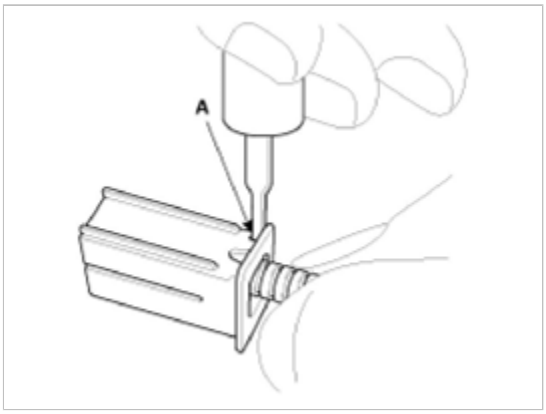
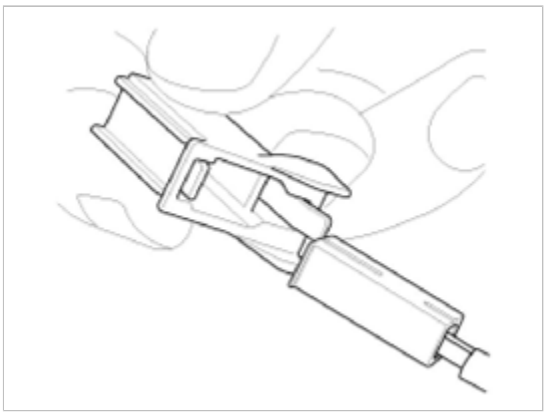
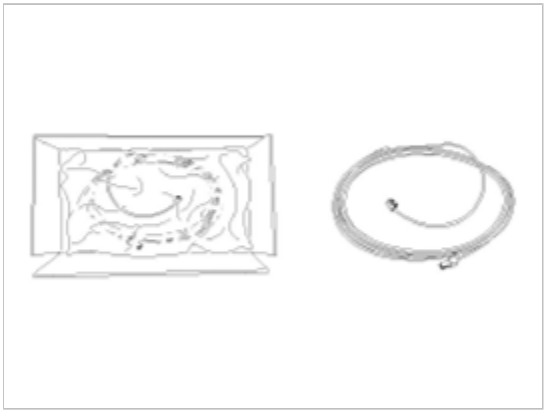




Changing Way The Cable Assembly



- Purpose : changing the defective assembly due to picking, breaking and others.
- Method : change into new cable assembly after remove from car body by cutting cable and remove damaged cable connector.

1. Prepare tools for the work
2. Separate the cable connector from the unit.
3. Change into new cable assembly after cutting cable assebly and separate from the car body. (must be needed re-locking)

Body Electrical System > Audio > Specifications

Specifications

Audio Unit

Item	Specification	
Model	RADIO/CDP/MP3/XM	RADIO/6CDC/MP3/XM

Power supply		DC 14.4V
Rated output		Max 3.2Vrms
Load Impedance		10KΩX 4
Antenna		80PF 75Ω
Tuning type		PLL synthesized type
External amplifier&sub woofer		External amplifier&sub woofer
Frequency range / Channel space	FM	87.5~107.9 MHz/ 200KHz
	AM	530~1710KHz/ 9KHz

□ XM : Satellite Radio

Keyboard Unit

Item		Specification
Power supply	Microcomputer	DC 5V
	Illumination	DC 14.4V
Operation Temperature		-20° C~ +65° C (-4° F ~ 149° F)
Dark current		MAX 0.5mA

Monitor Unit

Item	Specification
Voltage	DC 14.4V
Picture Size	144(H) X 51(V) mm (5.6(H) X 2(V) inches)
Operation Temperature	-20° C~ +70° C (-4° F ~ 158° F)
View Angle	H/V : -45~+45 / -35~ +25degrees

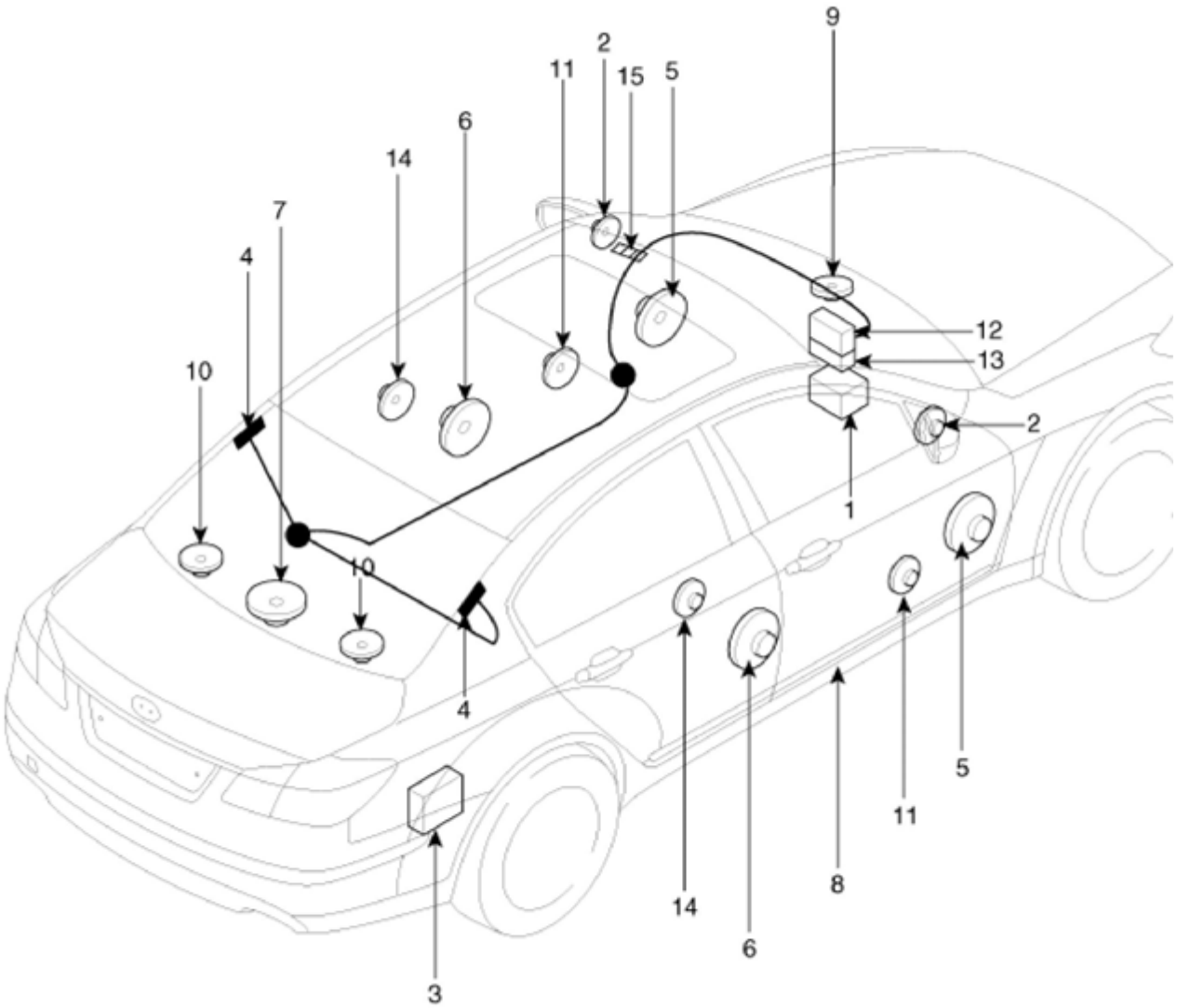
Speaker

Model		General		Premium		DIS	
Item		Input Power	Speaker Impedance (Ω)	Input Power	Speaker Impedance (Ω)	Input Power	Speaker Impedance (Ω)
Front door	Door speaker	25W , MAX 50W	2 ± 0.3	25W , MAX 50W	2 ± 0.3	25W , MAX 50W	2 ± 0.3
	Tweeter speaker	25W , MAX 50W	3.4 ± 0.5	8 Vrms	3.6	8 Vrms	3.6
	Middle speaker	-	-	-	-	8 Vrms	1.9 ± 0.25
Rear door	Door speaker	25W , MAX 50W	2 ± 0.3	25W , MAX 50W	2 ± 0.3	25W , MAX 50W	2 ± 0.3
	Tweeter speaker	-	-	8 Vrms	3.6	8 Vrms	3.6
Center speaker		-	-	8 Vrms	2.15 ± 0.25	8 Vrms	2.15 ± 0.25
Sub woofer speaker		25W , MAX 50W	2 ± 0.3	16 Vrms	4.8 ± 1	16 Vrms	4.8 ± 1

Surround speaker	-	-	8 Vrms	2.15 ± 0.25	8 Vrms	2.15 ± 0.25
Center tweeter speaker	-	-	-	-	8 Vrms	3.6
Speaker Number	7 EA		14 EA		17 EA	

Body Electrical System > Audio > Components and Components Location

Components



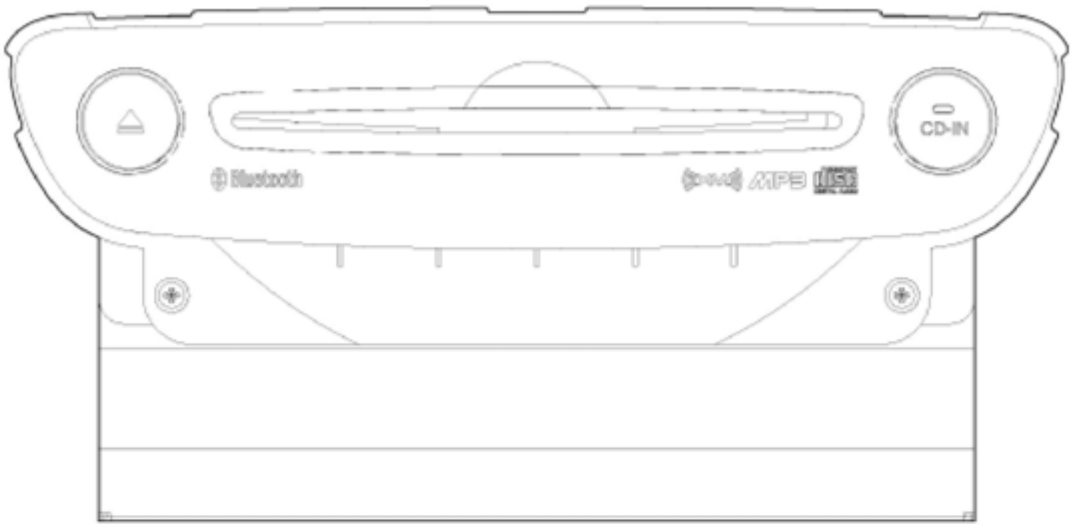
1. Audio head unit (Built-in bluetooth hand free unit)	9. Crash pad center speaker
2. Front tweeter speaker	10. Surround speaker
3. External amp	11. Middle speaker
4. Glass antenna amp(Radio)	12. Monitor unit
5. Front door speaker	13. Keyboard unit
6. Rear door speaker	14. Rear tweeter speaker
7. Sub woofer speaker	15. Hand free mic.

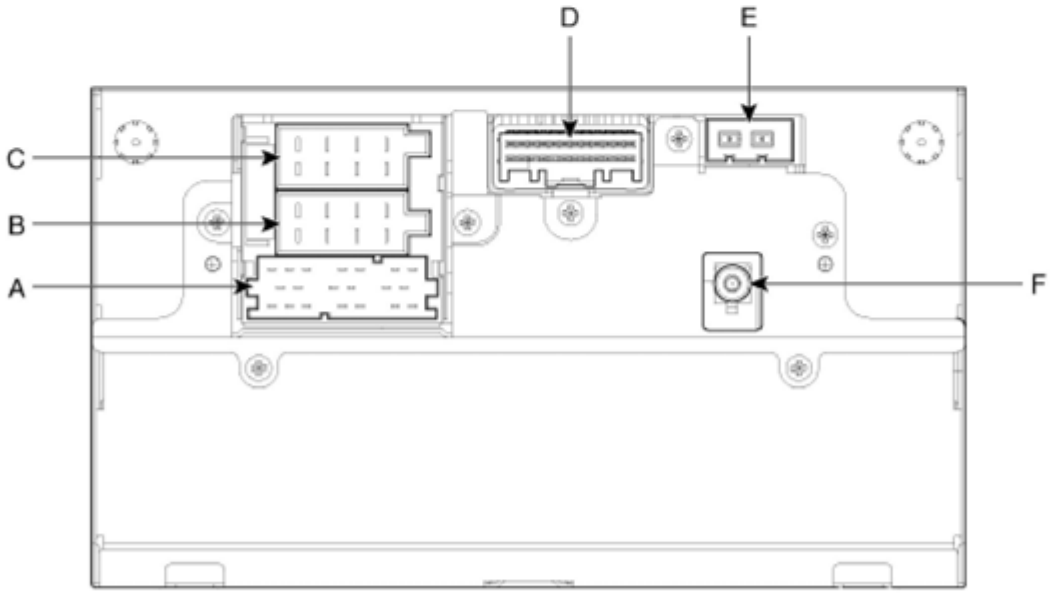
8. Antenna feeder cable	

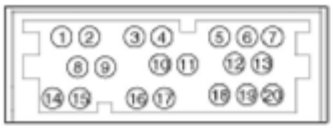
Body Electrical System > Audio > Audio Unit > Components and Components Location

Components

[RADIO/CDP/MP3]





Connector A	Pin	Description	Pin	Description
	1	MIC + (Bluetooth)	11	AUX Detect
	2	MIC - (Bluetooth)	12	USB D+/iPod Rx
	3	AUX R	13	USB/iPod GND
	4	AUX L	14	-
	5	Amp mute	15	IGN
	6	USB D-/iPod Tx	16	-
	7	CAN Low	17	-
	8	Mode	18	Amp power
	9	-	19	USB/iPod VDD
	10	AUX REF	20	CAN High

Connecto B	Pin	Description	Pin	Description
	1	Rear RH speaker +	5	Rear RH speaker -
	2	Front RH speaker +	6	Front RH speaker -
	3	Front LH speaker +	7	Front LH speaker -
	4	Rear LH speaker +	8	Rear LH speaker -

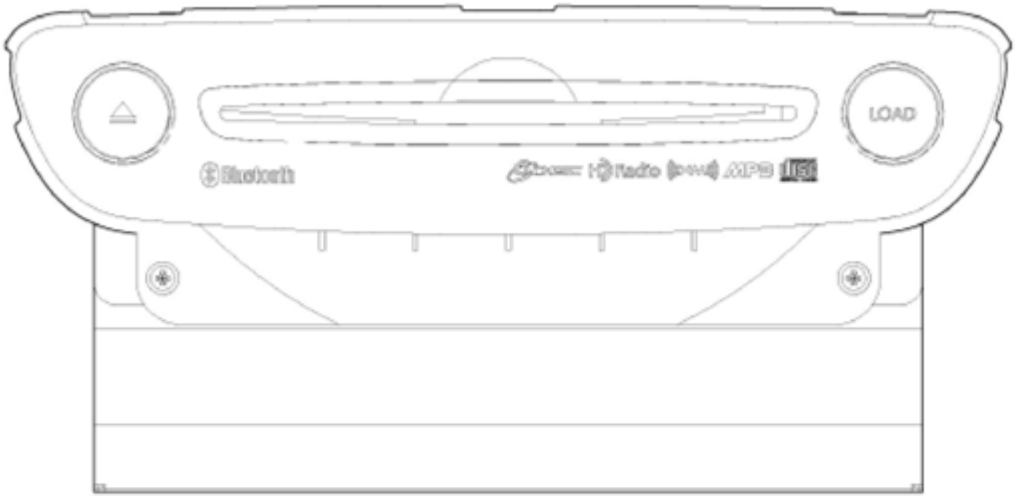
Connecto C	Pin	Description	Pin	Description
	1	-	5	-
	2	Illumination +	6	ACC
	3	-	7	Illumination -
	4	BAT +	8	Power GND

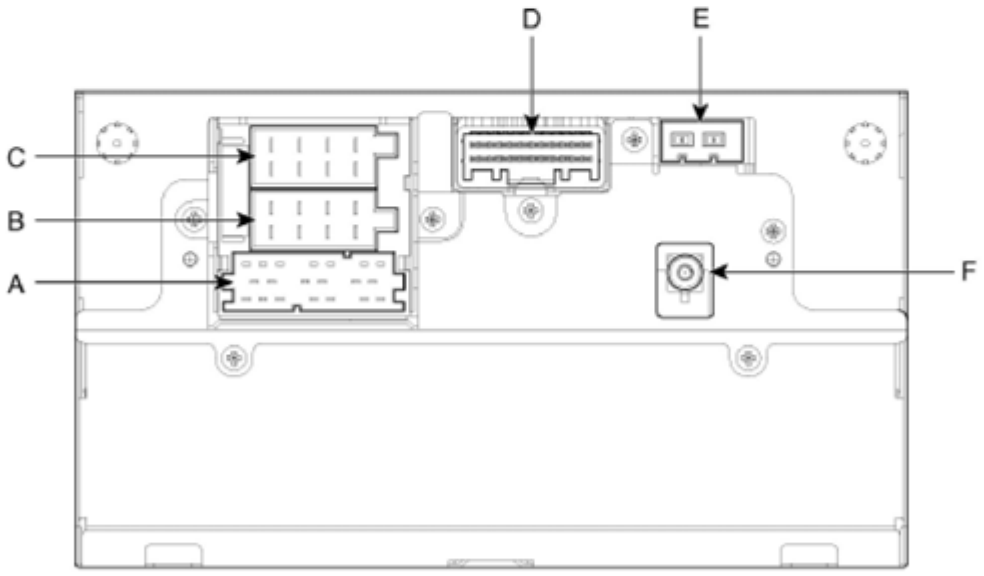
Connecto D	Pin	Description	Pin	Description
	1	-	13	Keyboard GND
	2	Keyboard B+	14	Keyboard D GND
	3	Keyboard UART Rx	15	Keyboard UART Tx
	4	Keyboard Remote	16	-
	5	-	17	-
	6	-	18	-
	7	-	19	-
	8	-	20	-
	9	-	21	-
	10	-	22	-
	11	-	23	-
	12	Surround	24	-

