

## Radio Connector

**Table a** lists radio connector terminal designations. The pin numbers are identified in Fig. 15.

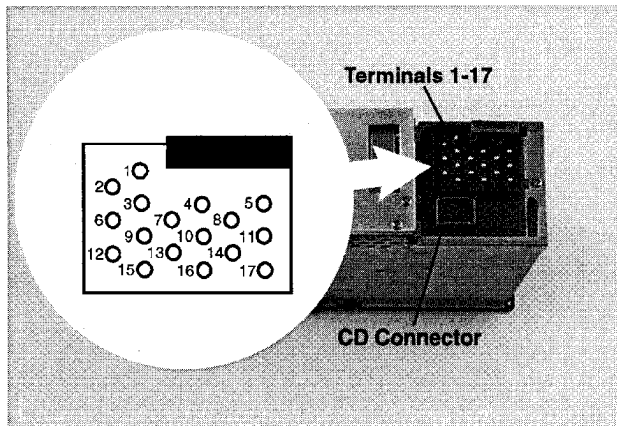


**Fig. 15.** Radio connector. See **Table a**.

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**Table a. Radio Connector Terminal Designation**

| Connector Terminal | Signal                                                                          |
|--------------------|---------------------------------------------------------------------------------|
| 1                  | Speaker, left front +                                                           |
| 2                  | Speaker, right front +                                                          |
| 3                  | Speaker, left rear +                                                            |
| 4                  | Telephone mute feature (where applicable)                                       |
| 5                  | Positive (terminal R)                                                           |
| 6                  | Front speaker, left                                                             |
| 7                  | I-bus connection (diagnostics)                                                  |
| 8                  | Speaker, left front                                                             |
| 9                  | Constant positive, Terminal 30                                                  |
| 10                 | Speedometer signal for speed-sensitive volume control (where applicable)        |
| 11                 | Speaker, right front                                                            |
| 12                 | Speaker, left rear                                                              |
| 13                 | Illumination (terminal 58G)                                                     |
| 14                 | Speaker, right rear                                                             |
| 15                 | Ground (terminal 31)                                                            |
| 16                 | Automatic antenna or window antenna amplifier or premium sound system amplifier |
| 17                 | Not assigned                                                                    |

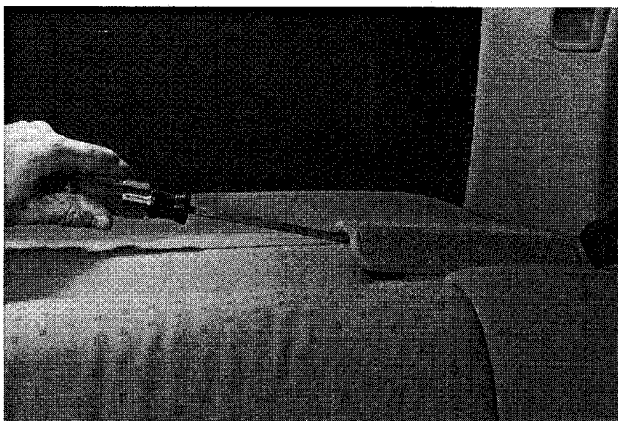


## Rear speaker, removing and installing

### NOTE —

Rear speakers in convertible models are installed under the rear side panels. For rear side panel removal procedure, see **411 Doors**.

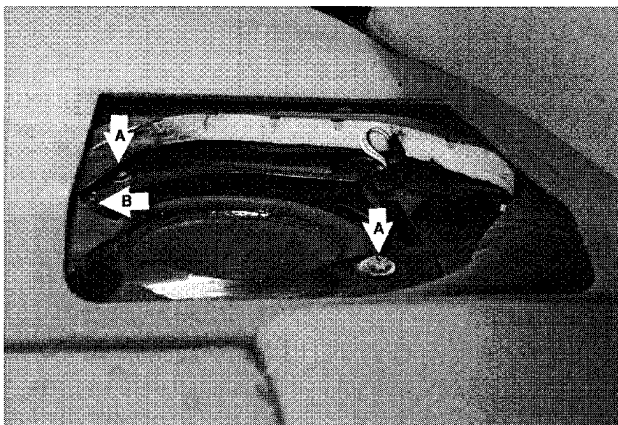
1. Working at rear parcel shelf, pry speaker cover by inner edge and remove. See Fig. 12.



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**Fig. 12.** Pry up inner edge of speaker cover off rear parcel shelf.

