AUDIO SYSTEM

8530-10/8610-22/8610-23/8610-25/8610-47/8910-05/ 8910-10/8930-26/

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GENERAL INFORMATION

1. SPECIFICATION

Unit	Item	Specification
Audio	Voltage	DC 14.4 V
	Speaker impedance	4 Ω
	Max. power	45 watts x 4 ch
	Weight	2,244 g
	Size	310.4 mm (W) x 275.7 mm (H) x 209 mm (D)
Radio	Frequency	FM: 87.5 MHz ~ 108.0 MHz AM: 531 kHz ~ 1,602 kHz
	Sensitivity	FM: 18 dBu AM: 35 dBu
	S/N ratio (Signal/noise ratio)	FM: 45 db AM: 40 db
	Stereo channel separation	FM: 20 db
MP3 [WMA]/USB	Frequency response	20 Hz ~ 20 kHz
	S/N ratio (Signal/noise ratio)	60 dB
	Channel response	54 dB
MP3 [WMA]/CD	Frequency response	20 Hz ~ 20 kHz (±3 db)
	S/N ratio (Signal/noise ratio)	50 dB
	Channel response	35 dB
Bluetooth	Frequency	2,402 ~ 2,480 MHz
	Specification	Supports headset, hands-free, A2DP and AVRCP profile formats (Headset, hands-free: profile for calling) (A2DP, AVRCP: profile for listening music)

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Unit	Item		Specification
Micro pole antenna	Audio specification	Operating current	Max. 150 mA
		Operating voltage	DC 10.5 V to 16 V
		Operating temperature	−30℃ ～ +60℃
		Storage temperature	−40℃ ～ +80℃
		I/O impedance	75 Ω (FM)

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2. CAUTIONS AND WARNING FOR SAFETY

⚠ CAUTION
- This mark indicates potentially hazardous situation which, if not observed, may result in serious injury and material damage.
- Ssangyong is not liable for any personal injury and material damage, caused by violation of traffic regulations or neglect of observing actual traffic and driving situations.
- Colors on display figures in this manual may differ from actual display due to publication concerns.
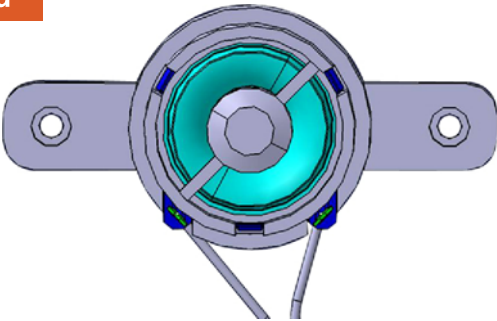
⚠ WARNING
- This mark indicates situation which, if not observed, may result in an accident or system malfunction.
- Do not disassemble or modify this system.
  If doing so, it may cause an accident, fire or electric shock.
- Do not use the system if it is malfunctioning (sound or video output problem).
  Doing so may lead to an accident or electric shock.
  Please contact a Ssangyong service dealer immediately.
- The system should be used only when the engine is started.
  Using the system for an extended period of the with the engine off may discharge the battery.
  Do not leave beverages or foreign materials around the system.
- If they enter the system, they may cause a fire.
  The system may break down if a disc not supported by this system is inserted.
- Do not apply impact to or drop this system.
- It might cause malfunction.
  Never leave the system in a hot or cold place for an extended period of time. Therefore, do not
- park the vehicle in a hot or cold place. The ambient temperature should be −30℃ ~ +80℃ for proper operation.

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3. MAJOR CHANGES

▶ **Front tweeter speaker**

Front tweeter speaker
Old / **New**
Design and supplier of front tweeter speaker changed(HANDOK SOUND Co., Ltd. → iMOSS)

▶ **Front door speaker**

Front door speaker
Old / **New**
Design and supplier of front/rear door speaker changed(HANDOK SOUND Co., Ltd. → iMOSS)

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▶ **Rear door speaker**

Rear door speaker	
Old	**New**
Design and supplier of front/rear door speaker changed(HANDOK SOUND Co., Ltd. → iMOSS)	

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OVERVIEW AND OPERATING PROCESS

1. OVERVIEW

The audio head unit is fitted with the Bluetooth handsfree for convenience. It has a micro pole antenna and its own integrated amplifier to improve the radio frequency reception rate and to provide the high-quality sound. The iPod function also has been added to the USB terminal.