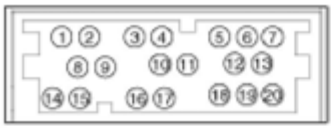
Connector E	Pin	Description	Pin	Description
	1	Antenna 1	2	Antenna 2

Connector F	Pin	Description
	1	XM Antena

[RADIO/6CDC/MP3]





Connector A	Pin	Description	Pin	Description
	1	MIC + (Bluetooth)	11	AUX Detect
	2	MIC - (Bluetooth)	12	USB D+/iPod Rx
	3	AUX R	13	USB/iPod GND
	4	AUX L	14	-
	5	Amp mute	15	IGN
	6	USB D-/iPod Tx	16	-
	7	CAN Low	17	-
	8	Mode	18	Amp power
	9	-	19	USB/iPod VDD
	10	AUX REF	20	CAN High

Connecto B	Pin	Description	Pin	Description
	1	Rear RH speaker +	5	Rear RH speaker -
	2	Front RH speaker +	6	Front RH speaker -
	3	Front LH speaker +	7	Front LH speaker -
	4	Rear LH speaker +	8	Rear LH speaker -

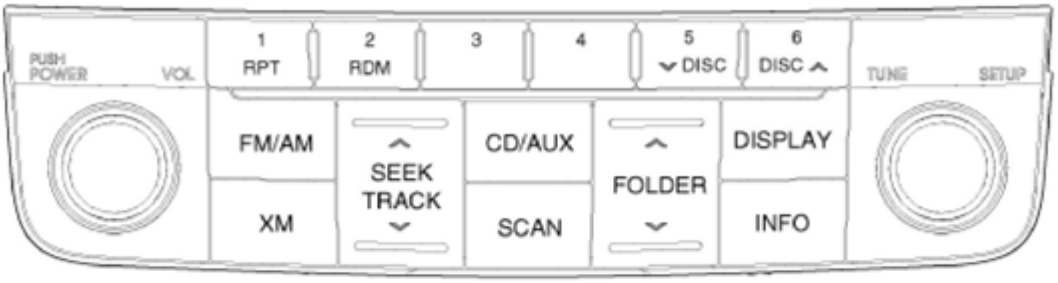
Connecto C	Pin	Description	Pin	Description
	1	-	5	-
	2	Illumination +	6	ACC
	3	-	7	Illumination -
	4	BAT +	8	Power GND

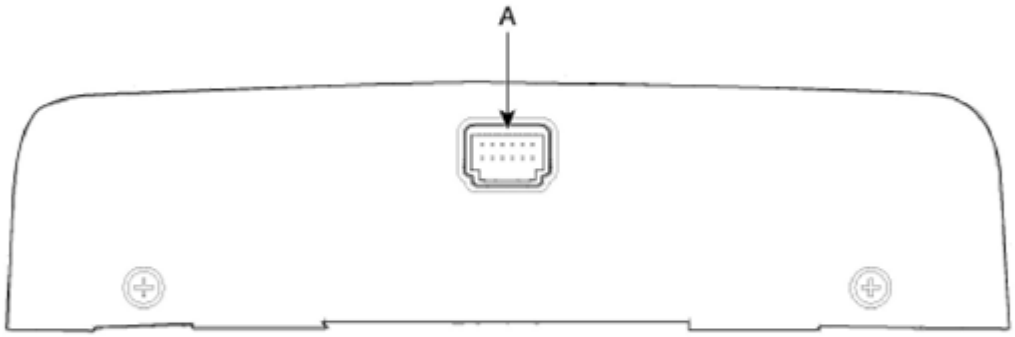
Connecto D	Pin	Description	Pin	Description
	1	-	13	Keyboard GND
	2	Keyboard B+	14	Keyboard D GND
	3	Keyboard UART Rx	15	Keyboard UART Tx
	4	Keyboard Remote	16	-
	5	-	17	-
	6	-	18	-
	7	-	19	-
	8	-	20	-
	9	-	21	-
	10	-	22	-
	11	-	23	-
	12	Surround	24	-

Connector E	Pin	Description	Pin	Description
	1	Antenna 1	2	Antenna 2

Connector F	Pin	Description
	1	XM Antena

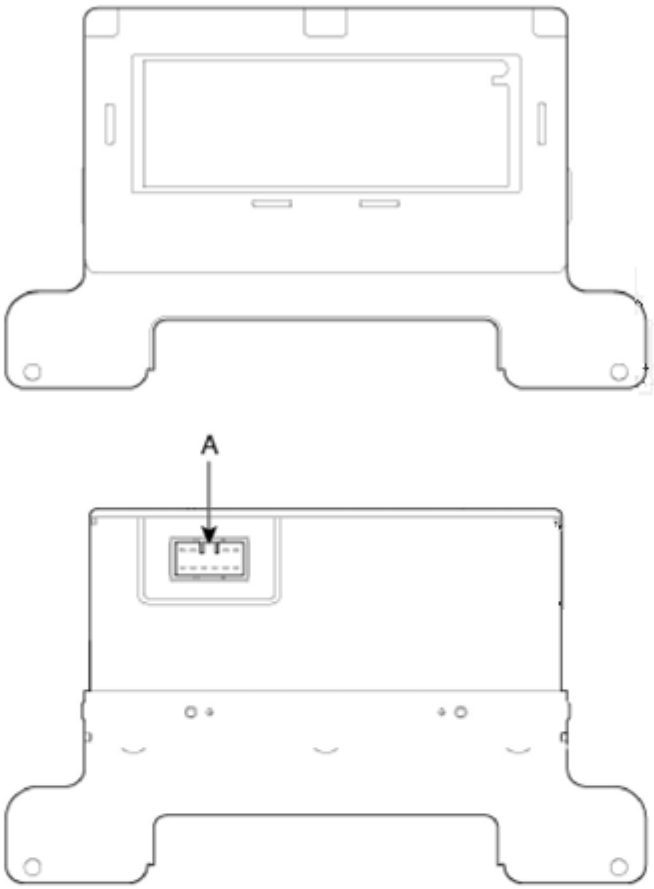
[Keyboard unit]

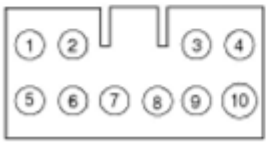




Connector A	Pin	Description	Pin	Description
	1	-	7	-
	2	-	8	-
	3	B+	9	Power GND
	4	Illumination +	10	Illumination -
	5	Remote PWR	11	Remote GND
	6	UART Tx	12	UART Rx

[Monitor unit]



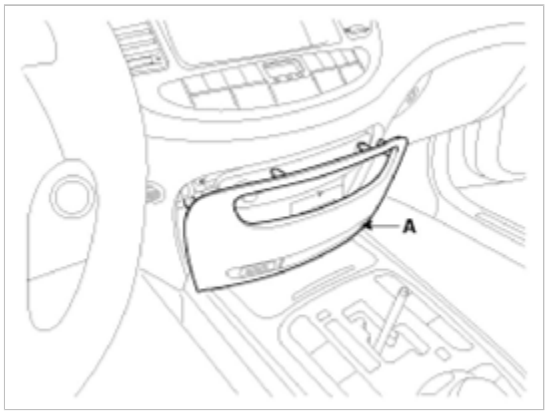
Connector A	Pin	Description	Pin	Description
	1	Illumination -	6	-
	2	-	7	CAN -
	3	-	8	CAN +
	4	Power GND	9	ACC
	5	Illumination +	10	B+

Body Electrical System > Audio > Audio Unit > Repair procedures

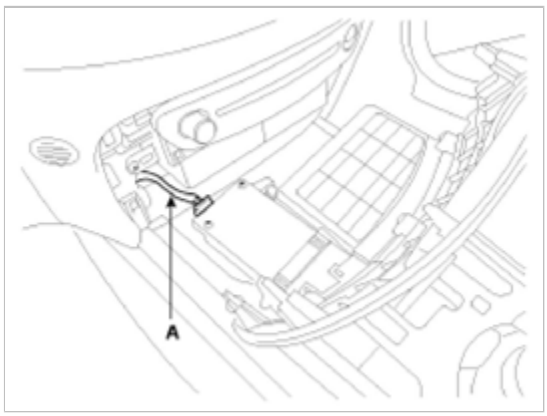
Removal

Audio Unit

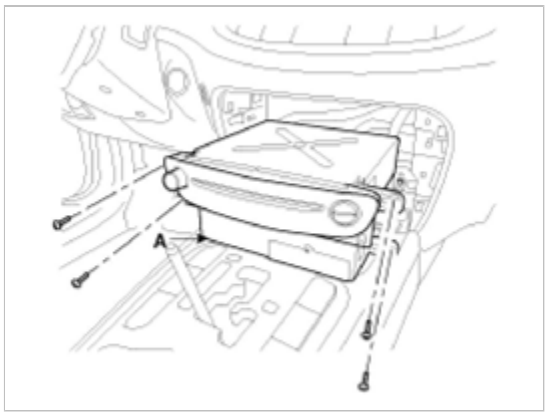
1. Disconnect the negative (-) battery terminal.
2. Remove the crash pad lower panel (A).



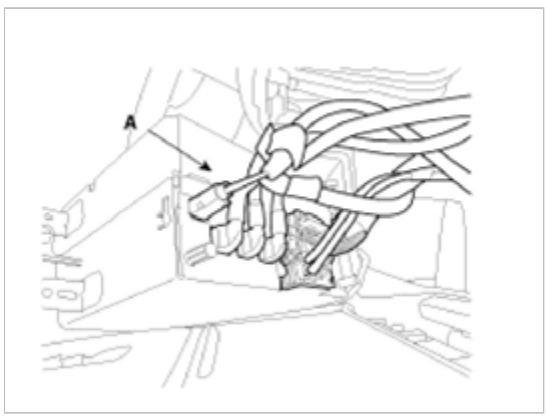
3. Remove the connector (A).



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



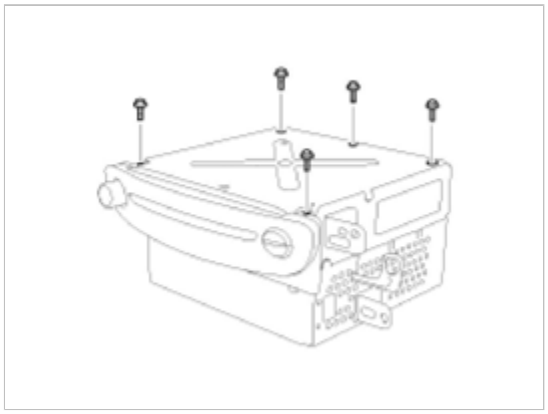
5. Remove the connector (A).



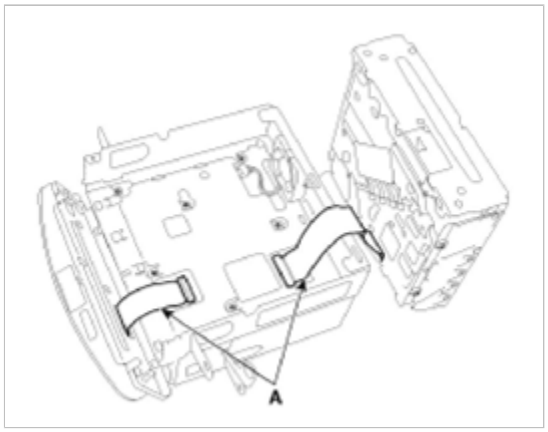
NOTE

When the compact disc is not ejected, do not remove it forcibly

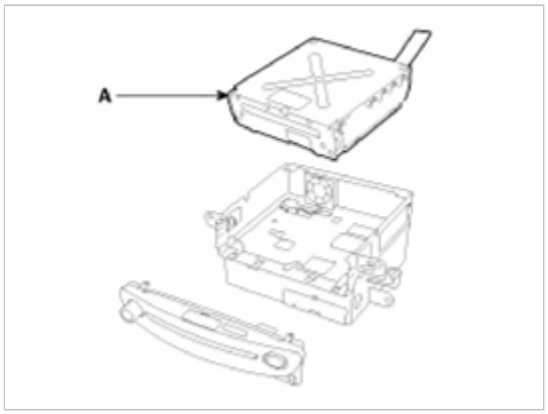
6. When separate the CD rom drive, if necessary, remove the screws (5EA) on the head unit.



7. Remove the connector (A).

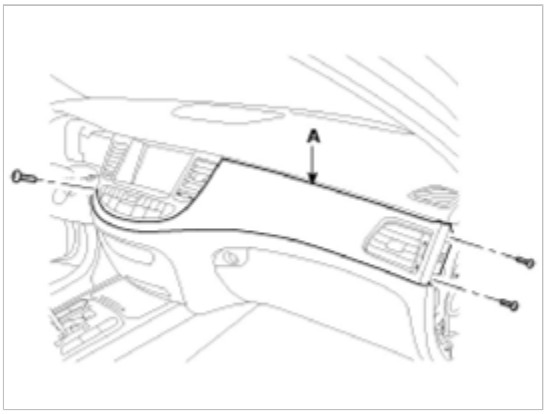


8. Remove the CD rom drive (A).

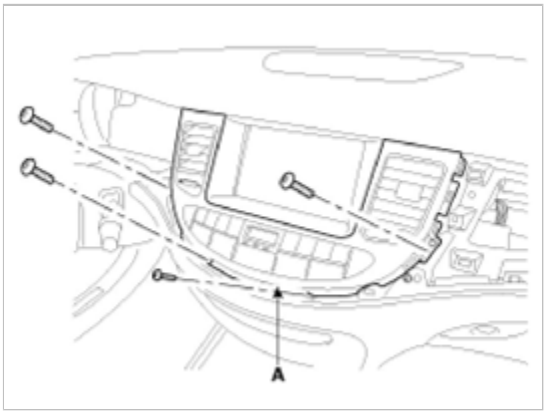


Keyboard Unit

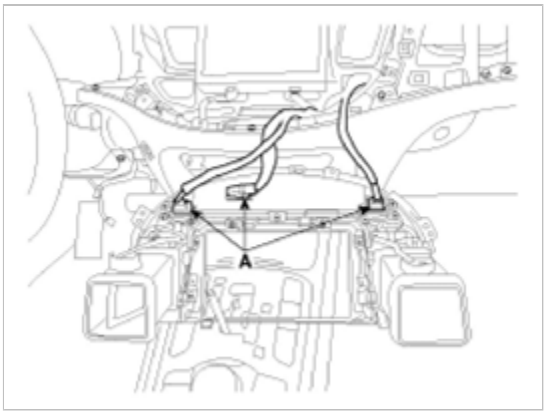
1. Disconnect the negative (-) battery terminal.
2. Remove the cluster fascia panel.
   (Refer to the BD group - "Crash pad")
3. Remove the crash pad side garnish (A) after removing the screws.



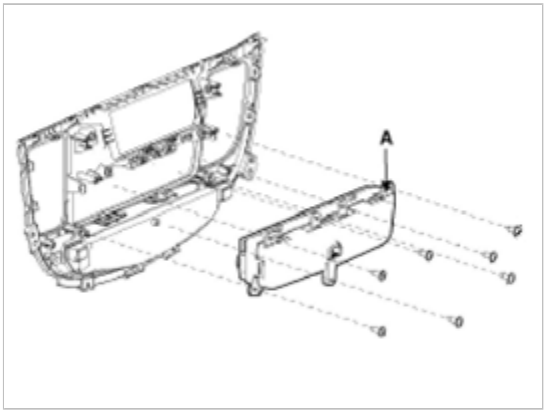
4. Remove the center fascia panel (A) after removing the screws.



5. Remove the connectors (A).



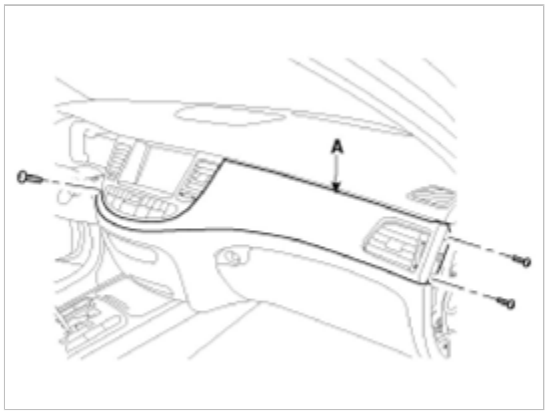
6. Remove the keyboard unit (A) after removing the screws.



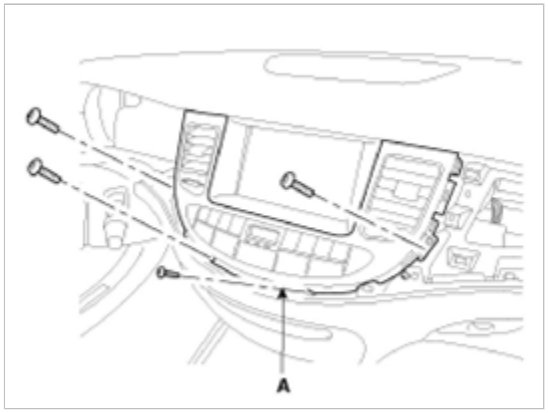
Monitor Unit

1. Disconnect the negative (-) battery terminal.

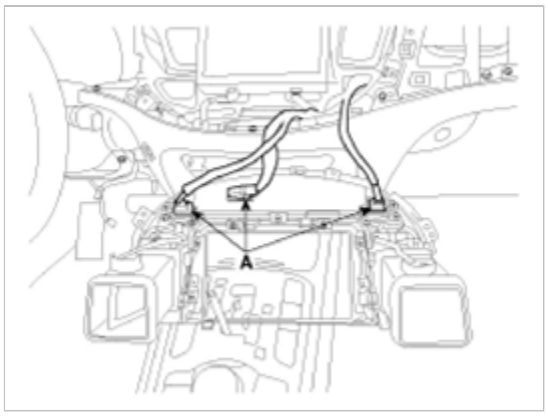
2. Remove the cluster fascia panel.
   (Refer to the BD group - "Crash pad")
3. Remove the crash pad side garnish (A) after removing the screws.



