

Specification

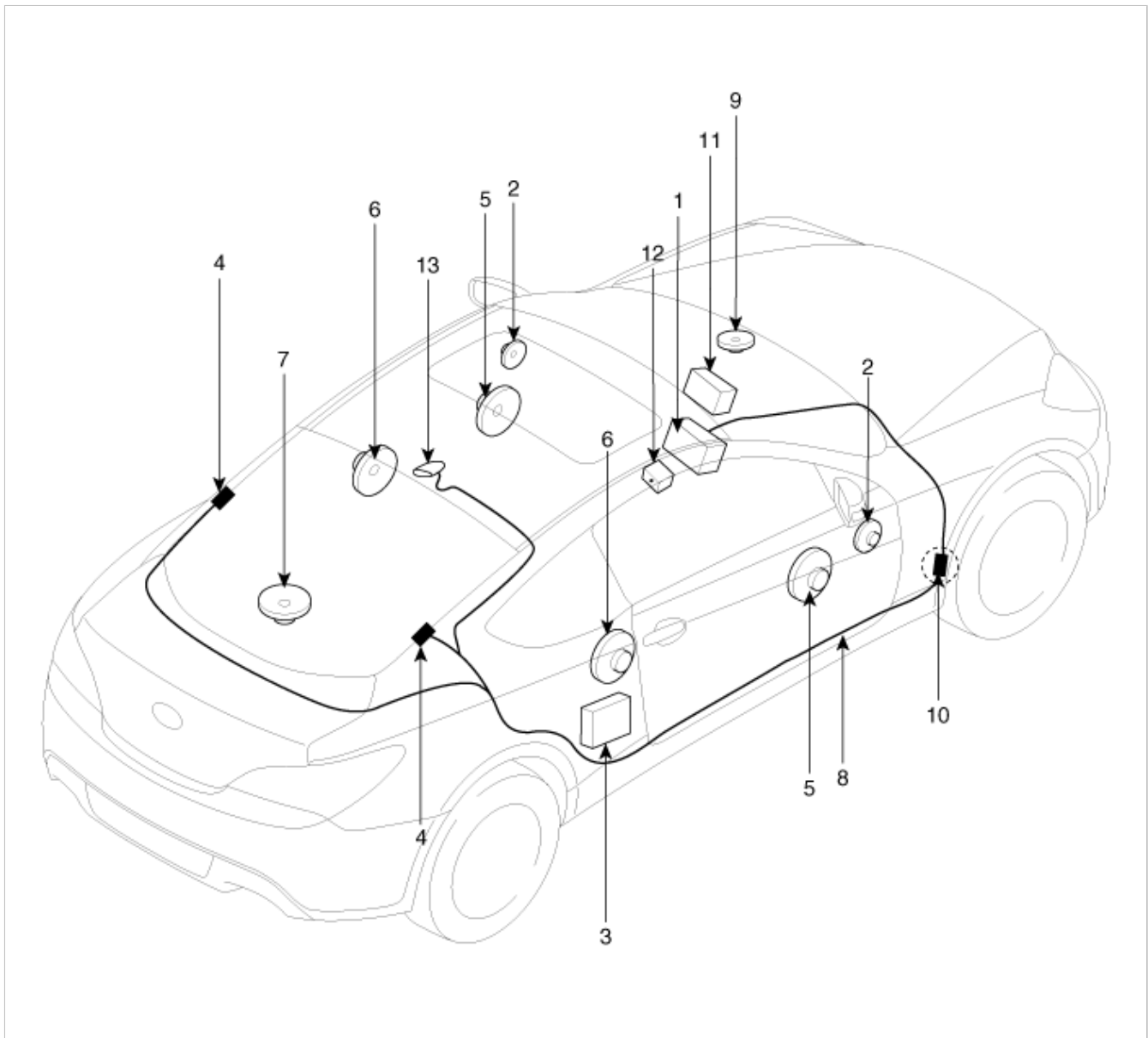
Audio

Item		Specification	
Model		RADIO/CD/MP3/XM (PA710S)	RADIO/CDC/MP3/XM (PA760S)
Power supply		DC 14.4V	
Rated output		Max. 43W x 4	Max. 3.2Vrms
Antenna		80PF 75Ω	
Tuning type		PLL synthesized type	
Other		Internal amplifier	External amplifier
Frequency range / Channel space	FM	87.5~107.9 MHz/ 200KHz	
	AM	530~1710 KHz/ 10KHz (General)	

Speaker

Item		PA710S	PA760S
Input power (W or V)	Front	MAX 40W	8 Vrms
	Rear	MAX 40W	8 Vrms
	Front center	-	8 Vrms
	Front tweeter	MAX 40W	8 Vrms
	Sub woofer	-	16 Vrms
Impedance(Ω)	Front	4 ± 0.6	Min 1.6
	Rear	4 ± 0.6	2.2 ± 0.4
	Front center	-	2.15 ± 0.25
	Front tweeter	3.4 ± 0.5	Min 3.6
	Sub woofer	-	4.8 ± 0.1
Number of speaker		6	8

Component Location



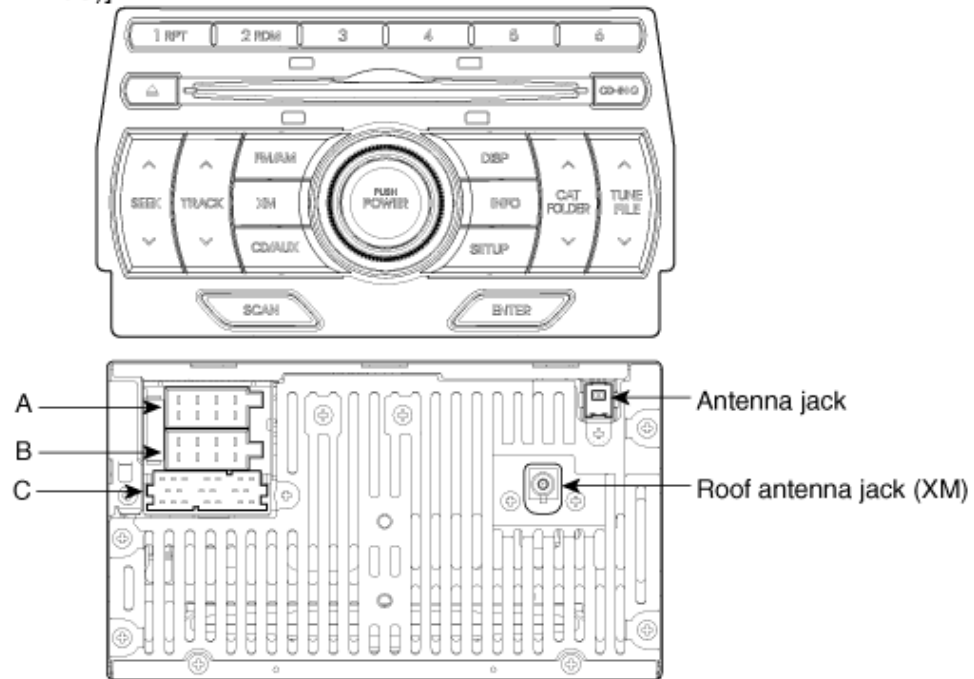
- 1. Audio unit
- 2. Tweeter speaker
- 3. External amp
- 4. Glass antenna
- 5. Front door speaker
- 6. Rear speaker
- 7. Woofer speaker

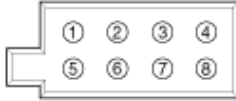


- 8. Antenna feeder cable
- 9. Crash pad center speaker
- 10. Feeder cable joint connector
- 11. Audio monitor
- 12. Aux jack
- 13. Roof antenna (SDARS)

※ SDARS : Satellite Digital Audio Radio Service

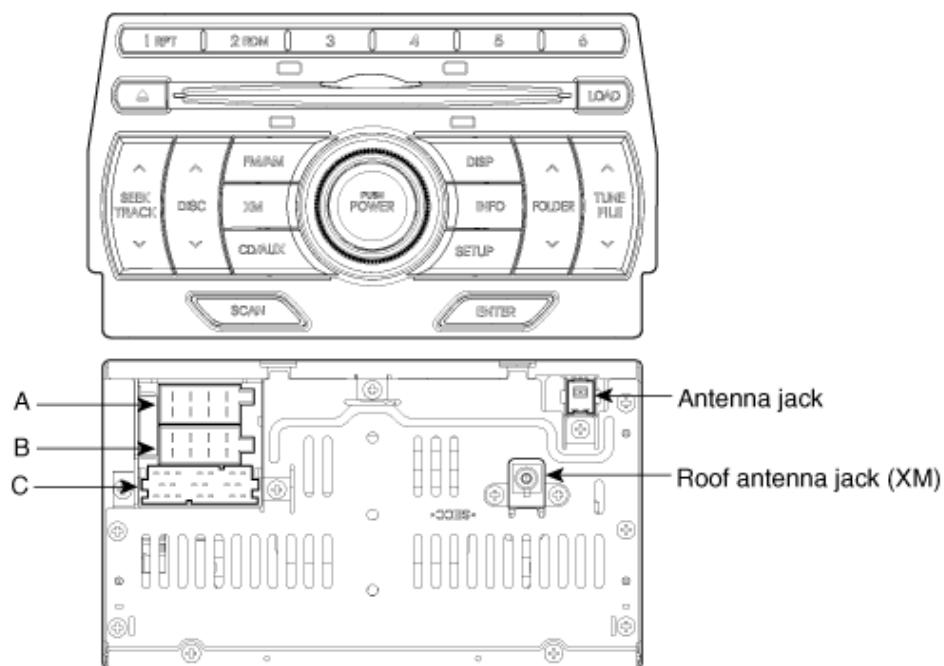
Components

[Radio/CD/MP3/XM (PA710S)]



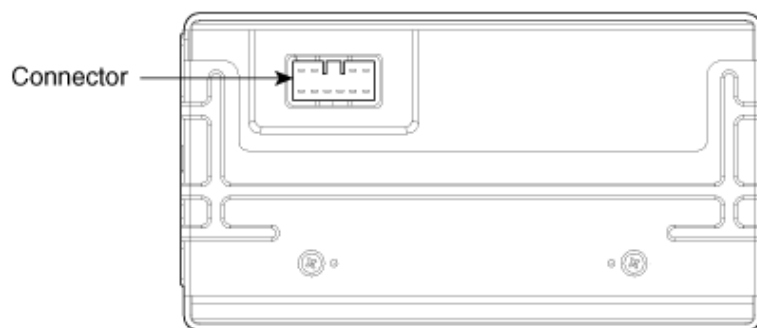
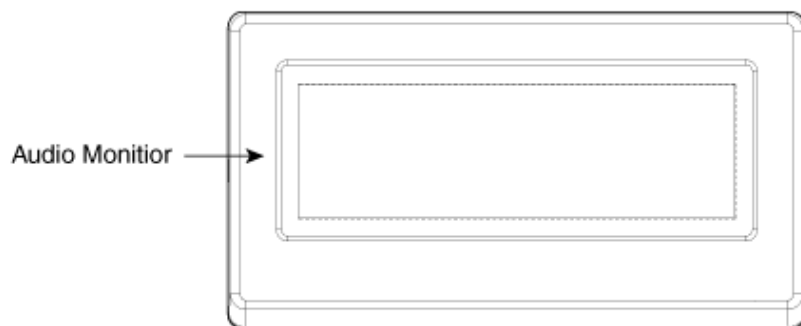
Connector A	Pin	Description	Pin	Description
	1	Speed	5	TEMP
	2	Illumination (+)	6	ACC
	3	Remote antenna	7	Illumination (-)
	4	Battery (+)	8	GND
Connector B	Pin	Description	Pin	Description
	1	Speaker RR +	5	Speaker RR -
	2	Speaker FR +	6	Speaker FR -
	3	Speaker FL +	7	Speaker FL -
	4	Speaker RL +	8	Speaker RL -
Connector C	Pin	Description	Pin	Description
	1-1	Mic(+)_Bluetooth	2-5	Steering Wheel Remote
	1-2	Mic(-)_Bluetooth	2-6	Remote GND
	1-3	-	3-1	-
	1-4	Bluetooth remote control	3-2	USB D-
	1-5	-	3-3	-
	1-6	Ignition	3-4	USB D+
	2-1	Aux Input R	3-5	USB/iPod/GND
	2-2	Aux Input L	3-6	-
	2-3	Aux REF	3-7	USB/iPod/VDD
	2-4	Aux DET	3-8	-

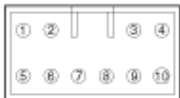
[Radio/CDC/MP3/XM (PA760S)]



