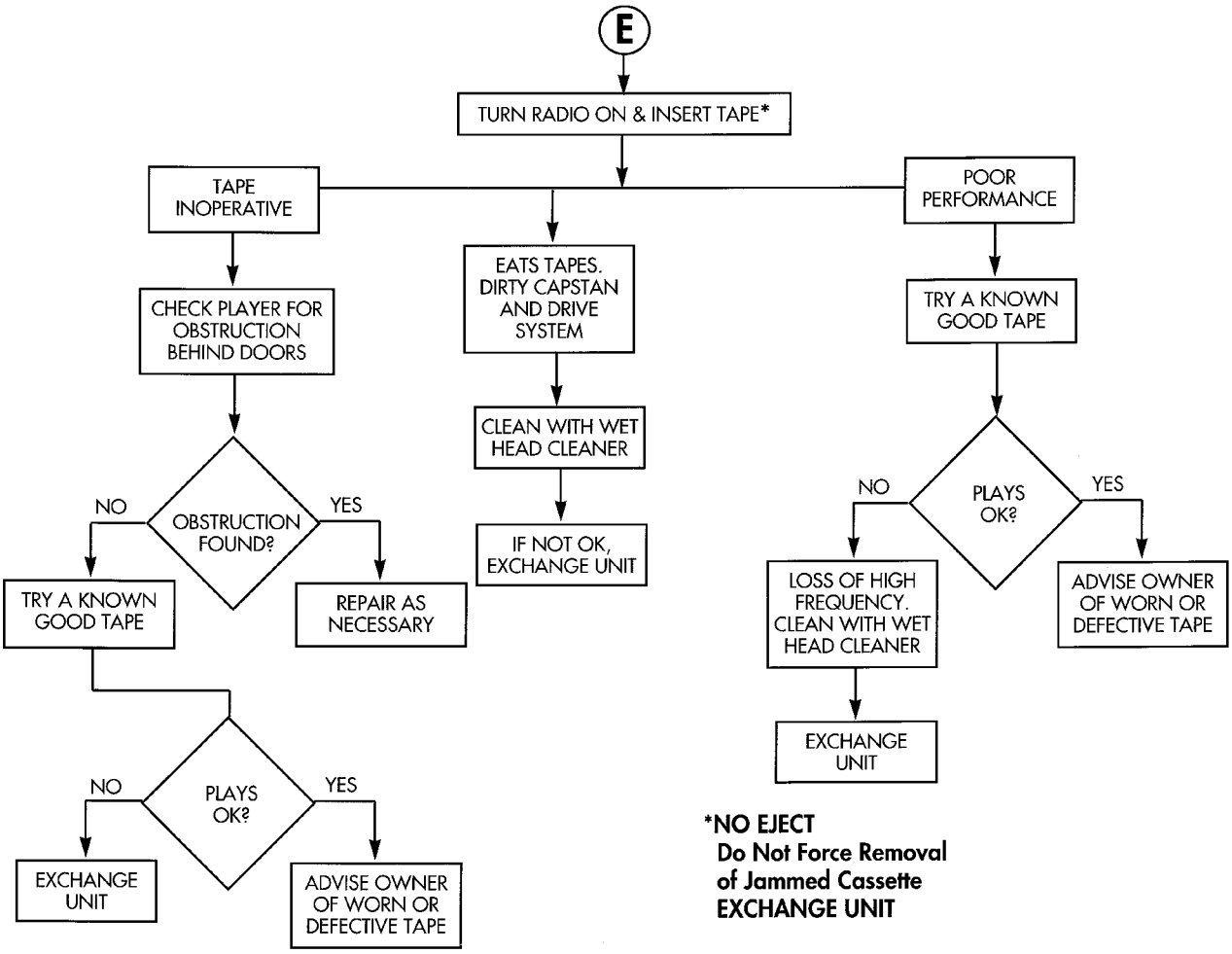
DIAGNOSIS AND TESTING (Continued)