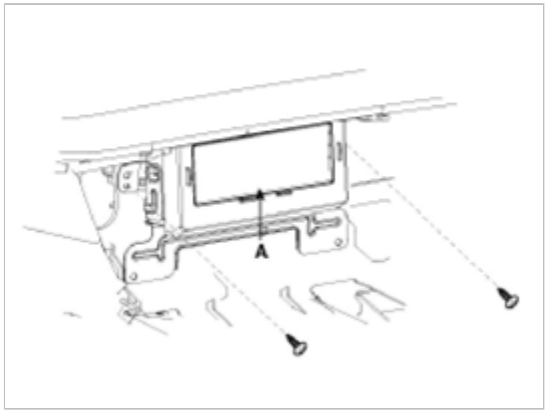
4. Remove the center fascia panel (A) after removing the screws.



5. Remove the connectors (A).



6. Remove the monitor unit (A) after removing the screws.



Installation

Audio Unit

1. Install the audio head unit after connecting the connectors.
2. Install the crash pad lower panel and connectors.
3. Connect the negative (-) battery terminal.

Keyboard Unit

1. Install the keyboard unit after connecting the connectors.
2. Install the center fascia panel.
3. Install the crash pad side garnish, cluster fascia pannel and crash pad lower panel.

Monitor Unit

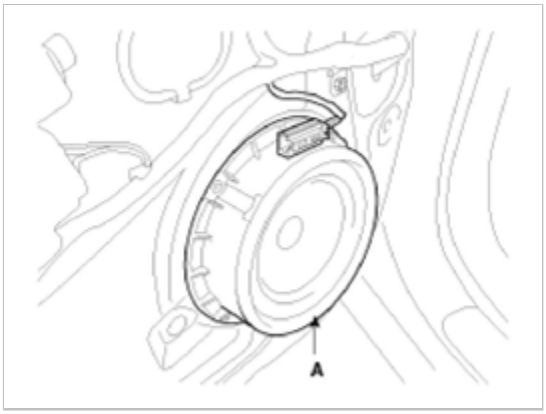
1. Install the monitor unit after connecting the connectors.
2. Install the center fascia panel.
3. Install the crash pad side garnish, cluster fascia pannel and crash pad lower panel.

Body Electrical System > Audio > Speakers > Repair procedures

Removal

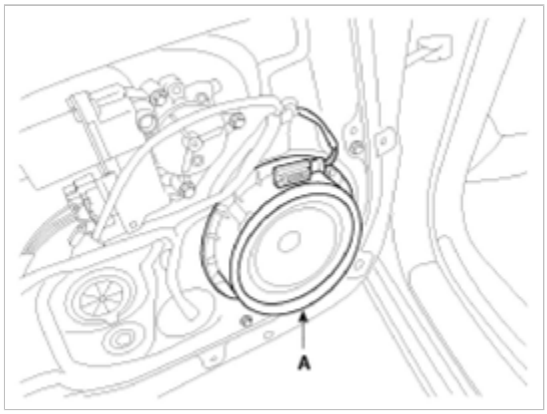
Front Speaker

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



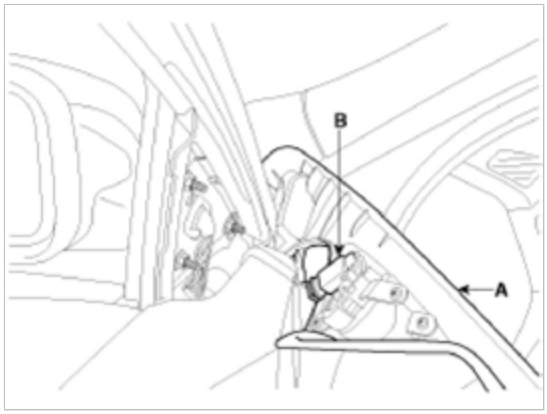
Rear Speaker

1. Remove the rear door trim panel.
   (Refer to the BD group - "Rear door")
2. Remove the rear speaker (A) after removing 4 rivets.

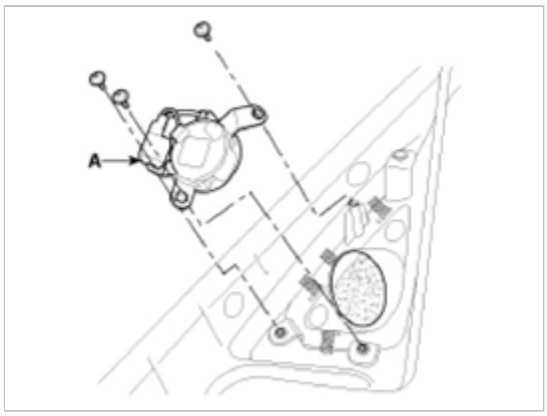


Front Door Tweeter Speaker

1. Remove the front door delta cover (A) after disconnecting the connector (B).
   (Refer to the BD group - "Front door")

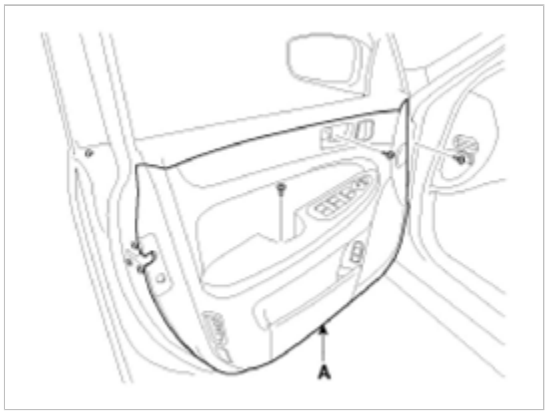


2. Remove the tweeter speaker (A).

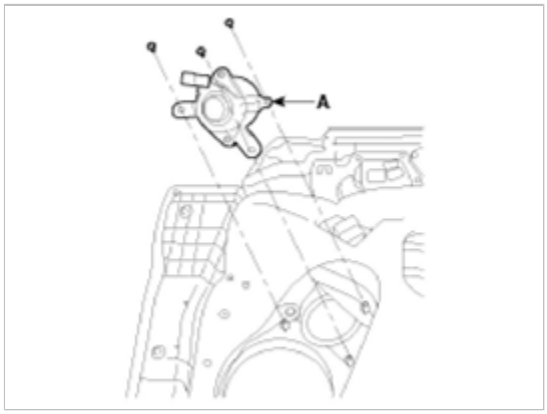


Front Door Middle Speaker

1. Remove the front door trim panel (A).
   (Refer to the BD group - "Front door")

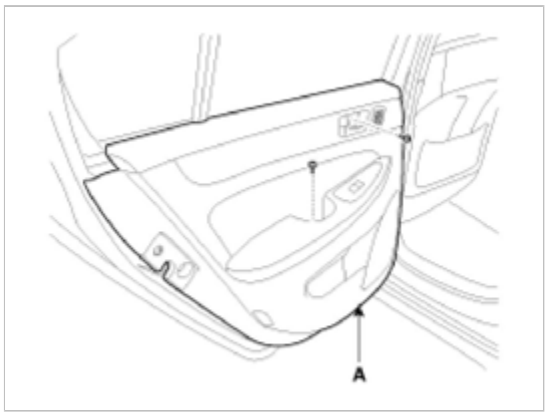


2. Remove the middle speaker (A) after removing the screws.

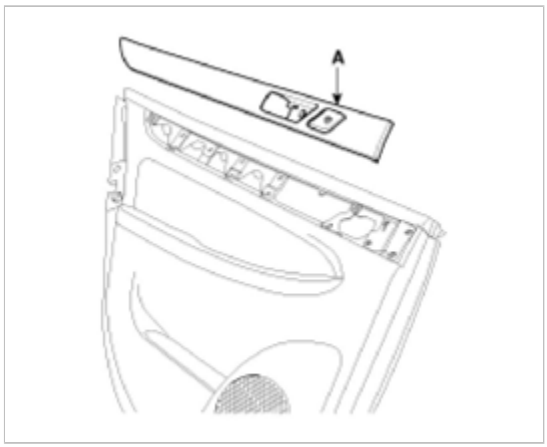


Rear Door Tweeter Speaker

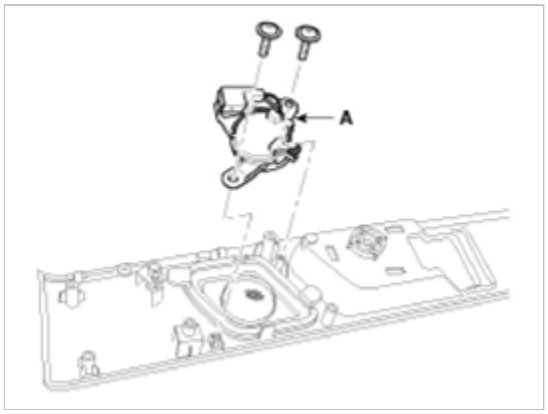
1. Remove the rear door trim panel (A).
   (Refer to the BD group - "Rear door")



2. Remove the door trim garnish (A) after removing the screws inside the door trim panel.

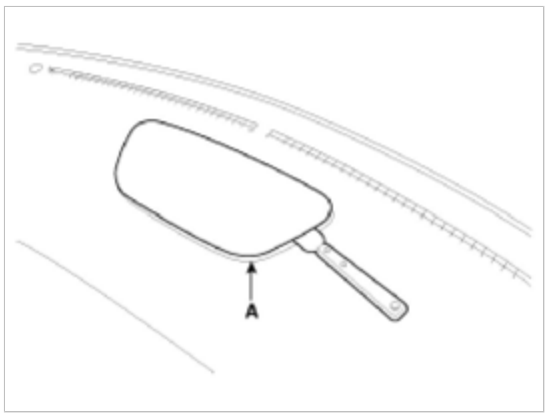


3. Remove the tweeter speaker (A) after removing the screws and connectors.

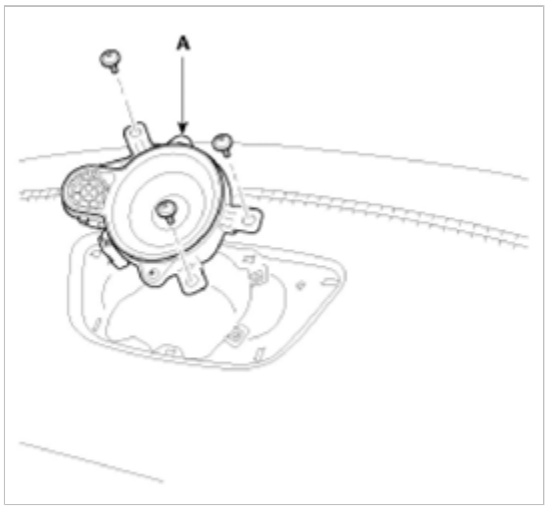


Crash Pad Center Speaker

1. Remove the crash pad center speaker grill (A).

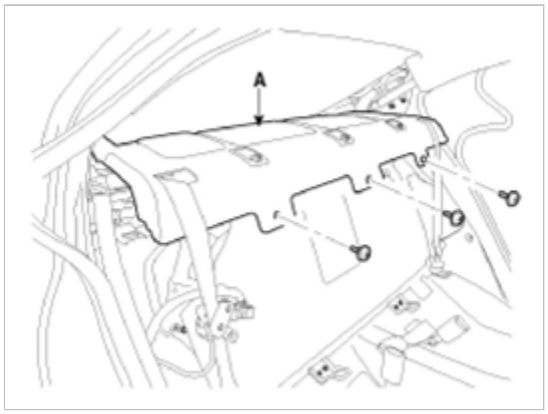


2. Remove the crash pad center speaker (A) after loosening the mounting screws (3EA).

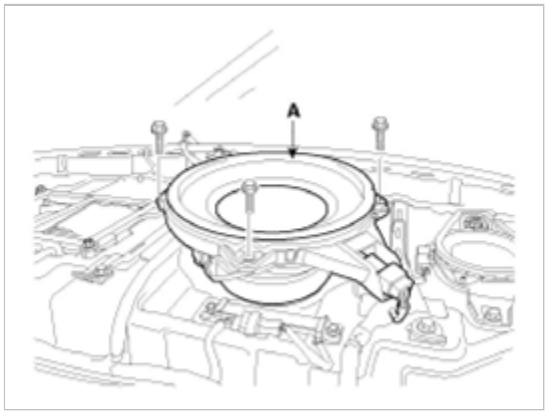


Sub Woofer Speaker

1. Remove the rear seat.
   (Refer to the BD group - "Rear seat")
2. Remove the rear package tray (A).
   (Refer to the BD group - "Rear seat")

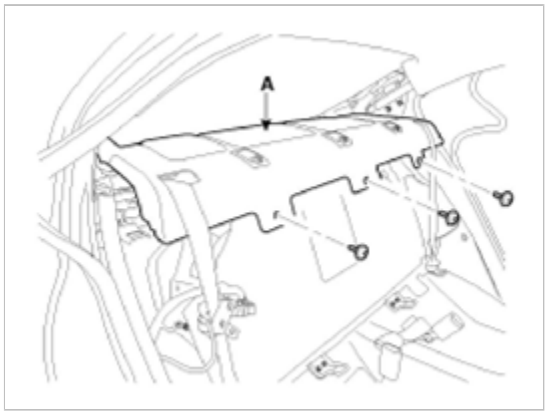


3. Remove the sub woofer speaker (A) after removing bolts (3EA).

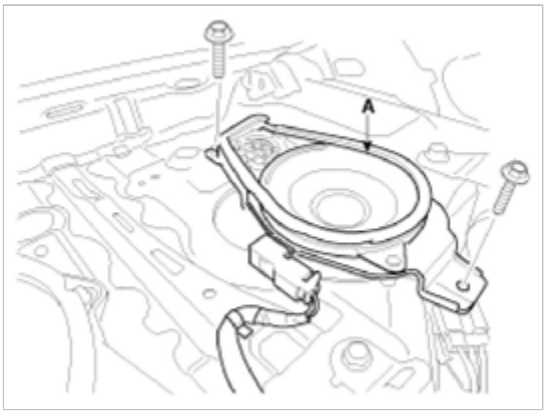


Surround Speaker

1. Remove the rear seat.
   (Refer to the BD group - "Rear seat")
2. Remove the rear package tray (A).
   (Refer to the BD group - "Rear seat")



3. Remove the surround speaker (A) after removing bolts (2EA).



External Amp

1. Disconnect the negative (-) battery terminal.
2. Remove the right trunk side trim.
3. Remove the external amplifier (A) after removing nuts and connectors.

※ For hand free mic, refer to the removal/installation of AVN hand free mic.

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 door trim.

Front Door Tweeter Speaker

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

Front Door Middle Speaker

1. Install the front door middle speaker on the door trim panel.
2. Install the front door trim panel.

Rear Door Tweeter Speaker

1. Install the tweeter speaker on the door trim garnish after connecting the tweeter speaker connector.
2. Install the door trim garnish on the door trim panel.

3. Install the door trim panel.

Crash Pad Center Speaker

1. Install the crash pad center speaker after connecting the connector.
2. Install the crash pad center speaker grill.

Sub Woofer Speaker

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

Surround Speaker

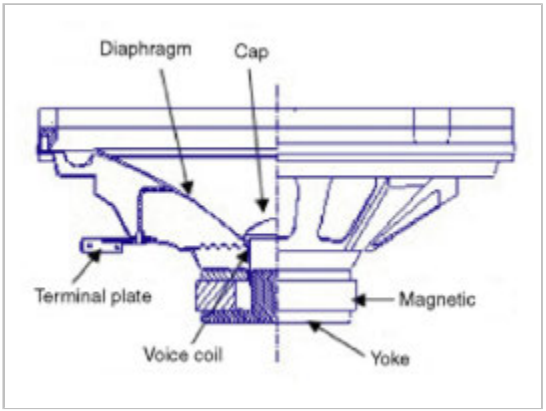
1. Install the surround speaker after connecting the connector.
2. Install the rear package tray and rear seat assembly.

External Amp

1. Install the external amp after connecting the connector.
2. Install the right trunk side trim.

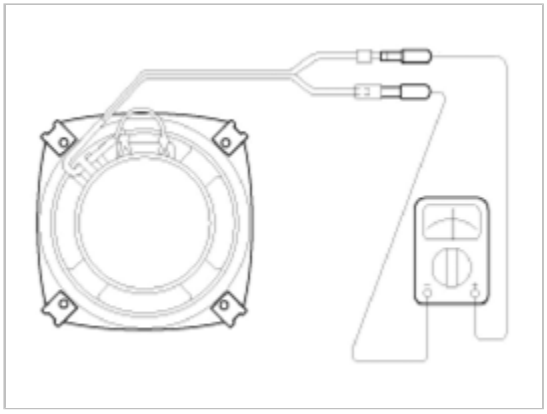
Inspection

1. Troubleshooting for Speaker
   (1) Basic inspection of speaker
   Inspect the sound from speaker after verifying that the speaker mounting screws are removed and the wiring connector is connected to remove any possible vibration transmitted from body trims and surrounding parts.



   (2) Case Troubleshooting

No.	Case	Inspection/Remedy
1	Trembling sound	1. Before replacing the speaker, inspect that the mounting screw is installed normally. 2. After re-installing the speaker, verify that no trembling sound is heard. 3. When hearing a trembling sound again, replace the speaker with new one.
2	Noise	1. Check if the wiring connector is connected normally. If not, reconnect the wiring connector. 2. In case of radio static, check if there is a noise from CD. 3. When a noise is heard on turning radio and CD on, replace the speaker with new one. NOTE In case there is only radio static, this causes from poor radio reception. Thus

		the speaker needs no repair and replacement.
3	Poor working	Inspection of the wiring connection between the battery and the speaker 1. Before replacing the speaker, inspect the wiring connection between the battery and the speaker is normal. 2. Check the supply power to the speaker and the resistance, then inspect the sound quality. ■ Specified impedance : 2 ~ 4Ω  3. If the speaker works poorly, replace it with new one.