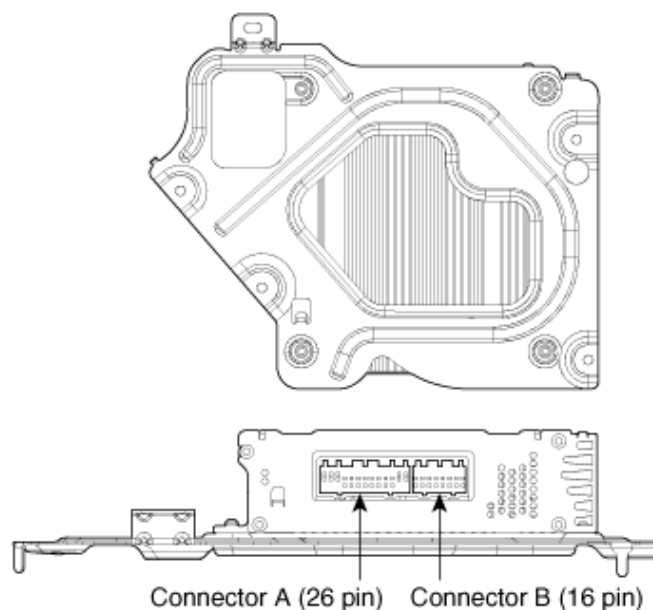
Connector A	Pin	Description	Pin	Description
	1	Speed	5	TEMP
	2	Illumination (+)	6	ACC
	3	Remote antenna	7	Illumination (-)
	4	Battery (+)	8	GND
Connector B	Pin	Description	Pin	Description
	1	Speaker RR +	5	Speaker RR -
	2	Speaker FR +	6	Speaker FR -
	3	Speaker FL +	7	Speaker FL -
	4	Speaker RL +	8	Speaker RL -
Connector C	Pin	Description	Pin	Description
	1-1	Mic(+)_Bluetooth	2-5	Steering Wheel Remote
	1-2	Mic(-)_Bluetooth	2-6	Remote GND
	1-3	-	3-1	-
	1-4	Bluetooth remote control	3-2	USB D-
	1-5	-	3-3	-
	1-6	Ignition	3-4	USB D+
	2-1	Aux Input R	3-5	USB/iPod/GND
	2-2	Aux Input L	3-6	Remote Amp
	2-3	Aux REF	3-7	USB/iPod/VDD
	2-4	Aux DET	3-8	-

[Audio Monitor]



Connector	No.	Name	No.	Name
	1	ILL (-)	6	-
	2	-	7	CAN -
	3	-	8	CAN +
	4	Power ground	9	ACC
	5	ILL (+)	10	Battery

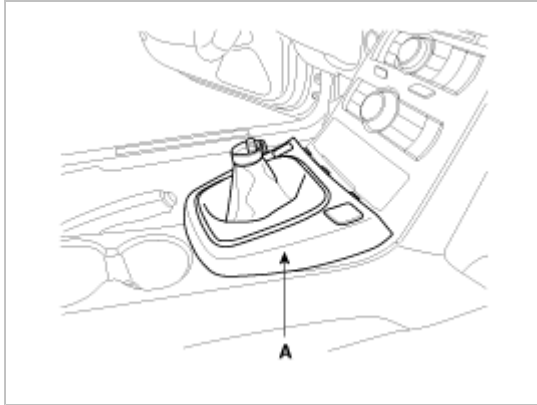
[External Amplifier]



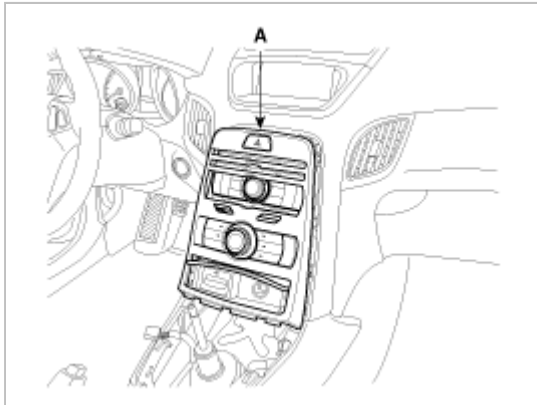
No.	Connector A	Connector B
1	B+	-
2	B+	-
3	B+	-
4	Front left input +	-
5	Front right input +	Rear door left + (CH 4)
6	Rear left input +	Front center + (CH 3)
7	Rear right input +	Front right + (CH 2)
8	ON/OFF	Front left + (CH 1)
9	-	-
10	Rear door right + (CH 8)	-
11	-	-
12	Sub 2 + (CH 6)	-
13	Sub 1 + (CH 5)	Rear door left - (CH 4)
14	GND	Front center - (CH 3)
15	GND	Front right - (CH 2)
16	GND	Front left - (CH 1)
17	Front left input -	
18	Front right input -	
19	Rear left input -	
20	Rear right input -	
21	Speed	
22	Mode EQ select	
23	Rear door right - (CH 8)	
24	-	
25	Sub 2 - (CH 6)	
26	Sub 1 - (CH 5)	

Removal

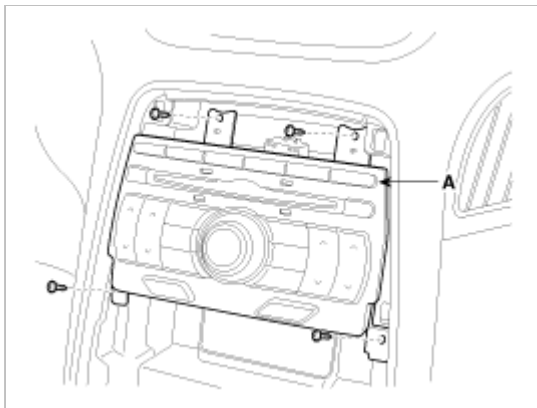
1. Disconnect the negative (-) battery terminal.
2. Remove the console upper cover(A).



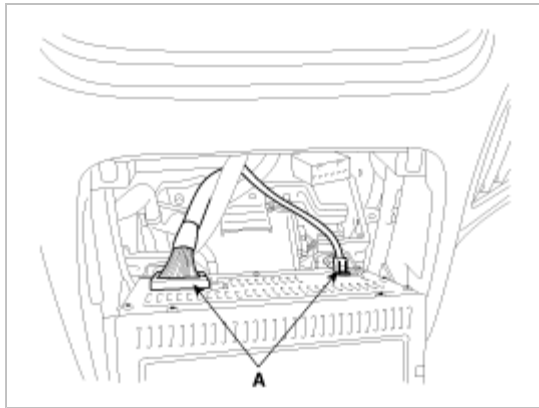
3. Remove the crash pad center fascia lower panel(A).
(Refer to the BD group - "Crash pad")



4. Remove the mounting screws then remove the audio head unit(A).

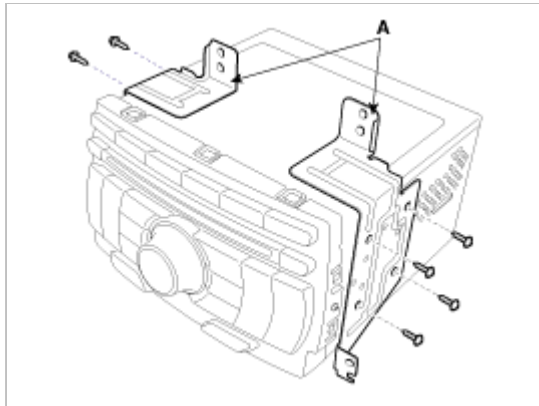


5. Remove the connectors and cable(A).

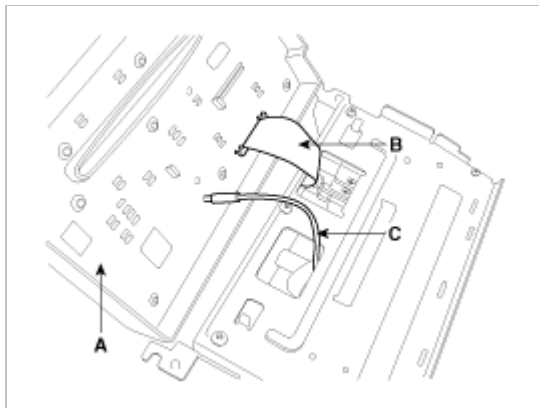


Disassembly

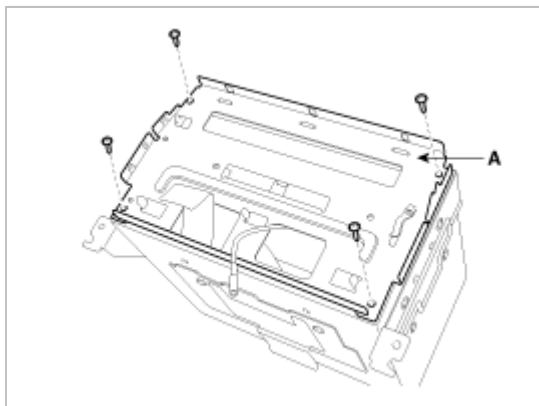
1. Remove the brackets(A) after loosening the mounting screws.



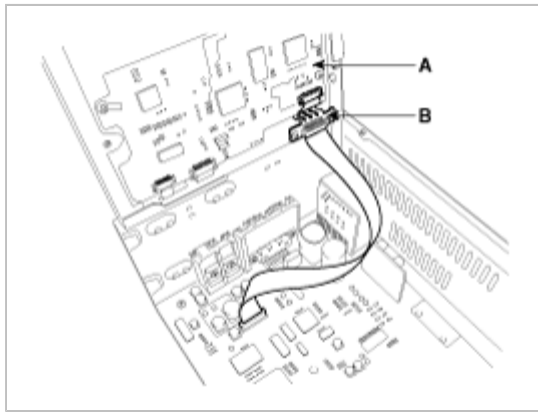
2. Disassemble the front panel(A) then disconnect the connector(B) and cable jack(C) between the unit and front panel.



3. Disassemble the front cover(A) after loosening 4 screws.



4. Disconnect the connector(B) between the unit and the deck(A) after loosening screws.



5. Disassemble the deck from the unit.

Reassembly

1. Reassemble the deck to the audio unit.
2. Reassemble the front cover.
3. Reassemble the front panel.
4. Reassemble the audio brackets.

NOTE

Make sure the film connector and cable jack are plugged in properly.

Installation

1. Connect the audio unit connectors and cables.
2. Install the audio unit.
3. Install the crash pad center fascia lower panel.
4. Install the console upper cover.
5. Check the audio system.

NOTE

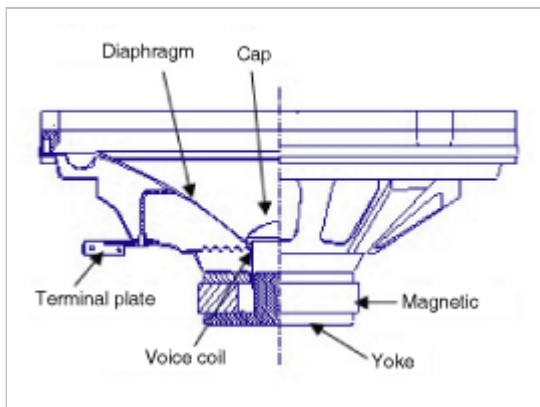
Make sure the audio head unit connectors are plugged in properly and the antenna cable is connected properly.

Inspection

1. Troubleshooting for Speaker

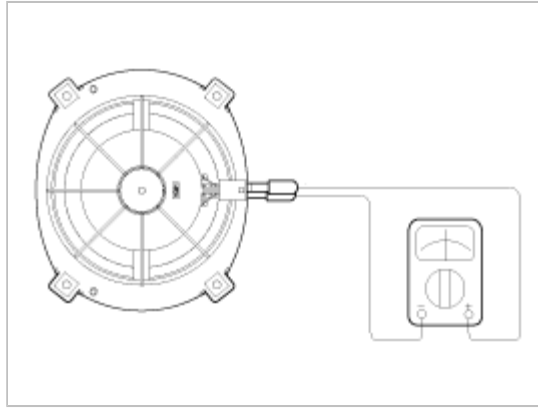
(1) Basic inspection of speaker

Inspect the sound from speaker after verifying that the speaker mounting screws is removed and the wiring connector is connected precisely to remove vibration transmitted from body trims and surrounding parts.