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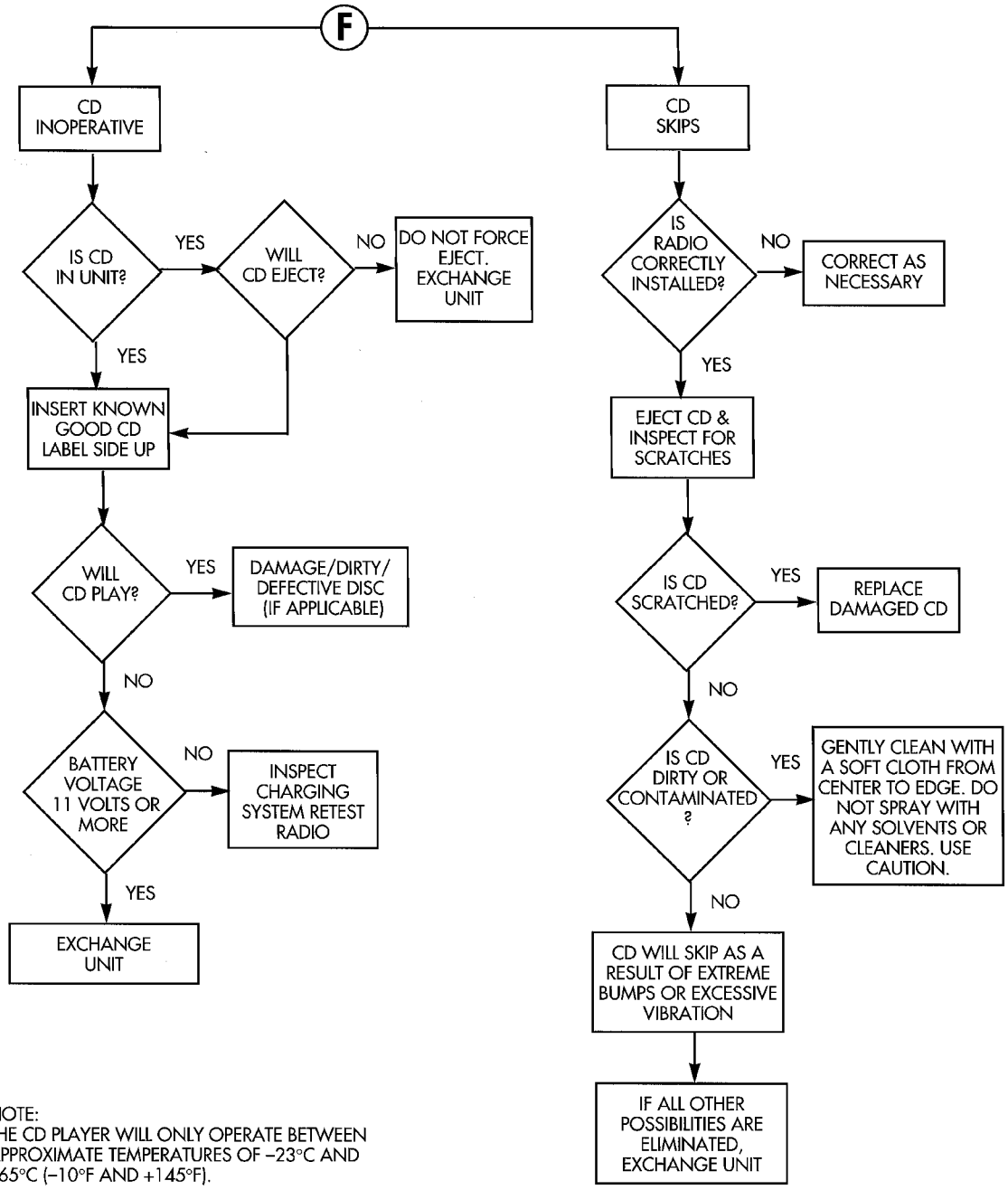
DIAGNOSIS AND TESTING (Continued)




NOTE:
THE CD PLAYER WILL ONLY OPERATE BETWEEN APPROXIMATE TEMPERATURES OF −23°C AND +65°C (−10°F AND +145°F).

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DIAGNOSIS AND TESTING (Continued)

## TESTING

The antenna has a short cable which connects into the instrument panel harness. The connection is made on the right side of the instrument panel.

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. 1).

(2) No continuity should be observed or a very high resistance of several megohms 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 antenna. The wheel well splash shield must be removed for access to the antenna that is mounted on load beam.