CAUTION

When handling the speakers:

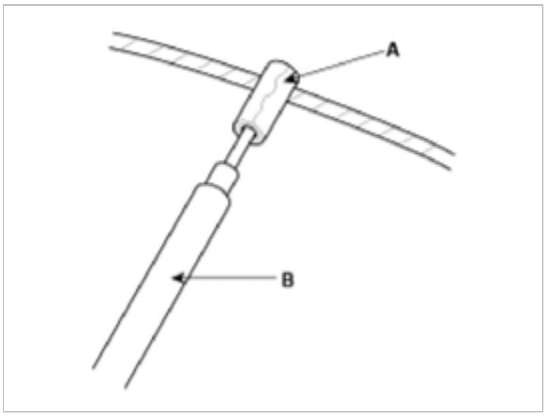
- Do not damage the speaker with impact, like dropping or throwing it.
- Be careful not to drop water and oil on the speakers.
- Caution during handling of speaker because the material of diaphragm is paper which is easily torn by impact or external force.
- Modifying the audio system may cause damage the speakers. If this is the case, the speakers are not covered by the manufacturer's warranty.

Body Electrical System > Audio > Antenna > Repair procedures

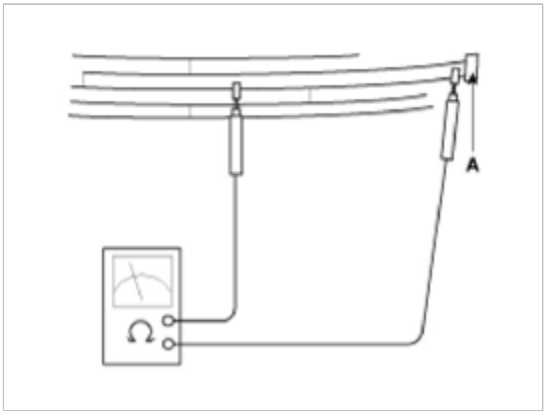
Inspection

Glass Antenna Test

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



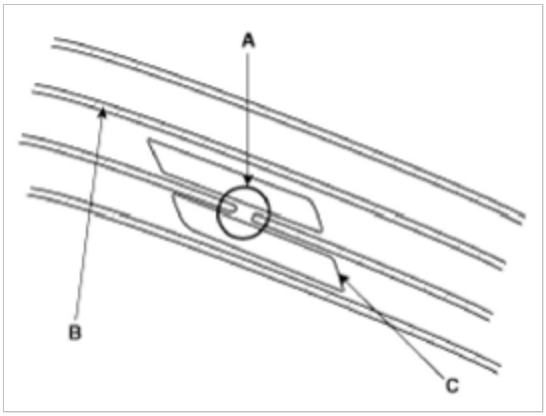
2. Touch one tester probe to the glass antenna terminal (A) hear, and move the other tester probe along the antenna wires to check that continuity exists.



Glass Antenna Repair

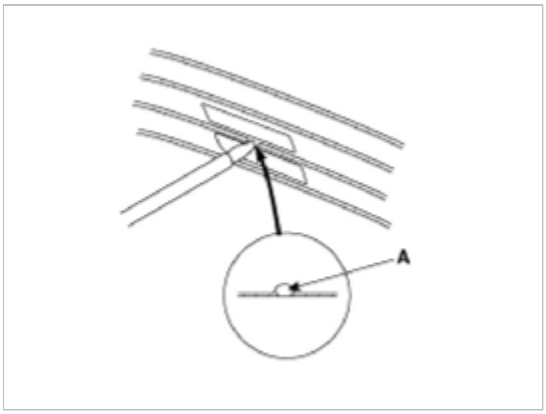
> NOTE
>
> To make an effective repair, the broken section must be no longer than one inch.

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.

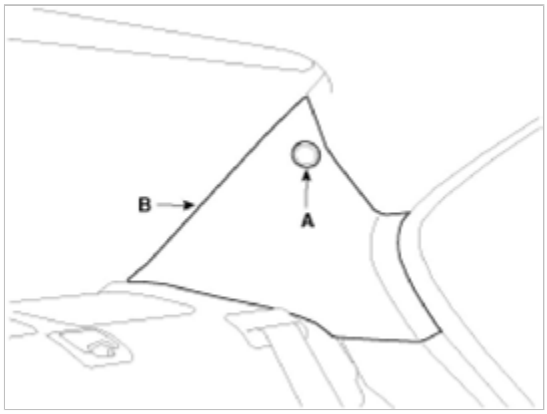
> NOTE
>
> Thoroughly mix the paint before use.



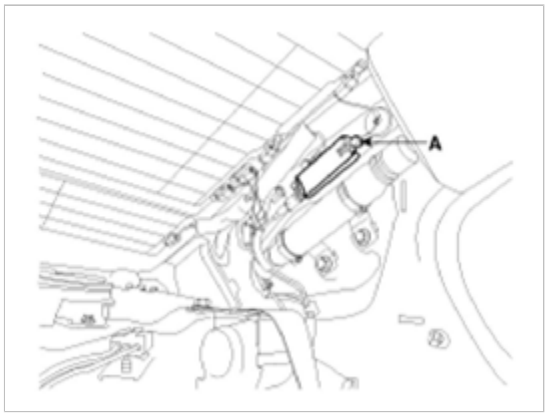
4. Check for continuity in the repaired wire.
5. Apply a second coat of paint in the same way. Let it dry three hours before removing the tape.

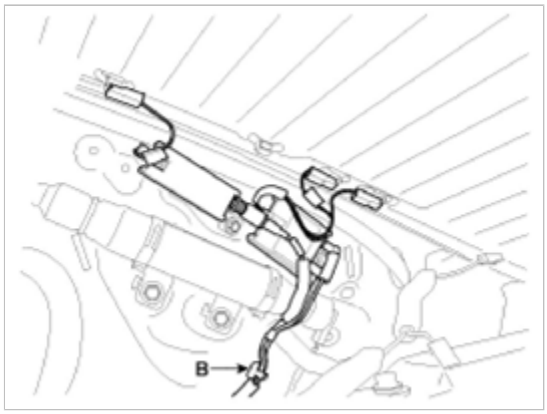
Glass Antenna Circuit Inspection

1. Remove the rear pillar trim (B) after removing the bolt in the cap (A).

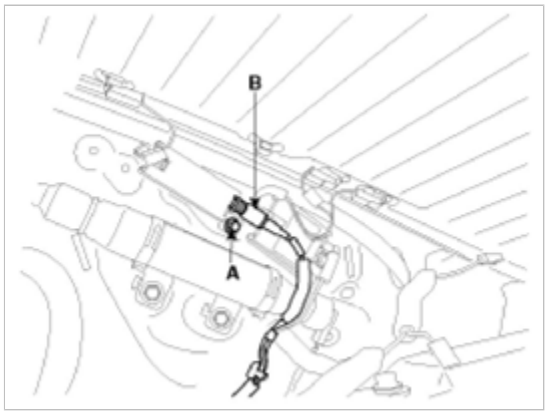


2. Disconnect the antenna feeder cable (B) from the glass antenna amp (A).





3. Turn the radio ON. Measure the voltage between terminal of the antenna feeder cable (B) and body ground (A).



4. Check for continuity between terminals of harness side connector and antenna grid terminals (AM, FM).
5. Check the grid lines that continuity exists.

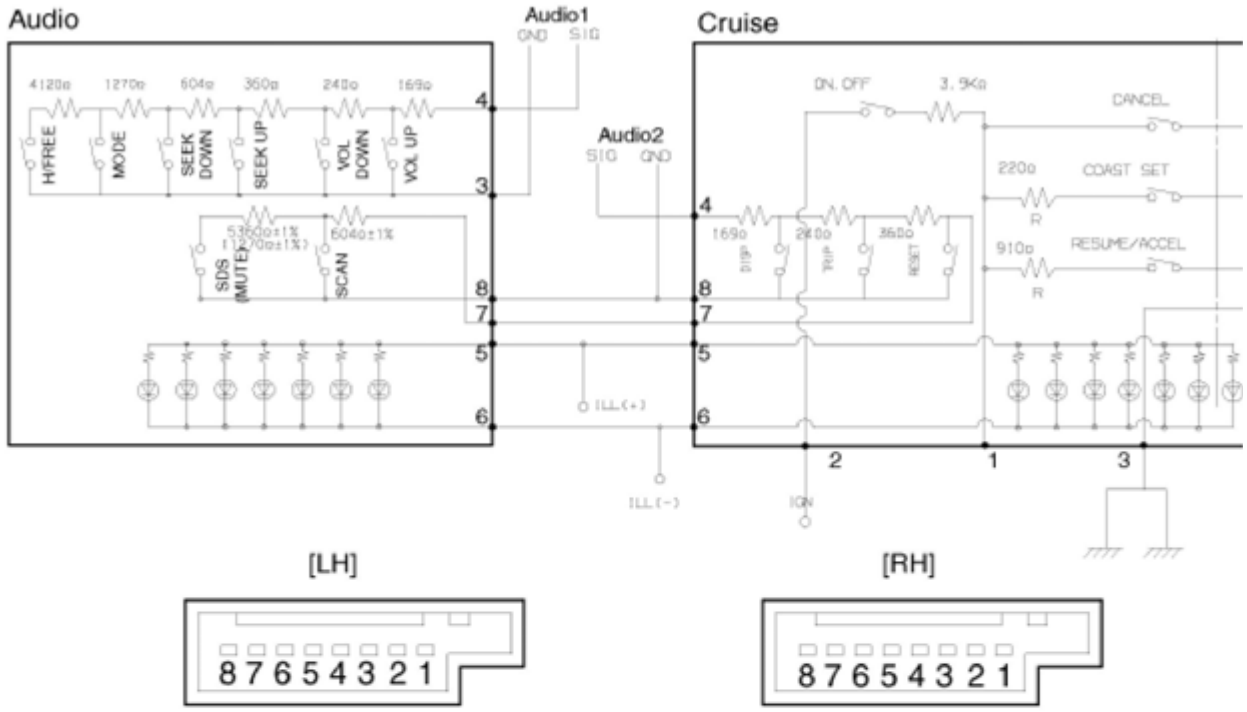
6. When a poor radio reception is not repaired through the above inspection methods, replace the amp.
   If the radio reception is still poor, check the radio cable for short and radio head unit for failure.

Body Electrical System > Audio > Audio Remote Control > Schematic Diagrams

Circuit Diagram

Steering Wheel Remote Control

[Audio + Cruise]

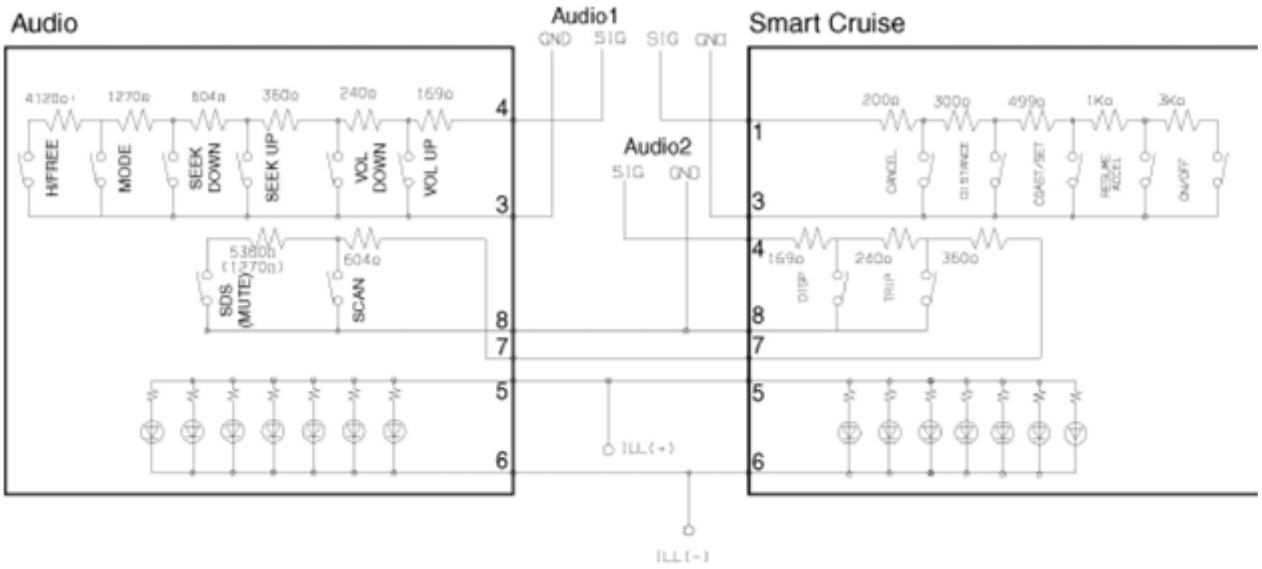


[LH]

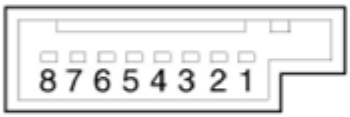
[RH]

Connector LH		Connector RH	
1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8	
Pin	Description	Pin	Description
1	-	1	Cruise switch output
2	-	2	Cruise switch IGN
3	Audio 1 GND	3	Cruise switch GND
4	Audio 1 signal	4	Audio 2 signal
5	Illumination +	5	Illumination +
6	Illumination -	6	Illumination -
7	Audio 2 signal junction	7	Audio 2 signal junction
8	Audio 2 GND	8	Audio 2 GND

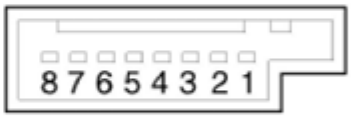
[Audio + Smart Cruise]



[LH]

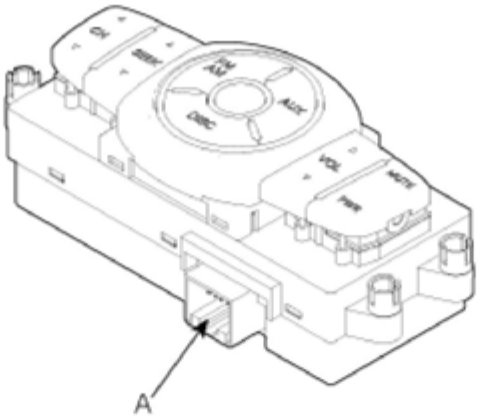


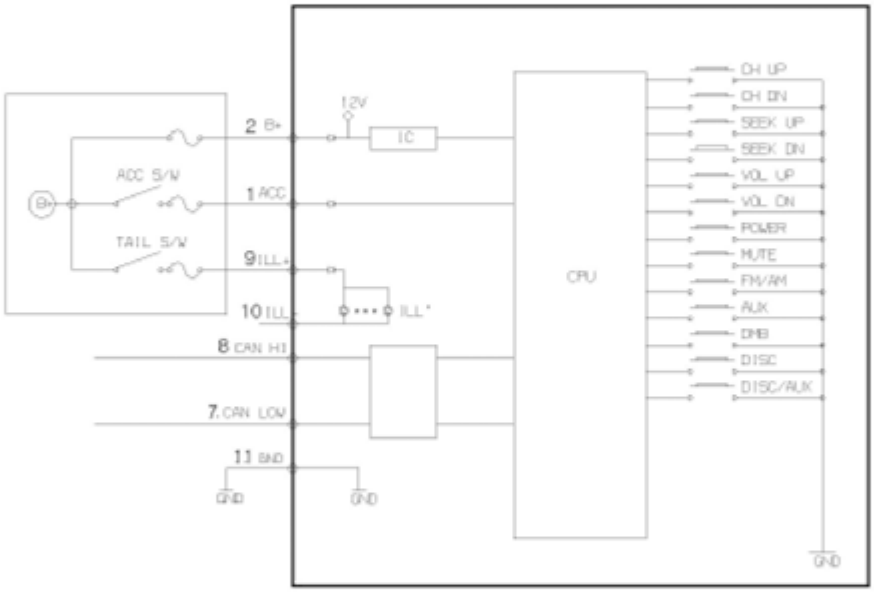
[RH]



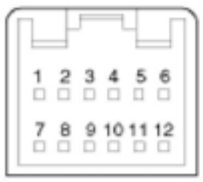
Connector LH		Connector RH	
			
Pin	Description	Pin	Description
1	-	1	Cruise signal
2	-	2	-
3	Audio 1 GND	3	Cruise GND
4	Audio 1 signal	4	Audio 2 signal
5	Illumination +	5	Illumination +
6	Illumination -	6	Illumination -
7	Audio 2 signal junction	7	Audio 2 signal junction
8	Audio 2 GND	8	Audio 2 GND

Rear Seat Audio Remote Control





Rear seat audio remote control

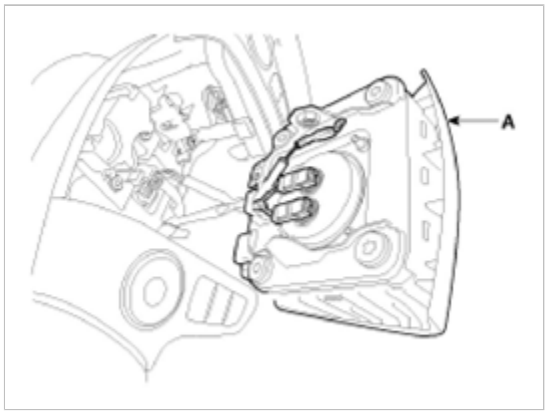
Connector A	Pin	Description	Pin	Description
	1	ACC	7	CAN low
	2	BAT +	8	CAN high
	3	-	9	Illumination +
	4	-	10	Illumination -
	5	-	11	GND
	6	-	12	-

Body Electrical System > Audio > Audio Remote Control > Repair procedures

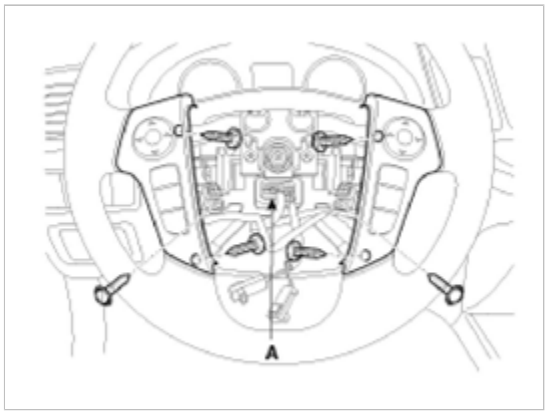
Removal

Steering Wheel Remote Control

1. Disconnect the negative (-) battery terminal.
2. Remove the driver airbag module(A).
   (Refer to the RT group)

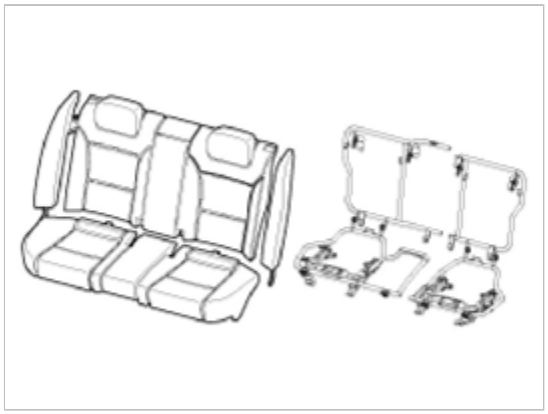


3. Remove the audio remote control switch after remove the steering wheel remote control switch connector (A) and 3 screws.

