AUDI SYSTEM
PARTS LOCATION

Liftback

Front Tweeter
Front Speaker
Door Speaker
Radio
Ignition Switch
Power Amplifier
Rear Speaker
Rear Tweeter
Antenna
Glass Printed Antenna
Antenna Motor and Control Relay

Coupe

Glass Printed Antenna
SYSTEM DESCRIPTION

RADIO WAVE BAND
The radio wave bands used in radio broadcasting are as follows:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>30 kHz</th>
<th>300 kHz</th>
<th>3 MHz</th>
<th>30 MHz</th>
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<tr>
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<td>LF</td>
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There is great difference in the size of the service area for AM, FM monaural, and FM stereo broadcasting. Thus it may happen that FM broadcast cannot be received even though AM comes in very clearly. Not only does FM stereo have the smallest service area, but it also picks up static and other types of interference ("noise") the most easily.

RECEPTION PROBLEMS
Besides the problem of static, there are also the problems called “fading,” “multipath”, and “fade out”. These problems are caused not by electrical noise but by the nature of the radio waves themselves.

Fading
Besides electrical interference, AM broadcasts are also susceptible to other types of interference, especially at night. This is because AM radio waves bounce off the ionosphere at night. These radio waves then interfere with the signals from the same transmitter that reach the vehicle’s antenna directly. This type of interference is called “fading”.

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One type of interference caused by the bouncing of radio waves off of obstructions is called “multipath”. Multipath occurs when a signal from the broadcast transmitter antenna bounces off of buildings and mountains and interferes with the signal that is received directly.

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COMPACT DISC PLAYER
Compact Disc (hereafter called “CD”) players use a laser beam pick-up to read the digital signals recorded on the CD and reproduce analog signals of the music, etc. There are 4.7 in. (12 cm) and 3.2 in. (8 cm) CD available.

HINT: Never attempt to disassemble or oil any part of the player unit. Do not insert any object other than a disc into the slot.

NOTICE: CD players use invisible laser beam which could cause hazardous radiation exposure if directed. Be sure to operate the player correctly as instructed.

MAINTENANCE
(Tape Player)
Head Cleaning
(a) Raise the cassette door with your finger.
   Next using a pencil or like object, push in the guide.
(b) Using a cleaning pen or cotton applicator soaked in cleaner, clean the head surface, pinch rollers and capstans.

(CD Player)
Disc Cleaning
If the Disc gets dirty, clean the Disc by wiping the surfaces from the center to outside in the radial directions with a soft cloth.

NOTICE: Do not use a conventional record cleaner or anti-static record preservative.

AUDIO TYPES
Example:

Radio w/o Tape Player

Radio – Type Player Unit

Radio – Tape Player (Separate)

Radio – Tape Player – CD Player Unit
HOW TO USE DIAGNOSTIC CHART

1. Radio NO POWER COMING IN
   
   1. Audio system type and symbol used.
      HINT: Confirm the applicable type of audio system. (See page BE–126).
   2. Symbol for type of audio system the question applies to.
      HINT: If the audio system type is not applicable, proceed to next question below.
   3. Junction without black circle.
      HINT: Proceed to next question below.
   4. Junction with black circle.
      HINT: Proceed to question for applicable audio system type.
   5. HINT: Select question for applicable audio system type.

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(5) HINT: Select question for applicable audio system type.
ANTI–THEFT SYSTEM

The anti–theft system is only provided for audio systems equipped with an Acoustic Flavor function.
HINT: The words “ANTI–THEFT SYSTEM” are displayed on the cassette tape slot cover.
For operation instructions for the anti–theft system, please consult the audio system section in the Owner’s Manual.

1. SETTING SYSTEM
The system is in operation once the customer has pushed the required buttons and entered the customer–selected 3–digit ID number.
(Refer to the Owner’s Manual section, “SETTING THE ANTI–THEFT SYSTEM”)
HINT:
• When the audio system is shipped the ID number has not been input, so the anti–theft system is not in operation.
• If the ID number has not been input, the audio system remains the same as a normal audio system.