2. LAYOUT

❶ Audio head unit	❷ USB & AUX jack assembly	❸ Bluetooth (hands-free)microphone

❹ Audio remote control switch	❺ Front door tweeter speaker	❻ Front door speaker

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Bluetooth (hands-free) microphone

Audio head unit

Audio remote control switch

USB/AUX jack assembly

⑦	**Rear door speaker**		⑧	**Micro pole antenna**

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3. OPERATION PROCESS

Audio remote control switch
Outputs the signal when power, mode, volume up/down, handsfree, seek up/down, mute switch is operated.

Bluetooth (hands-free) microphone
It sends the transmission tone signal to the head unit and outputs the receiving tone and navigation guidance sound to the driver's door speaker during hands-free calling.

USB/AUX jack assembly
Sends USB signal, AUX (stereo) and iPod output signals.

Audio head unit
The audio system plays a various types of music such as radio, MP3, CD, USB and iPod. It has a built-in high output amplifier, allowing to provide the high-quality sound.

Micro pole antenna
Micro pole radio antenna is fitted to ensure the high sensitivity.

Bluetooth (hands-free)
Once the pairing is complete, after searching for the Bluetooth phone, you can use a various functions and contents in the phone via Bluetooth.

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Door speaker FL

Tweeter speaker FL

Door speaker RL

Door speaker FR

Tweeter speaker FR

Door speaker RR

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4. SWITCH OPERATION AND FUNCTION

1) Audio Head Unit

No.	Name	Description
1	Display window	Displays operation status and various information
2	[BAND/AS] button	Briefly press: Switching between AM and FM radio Press and hold: Registering and storing station with good reception automatically
3	[SCAN/INF] button	Briefly press: Scanning receivable stations or displaying other information of music currently playing Press and hold: Displaying data table of music currently playing
4	[MEDIA] button	Playing connected external device such as USB/iPod/Bluetooth/AUX
5	[SET] button	Enter into setting mode
6	Adjustment button	- Radio mode Briefly press: Search broadcasting frequency Press and hold: Search receivable frequency - MP3/CD/USB/iPod mode Briefly press: Move to previous/next song Press and hold: Fast forwarding/rewarding
7	Dial button	Briefly press: Receive a phone call Press and hold: Connect to Bluetooth phone
8	End button	Briefly press: End a call Press and hold: Disconnect Bluetooth phone

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No.	Name	Description
9	Disc slot	Insert or eject a disc to play
10	CD button	Select CD/MP3 disc play function
11	Disc eject button	Eject a disc

12	Station memory button [1~6]	- Radio mode
		  Briefly press: Select a stored station directly
		  Press and hold: Store the listening broadcasting frequency
		  MP3/CD mode
		- Press [3FLDR▼] / [6FLDR▲] button to move other folder

13	Power/mute button with volume dial	Briefly press: Switch the system on, activate/deactivate mute Pause ON/OFF Press and hold: Switch the system off Turn dial: adjust volume
14	[ENTER] button, [TUNE]/[FILE] dial	Turn dial: change frequency, song or menu Press dial: Change or select item or setting value Press and hold dial: Turn off display window backlight (comes on if any of buttons is pressed)

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2) Display Window

Radio
CD-IN USB 🔵⬛♫ CLASSIC　　　⊞ PM 06:44　⑤ ① FM1 (📡) STEREO **107.70** MHz P-1 ⑥　②　④
1. Radio station band: FM1/FM2/AM 2. FM stereo reception display 3. EQ: POP/ROCK/COUNTRY/VOICE/JAZZ/ CLASSIC 4. Receiving broadcasting frequency 5. Digital clock 6. Specified station number: P1~P6

CD/MP3
⑦ CD-IN USB 🔵⬛♫　　⊞ AM 09:28 ⑧ 📁RDM　CLASSIC CD 📁 Root　　　　　　　　⑨ ⑩ (◎) **Ben Folds Five**　⑪ ⑫ 01:23
7. Disc insertion display 8. Play mode display 　RDM (Random): Play folder in random order RPT (Repeat): Play folder repeatedly　INT (Intro): Play folder intro 9. Current folder name 10. Play disc 11. Current playing song name 12. Other information of current playing song: Play time/album/artist/genre

USB
⑬ CD-IN USB 🔵⬛♫　⊞ AM 12:34 📁 RPT　　EQ USB 📁 Folder A ⑭ 🔌 **Dancing Queen** ABBA Gold
13. USB connection 14. USB play

BT AUDIO
⑮ CD-IN USB 🔵⬛♫　⊞ AM 10:34 📁 RPT　　EQ 🔵 **BT Audio**
15. Bluetooth connection

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5. SETTINGS

▶ Tone setup

Set the Bass/Middle/Treble, Balance and EQ (sound effect) for the sound of the output speaker.