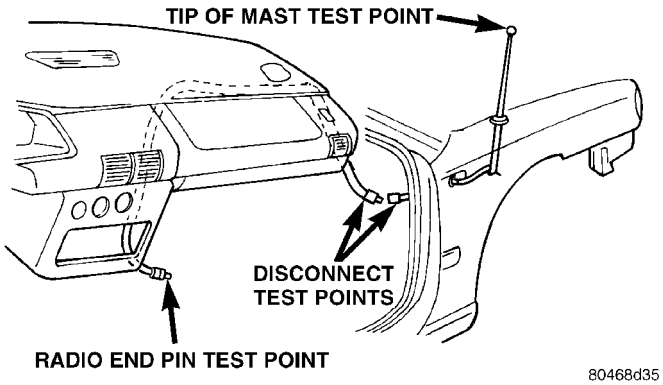


*Fig. 1 Antenna Test Points*

## 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 lead in (Fig. 2).

(2) No continuity should be observed or a very high resistance of several megohms 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 bracket. **Wiggle cable over its entire length to reveal intermittent short or open circuits during step 1, 2 and 3.**

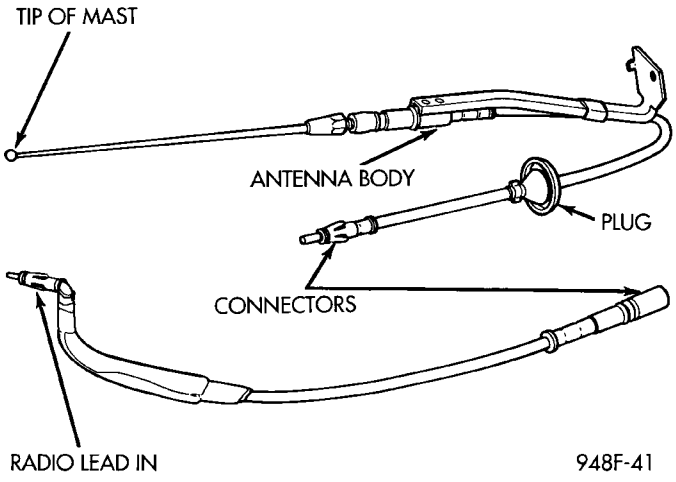


*Fig. 2 Antenna Bench Test Points*

REMOVAL AND INSTALLATION

## ANTENNA

### *REMOVAL*

(1) Remove antenna mast by unscrewing mast from antenna body (Fig. 3), or (Fig. 4).

(2) Locate the antenna lead disconnect in the instrument panel wire harness above the right kick panel. Disconnect the antenna cable from cable lead.

(3) Unfasten push pins from the rear of the plastic inner fender shield and move shield to gain access to mounting screws (Fig. 5).

(4) Remove mounting screw and remove antenna base and cable assembly from under the fender.

### *INSTALLATION*

(1) Align antenna adapter tongue with grove in the fender hole and push adapter into fender.

(2) From under the fender, push the antenna base and cable assembly through the adapter in the fender. Tighten mounting screw to 7 N·m (75 in. lbs.).

(3) Seat the grommet in the side panel and connect the cable to the instrument panel harness connector.

(4) Install the plastic inner fender shield.

REMOVAL AND INSTALLATION (Continued)

(5) Connect the antenna cable to the cable lead.