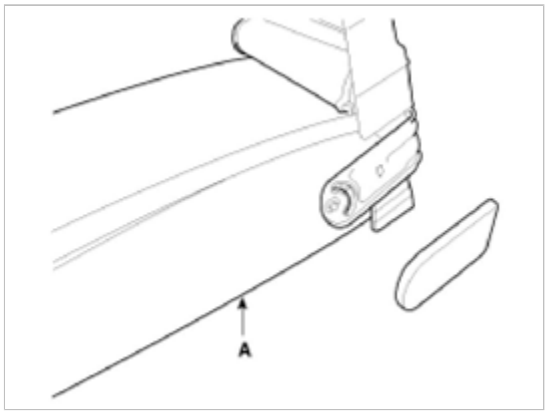


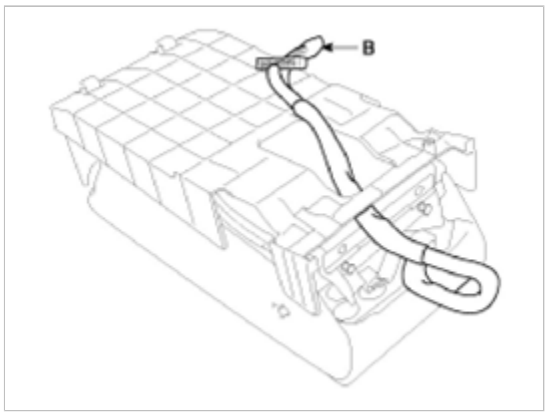
Rear Seat Audio Remote Control

1. Disconnect the negative (-) battery terminal.
2. Remove the rear seat.
   (Refer to the BD group - "Rear seat")

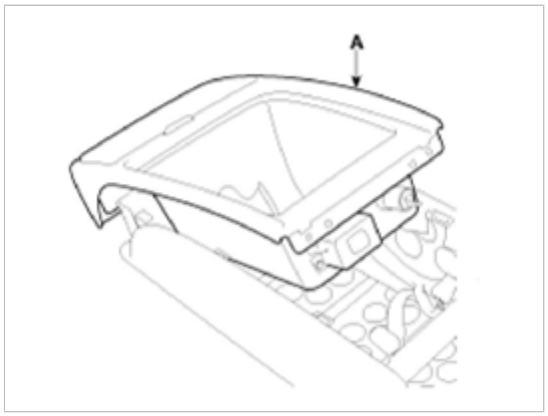


3. Remove the arm rest (A) from the rear seat and disconnect the connector (B).

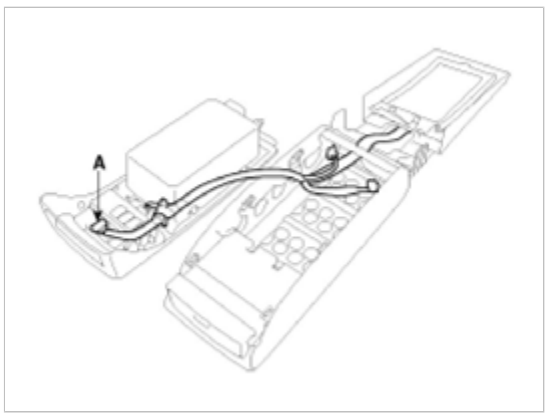




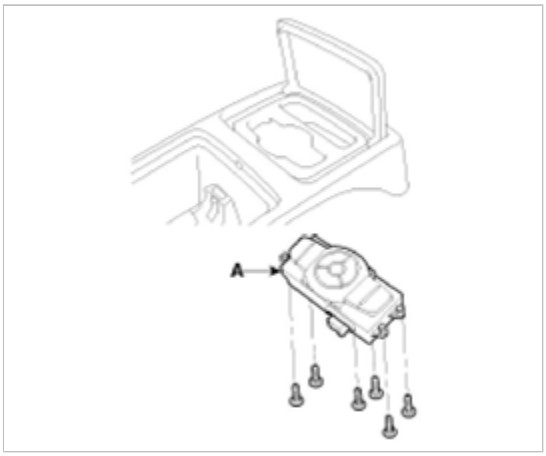
4. Remove the arm rest cover (A) after removing the screws.



5. Disconnect the rear seat audio remote control connector (A) after removing the arm rest cover.

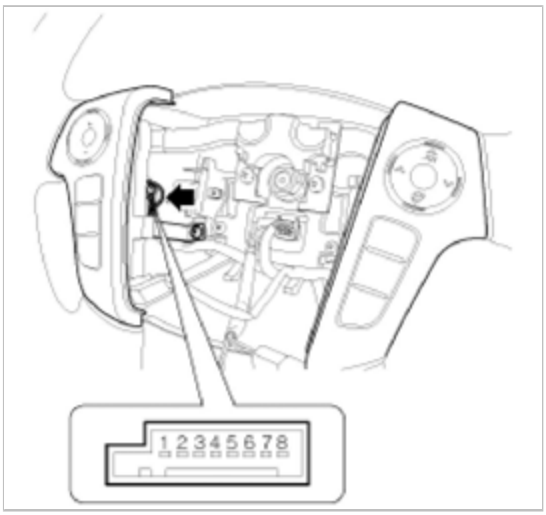


6. Remove the rear seat audio remote control unit (A).



Inspection

1. Check for resistance between No.3 and No.4 terminals in each switch position.



Switch	Connector terminal	Resistance (±5%)
Volume Up	3 - 4	0.17 kΩ
Volume Down	3 - 4	0.41 kΩ
Seek Up	3 - 4	0.77 Ω
Seek Down	3 - 4	1.37 kΩ
Mode	3 - 4	2.64 kΩ
Hand free	3 - 4	6.76 kΩ

Installation

Steering Wheel Remote Control

1. Install the audio remove control switch to the steering wheel.
2. Install the driver airbag module.

Rear Seat Audio Remote Control

1. Install the rear seat audio remote control unit to the arm rest cover.
2. Install the arm rest cover and arm rest.

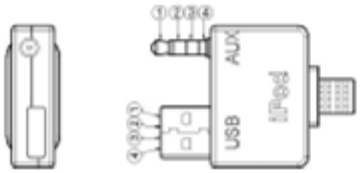
3. Install the rear seat.

Body Electrical System > Audio > AUX(Auxiliary) Jack > Schematic Diagrams

Circuit Diagram

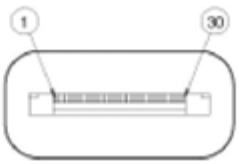
[AUX, USB, iPod Jack]

USB & AUX Jack



Pin	USB	AUX
1	USB/iPod 5V	AUX1 L in
2	USB D-/iPod Tx	AUX1 R in
3	USB D+/iPod Rx	Option/Video
4	USB/iPod GND	AUX1 GND

iPod Connector (30P, Male)



Pin	iPod Male	Pin	iPod Male
1	GND	16	GND
2		17	-
3	-	18	Rx
4	D+	19	Tx
5	-	20	ACC-DET
6	D-	21	-
7	-	22	-
8	5V	23	Video
9	-	24	-
10	ACC ID	25	-
11	-	26	-
12	-	27	AUX1 L IN
13	-	28	AUX1 R IN
14	-	29	AUX1 GND
15	GND	30	Signal wire GND

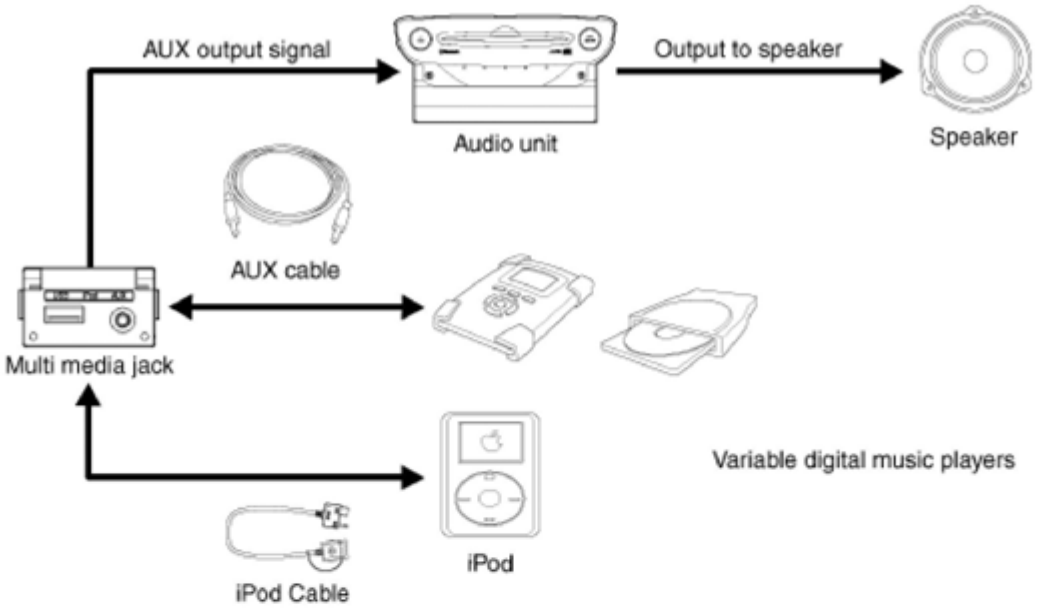
Body Electrical System > Audio > AUX(Auxiliary) Jack > Description and Operation

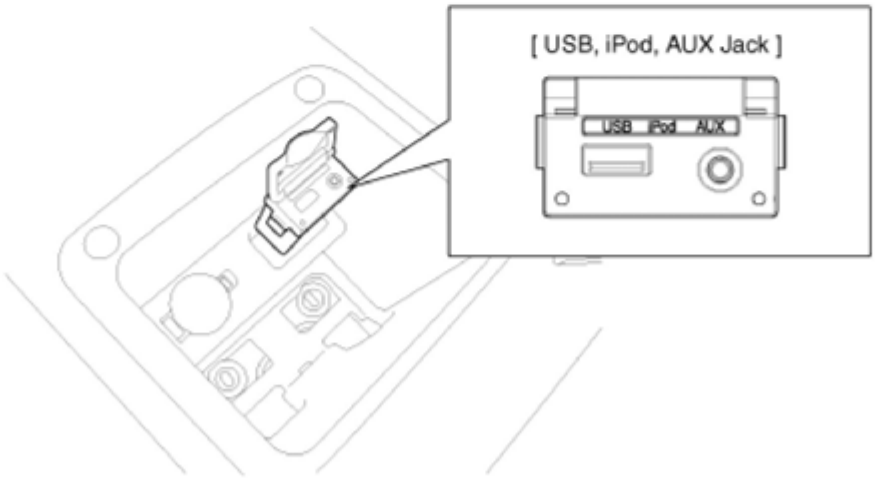
Description

The AUX JACK on the center console 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 defective but the output level of the used media does not match the specification of the AUX input.

NOTE

Hyundai-iPod cable must be used to iPod playback. The Apple-iPod cable supplied with the player will NOT work.

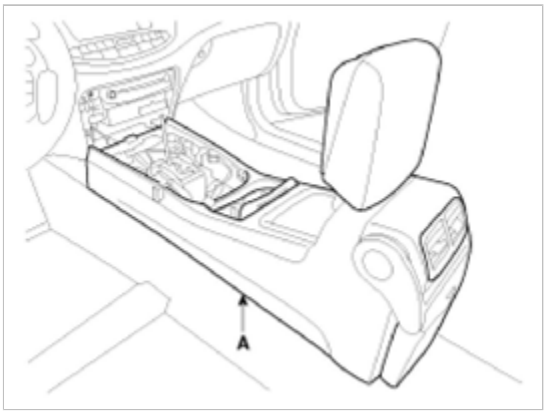




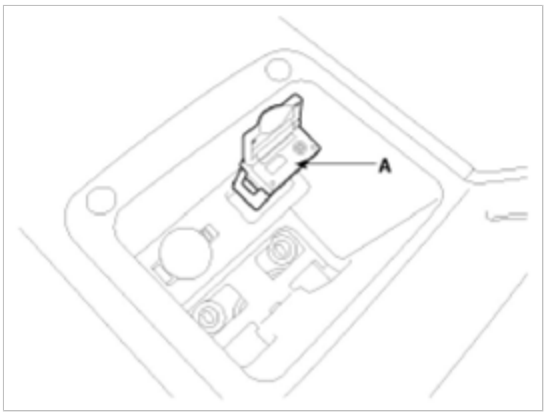
Body Electrical System > Audio > AUX(Auxiliary) Jack > Repair procedures

Removal

1. Remove the floor console (A).
   (Refer to BD group - "Console")



2. Disconnect the jack assembly connector from the floor console.
3. Remove the Multi media Jack (A) from the floor console.

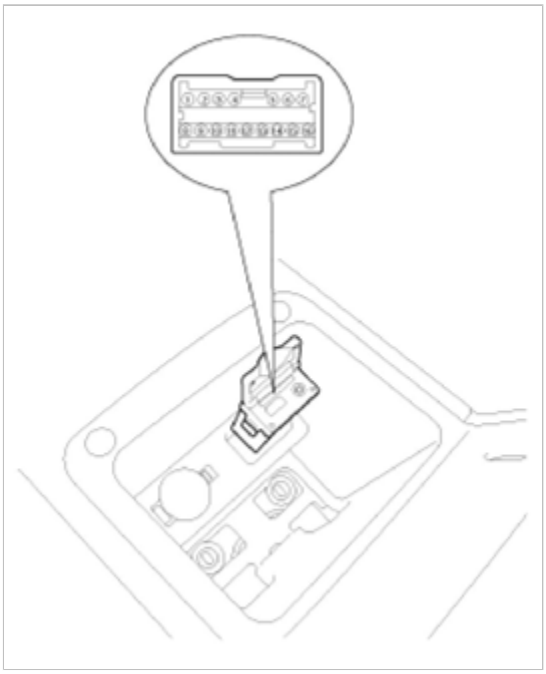


Installation

1. Install the Multi media Jack.
2. Connect the Multi Media Jack connector.
3. Install the under cover to the floor console.

Inspection

1. Disconnect the negative(-) battery terminal.
2. Disconnect the Multi Media Jack connector after from the floor console.



3. To inspect USB/iPod port, check the voltage between NO.1 and 4 terminal of.

   Standard value: 5V

4. To inspect AUX Jack, check the voltage between NO.14 terminal of Jack output connector and NO.4 terminal of USB/iPod input port at AUX input.

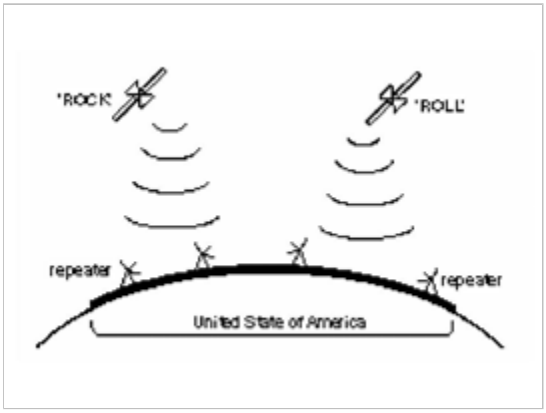
   Standard value: 5V

Body Electrical System > Audio > XM Radio > Description and Operation

Description

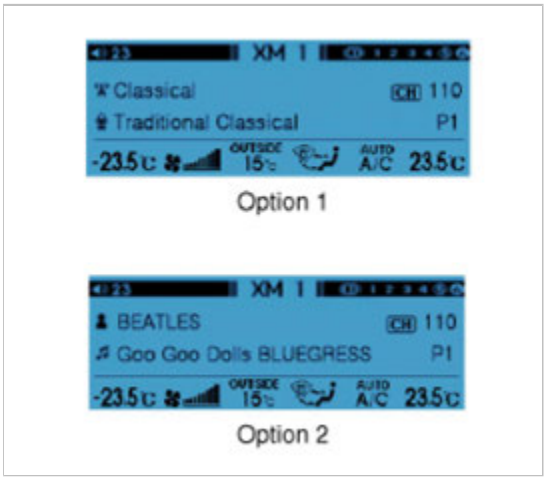
Introduction to XM radio

XM-Radio is a Satellite Based Radio Broadcast System that operates around 2.3 GHz from two 15,000 watts satellites; one named "ROCK," at 115 Degrees West, the other named "ROLL" at 85.0 Degrees West. Or another way of saying, the satellites are positioned over the East and West Coasts of US. The service covers only US. Due to the limitations of satellite transmission, the signal is not able to penetrate buildings, so it cannot effectively cover dense urban areas. The terrestrial repeater network extends SDARS coverage and allows providers to reach the greatest number of subscribers and provide quality coverage. The repeaters receive the XM signal directly from the satellites and then re-transmit it to XM radios anywhere.
XM provides digitalized radio programs in terms of channels. Each channel is a program that the user can tune to. A category is a group of channels. Examples of categories are classical, news and sports.
XM is a paid service. That means users have to make a subscription to XM before they can enjoy the programs. However, XM does give some free-to-air channels. The users can listen to one of them without making any subscription.