2. ANTI–THEFT SYSTEM OPERATION
If the normal electrical power source (connector or battery terminal) is cut off, the audio system becomes inoperable, even if the power supply resumes.

3. CANCELLING SYSTEM
The ID number chosen by the customer is input to cancel the anti–theft system.
(Refer to the Owner’s Manual, “IF THE SYSTEM IS ACTIVATED”)
HINT: To change or cancel the ID number, please refer to the Owner’s Manual, “CANCELLING THE SYSTEM”.


**TROUBLESHOOTING**

**NOTICE:** When replacing the internal mechanism (ECU part) of the audio system, be careful that no part of your body or clothing comes in contact with the terminals of the leads from the IC, etc. of the replacement part (spare part).

**HINTS:** This inspection procedure is a simple troubleshooting which should be carried out on the vehicle during system operation and was prepared on the assumption of system component troubles (except for the wires and connectors, etc.).

- Always inspect the trouble taking the following items into consideration.
- Open or short circuit of the wire harness
- Connector or terminal connection fault
- For audio systems with anti-theft system, troubleshooting items marked (*) indicate that “Troubleshooting for ANTI-THEFT SYSTEM” should be carried out first.

<table>
<thead>
<tr>
<th>Problem</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tape jammed, malfunction with tape speed or auto-reverse.</td>
<td>13</td>
</tr>
<tr>
<td>APS, SKIP, RPT buttons not operating.</td>
<td>14</td>
</tr>
<tr>
<td>Cassette tape will not eject.</td>
<td>*15</td>
</tr>
<tr>
<td>CD cannot be inserted.</td>
<td>16</td>
</tr>
<tr>
<td>CD inserts, but no power.</td>
<td>17</td>
</tr>
<tr>
<td>Power coming in, but CD player not operating.</td>
<td>18</td>
</tr>
<tr>
<td>Sound jumps.</td>
<td>19</td>
</tr>
<tr>
<td>Sound quality poor (Volume faint).</td>
<td>20</td>
</tr>
<tr>
<td>Either speaker does not work.</td>
<td>21</td>
</tr>
<tr>
<td>CD will not eject.</td>
<td>22</td>
</tr>
<tr>
<td>Antenna – related.</td>
<td>23</td>
</tr>
<tr>
<td>Noise produced by vibration or shock while driving.</td>
<td>24</td>
</tr>
<tr>
<td>Noise produced when engine starts.</td>
<td>25</td>
</tr>
<tr>
<td>Radio</td>
<td></td>
</tr>
<tr>
<td>No power coming in.</td>
<td>*1</td>
</tr>
<tr>
<td>Power coming in, but radio not operating.</td>
<td>*2</td>
</tr>
<tr>
<td>Noise present, but AM–FM not operating.</td>
<td>3</td>
</tr>
<tr>
<td>Either speaker does not work.</td>
<td>4</td>
</tr>
<tr>
<td>Either AM or FM does not work.</td>
<td>5</td>
</tr>
<tr>
<td>Reception poor (Volume faint).</td>
<td>5</td>
</tr>
<tr>
<td>Few preset tuning bands.</td>
<td>5</td>
</tr>
<tr>
<td>Sound quality poor.</td>
<td>6</td>
</tr>
<tr>
<td>Cannot set station select button.</td>
<td>7</td>
</tr>
<tr>
<td>Preset memory disappears.</td>
<td>7</td>
</tr>
<tr>
<td>Tape Player</td>
<td></td>
</tr>
<tr>
<td>Cassette tape cannot be inserted.</td>
<td>8</td>
</tr>
<tr>
<td>Cassette tape inserts, but no power.</td>
<td>*9</td>
</tr>
<tr>
<td>Power coming in, but tape player not operating.</td>
<td>10</td>
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<tr>
<td>Either speaker does not work.</td>
<td>11</td>
</tr>
<tr>
<td>Sound quality poor (Volume faint).</td>
<td>12</td>
</tr>
<tr>
<td>Tape jammed, malfunction with tape speed or auto-reverse.</td>
<td>13</td>
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<tr>
<td>CD Player</td>
<td></td>
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<tr>
<td>Antenna</td>
<td></td>
</tr>
<tr>
<td>Noise</td>
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</table>
Troubleshooting for ANTI–THEFT SYSTEM

Turn ignition key from LOCK position to ACC position.