(2) Case Troubleshooting

No.	Case	Inspection/Remedy
1	Trembling sound	<ol style="list-style-type: none"> Before replacing the speaker, inspect that the mounting screw is installed normally. After re-installing the speaker, verify that no trembling sound is heard. When hearing a trembling sound again, replace the speaker with new one.
2	Noise	<ol style="list-style-type: none"> Check if the wiring connector is connected normally. If not, reconnect the wiring connector. In case of radio static, check if there is a noise from CD. When a noise is heard on turning radio and CD on, replace the speaker with new one. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>NOTE</p> <p>In case there is only radio static, this causes from poor radio reception. Thus the speaker needs no repair and replacement.</p> </div>
3	Poor working	<p>Inspection of the wiring connection between the battery and the speaker</p> <ol style="list-style-type: none"> Before replacing the speaker, inspect the wiring connection between the battery and the speaker is normal. Check the supplying power to the speaker and the resistance, then inspect the sound quality. <ul style="list-style-type: none"> ■ Specified impedance : 2 ~ 4Ω



3. If the speaker works poorly, replace it with new one.

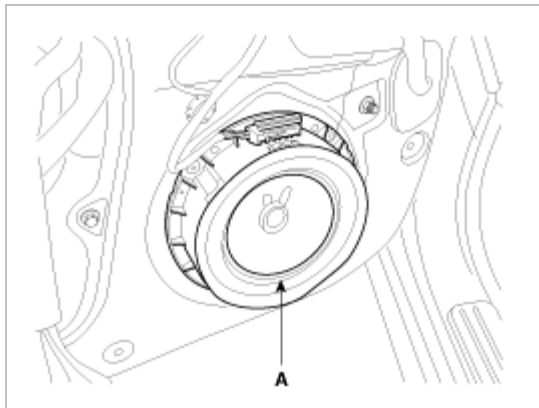
CAUTION

- During dealing of speaker
- Do not damage the speaker with impact as like a drop and a throw.
- Be careful not to cover water and oil over the speaker.
- Caution during dealing of speaker because the material of diaphragm is paper which is easy to be torn by impact and external force.
- When modifying audio system as customer pleases, this does electric damage to speaker.
- And, in this case the speakers are not covered by the manufacturer's warranty.

Removal

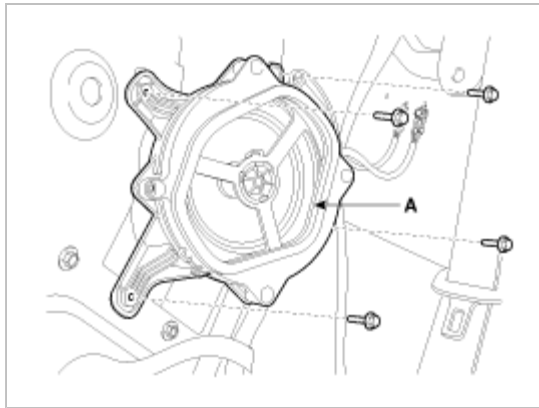
Front Speaker

1. Remove the front door trim panel.
(Refer to the Body group - "Front door")
2. Remove the front speaker (A) after loosening 4 rivets.



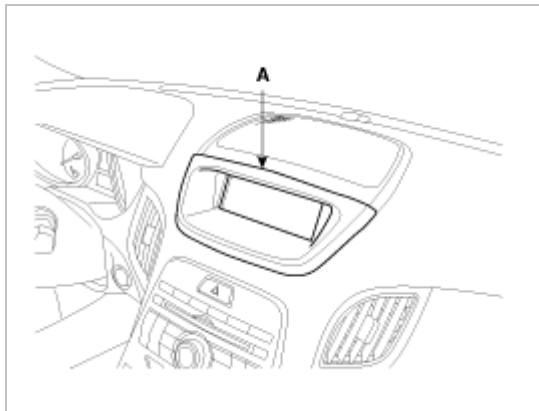
Rear Speaker

1. Remove the rear seat.
(Refer to the Body group - "Rear seat")
2. Remove the rear side trim and then remove the rear speaker (A) after removing 4 bolts.

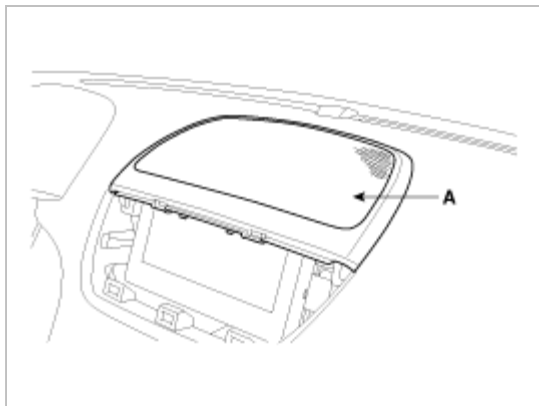


Crash pad center speaker

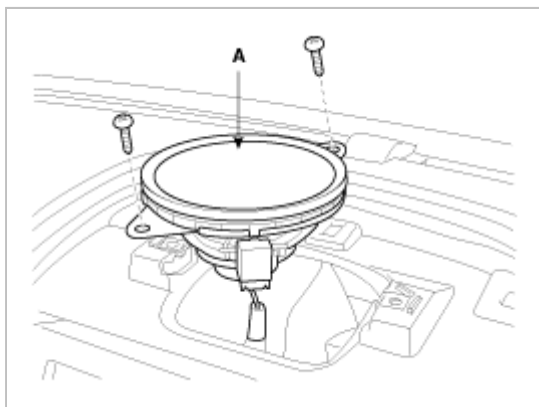
1. Remove the center fascia upper panel(A).



2. Remove the speaker grille(A).

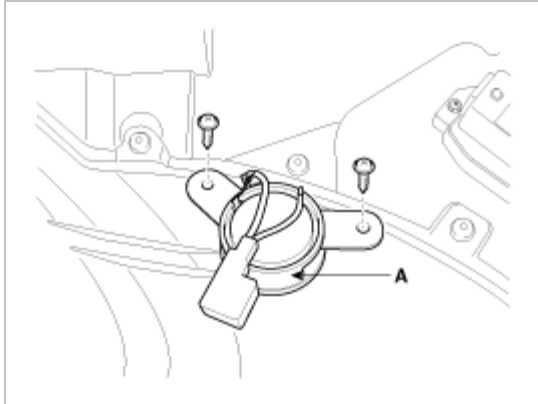


3. Remove the center speaker(A) after loosening the mounting screws.



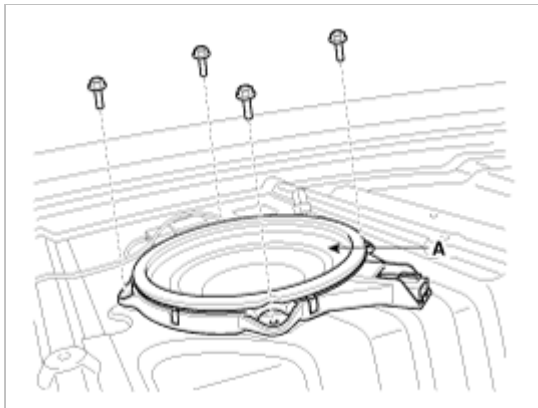
Tweeter Speaker

1. Remove the front door trim(A).
(Refer to the Body group - "Front door")
2. Remove the tweeter speaker(A) from the front door trim after disconnecting the connector.



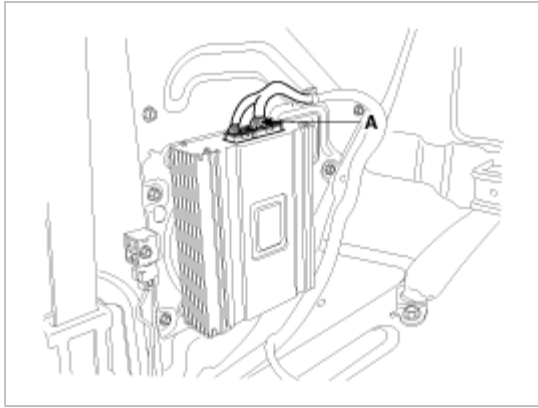
Woofer Speaker

1. Fold the rear seat forward.
(Refer to the Body group - "Rear seat")
2. Remove the rear package tray.
(Refer to the Body group - "Interior trim")
3. Remove the woofer speaker (A) after removing 4 bolts.

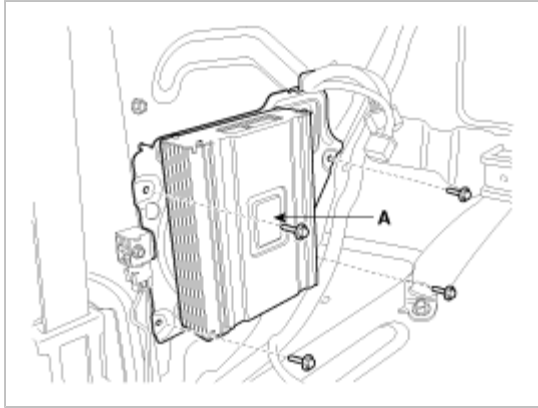


External Amp

1. Remove the rear seat.
(Refer to BD group - "Rear seat")
2. Remove the rear right side trim.
3. Remove the external amplifier connector(A) from the rear right quarter panel.



4. Remove the external amplifier(A) after loosening the mounting bolts.



Installation

Front Speaker

1. Install the front speaker.
2. Install the front door trim.

Rear Speaker

1. Install the rear speaker.
2. Install the rear side trim.
3. Install the rear seat.

Crash pad center speaker

1. Install the center speaker.
2. Install the center speaker grille.
3. Install the center fascia upper panel.

Tweeter Speaker

1. Install the tweeter speaker after connecting the tweeter speaker connector.
2. Install the front door trim.

Woofer Speaker

1. Install the woofer speaker after connecting the connector.
2. Install the rear package tray and rear seat assembly.

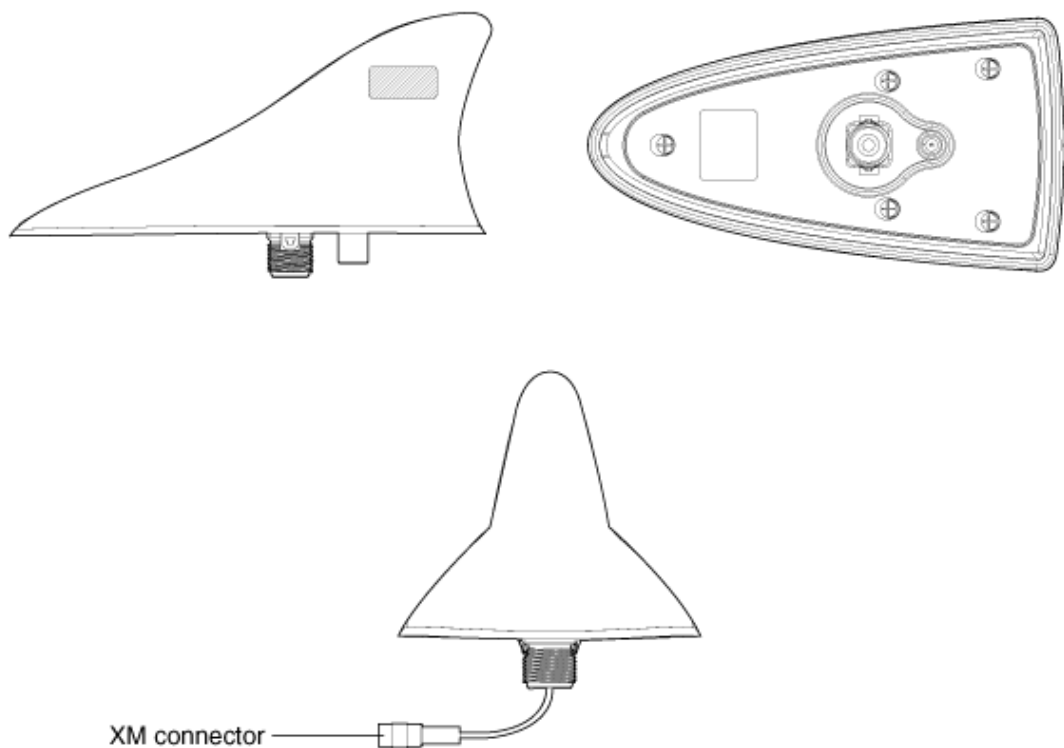
External Amp

1. Install the external amplifier after connecting the connector.

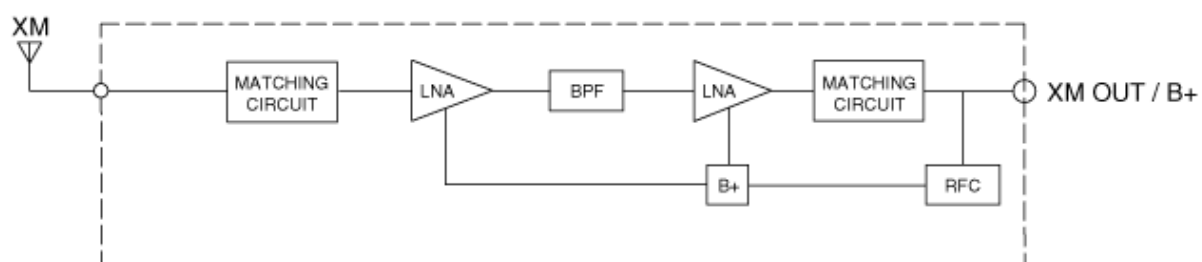
2. Install the rear right side trim.