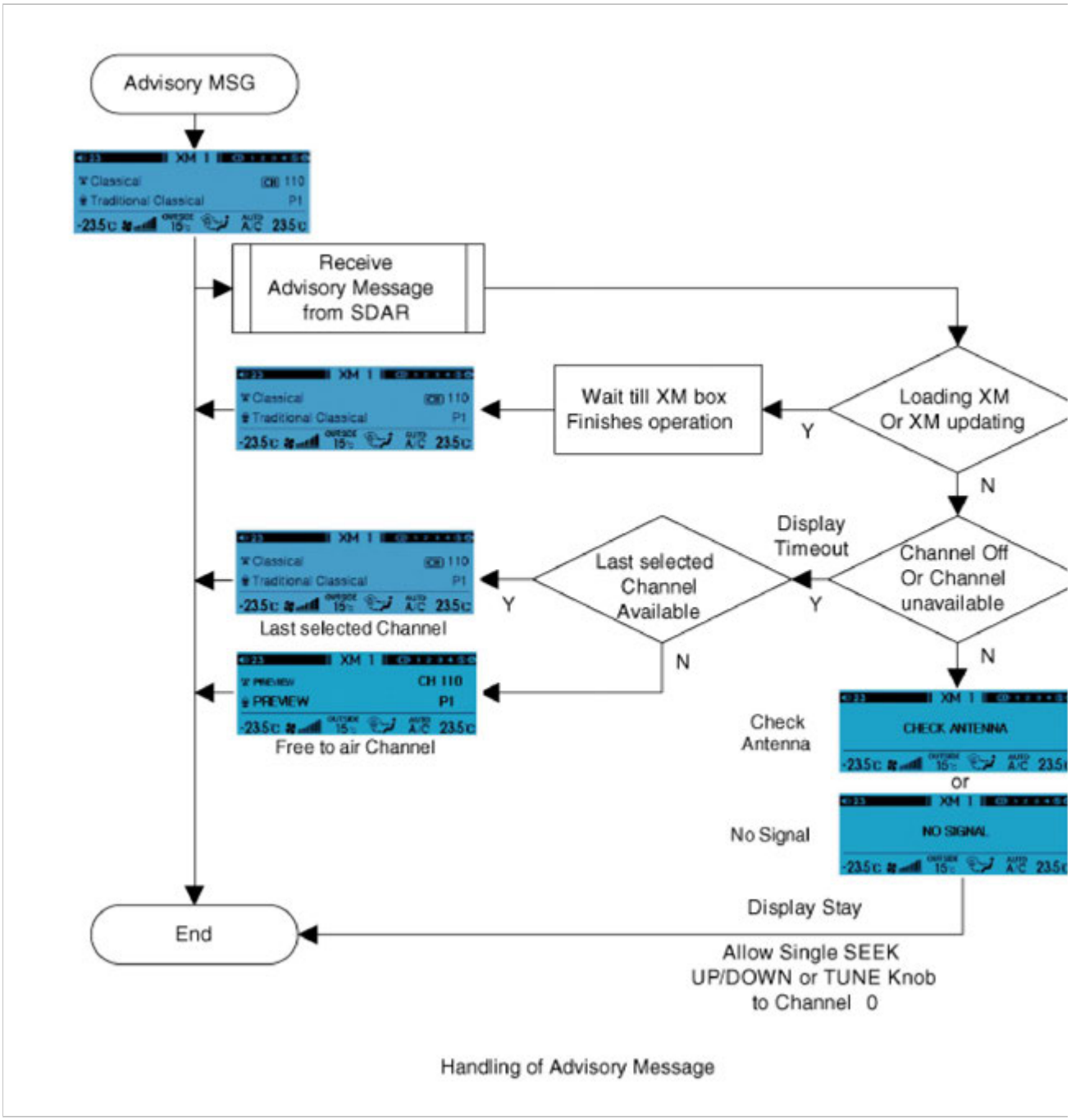
Function

Main Display



Main display in XM mode

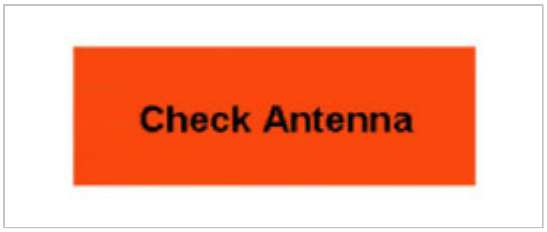
XM1	XM band
CH 100	Channel Number
Dance	Category name
Dance hits	Channel name
Britney Jean Spears	Artist name
TOXIC	Song title
P1/P2/P3/P4/P5/P6	Preset channel number
100	Current preset channel number
*The disc icons reflect the actual disc status in the CD changer (for CDC Models).	
* User can select the base display of channel info. (Option 1 or Option 2)	
* Information display mode is extended mode. (Display allowable characters.)	

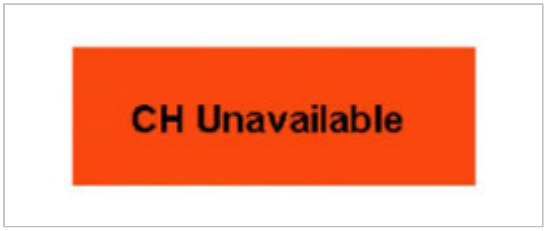


Handling of Advisory Message

Handling Of Advisory Messages

Advisory messages are messages to indicate the various abnormal conditions during XM operations. These are defined in the “XM Radios Minimum Feature & Functionality” and duplicated here. The ways to handle each message are stated in the table below.

Condition	Display	Handling
Antenna not connected	Check Antenna 	Display stays. No beep. Allow seek up/down to channel 0 for viewing Radio ID.
	XM Updating	

Updating encryption code		Display stays. No beep. Go back to channel after updating is done.
Loss of signal	No Signal 	Display stays. No beep. Allow seek up/down to channel 0 for viewing Radio ID.
Acquiring channel audio or information NOTE In the process of initializing the XM module, H/U displays “Loading XM”.	Loading 	Display stays. No beep. Go back to channel after loading is done.
Channel not in service	Off Air 	Display timeout. No beep. Go to last selected channel if one exists. If not, go to free-to-air channel, e.g. CH1
Channel (SID) no longer available	CH Unavailable 	Display timeout. No beep. Go to last selected channel if one exists. If not, go to free-to-air channel, e.g. CH1
Corresponding Artist Name/Feature, or Song/Program Title are null (empty)	No Artist Info / No Title Info 	Timeout follows that defined in Extra Channel Info section. No beep. Stay in current channel.
Category name not available	No CAT Info	Timeout follows that defined in Extra Channel Info section. No beep. Stay in current channel.

		
No channel available for the chosen category	Not Found 	Display timeout. No beep. Go to last selected channel if one exists. If not, go to free-to-air channel, e.g. CH1

Body Electrical System > Audio > XM Radio > Troubleshooting

Troubleshooting

SDAR Diagnostic Test

1. Entering Diagnostic Mode

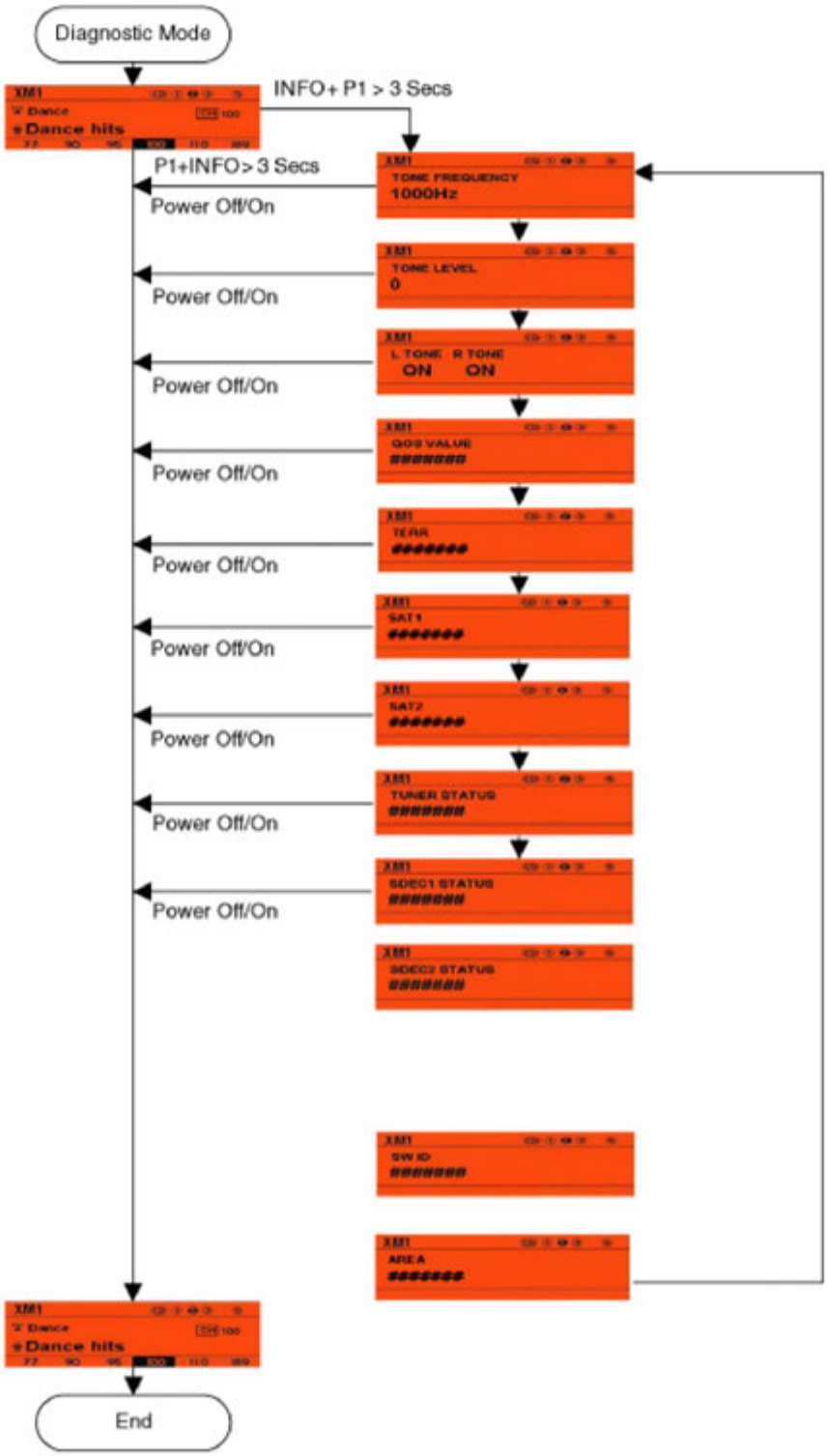
The method to enter H/U diagnostic mode is by press-&-hold the INFO button and preset M1 simultaneously for more than 3 seconds.

2. Diagnostic Messages

Use the CAT/FLDR up/down button to cycle through the various test messages provided by the SDAR.
The sequence of cycling is as followed: Tone Frequency → Tone Level → RTone LTone → QOS Value → TERR Status → SAT1 Status → SAT2 Status → TUNER Status → SDEC1 Status → SDEC2 Status → TERR Status → SW ID → AREA → Tone Frequency.
The first three test tone menus allow viewing and changing on the test tone settings by turning the AUDIO CONTROL knob. For LTONE/RTONE on/off, every 1 click clockwise turning shall select a combination in the following sequence: OFF/OFF and ON/ON. Turning anti-clockwise shall reverse the sequence. For TONE LEVEL, every click shall increment or decrement the value by 1. And for TONE FREQUENCY, every click shall increment or decrement the value by 100Hz. Turn clockwise to increase and anti-clockwise to decrease the value. By default, the test tone is set to ON/ON with frequency set to 1000 Hz and level set to 0. SDEC1, SDEC2 and TERR Status means BER(Bit Error Rate) and CN(Carrier to Noise). SW ID means software version on the company of development. AREA means the broadcast country. (USA or CANADA)

3. Exiting Diagnostic Mode

The method to exit H/U diagnostic mode is pressing-&-holding the preset M1 and INFO button simultaneously for more than 3 seconds or power Off/On.
※ In diagnostic mode, any button except power On/Off, preset M1+ INFO(for more than 3 secs), CAT/FLDR up/down and Volume Knob doesn’t operate



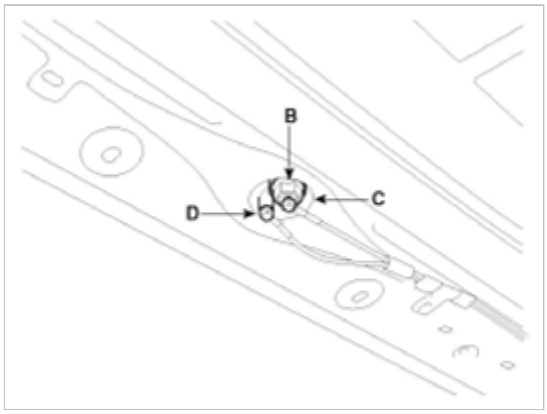
Diagnostic Test

Body Electrical System > Audio > XM Radio > Repair procedures

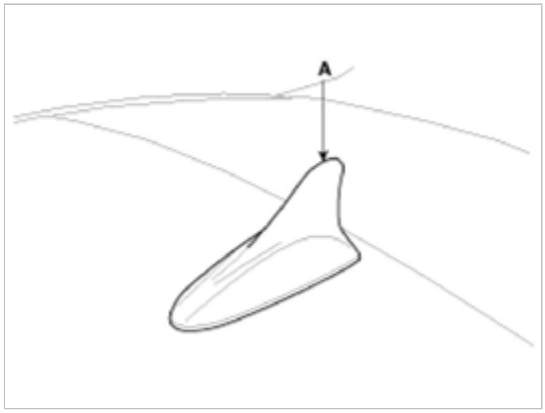
Removal

Roof Antenna

1. Remove the rear roof trim.
   (Refer to the BD group - "Roof trim")
2. Disconnect the GPS cable (C) and XM radio cable (D) after removing a nut (B).



3. Remove the roof antenna (A).



Installation

Roof Antenna

1. Connect the GPS cable and XM radio cable.
2. Install the roof trim.

Body Electrical System > Audio > Troubleshooting

Troubleshooting

Customer Complaint Analysis Check Sheet

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

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.

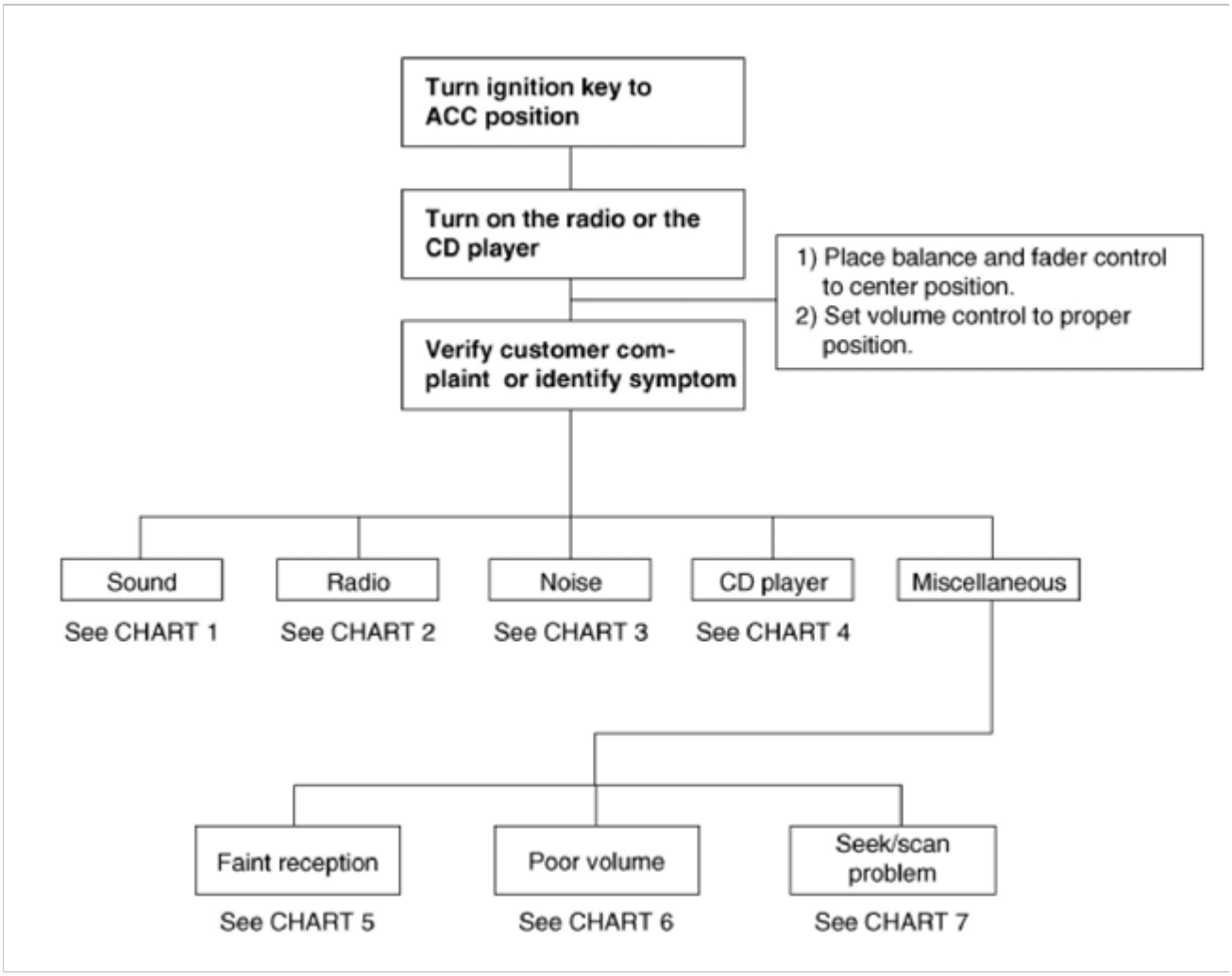
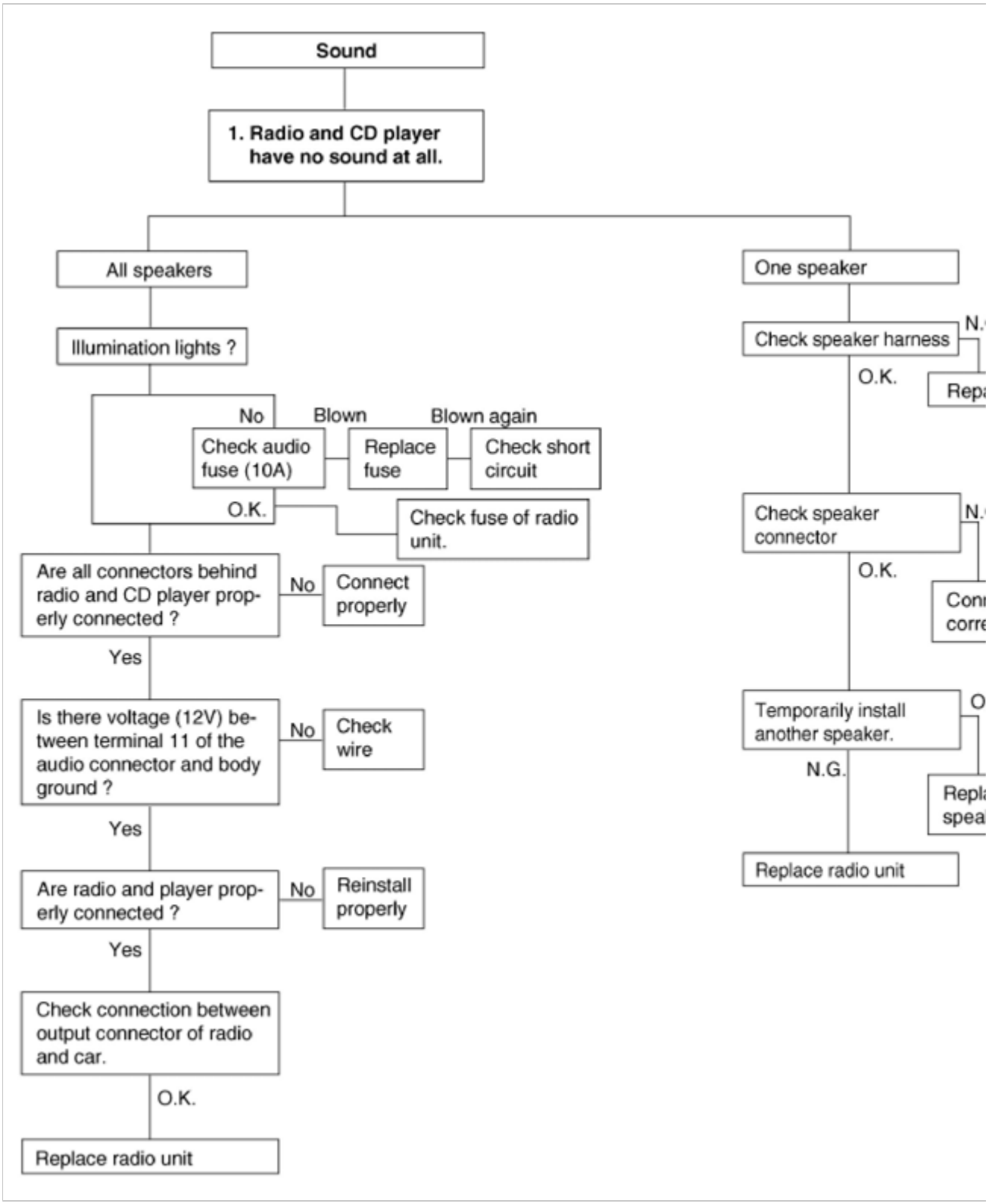