Display A: ID Number is set.

“SEC” display disappears after 1 seconds.

No

Display B

Radio switch ON.

OK Normal operation.

Radio switch ON.

NG

Cancel ID number, refer to each malfunction item.

Display E: ANTI–THEFT SYSTEM operation condition (ID number input error 10 times or more.)

Take to designated radio service station.

Display B

Display D

Refer to each malfunction item.

Normal operation.

Display C → A

ANTI–THEFT SYSTEM cancelled, check audio system again.

OK Normal operation.

No

Cancel ID number, refer to each malfunction item.

ANTI–THEFT SYSTEM operation condition.
(ID number input error 9 times or less.)

Input ID number to cancel ANTI–THEFT SYSTEM, and check display.

Display A → B

Radio switch ON.

Display D

Display “E”

HINT:
- Refer to Owner’s Manual for operation details of ANTI–THEFT SYSTEM.
- When the ID number has been cancelled, reset the same number after completing the operation, or inform the customer that it has been cancelled.
1 Radio

**NO POWER COMING IN**

- **R**: w/o Tape Player
- **S**: Radio – Tape Player (Separate)
- **U**: Radio – Tape Player Unit
- **C**: Radio – Tape Player – CD Player Unit

**S U C**

Is tape player operating normally?

- **R**
  - No **U C S**

**R S U C**

Check if CIG & RAD fuse is OK?

- **NG** Replace fuse.
  - **OK**

- **R** Is ACC applied to radio?
  - **No** **ACC wire harness faulty.**
    - **S** Is ACC applied to tape player?
      - **No** **ACC wire harness faulty.**
        - **U C** Is ACC applied to power amplifier?
          - **Yes**
            - **R** Check if GND (wire harness side) to radio is OK?
              - **S** Check if GND (wire harness side) to tape player is OK?
                - **U C** Check if GND (wire harness side) to power amplifier is OK?
                  - **C** **R** Radio faulty.
                    - **S** Tape player faulty.

**U C S**

Is ACC applied to radio assembly?

- **No** **U C S** Power amplifier faulty.
  - **Yes**
    - Check if GND (wire harness side) to radio is OK?
      - **NG** **U C S** Power amplifier faulty.
        - **OK** Radio assembly faulty.
POWER COMING IN, BUT RADIO NOT OPERATING

R: w/o Tape Player  S: Radio – Tape Player  U: Radio – Tape Player Unit
C: Radio – Tape Player – CD Player Unit

Do speakers pop when the volume switch is turned to maximum and then the power is switched OK?

No

Yes

Is power for the antenna being output from the radio?

Radio faulty.

Yes

Is tape player operating normally?

No

Is power for the antenna being output from the radio or radio assembly?

Radio or radio assembly faulty.

Yes

Is power for the antenna being output from the power amplifier?

Power amplifier faulty.

Radio

S

Yes

Is tape player operating normally?

No

Speaker wire harness faulty.

Yes

Speaker faulty.

No

Temporarily install another speaker. Functions OK?

Speakers faulty.

Yes

If radio side faulty.

Go to No.23.

Radio faulty.

No

S

Hissing sound from speaker?

No

Radio assembly faulty. Recheck system after repair.

Yes

Power amplifier faulty. Recheck system after repair.

Yes

Go to No.23.

If radio side faulty.
3 Radio

NOISE PRESENT, BUT AM–FM NOT OPERATING

\[ R \]: w/o Tape Player \[ S \]: Radio – Tape Player \[ U \]: Radio – Tape Player Unit
\[ C \]: Radio – Tape Player – CD Player Unit

Is power for the antenna being output from the radio or radio assembly?

- Yes \( R \) \[ S \] \[ U \] \[ C \]
  - Is power for the antenna being output from the power amplifier?
    - Yes \[ No \]
    - Go to No.23.
    - No \[ S \] \[ C \]
      - Power amplifier faulty.

Radio or radio assembly faulty.