2. Remove mounting screws and depress speaker retaining clip. See Fig. 13. Lower speaker into trunk.



0011633

**Fig. 13.** Remove screws (A) and depress clip (B).

3. Disconnect speaker connector and remove speaker from box.
4. Installation is reverse of removal.

## Door panel speaker, removing and installing

1. On cars with side-impact airbags, disconnect negative (-) cable from battery.

### CAUTION —

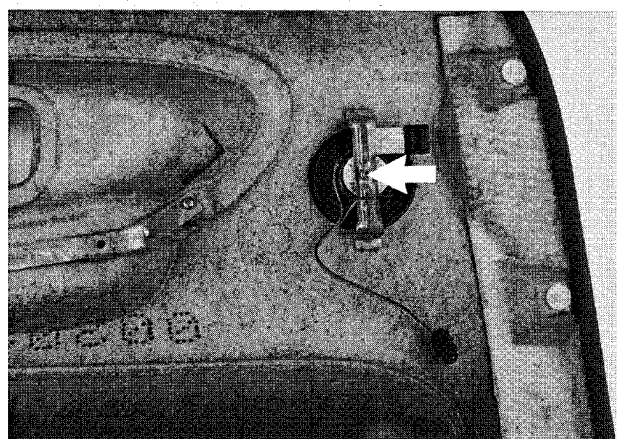
Prior to disconnecting the battery, read the battery disconnection cautions given at the front of this manual on page viii.

2. Remove inner door panel. See **411 Doors**.

### WARNING —

Some 1997 and all 1998 model year cars are equipped with front side-impact airbags in the front doors. When servicing the doors with front side-impact airbags, always disconnect the negative (-) battery terminal. See **721 Airbag System (SRS)** for cautions and procedures relating to the airbag system.

3. On back of door panel, remove nut on top of speaker retaining bracket and remove bracket from behind speaker. See Fig. 14.

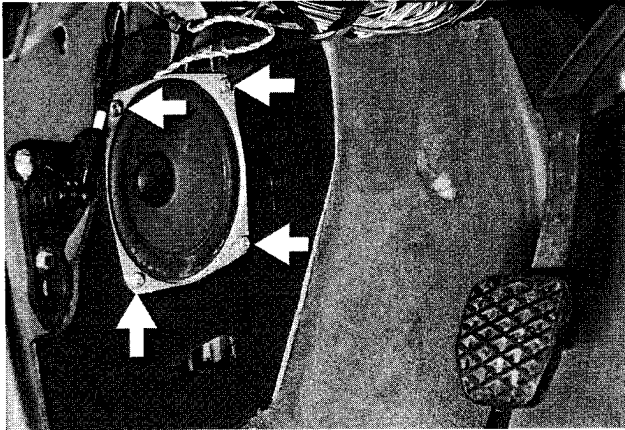


0011634

**Fig. 14.** Speaker retaining nut (arrow).

4. Disconnect speaker connector from harness connector and remove loudspeaker forward through door panel.
5. Installation is reverse of removal. Install side-impact airbag using new screws. See **721 Airbag System (SRS)**.

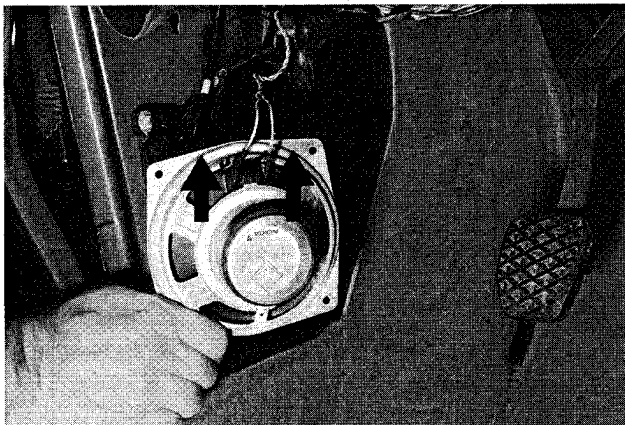
3. Remove speaker by removing mounting screws. See Fig. 8.



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**Fig. 8.** Speaker mounting screws (arrows).

4. Disconnect harness connector(s) from speaker. See Fig. 9.



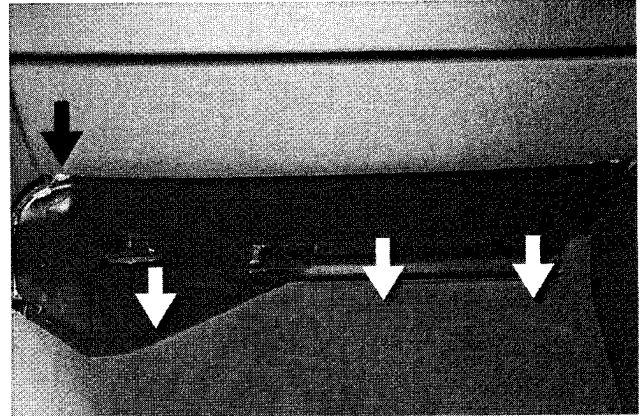
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**Fig. 9.** Disconnect speaker electrical connector(s) in direction shown (arrows).