Chart 1


Sound
1. Radio and CD player have no sound at all.
All speakers
Illumination lights ?
No
Blown
Blown again
Check audio fuse (10A)
Replace fuse
Check short circuit
O.K.
Check fuse of radio unit.
Are all connectors behind radio and CD player properly connected ?
No
Connect properly
Yes
Is there voltage (12V) between terminal 11 of the audio connector and body ground ?
No
Check wire
Yes
Are radio and player properly connected ?
No
Reinstall properly
Yes
Check connection between output connector of radio and car.
O.K.
Replace radio unit
One speaker
Check speaker harness
O.K.
Check speaker connector
O.K.
Temporarily install another speaker.
N.G.
Replace radio unit

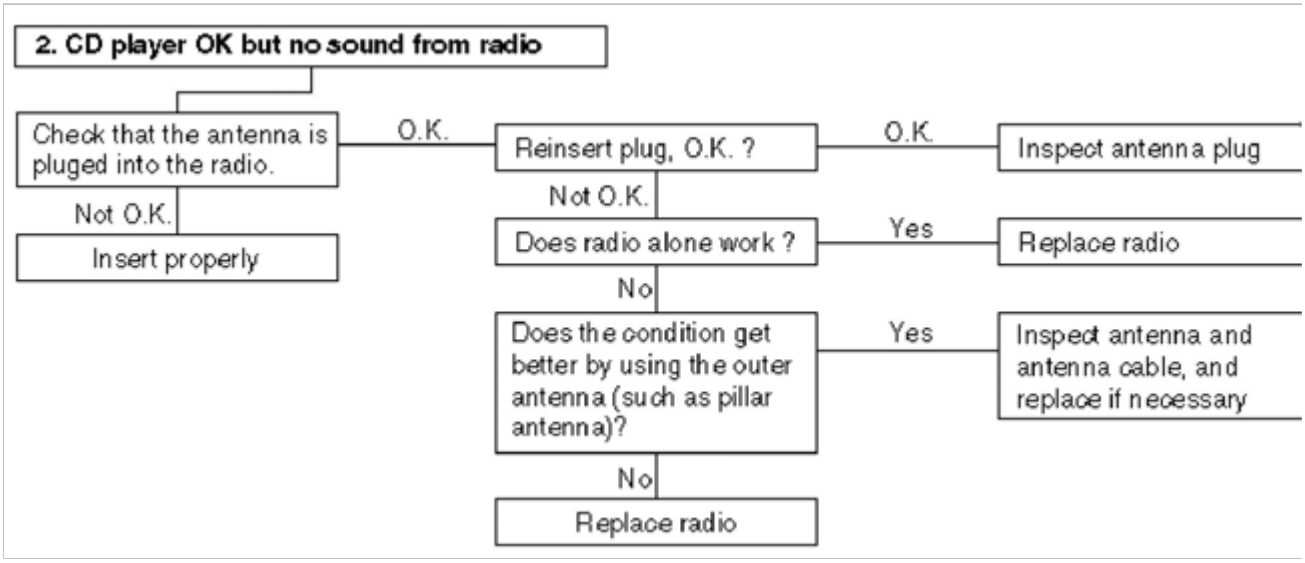


Chart 2

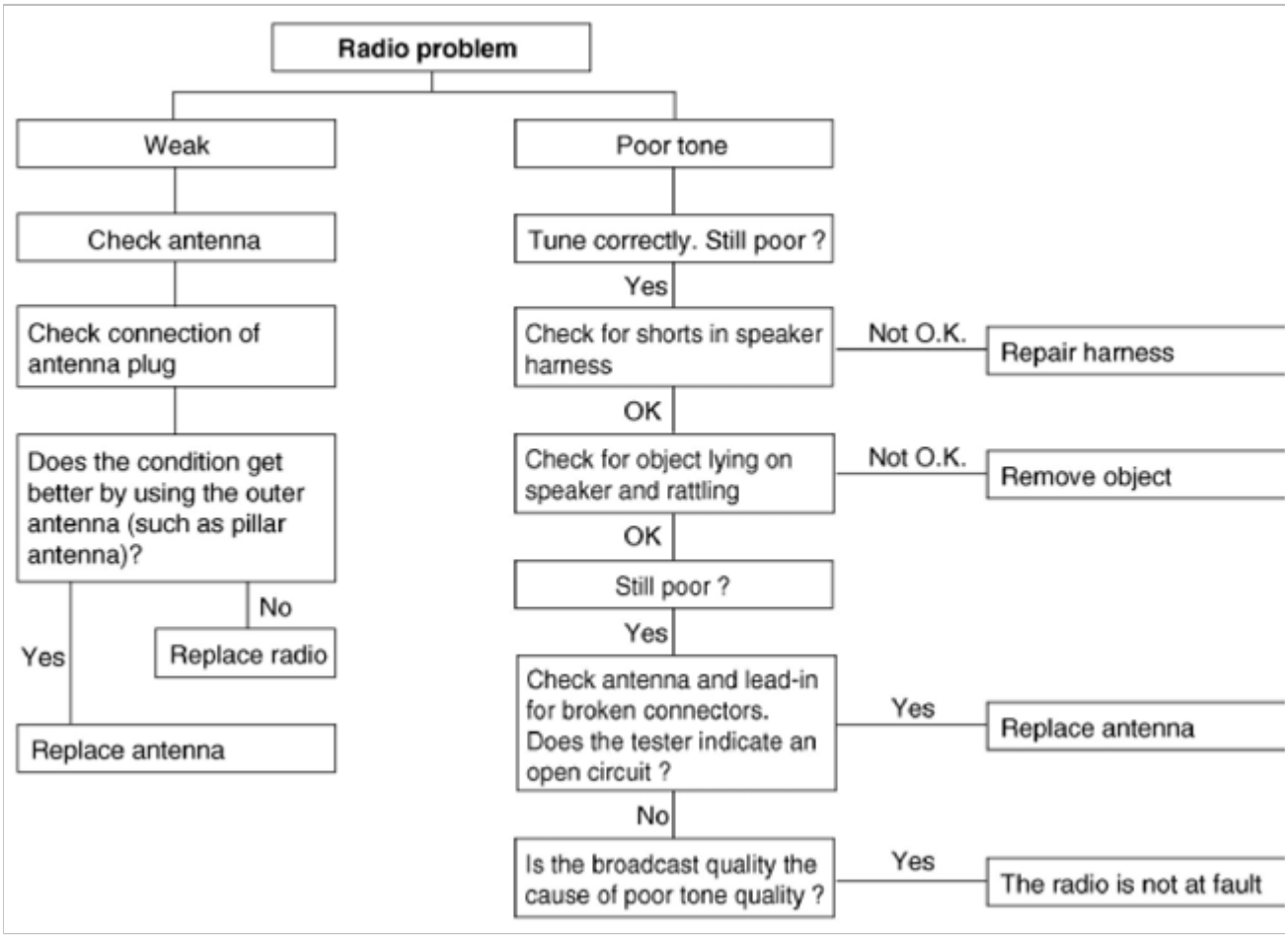


Chart 3

1. RADIO

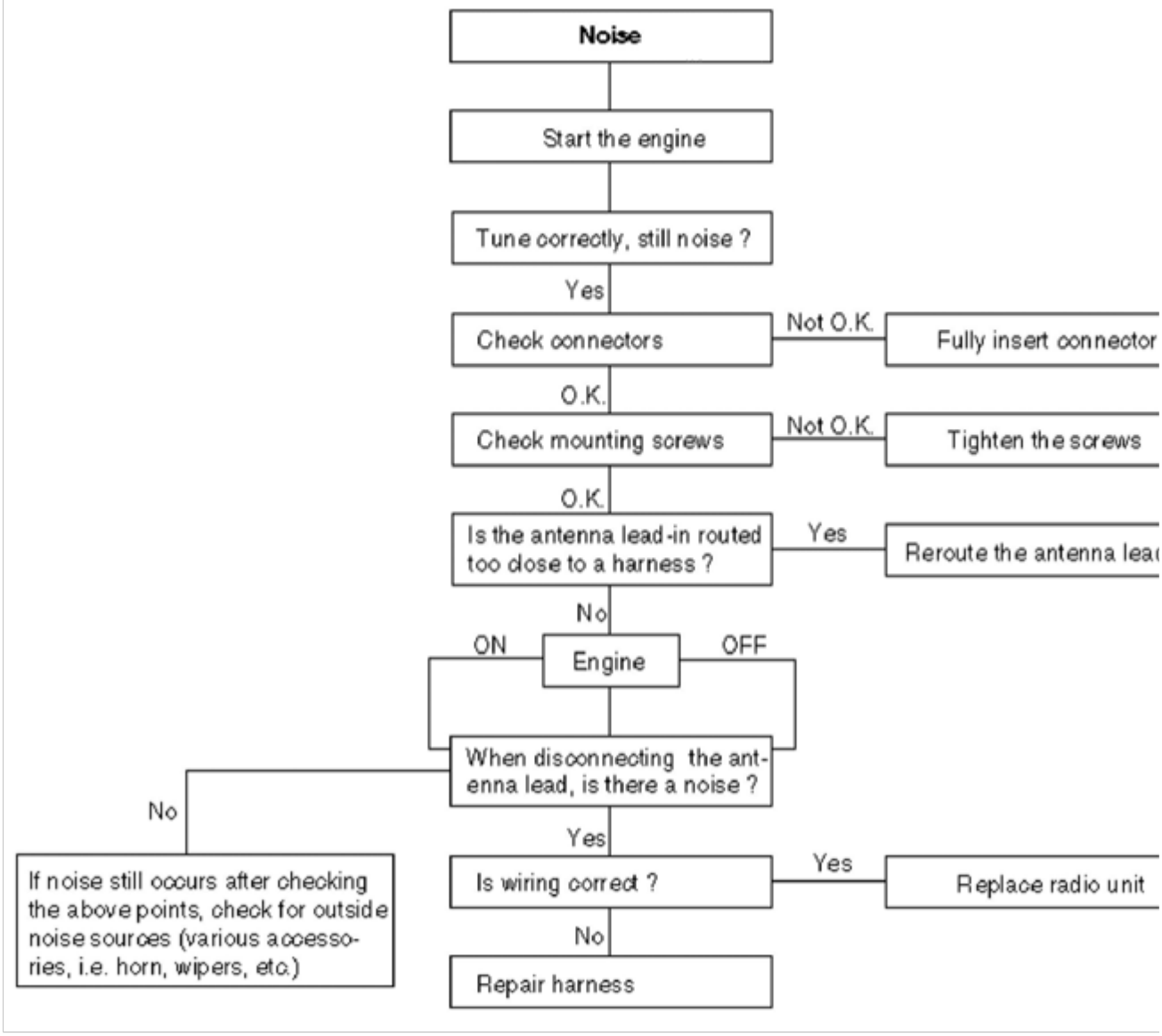
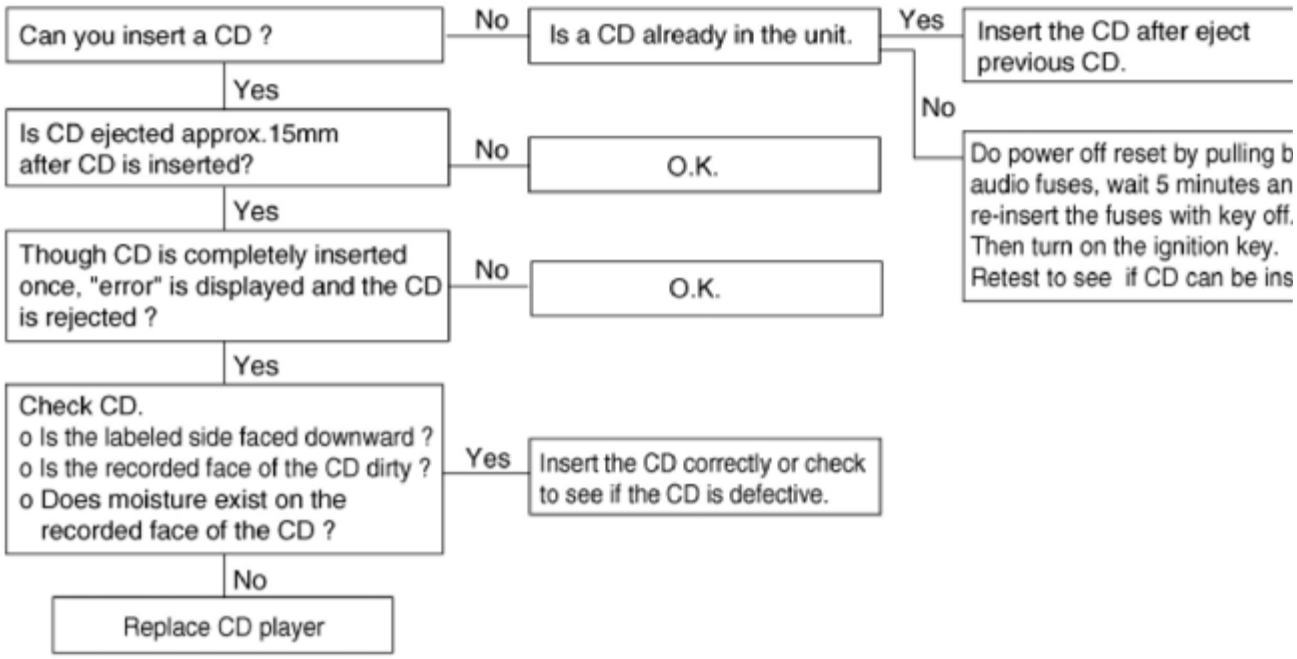
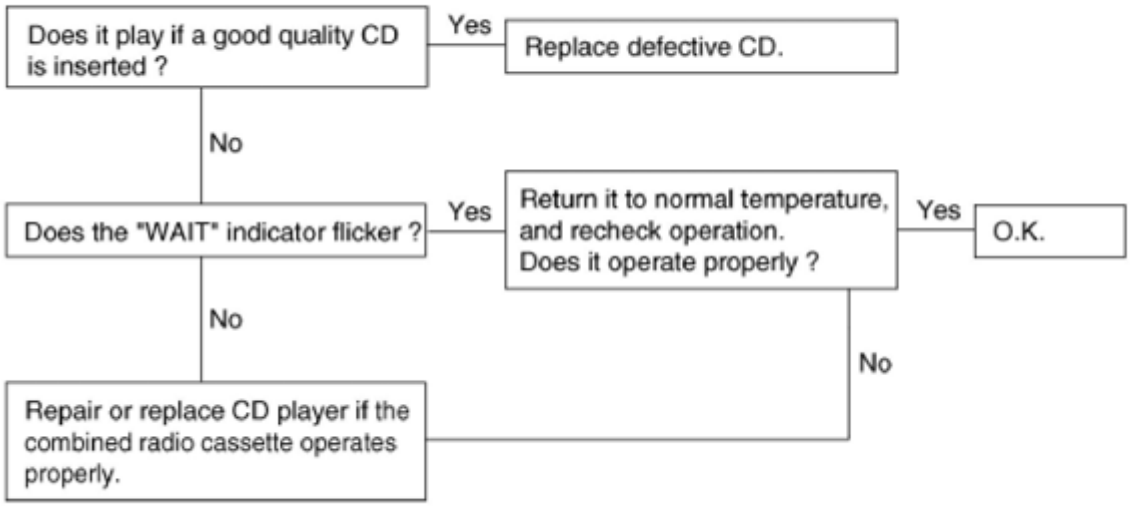