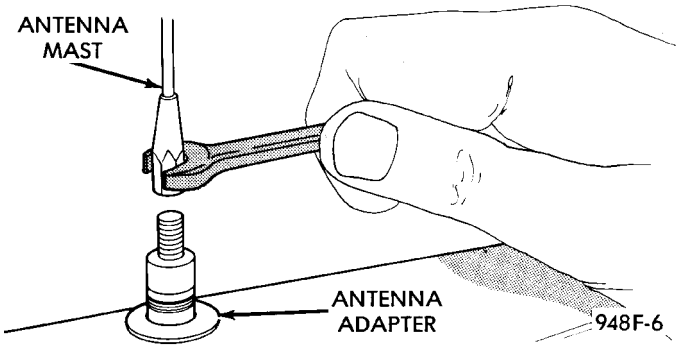


*Fig. 3 Antenna Mast Removal*

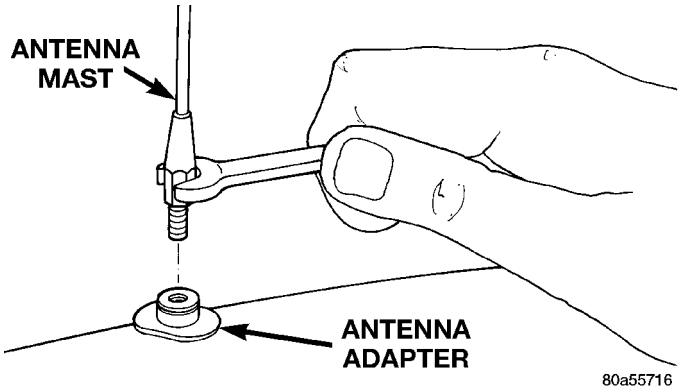


*Fig. 4 Antenna Mast Removal - Export*

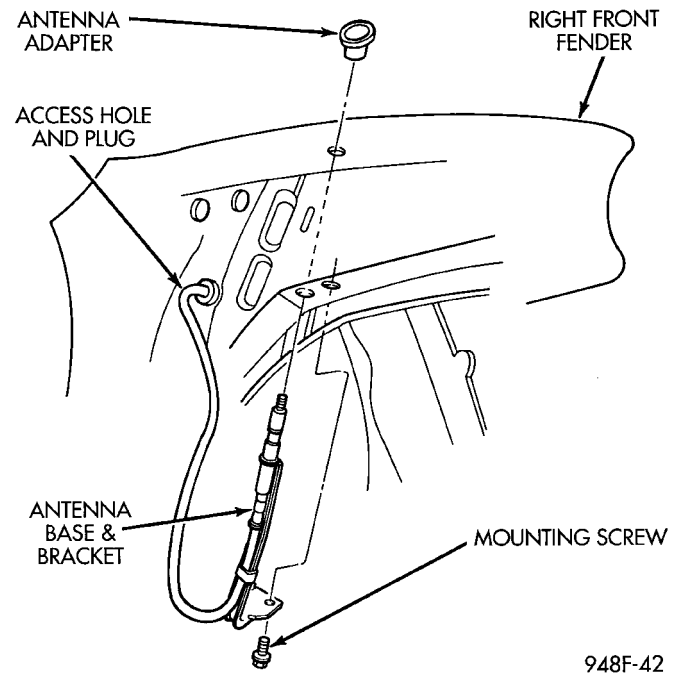


*Fig. 5 Antenna Mounting*

## RADIO

*REMOVAL*

(1) Remove center module bezel (Fig. 6).

(2) Remove two mounting screws on the radio and pull out of instrument panel (Fig. 7).

(3) Disconnect wiring and antenna cable and remove ground wire from radio.

*INSTALLATION*

For installation reverse the above procedures.

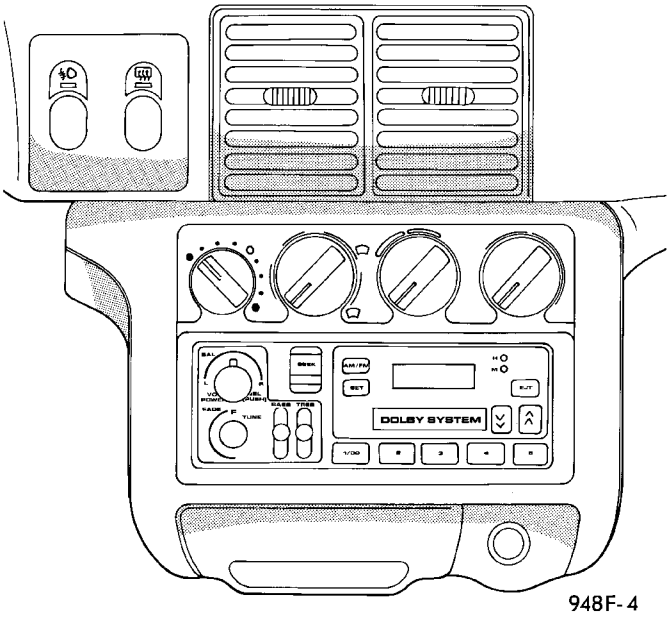


*Fig. 6 Center Module Bezel*

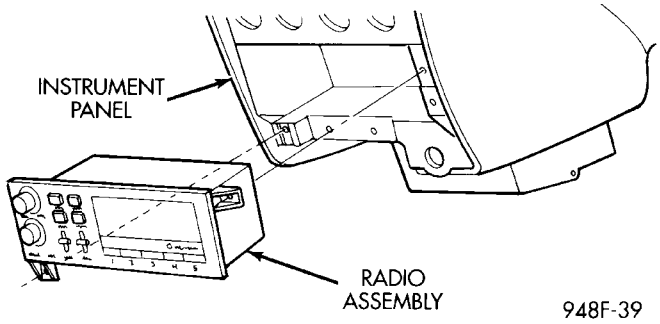


*Fig. 7 Radio Assembly*

## INSTRUMENT PANEL SPEAKER

*REMOVAL*

(1) Remove instrument panel top cover and cluster bezel (Fig. 8). Refer to Group 8E, Instrument Panel and Systems, for removal procedures.