Component

Roof Antenna (SDARS)



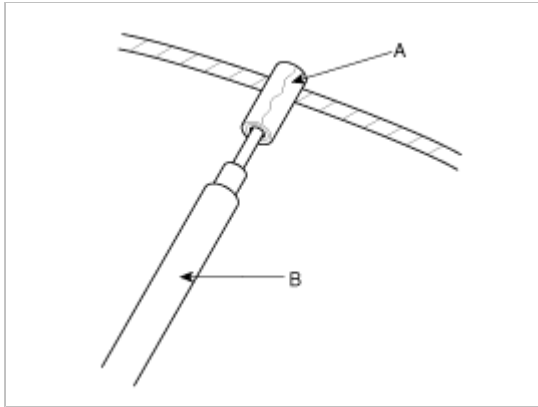
[Circuit Diagram]



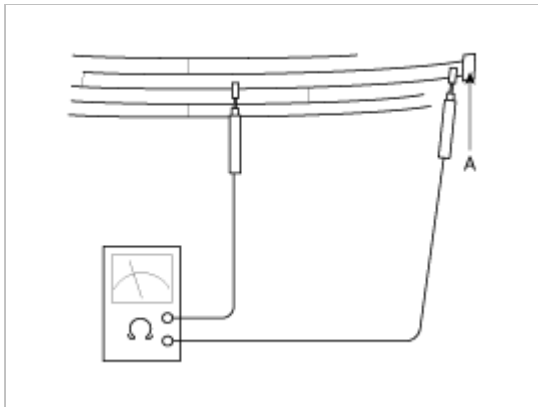
Inspection

Glass Antenna Test

1. Wrap aluminum foil (A) around the tip of the tester probe (B) as shown.



2. Touch one tester probe to the glass antenna terminal (A) and move the other tester probe along the antenna wires to check that continuity exists.

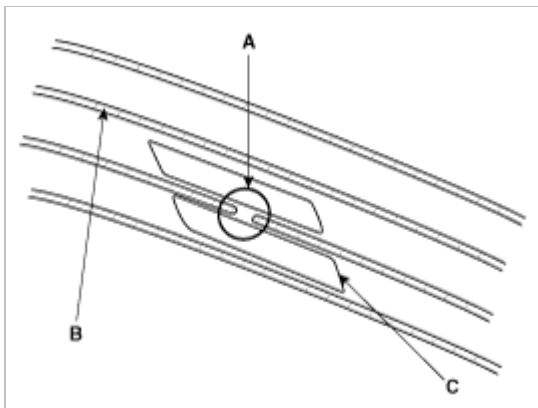


Glass Antenna Repair

NOTE

To make an effective repair, the broken section must be no longer than one inch.

1. Lightly rub the area around the broken section (A) with fine steel wool, and then clean it with alcohol.

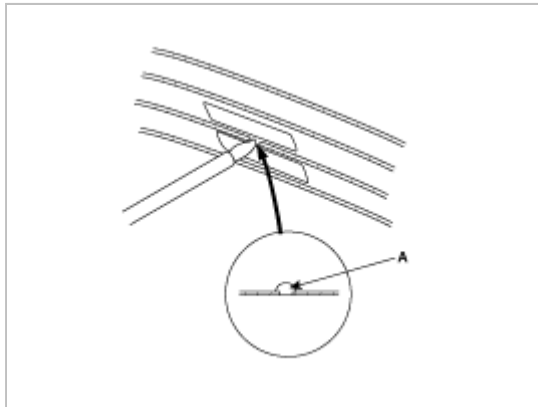


2. Carefully mask above and below the broken portion of the glass antenna wire (B) with cellophane tape (C).
3. Using a small brush, apply a heavy coat of silver conductive paint (A) extending about 1/8" on both sides of the

break. Allow 30 minutes to dry.

NOTE

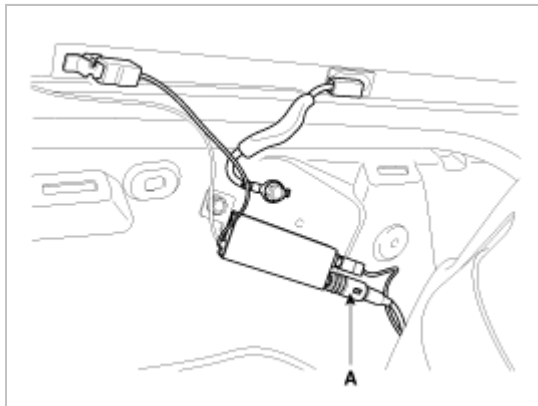
Thoroughly mix the paint before use.



4. Check for continuity in the repaired wire.
5. Apply a second coat of paint in the same way. Let it dry three hours before removing the tape.

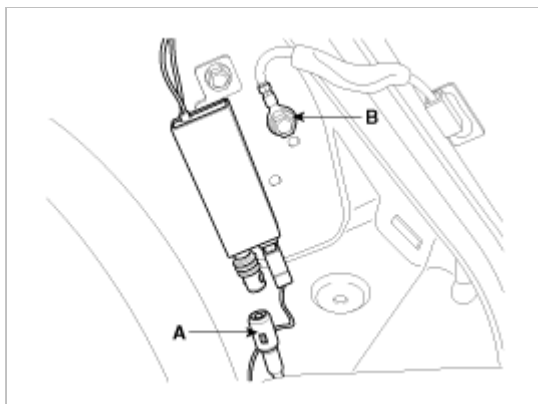
Glass Antenna Circuit Inspection

1. Remove the right side rear quarter trim.
Then disconnect the antenna feeder cable(A) from the glass antenna amp.



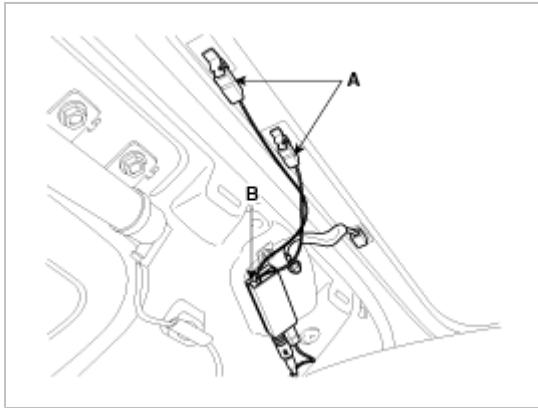
2. Turn the radio ON.
Measure the voltage between terminal 2 of the harness side feeder cable(A) and body ground(B).

OK : approximately 12V (ACC+)



3. Disconnect the 2P connector of radio wiring from the glass antenna amp.

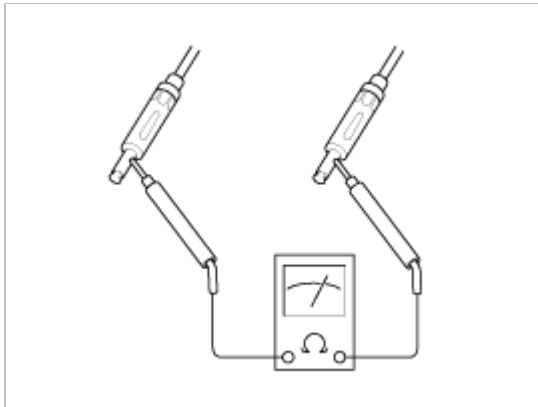
4. Check for continuity between terminals of harness side connector(B) and antenna grid terminals(A).



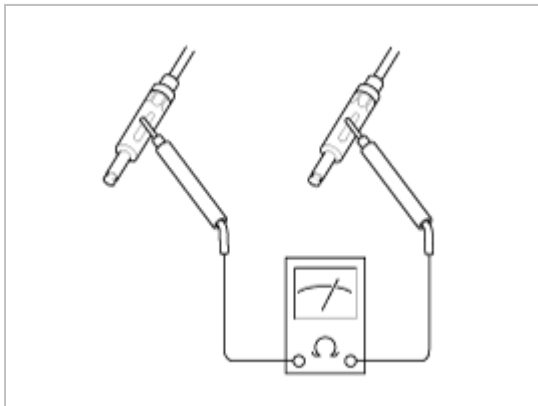
5. Check the grid lines for continuity.
6. When a poor radio reception is not repaired through the above inspection methods, replace the amp.
If the radio reception is still poor, check the radio cable for short and radio head unit for failure.

Antenna Cable

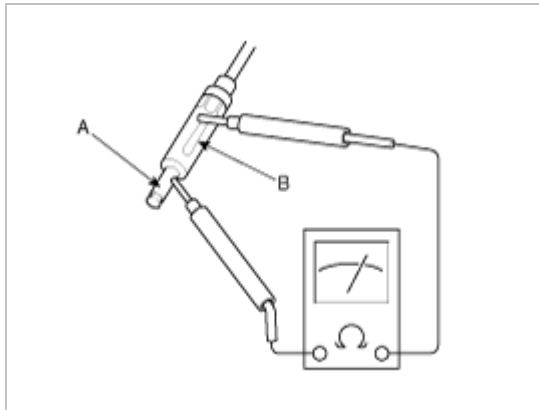
1. Remove the antenna jack from the audio unit and antenna.
2. Check for continuity between the center poles of antenna cable.



3. Check for continuity between the outer poles of antenna cable. There should be continuity.



4. If there is no continuity, replace the antenna cable.
5. Check for continuity between the center pole (A) and outer pole (B) of antenna cable. There should be no continuity.

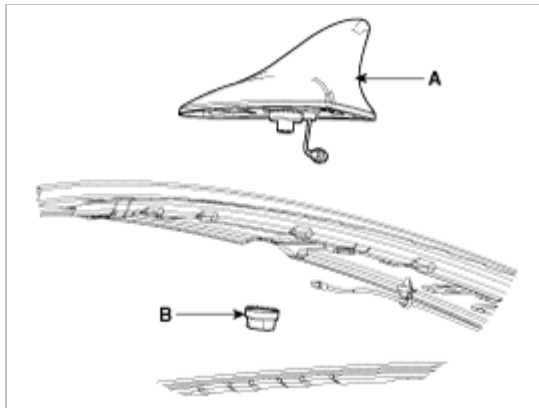


6. If there is continuity, replace the antenna cable.

Removal

Roof Antenna (SDAR)

1. Remove the rear roof trim.
(Refer to the Body group - "Roof trim")
2. Disconnect the antenna connector from the feeder cable connector.

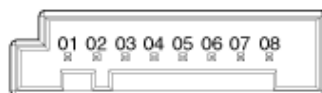
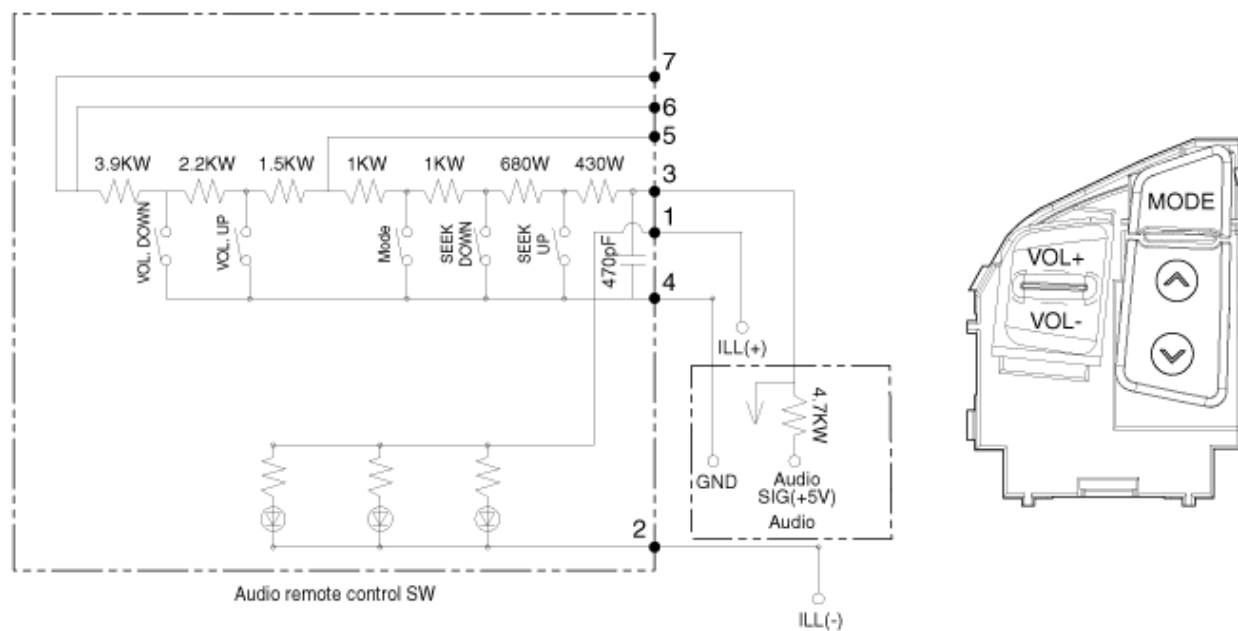