If radio side faulty

- \[ S \] \[ U \] \[ C \]
  - Radio or radio assembly faulty.

Is tape player operating normally?

- Yes \[ No \]
  - Radio or radio assembly faulty.
- No \[ U \] \[ C \] \[ S \]
  - Hissing sound from speaker?
    - No \[ No \]
      - Power amplifier faulty. Recheck system after repair.
    - Yes \[ Yes \]
      - Radio assembly faulty. Recheck system after repair.
4 Radio

EITHER SPEAKER DOES NOT WORK

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<th>[S]</th>
<th>: Radio – Tape Player</th>
<th>U</th>
<th>: Radio – Tape Player Unit</th>
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<tbody>
<tr>
<td>C</td>
<td>: Radio – Tape Player – CD Player Unit</td>
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<td></td>
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Is tape player operating normally?

Yes

Radio or radio assembly faulty.

No

Is hiss produced by non-functioning speaker?

Yes

Radio faulty.

S

Radio assembly faulty.

U

Radio assembly faulty. Recheck system after repair.

C

Is there continuity in speaker wire harness?

Yes

Temporarily install another speaker. Functions OK?

Yes

Speaker faulty.

No

Radio faulty.

S

Radio assembly faulty.

U

Radio amplifier faulty. Recheck system after repair.

C

5 Radio

EITHER AM OR FM DOES NOT WORK, RECEPTION POOR (VOLUME FAINT), FEW PRESET TUNING BANDS

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<tr>
<td>C</td>
<td>: Radio – Tape Player – CD Player Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Problem with radio wave signals or location? (See page BE–125)

Yes

Poor signals, poor location.

No

Are both AM and FM defective?

Yes

Radio or radio assembly faulty.

No

Is power for the antenna being output from the radio or radio assembly?

Yes

CONTINUED ON NEXT PAGE
CONTINUED FROM PREVIOUS PAGE

Go to No. 23.

If radio side faulty

R S U C

Is tape player operating normally?

Yes

Radio or radio assembly faulty.

No

S U C

Radio faulty.

USC

R

Radio faulty.

UCS

Hissing sound from speaker?

No

Power amplifier faulty. Recheck system after repair.

Yes

Radio assembly faulty. Recheck system after repair.

6 Radio

SOUND QUALITY POOR

R : w/o Tape Player
S : Radio – Tape Player
U : Radio – Tape Player Unit
C : Radio – Tape Player – CD Player Unit

Is sound quality is always bad?

No

Is sound quality bad in certain areas only?

Yes

Poor signals, poor location.

No

Yes

S U C

Is tape player operating normally?

Radio or radio assembly faulty.

No

Radio assembly or power amplifier faulty.

CONTINUED ON NEXT PAGE
CONTINUED FROM PREVIOUS PAGE

**R**

Is tape player operating normally?

Yes

Is power for the antenna being output from the radio or radio assembly?

No

Radio or radio assembly faulty.

**S U C**

Yes

**S U C**

No

**S C**

Power amplifier faulty.

**S**

Is power for the antenna being output from the power amplifier?

**S C**

Radio assembly or power amplifier.

**R**

Is power for the antenna being output from the radio?

No

Radio faulty.

Yes

Go to No.23.

If radio side faulty

Yes

Speaker faulty.

No

Install properly.

Temporarily install another speaker. Functions OK?

Yes

Speaker faulty.

No

**R**

Is speaker properly installed?

No

Install properly.

**S U C**

Radio assembly or power amplifier.

**R**

Radio assembly or power amplifier faulty. Recheck system after repair.

**7 Radio**

CANNOT SET STATION SELECT BUTTON, PRESET MEMORY DISAPPEARS

**R** : w/o Tape Player  **S** : Radio – Tape Player  **U** : Radio – Tape Player Unit  **C** : Radio – Tape Player – CD Player Unit

**U C**

Can cassette tape be inserted in tape player?

Yes

Radio assembly faulty.

No

**R S U C**

Replace fuse.

Check if DOME fuse is OK?

NG

Replace fuse.