Chart 4

1. CD WILL NOT BE ACCEPTED

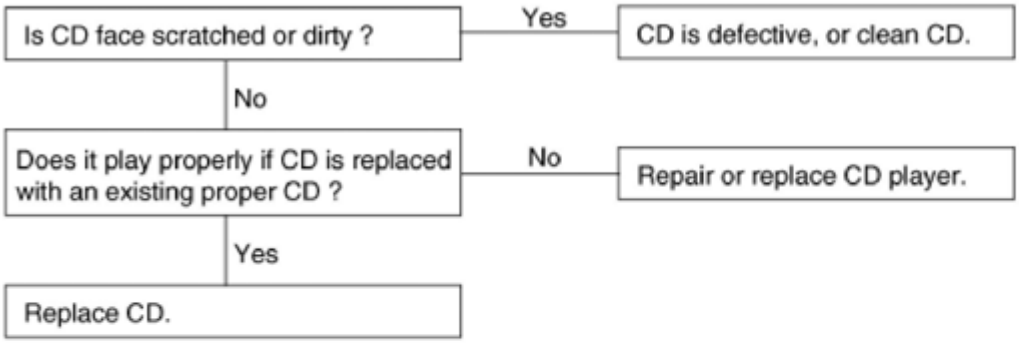


2. NO SOUND

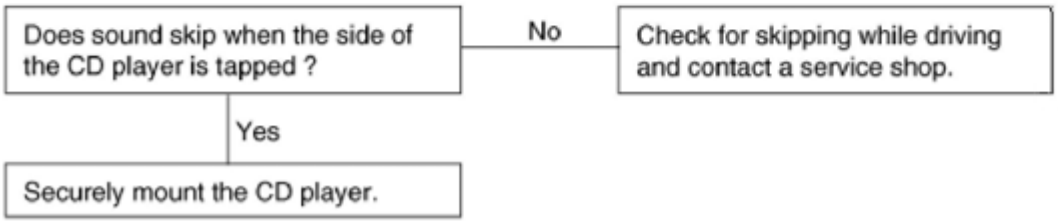


3. CD SOUND SKIPS

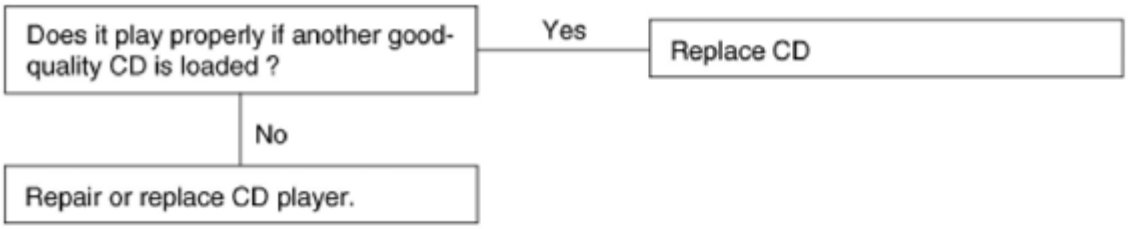
1) Sound sometimes skips when parking.



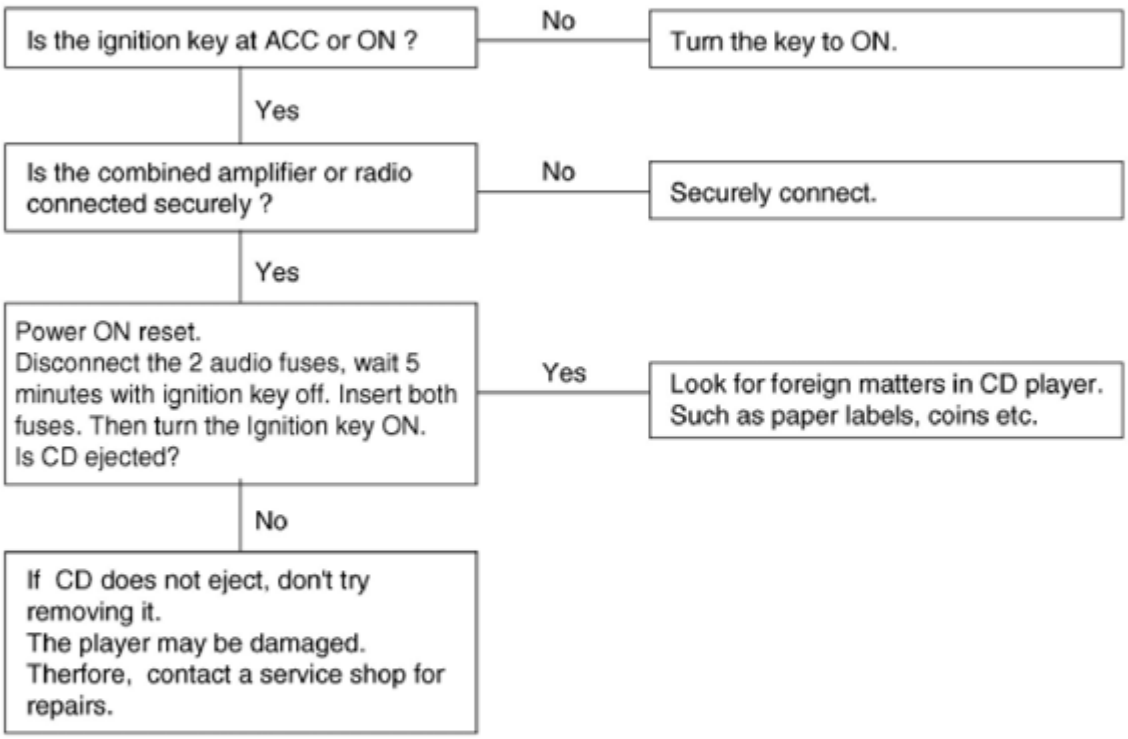
2) Sound sometimes skips when driving.
(Stop vehicle, and check it.)
(Check by using a CD which is free of scratches, dirt or other damage.)



4. SOUND QUALITY IS POOR



5. CD WILL NOT EJECT



6. NO SOUND FROM ONE SPEAKER

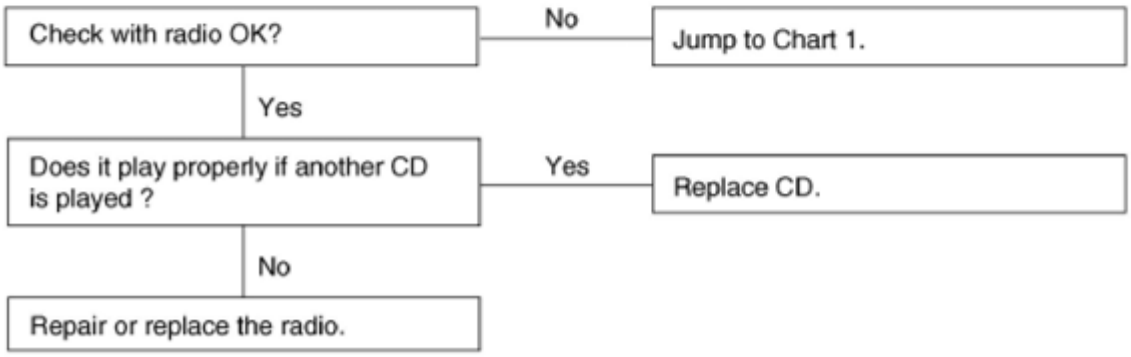


Chart 5

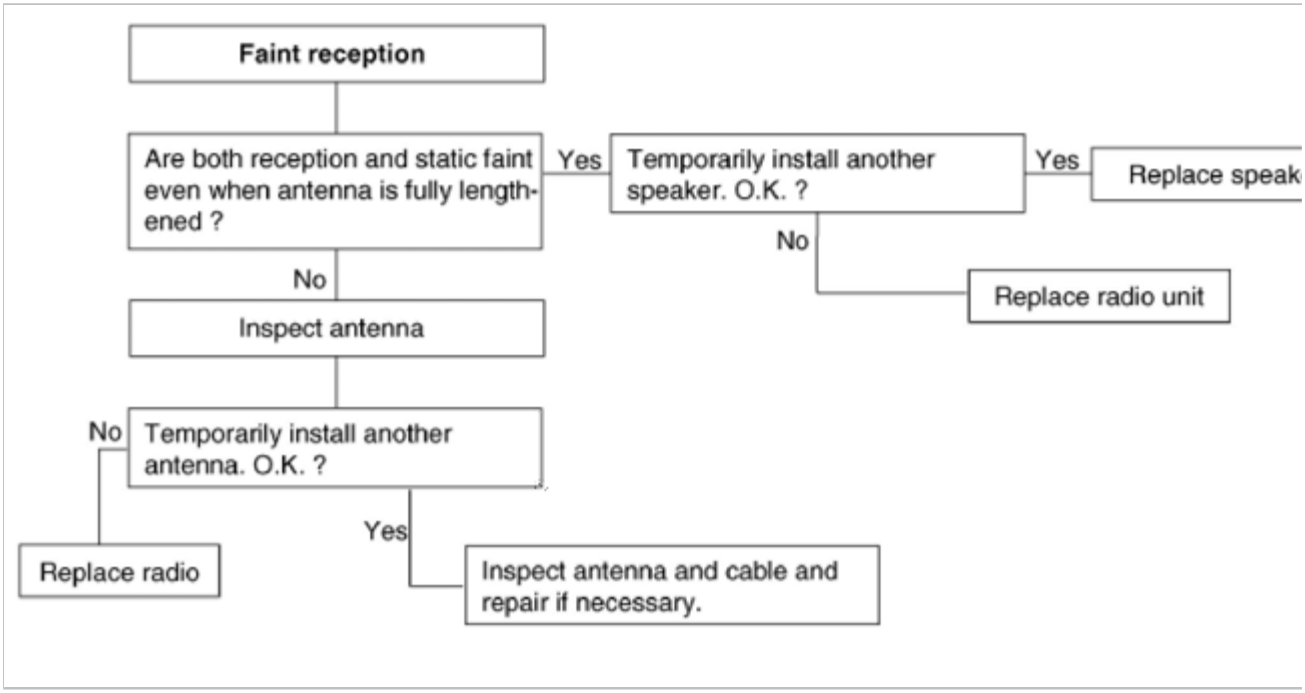


Chart 6

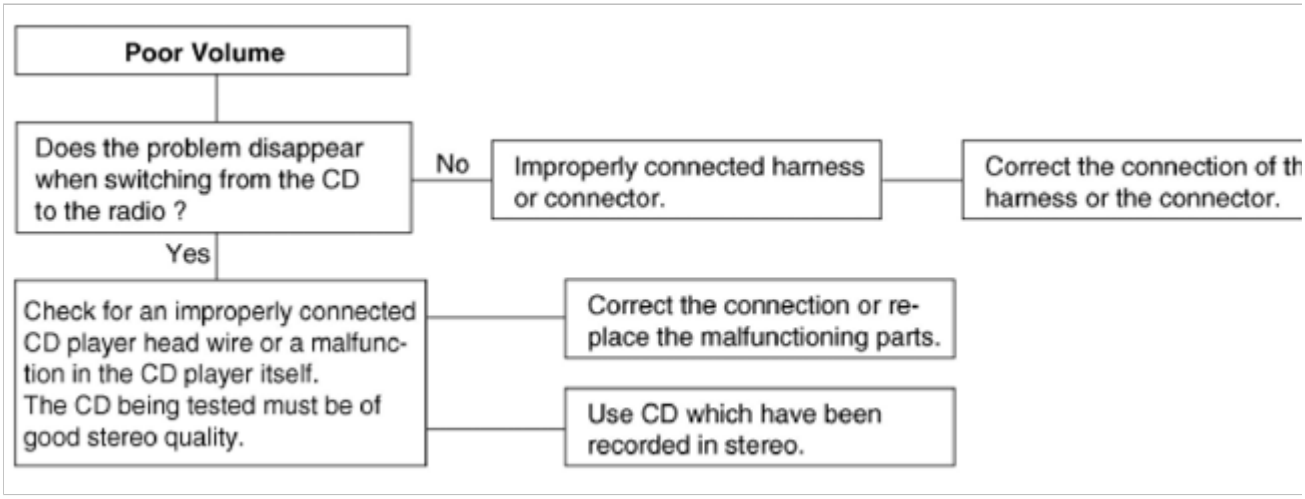
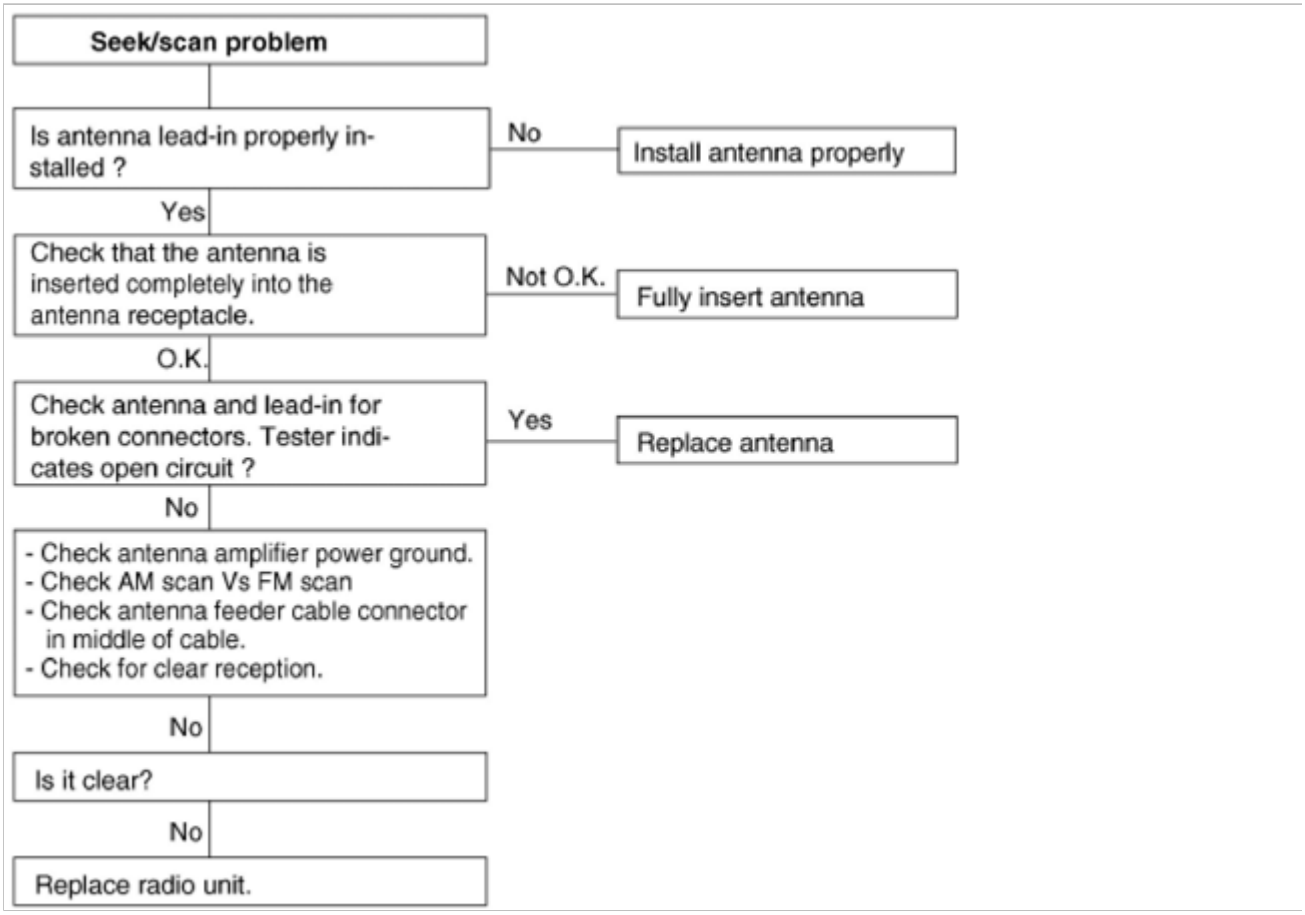


Chart 7



Troubleshooting

Bluetooth Hand Free

Symptom	Possible Cause	Solution
Not pairing	Bluetooth device of Car is not discoverable mode	Enter Bluetooth pairing (searching) mode
	User’s phone is Bluetooth off mode	User’s phone set Bluetooth on
	Making an attempt pairing others Bluetooth System	Check Bluetooth device name and address (12 word) to attempt paring Ex) 000B24FFF123
	Pass key error	Input the passkey displayed on the Audio screen into the phone.
	5 phones have already been registered.	Delete paired phone list
	Bluetooth system cannot communicate with the phone.	Refer to IOP sheet ※ IOP : Inter-Operability
Not connection	User’s phone or Bluetooth device of Car dose not register Bluetooth device to connect	Retry pairing
	Bluetooth system cannot communicate with the phone.	Waiting 1minute then Retry connection or phone power off/on. Refer to IOP sheet
Not redial	User phone system issue	Push the 2 times Send button
Not accept call	User phone system issue	Refer to IOP sheet
Not dialing	User’s phone playing other menu (internet, mp3, game, etc..)	Stop other menu then set normal mode