3. Remove the SDARS roof antenna(A) from the roof panel hole after loosening a nut(B).

Installation

1. Install the roof antenna to the roof panel.
2. Tighten the nut.
3. Connect the roof antenna connector.

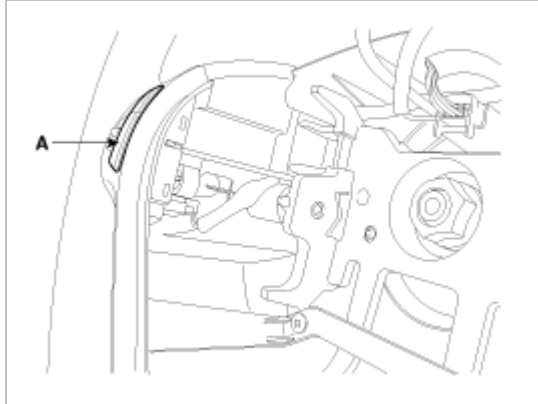
Circuit Diagram



Pin No.	Name
1	ILL (+)
2	ILL (-)
3	Audio (+)
4	Audio (-)
5	Mute Out
6	-
7	-
8	-

Inspection

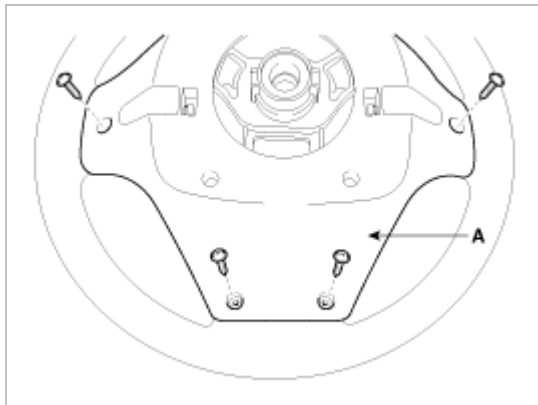
1. Check the audio remote control switch(A) for resistance between No.3 and No.4 terminals in each switch position.



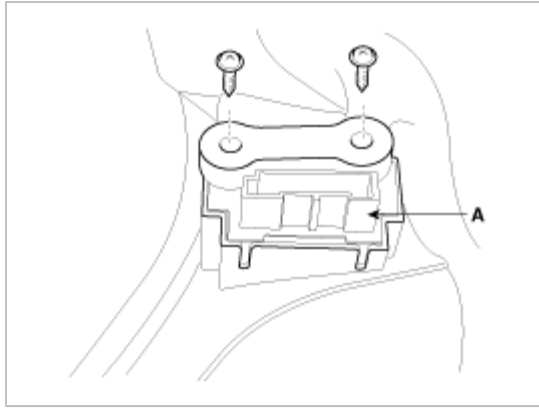
Switch	Connector terminal	Resistance (±5%)
Volume Down	3 - 4	6.81 kΩ
Volume Up	3 - 4	4.61 kΩ
Seek Up	3 - 4	430 Ω
Seek Down	3 - 4	1.11 kΩ
Mode	3 - 4	2.11 kΩ

Removal

1. Disconnect the negative (-) battery terminal.
2. Remove the driver airbag module.
(Refer to the airbag group)
3. Remove the steering wheel.
(Refer to ST group - "Steering column & shaft")
4. Remove the steering wheel cover after loosening the 4 screws.



5. Remove the audio remote control switch (A) after removing the steering wheel remote control switch connector and 2 screws.



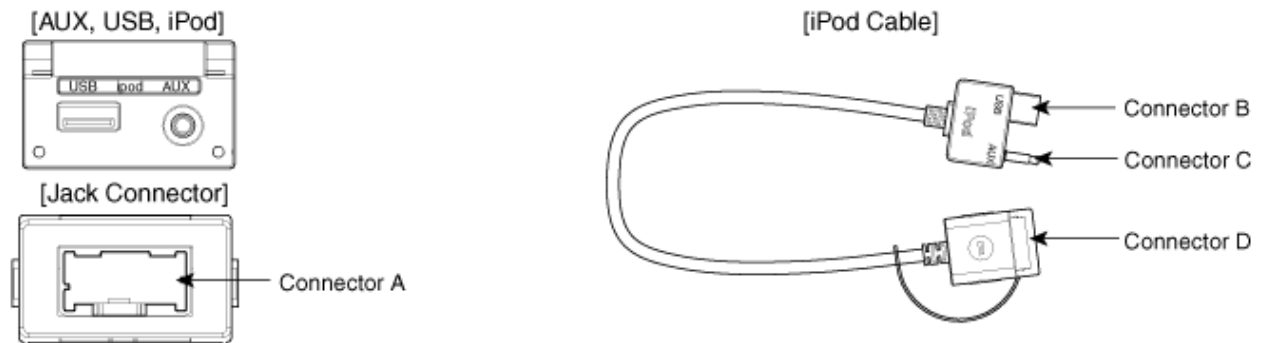
Installation

1. Reassemble the steering wheel remote control switch after connecting the connector.
2. Reassemble the steering wheel.
3. Reassemble the driver airbag module.

NOTE

Make sure the audio remote control switch and the airbag module connectors are plugged in properly.

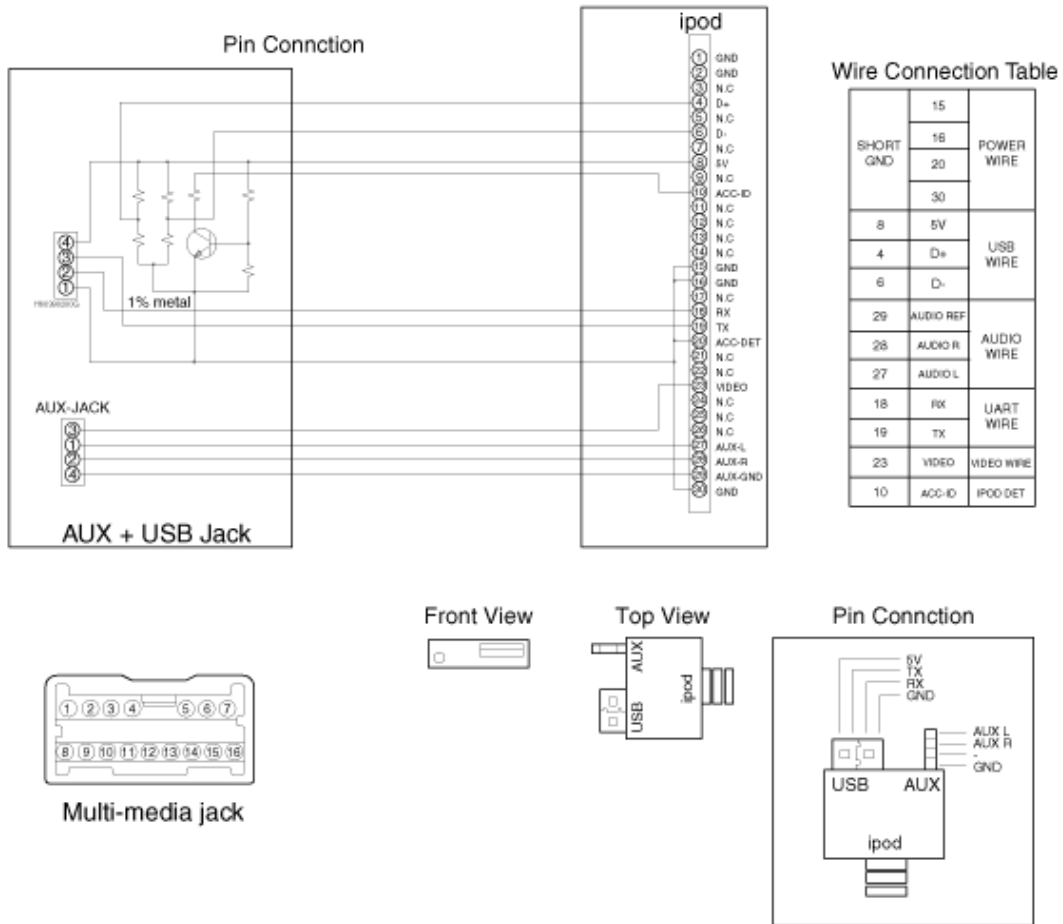
Components



Name	Multi-media Jack Connector A (USB/AUX/iPod)	USB Connector B	AUX Connector C	iPod Connector D
Connector				
1	USB/iPod 5V	USB/iPod 5V	AUX1 L IN	GND
2	USB D-/iPod TX	USB D-/iPod TX	AUX1 R IN	GND
3	USB D+/iPod RX	USB D+/iPod RX	-	-
4	USB/iPod GND	USB/iPod GND	AUX1 GND	D+
5	-			-
6	AUX1 REF			D-
7	AUX1 L IN			-
8	ILL+			5V
9	USB Shield GND			-
10	-			ACC ID
11	M/Media GND			-
12	-			-
13	-			-
14	AUX DET			-
15	AUX shield GND			GND
16	AUX1 R IN			GND
17				-
18				RX
19				TX
20				ACC DET
21				-
22				-
23				-
24				-
25				-
26				-
27				AUX1 L IN
28				AUX1 R IN
29				AUX1 GND
30				Signal wire GND

Circuit Diagram

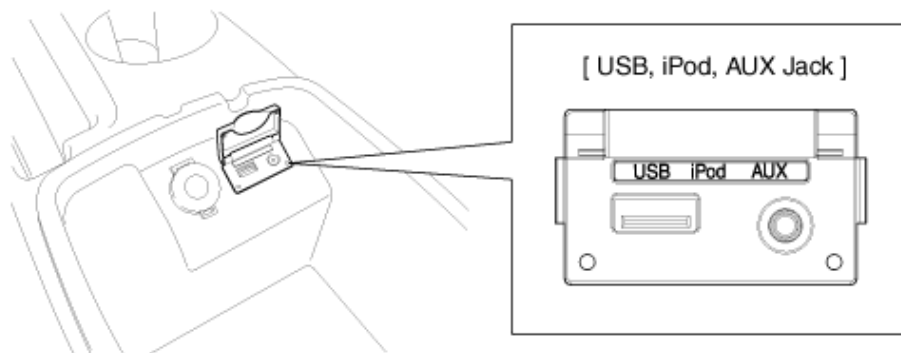
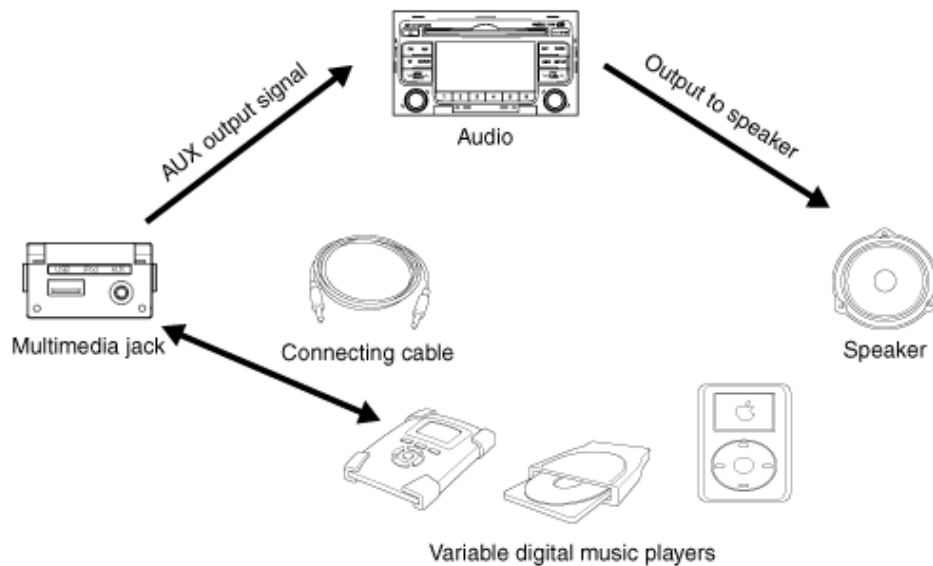
[Aux + USB + iPod] Multimedia jack



Description

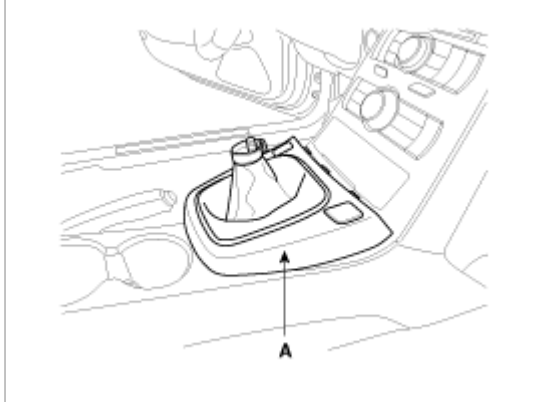
The multimedia jack on the console upper cover is for customers who like to listen to external portable music players like the MP3, iPod and etc., through the vehicle's sound system when it is linked to this jack. The customer has this added option.