OK

CONTINUED ON NEXT PAGE
CONTINUED FROM PREVIOUS PAGE

Radio – Tape Player – CD Player Unit

8 Tape Player CASSETTE TAPE CANNOT BE INSERTED

S: Radio – Tape Player
U: Radio – Tape Player Unit
C: Radio – Tape Player – CD Player Unit

Is there a foreign object inside tape player? Yes Remove foreign object.

No

UC

Tape player faulty.

SC

Is auto search button of radio operating normally? Yes Radio assembly faulty.

No

Check if DOME fuse is OK? NG Replace fuse.

OK

UC

Is +B applied to power amplifier? No +B wire harness faulty.

Yes

Check if GND (wire harness side) to power amplifier is GK? NG GND faulty.

OK

CONTINUED ON NEXT PAGE
CONTINUED FROM PREVIOUS PAGE

Is \( +B \) applied to radio assembly? 

No: Power amplifier faulty.

Yes

Check if GND (wire harness side) to radio assembly is OK?

NG: Power amplifier faulty.

OK

Radio assembly faulty.

---

**9 Tape Player**  
**CASSETTE TAPE INSERTS, BUT NO POWER**

\[ S \]: Radio – Tape Player  \[ U \]: Radio – Tape Player Unit  
\[ C \]: Radio – Tape Player – CD Player Unit

Is radio operating normally? 

Yes: \[ S U C \] Radio assembly faulty.

No

Check if CIG & RAD fuse is OK?

NG: Replace fuse.

\[ S U C \] OK

Is ACC applied to power amplifier? 

No: ACC wire harness faulty.

Yes

Is ACC applied to radio assembly? 

No: \[ S U \] ACC wire harness faulty.

Yes: \[ S C \] Power amplifier faulty.

Radio assembly faulty.
10 Tape Player [POWER COMING IN, BUT TAPE PLAYER NOT OPERATING]

- **S**: Radio – Tape Player
- **U**: Radio – Tape Player Unit
- **C**: Radio – Tape Player – CD Player Unit

**Functions OK if different cassette tape inserted?**
- Yes → Cassette tape faulty.
- No → Is radio operating normally?
  - Yes → **S U C** Radio assembly faulty.
  - No → Is there continuity in speaker wire harness?
    - No → Speaker wire harness faulty.
    - Yes → Temporarily install another speaker. Functions OK?
      - Yes → Speaker faulty.
      - No → **U C S**
        - **S** Radio assembly faulty.

**S U C**

**Hissing sound from speaker?**
- No → Power amplifier faulty. Recheck system after repair.

11 Tape Player [EITHER SPEAKER DOES NOT WORK]

- **S**: Radio – Tape Player
- **U**: Radio – Tape Player Unit
- **C**: Radio – Tape Player – CD Player Unit

**Is radio operating normally?**
- Yes → **S U C** Radio assembly faulty.
- No → Is hiss produced by non–functioning speaker?
  - Yes → **S** Radio assembly faulty.
  - No → Is there continuity in speaker wire harness?
    - Yes → CONTINUED ON NEXT PAGE
## Tape Player

**SOUND QUALITY POOR (VOLUME PAINT)**

<table>
<thead>
<tr>
<th></th>
<th>Radio – Tape Player</th>
<th>Radio – Tape Player Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Tape player faulty.</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>Radio assembly faulty.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Power amplifier faulty. Recheck system after repair.</td>
<td></td>
</tr>
</tbody>
</table>

### Function OK if different cassette tape inserted?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cassette tape faulty.</td>
<td></td>
</tr>
</tbody>
</table>

### Operates normally after cleaning the heads? (See page BE–126)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Head dirty.</td>
<td></td>
</tr>
</tbody>
</table>

### Is radio operating normally?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>C</td>
<td>U</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Radio assembly faulty.</td>
<td></td>
</tr>
</tbody>
</table>

### Is speaker properly installed?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Install properly.</td>
<td></td>
</tr>
</tbody>
</table>

### Temporarily install another speaker. Functions OK?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speaker faulty.</td>
<td></td>
</tr>
</tbody>
</table>