5. Installation is reverse of removal.

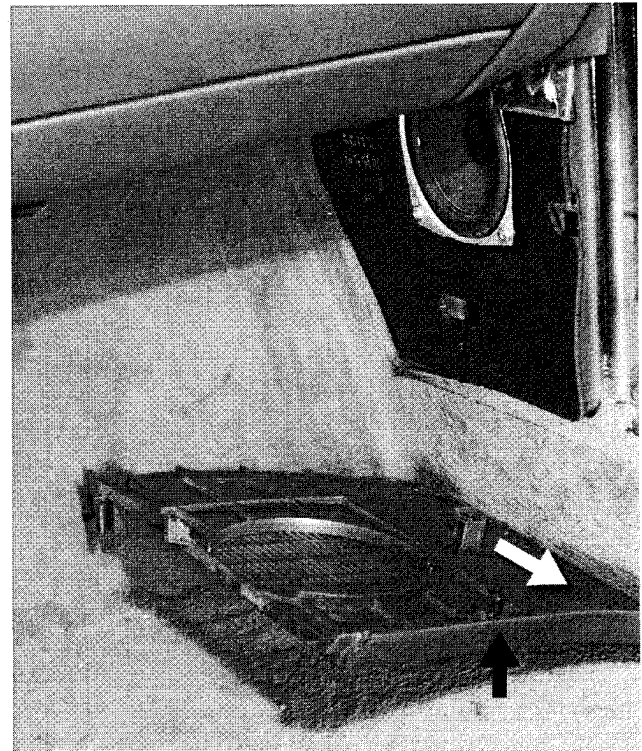
## Right footwell speaker, removing and installing

1. Remove glove compartment lower trim. See Fig. 10.
2. Rotate speaker cover plastic retainer  $\frac{1}{4}$  turn. Remove door seal at edge of speaker cover. See Fig. 11.
3. Pull speaker trim panel away from body and then pull panel back toward rear of car.



0012582

**Fig. 10.** Remove lower glove compartment trim panel retaining screw (black arrow). Pull trim in direction shown (white arrows).

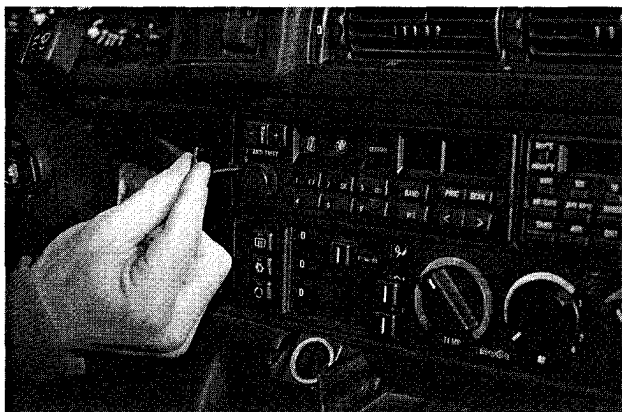


0012583

**Fig. 11.** Speaker cover retainer (black arrow). Pull trim in direction shown (white arrow).

4. Remove speaker by removing mounting screws. Disconnect harness connector(s) from speaker.
5. Installation is reverse of removal.

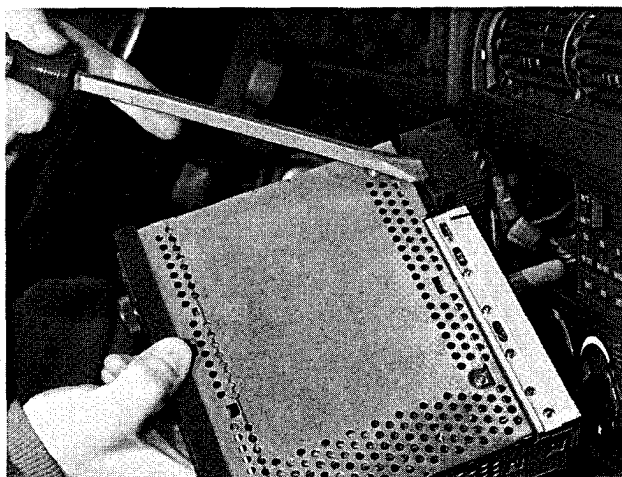
2. Using special hex key, turn radio mounting screws counterclockwise to loosen. See Fig. 4.