In case of distortions from media connected to the AUX source, the audio unit may not be defect but the output level of the used media does not match the specification of the AUX input.

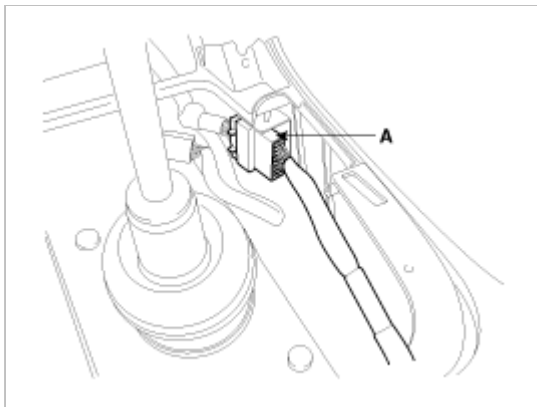
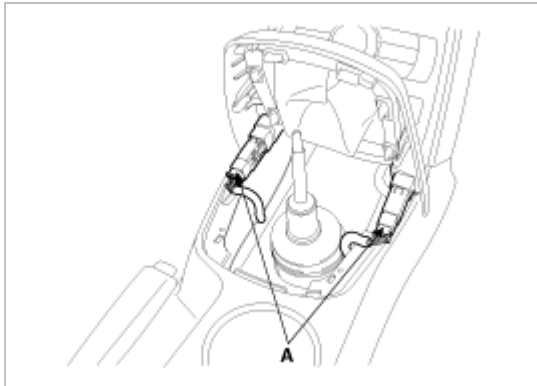


Removal

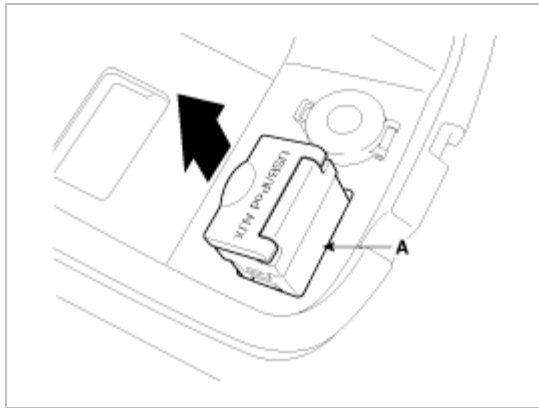
1. Remove the shift lever knob.
(Refer to BD group - "Console")
2. Remove the console upper cover(A).



3. Disconnect the connector(A) from the console upper cover and console.



4. Remove the console.
(Refer to BD group - "Console")
5. Remove the multimedia jack(A) from the console under cover after loosening the mounting screws.



Installation

1. Install the multimedia jack.
2. Connect the AUX jack connector.
3. Install the center console.
4. Install the console upper cover.
5. Install the shift lever knob.

NOTE

Make sure the Aux connector and the console connectors are plugged in properly.

Troubleshooting

Customer Complaint Analysis Check Sheet

TROUBLE IN	<input type="checkbox"/> ALL <input type="checkbox"/> AM <input type="checkbox"/> FM <input type="checkbox"/> CD <input type="checkbox"/> MP3 <input type="checkbox"/> CD changer <input type="checkbox"/> AMP <input type="checkbox"/> Others
TROUBLE OCCURS	<input type="checkbox"/> Always <input type="checkbox"/> Engine start <input type="checkbox"/> Engine Running <input type="checkbox"/> Cold <input type="checkbox"/> Warm <input type="checkbox"/> Sometimes <input type="checkbox"/> Most of the time <input type="checkbox"/> Engine off
TYPE OF TROUBLE	<input type="checkbox"/> Will not play <input type="checkbox"/> Weak <input type="checkbox"/> Squealing noise <input type="checkbox"/> Display/illumination poor <input type="checkbox"/> CD skips & jumps <input type="checkbox"/> CD will not eject or insert <input type="checkbox"/> Others (Describe) :
OTHERS	<p>▶ Customer complaint contents :</p> <p>▶ Have you checked customer's defects :</p>
<p>★ Using the customer complaint analysis check sheet for reference, ask the customer for as much detail as possible about the problem.</p>	

There are six areas where a problem can occur: wiring harness, the radio, the CD player, and speaker. Troubleshooting enables you to confine the problem to a particular area.

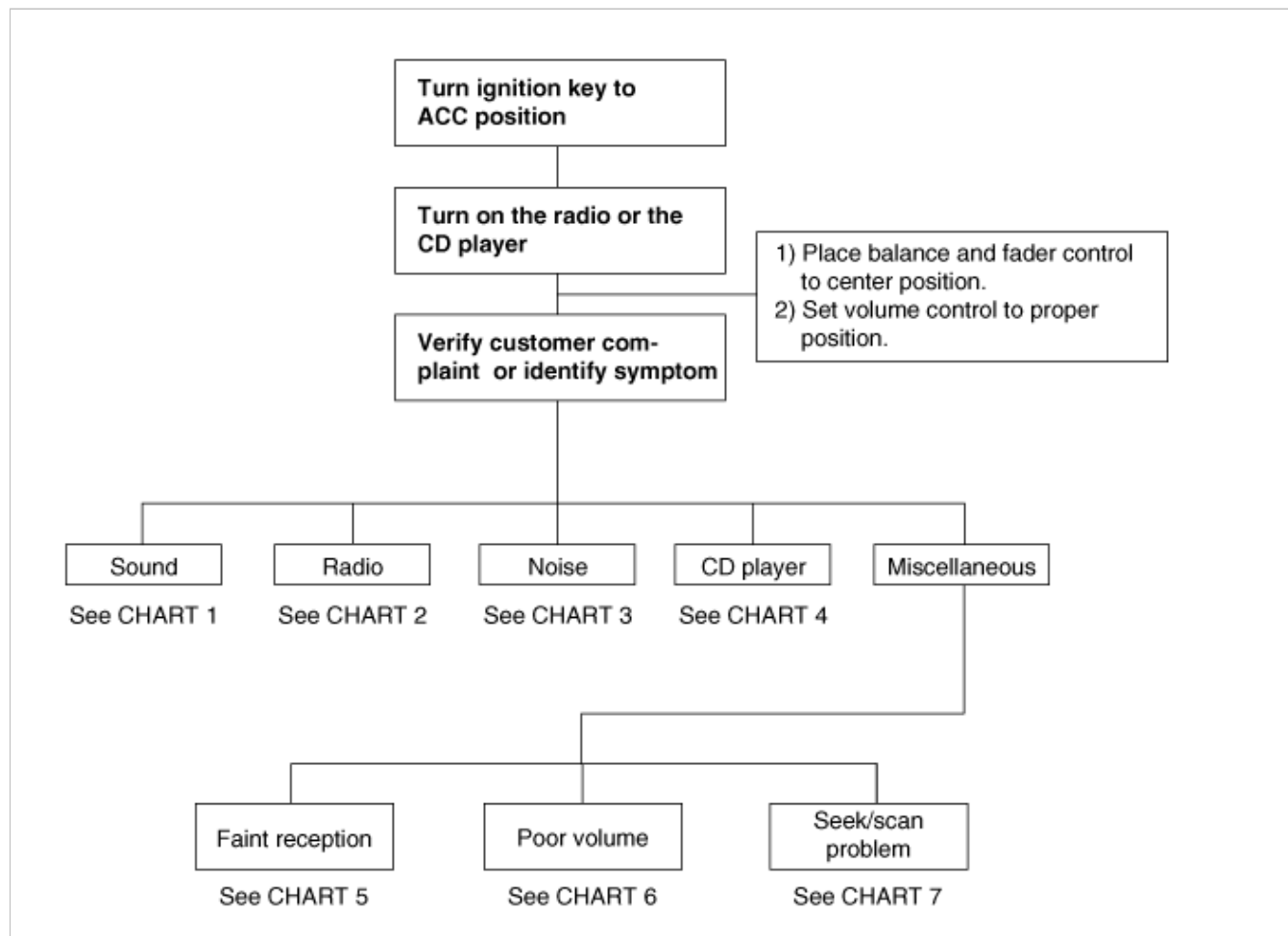
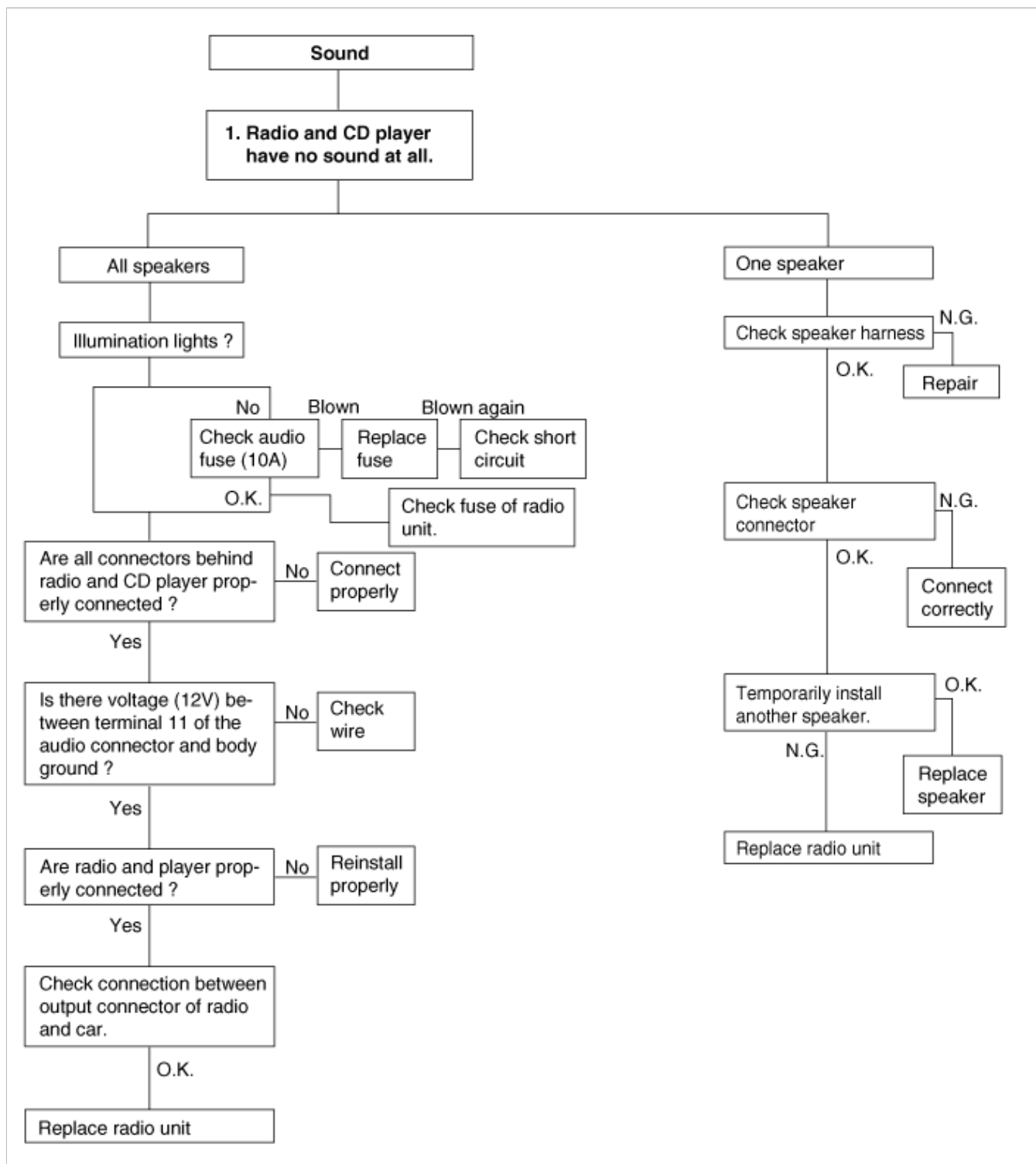