### Radio assembly or power amplifier faulty.

<table>
<thead>
<tr>
<th></th>
<th>Radio assembly faulty.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Radio assembly or power amplifier faulty.</td>
</tr>
</tbody>
</table>
13 Tape Player TAPE JAMMED, MALFUNCTION WITH TAPE SPEED OR AUTO–REVERSE

S : Radio – Tape Player  U : Radio – Tape Player Unit
C : Radio – Tape Player – CD Player Unit

Functions OK if different tape (less than 120 mins.) is inserted?
Yes → Cassette tape faulty.
No

Is there a foreign object inside tape player?
Yes → Remove foreign object.
No

Operates normally after cleaning the heads? (See page BE–126)
Yes → Head dirty.
No

S U C Radio assembly faulty.

14 Tape Player APS, SKIP RPT BUTTONS NOT OPERATING

Functions OK if different cassette tape inserted?
No → Radio assembly faulty.
Yes

Cassette tape faulty. (Less than 3 secs. of silence between songs (APS, RPT). Less than 15 secs. of silence (SKIP).)

15 Tape Player CASSETTE TAPE WILL NOT EJECT

S : Radio – Tape Player  U : Radio – Tape Player Unit
C : Radio – Tape Player – CD Player Unit

Is tape player operating normally?
No → Cassette tape jammed.
Yes

Is auto search button of radio operating normally?
Yes → Radio assembly faulty.
No

Check if DOME fuse is OK?
NG → Replace fuse.
OK → CONTINUED ON NEXT PAGE
CONTINUED FROM PREVIOUS PAGE

Is +B applied to power amplifier?  
Yes  
No

Is +B applied to radio assembly?  
Yes  
No

Radio assembly faulty.

CD CANNOT BE INSERTED

Is CD already inserted?  
Yes  
No

Is auto search button of radio operating normally?  
Yes  
No

Is +B applied to CD player?  
Yes  
No

Radio assembly faulty.

Check if GND (wire harness side) to CD player is OK?  
OK  
NG

CD player faulty.

Check if DOME fuse is OK?  
NG  
OK

Replace fuse.

Is +B applied to power amplifier?  
Yes  
No

+G wire harness faulty.

Check if GND (wire harness side) to power amplifier is OK?  
NG  
OK

GND faulty.

Is +B applied to radio assembly?  
Yes  
No

Power amplifier faulty.

Check if GND (wire harness side) to radio assembly is OK?  
OK  
NG

Radio assembly faulty.
17 CD Player

CD INSERTS, BUT NO POWER

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is radio operating normally?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check if CIG &amp; RAD fuse is OK?</td>
<td>NG</td>
<td>OK</td>
</tr>
<tr>
<td>OK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is ACC applied to power amplifier?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is ACC applied to radio assembly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is ACC applied to CD player?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio assembly faulty.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18 CD Player

POWER COMING IN, BUT CD PLAYER NOT OPERATING

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is CD inserted correct side up?</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functions OK if different CD inserted?</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Is radio operating normally?</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is temperature inside cabin hot?</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has sudden temperature change occurred inside cabin?</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there continuity in speaker wire harness?</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporarily install another speaker. Functions OK?</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hissing sound from speaker?</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio assembly faulty.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Replace fuse.  
ACC wire harness faulty.  
Power amplifier faulty.  
Insert correctly.  
CD faulty.  
Protective circuit in operation.  
Formation of condensation due to temp. change.  
Speaker wire harness faulty.  
Speaker faulty.  
Power amplifier faulty.  
Recheck system after repair.
19 | **CD Player** | **SOUND JUMPS**

Does sound jump only during strong vibration? **Yes** Jumping caused by vibration.

No

Is CD player properly installed? **No** Install properly.

Yes

Functions OK if different CD inserted? **Yes** CD faulty.

No

Has sudden temperature change occurred inside cabin? **Yes** Formation of condensation due to temp. change.

No

CD player faulty.

20 | **CD Player** | **SOUND QUALITY POOR (VOLUME FAINT)**

Functions OK if different CD inserted? **Yes** CD faulty.

No

Is radio operating normally? **Yes** CD player faulty.

No

Is speaker properly installed? **No** Install properly.

Yes

Temporarily install another speaker. Functions OK? **Yes** Speaker faulty.