0011845

**Fig. 4.** Use special hex key or Torx driver to loosen/tighten radio mounting screws.

3. Pull radio out of instrument panel opening.
4. Remove connector(s) from rear of radio. See Fig. 5.



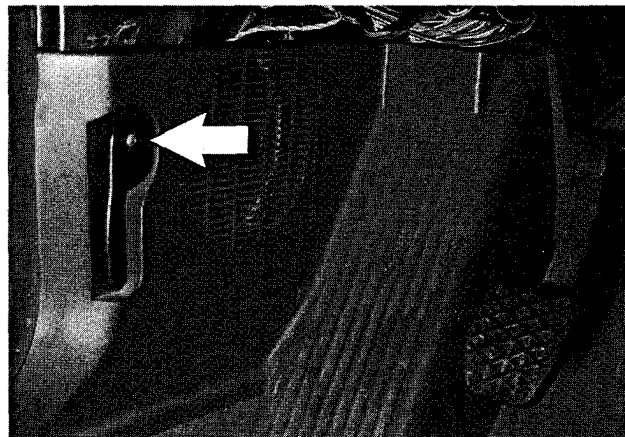
0011846

**Fig. 5.** Radio connector being removed.

5. Installation is reverse of removal.

## Left footwell speaker, removing and installing

1. Remove screw from center of hood latch release lever. Remove lever. See Fig. 6.



0012578

**Fig. 6.** Hood release lever retaining screw (arrow).

2. Rotate plastic trim panel retainer ¼ turn. Pull off door seal from edge of speaker cover and pull speaker trim panel back toward rear of car. See Fig. 7.



0012579

**Fig. 7.** Rotate plastic retainer (black arrow) and remove panel in direction shown (white arrows).

- A 320-watt Harmon-Kardon ten speaker system, including a separate high power multi-channel audio amplifier and two sub-woofers. In this system, the bass and volume outputs from the selected audio source automatically compensate for vehicle speed, making constant volume adjustments unnecessary. An additional feature of this sound system is the ability to switch from normal left-right stereo into Spatial Enhancement Mode, which produces a fuller, rounder sound. See Fig. 3.

The E36 radio is also equipped with a built-in anti-theft system. If power is removed from the radio circuitry by removing the radio electrical connectors, or by disconnecting the battery, the radio is rendered inoperative. The radio is not permanently damaged, and proper operation can be restored by entering the radio anti-theft code.

## RADIO AND SPEAKER SERVICE

### Radio, removing and installing

#### CAUTION —

- Before beginning work on the radio or sound system, verify that the radio is an original equipment BMW radio and that the wiring harness has not been modified.
- Servicing of aftermarket sound equipment should be referred to an authorized agent of the equipment's manufacturer.
- Do not remove radio or disconnect the battery without first obtaining the anti-theft code.