Chart 1



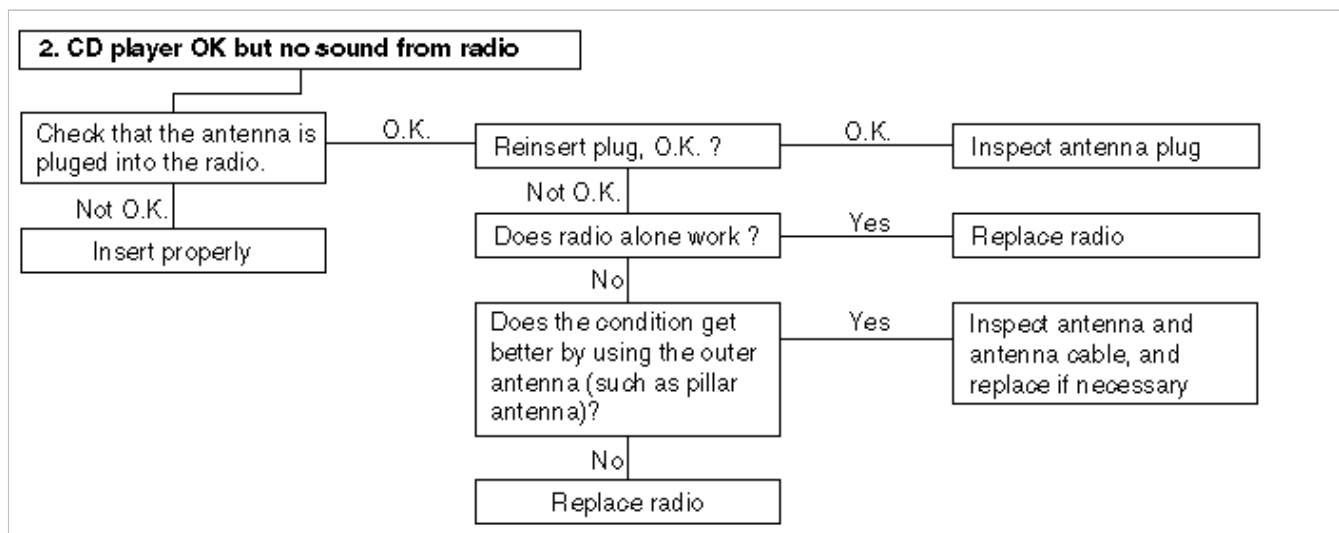


Chart 2

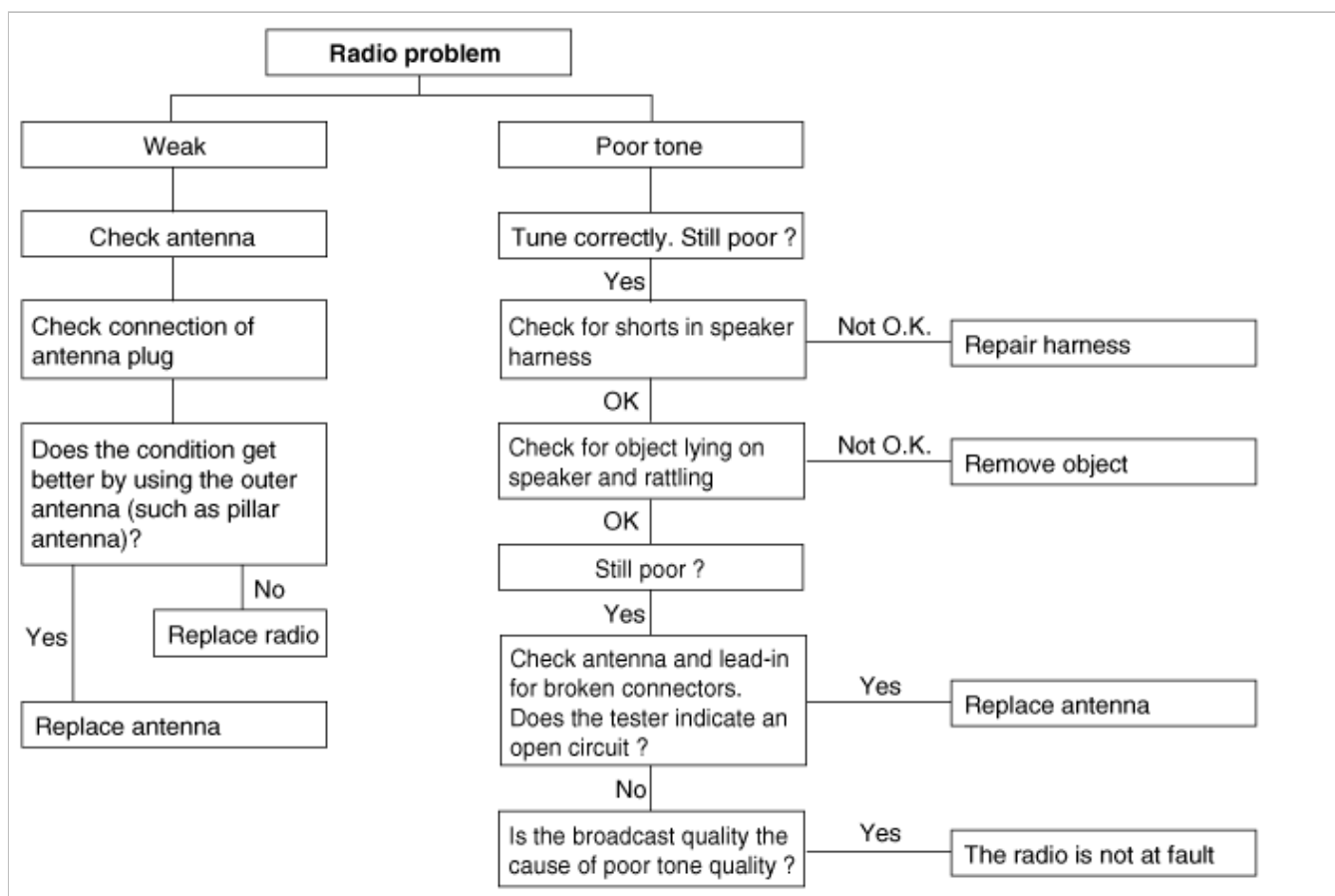


Chart 3

1. RADIO

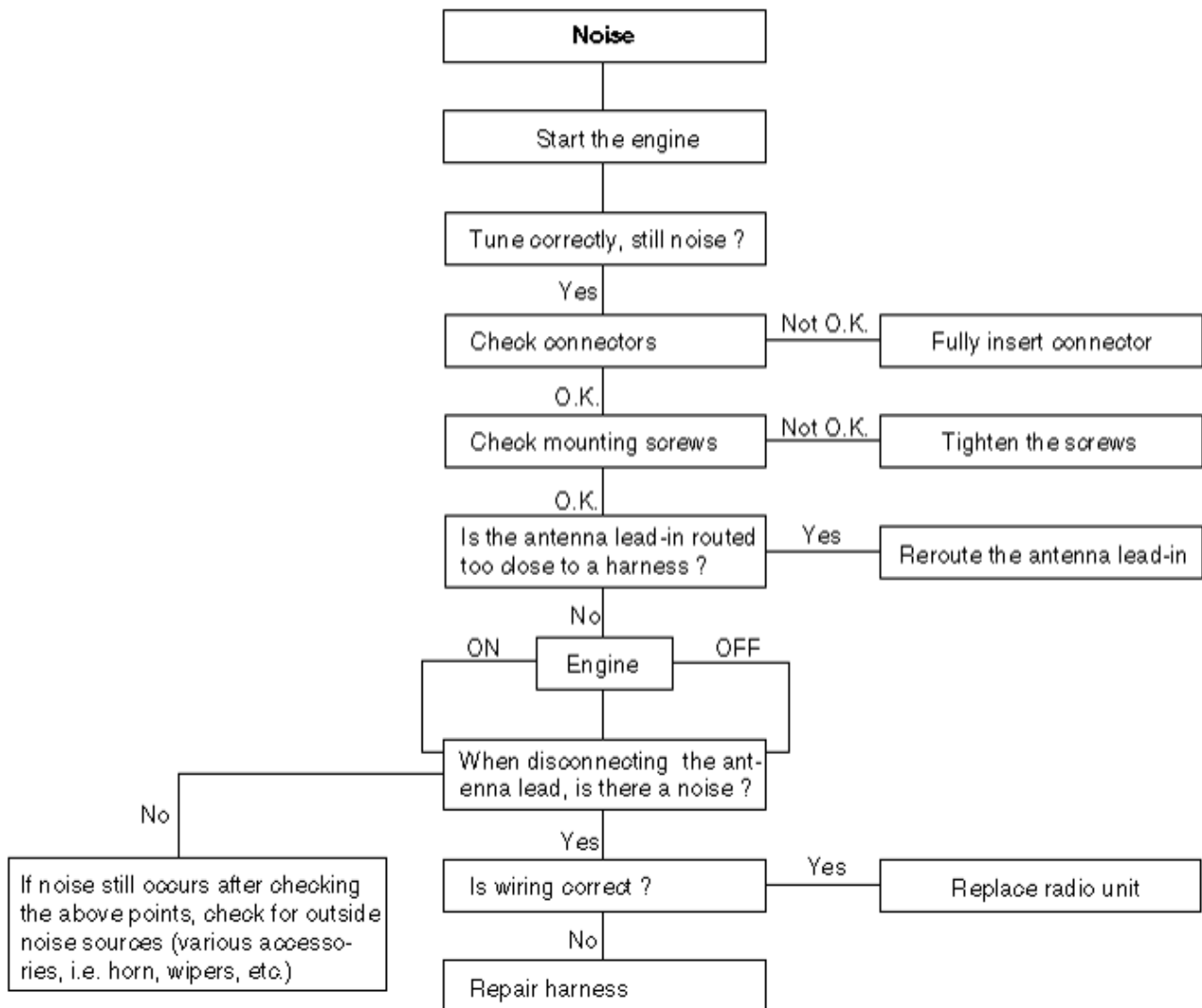
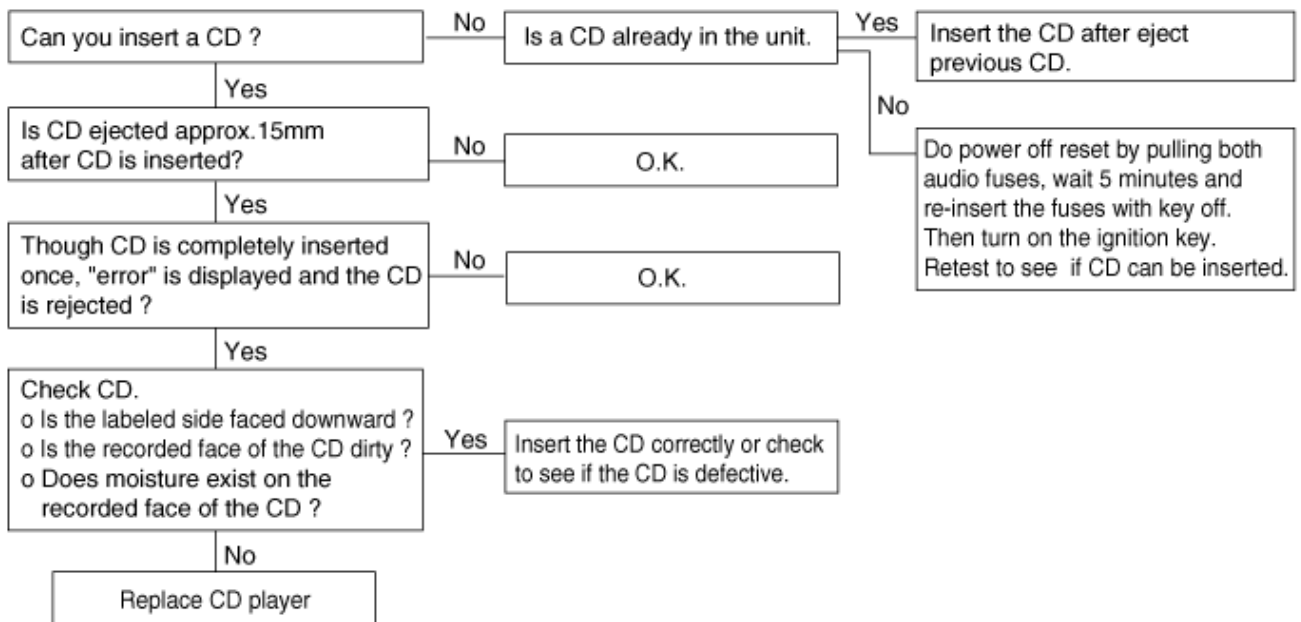
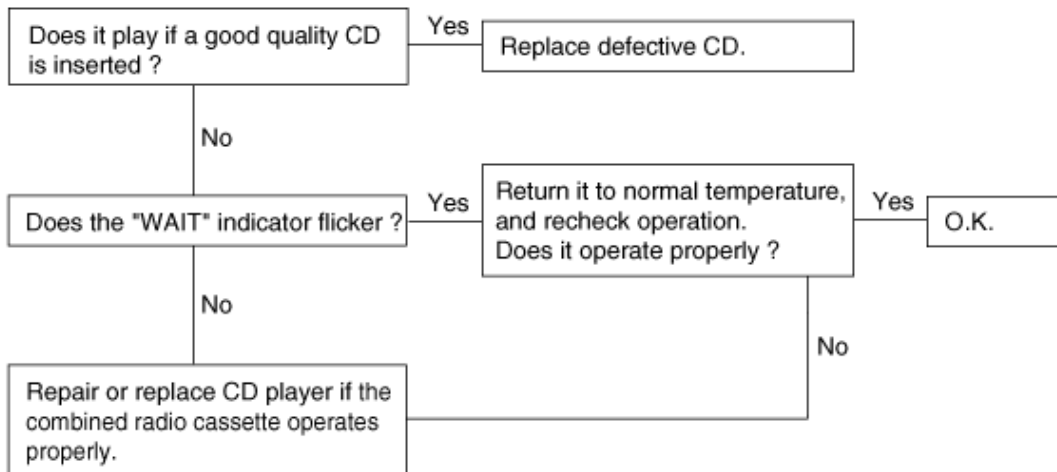