No

Radio assembly or CD player or power amplifier faulty.
### 21 CD Player

**EITHER SPEAKER DOES NOT WORK**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is radio operating normally?</td>
<td>No</td>
<td>CD player faulty.</td>
</tr>
<tr>
<td>Is there continuity in speaker wire harness?</td>
<td>No</td>
<td>Speaker wire harness faulty.</td>
</tr>
<tr>
<td>Temporarily install another speaker. Functions OK.</td>
<td>Yes</td>
<td>Speaker faulty.</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Power amplifier faulty. Recheck system after repair.</td>
</tr>
</tbody>
</table>

### 22 CD Player

**CD WILL NOT EJECT**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is auto search button of radio operating normally?</td>
<td>Yes</td>
<td>Is +B applied to CD player?</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Radio assembly faulty.</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>CD player faulty.</td>
</tr>
<tr>
<td>Check if DOME fuse is OK?</td>
<td>NG</td>
<td>Replace fuse.</td>
</tr>
<tr>
<td></td>
<td>OK</td>
<td>Replace fuse.</td>
</tr>
<tr>
<td>Is +B applied to power amplifier?</td>
<td>No</td>
<td>+B wire harness faulty.</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Replace fuse.</td>
</tr>
<tr>
<td>Is +B applied to radio assembly?</td>
<td>No</td>
<td>Power amplifier faulty.</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Replace fuse.</td>
</tr>
<tr>
<td>Radio assembly faulty.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Antenna**

**ANTENNA–RELATED**

| P | Antenna w/o Motor | M | Motor Antenna | [D] | Motor Antenna and Glass Printed Antenna |

**P**

- Is antenna extended? **No** → Extend fully.
  - Yes
    - Temporarily install another antenna. Functions OK? **Yes** → Antenna faulty.
    - No → Radio side faulty.

**M, D**

- Does antenna extend when radio switched ON? **Yes**
  - **M** → Inspect glass printed antenna. (See page BE–149)
  - **D**
    - **NG** → Glass printed antenna faulty.
    - **OK** → Temporarily install another antenna. Functions OK? **Yes** → Motor antenna faulty.
    - No → Radio side faulty.

- Inspect antenna motor. (See page BE–148) **NG** → Antenna motor faulty.
  - **OK**
    - Inspect antenna motor control relay. (Relay circuit) (See page BE–148) **OK** → Relay faulty.
    - **NG** → Is power related to the antenna being input to the antenna motor control relay? **Yes** → Relay circuit faulty.
    - **No** → Check continuity between antenna motor control relay and radio. **NG** → Wire harness faulty.
    - **OK** → Radio side faulty.
NOISE PRODUCED BY VIBRATION OR SHOCK WHILE DRIVING

Is speaker properly installed?  
Yes  
No  
Install properly.

Is each system correctly installed?  
Yes  
No

With vehicle stopped, lightly tap each system. Is noise produced?  
Yes  
Each system faulty.

No  
Noise produced by static electricity accumulating in the vehicle body.

NOISE PRODUCED WHEN ENGINE STARTS

Whistling noise which becomes high–pitched when accelerator strongly depressed, disappears shortly after engine stops.  
Yes  
Alternator noise.

No

Whining noise occurs when NC is operating.  
Yes  
A/C noise.

No

Scratching noise occurs during sudden acceleration, driving on rough roads or when ignition switch is turned on.  
Yes  
Fuel gauge noise.

No

Clicking sound heard when horn button is pressed, then released. Whirring/grating sound when pushed continuously.  
Yes  
Horn noise.

No

Murmuring sound, stops when engine stops.  
Yes  
Ignition noise.

No

Tick–tock noise, occurs in co–ordination with blinding of flasher.  
Yes  
Turn signal noise.

No

Noise occurs during window washer operation.  
Yes  
Washer noise.

No

Scratching noise occurs while engine is running, continues a while even after engine stops.  
Yes  
Engine coolant temp. gauge noise.

No

Scrapping noise in time with wiper beat.  
Yes  
Wiper noise.