1. Carefully pry open small square covers at left and right sides of radio.

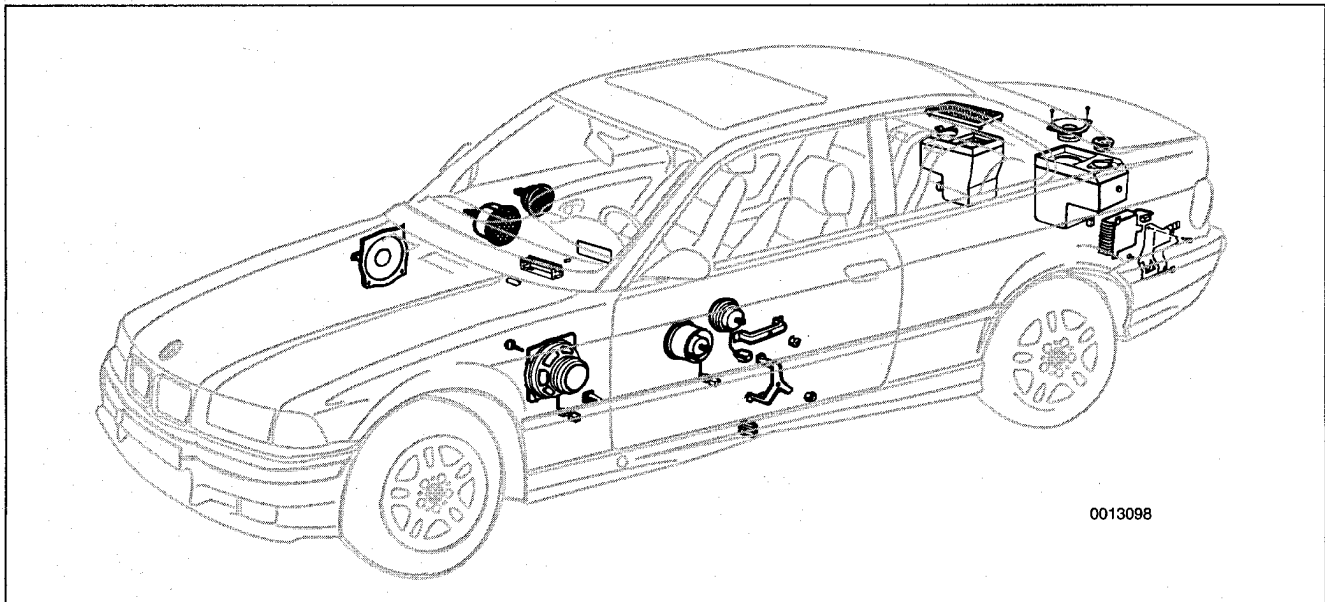


**Fig. 3.** Ten speaker sound system.

# 650 Radio

|                                                          |       |                                                      |       |
|----------------------------------------------------------|-------|------------------------------------------------------|-------|
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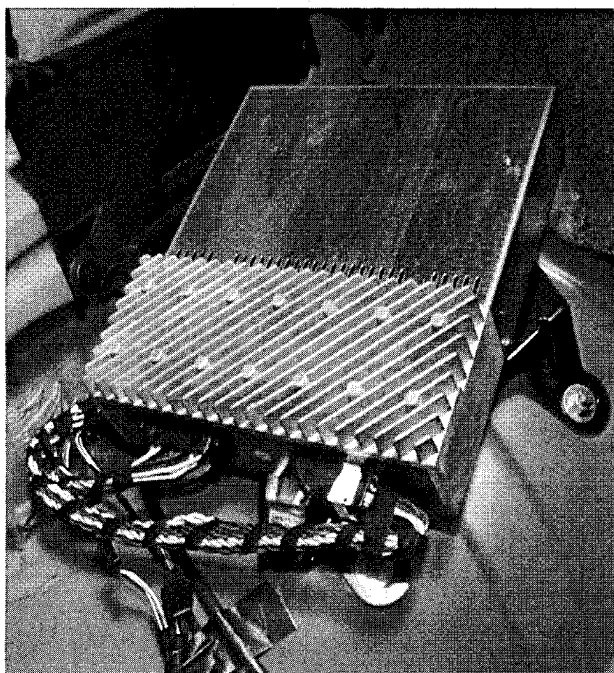
## TABLE

|                                               |       |
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|-----------------------------------------------|-------|

## GENERAL

This section covers the BMW factory-installed sound system, including radio and speaker removal, radio connectors and terminal designations.

The antenna is incorporated into the rear window defogger.



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**Fig. 1.** Radio amplifier (premium package) in luggage compartment behind left panel.

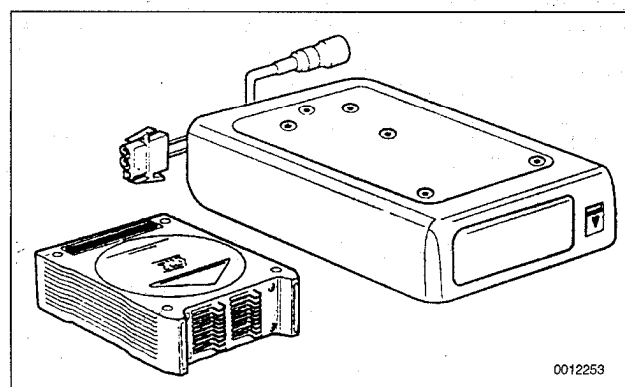
## AUDIO SYSTEM

The BMW E36 is equipped with a three band radio/cassette player unit mounted in the middle of the center console. In addition to AM and FM bands, the radio will receive broadcasts from the National Weather Service.

The cassette deck is equipped with the Dolby™ C noise reduction system, for improved tape performance with reduced background tape noise.

A 6-speaker audio system was standard in the early years of the model line. Many additional features have been installed as optional or standard equipment during the vehicle production run.

- A 200-watt power amplifier with custom-contoured equalization and ten speaker output. See Fig. 1.
- A multi-disc compact disc changer, for which the vehicle and the radio are prewired. See Fig. 2.



0012253

**Fig. 2.** Optional multi-disc compact disc changer and disc cartridge.

AUDIO SYSTEM