Chart 4

1. CD WILL NOT BE ACCEPTED

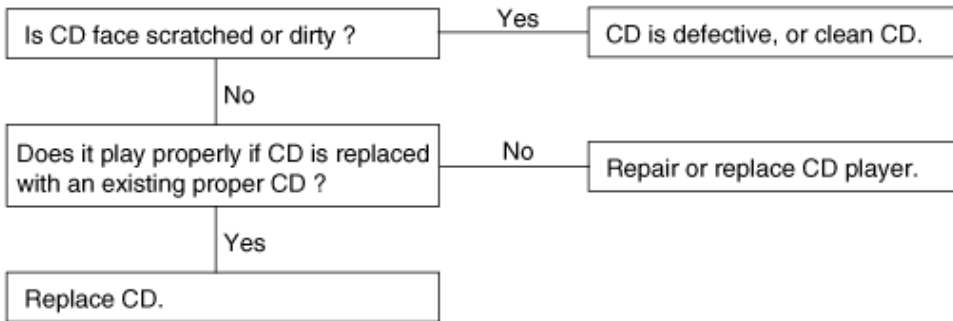


2. NO SOUND



3. CD SOUND SKIPS

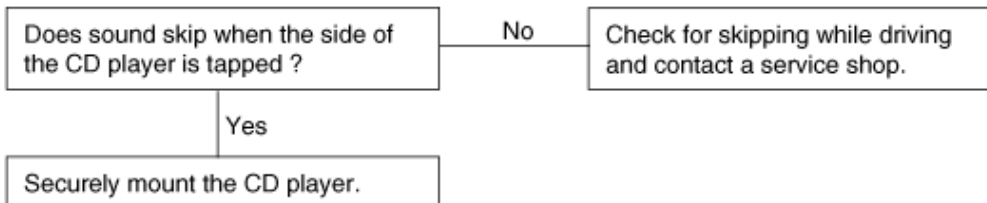
1) Sound sometimes skips when parking.



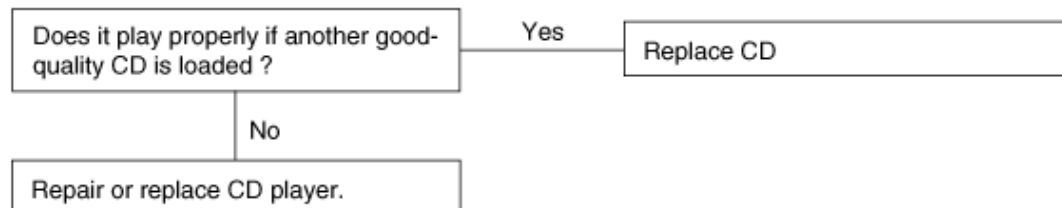
2) Sound sometimes skips when driving.

(Stop vehicle, and check it.)

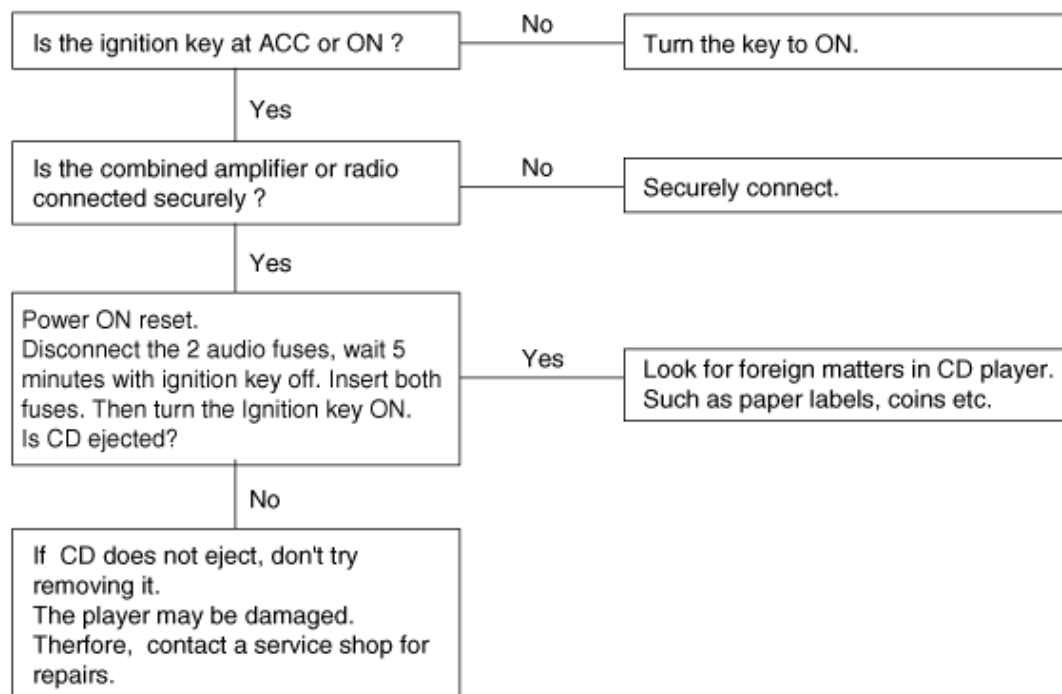
(Check by using a CD which is free of scratches, dirt or other damage.)



4. SOUND QUALITY IS POOR



5. CD WILL NOT EJECT



6. NO SOUND FROM ONE SPEAKER

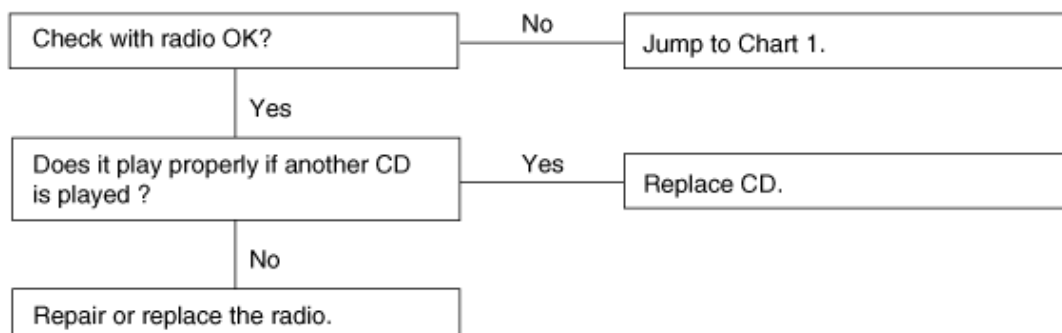


Chart 5

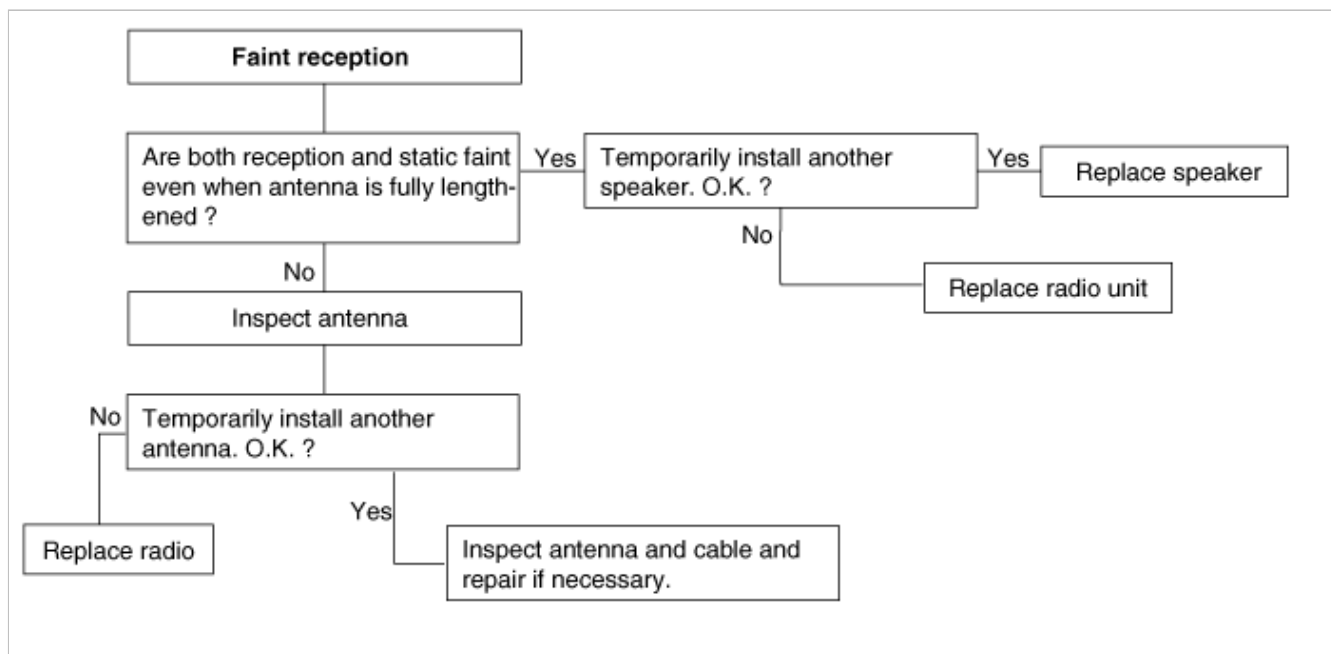


Chart 6

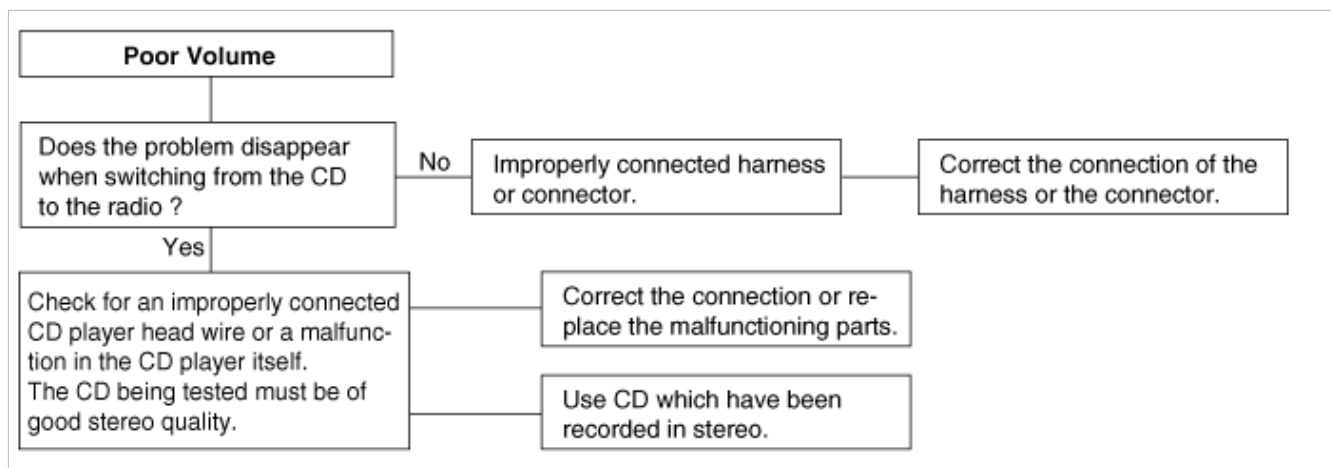


Chart 7