No

Other type of noise.
ANTENNA MOTOR
ANTENNA MOTOR INSPECTION
(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (−) lead to terminal 4.
(b) Check that the motor turns (moves upward).
   NOTICE: These tests must be performed quickly (within 3 – 5 seconds) to prevent the coil from burning out.
(c) Then, reverse the polarity, check that the motor turns the opposite way (moves downward).
   NOTICE: These tests must be performed quickly (within 3 – 5 seconds) to prevent the coil from burning out.
If operation is not as specified, replace the motor.

ANTENNA MOTOR CONTROL RELAY
ANTENNA MOTOR CONTROL RELAY INSPECTION
RELAY CIRCUIT
Disconnect the connector from the relay and inspect the connector on wire harness side as shown in the chart.

<table>
<thead>
<tr>
<th>Check for</th>
<th>Tester connection</th>
<th>Condition</th>
<th>Specified value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuity</td>
<td>1 – 4</td>
<td>Constant</td>
<td>Continuity</td>
</tr>
<tr>
<td></td>
<td>2 – Ground</td>
<td>Constant</td>
<td>Continuity</td>
</tr>
<tr>
<td>Voltage</td>
<td>3 – Ground</td>
<td>Constant</td>
<td>Battery positive voltage</td>
</tr>
<tr>
<td></td>
<td>5 – Ground</td>
<td>Ignition switch position</td>
<td>LOCK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACC or ON</td>
<td>Battery positive voltage</td>
</tr>
<tr>
<td></td>
<td>6 – Ground</td>
<td>Ignition switch position</td>
<td>LOCK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACC or ON</td>
<td>No voltage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Radio switch and cassette OFF</td>
<td>Battery positive voltage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Radio switch or cassette ON</td>
<td>Battery positive voltage</td>
</tr>
<tr>
<td></td>
<td>8 – Ground</td>
<td>Ignition switch position</td>
<td>LOCK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACC or ON.</td>
<td>Radio switch OFF cassette ON</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Radio switch ON and cassette OFF</td>
<td>Battery positive voltage</td>
</tr>
<tr>
<td></td>
<td>9 – Ground</td>
<td>Ignition switch position</td>
<td>LOCK or ACC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ON</td>
<td>Battery positive voltage</td>
</tr>
</tbody>
</table>

If circuit is as specified, replace the relay.
GLASS PRINTED ANTENNA

GLASS PRINTED ANTENNA INSPECTION
Use same procedure as for “INSPECT DEFOGGER WIRES” on page BE–64.

REPAIR GLASS PRINTED ANTENNA
Use same procedure as for “REPAIR DEFOGGER WIRES” on page BE–64.

ANTENNA ROD

ANTENNA ROD REMOVAL AND INSTALLATION

REMOVE ANTENNA ROD
HINT: Perform this operation with the battery negative H cable connected to the battery terminal.
(a) Turn the ignition switch to “LOCK” position.
(b) Remove the antenna nut.
(C–1) With CD player
Press the “AM, FM” buttons on the radio receiver, and simultaneously turn the ignition switch to “ACC” position.
(C–2) Without CD player
Press the “AM” button on the radio receiver, and simultaneously turn the ignition switch to “ACC” position.

HINT:
• The rod will extend fully and be released from the motor antenna.
• After removing the antenna rod, leave the ignition switch at “ACC”.

NOTICE: To prevent body damage when the antenna rod is released, hole the rod while it comes out.
INSTALL ANTENNA ROD
(a) Insert the cable of the rod until it reaches the bottom.
   HINT:
   • When inserting the cable, the teeth on the cable must face toward the rear of the vehicle.
   • Insert the antenna approx. 300 mm (1.18 in.).
(b) Wind the cable to retract the rod by turning the ignition switch to “LOCK” position.
   HINT:
   • If the ignition switch is already in “LOCK” position, perform step 1 (c) first, then turn the ignition switch to “ACC” position.
   • In case the cable is not wound, twist it as shown in the illustration.
   • Even if the rod has not retracted fully, install the antenna nut and inspect the antenna rod operation. It will finally retract fully.
(c) Inspect the antenna rod operation by pushing the radio wave band select buttons.