(2) Remove speaker retaining screws.

(3) Remove speaker and disconnect wire connector.

*INSTALLATION*

For installation reverse the above procedures.

REMOVAL AND INSTALLATION (Continued)

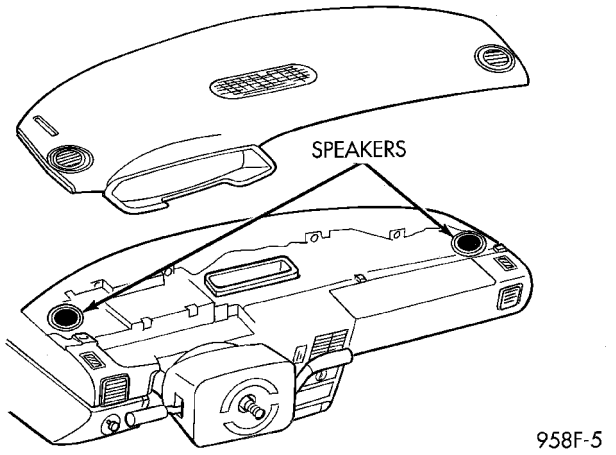


*Fig. 8 Instrument Panel Speakers*

## FRONT DOOR SPEAKER

*REMOVAL*

(1) Remove door trim panel, refer to Group 23, Body.

(2) Remove three speaker retaining screws (Fig. 9).

(3) Remove speaker assembly and disconnect wire connector.

*INSTALLATION*

For installation reverse the above procedures.

## REAR SHELF SPEAKER(S)

*REMOVAL*

(1) Remove rear seat and seat back, refer to Group 23, Body for seat removal procedures. Remove seat cushion, seat back and seat belt anchor bolts.

(2) Pry out the seat belt trim bezel along the rearward edge.

(3) Partially remove the shelf trim panel slipping it down to the seat back position.

(4) Remove four speaker retaining screws (Fig. 10).

(5) Remove speaker and disconnect wire connector.

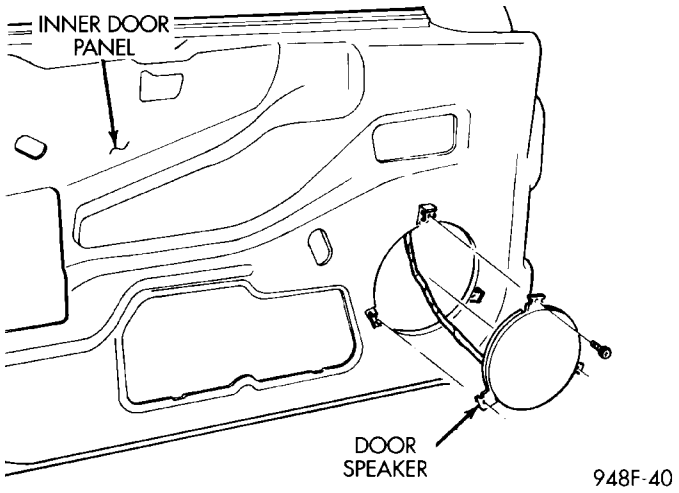


*Fig. 9 Front Door Speaker*

*INSTALLATION*

For installation reverse the above procedures. Position speakers so that the wire connectors are pointing to the drivers side of car. Tighten the seat belt anchor bolts to the proper torque refer to Group 23, Body.

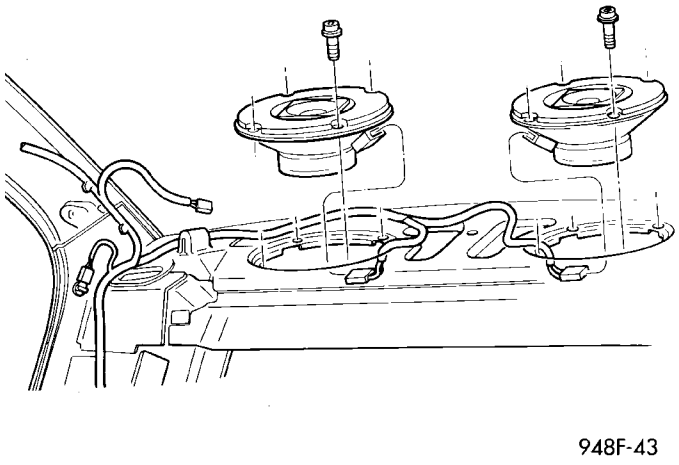


*Fig. 10 Rear Shelf Speakers*