1. When pressing the SET button, "Setup List" is displayed.
   - "Setup List" screen is displayed only for 5 seconds.
2. Turn the [TUNE] dial to select a desired "Tone Setup" and press the [ENTER] button.
   − Press the［1BACK◀］button in order to go back to the previous screen.
3. Turn the [TUNE] dial to select a desired setup item and press the [ENTER] button.
   − Select one of the following: Bass ↔ Middle ↔ Treble ↔ Balance ↔Fader ↔ EQ (sound effect).
4. Turn the [TUNE] dial or press the [ENTER] button to select the desired setting value.
   - Bass: setting the bass level (-7 ~ +7)
   - Middle: setting the middle level (-7 ~ +7)
   - Balance: setting LH/RH speaker balance (LEFT 15 ~ RIGHT 15)
   - EQ (Equalizer): select EQ (sound effect) style.
     (EQ OFF ↔ POP ↔ ROCK ↔ COUNTRY ↔ VOICE ↔ JAZZ ↔ CLASSIC)
   - Default: initialize all the settings.

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6. CURRENT TIME/DATE SETTING

▶ **Turn the power off and set the displayed current time and date.**

1. When pressing the SET button, "Setup List" is displayed.
   - "Setup List" screen is displayed only for 5 seconds.
2. Turn the [TUNE] dial to select a desired "Time & Date" and press the [ENTER] button.
   − Press the [1BACK◀] button in order to go back to the previous screen.
3. Turn the [TUNE] dial to select a desired setup item and press the [ENTER] button.
   − Select one of the followings: Set Time ↔ Set Time Format ↔ Set Date ↔ Display Digital
     Clock On/Off
4. Turn the [TUNE] dial or press the [ENTER] button to select the desired setting value. Repeat these
   steps if several items need to be set. (e.g. YY/MMDD in date setting)
   - Set Time: Set the current time.
   - Set Time Format: Set the time format to 12-hour or 24-hour system.
   - Set Date: Set the date.
   - Display Digital Clock On/Off: Set whether the digital clock is displayed or not.

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7. RADIO SETTINGS

▶ **Listening radio station**

1. Press the [BAND] button repeatedly to select the desired broadcasting band.
   - Select one of FM1, FM2 or AM.
   - Broadcasting is received from the broadcasting frequency which has been listening previously.

▷ Searching for broadcasting manually

2. Turn the [TUNE] dial or press the <<ADJ>> button repeatedly to select the desired broadcasting frequency.

▷ Searching for broadcasting automatically

3. Press the <<ADJ>> button more than 2 seconds and release it so that the system searches for one broadcasting frequency with good reception and receives it automatically.

▷ Selecting broadcasting with automatic search

4. When pressing the [SCAN] button, the system searches for the broadcasting with good reception one by one within the receiving frequency range and gives a hearing about for 5 seconds. If you hear the desired broadcasting, press the [SCAN] button briefly to keep listening it.

▶ **Registering broadcasting frequency manually**

1. Select the broadcasting frequency to register.
2. When the [1BACK◀] ~ [6FLDR▲] buttons to register is pressed for more than 2 seconds, the beep sounds to indicate the registration is completed.

▶ **Registering broadcasting frequency automatically**

1. Press the [BAND] button repeatedly to select the desired broadcasting band.
   - Select one of FM1, FM2 or AM.
   - The system shows the selected frequency previously in the selected broadcasting band and receives it.

2. Press the [AS] button for more than 2 seconds.
   - "AST Scanning" is displayed, and the system searches for 6 stations with good reception one by one to register them to each [1BACK◀] ~ [6FLDR▲] button.

▶ **Listening registered station**

1. Press the [BAND] button repeatedly to select the desired broadcasting band.
   - Select one of FM1, FM2 or AM.
   - The system shows the selected frequency previously in the selected broadcasting band and receives it.

2. Press the desired button between [1BACK◀] and [6FLDR▲] to listen the broadcasting.

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8. MP3 [WMA]/CD PLAYER

▶ **To change play mode**

1. Press the [2RPT] button repeatedly to select the repeat mode.
    - 🗀RPT: Repeat all the songs in the current folder in order (applies only to MP3/WMA disc)
    - RPT: Repeat the playing song consecutively
    - OFF: Deactivates repeat mode

2. Press the [4INT] button repeatedly to select the intro play mode.
    - 🗀INT: Play the intro of all the songs in the current folder in order for about 10 seconds (applies only to MP3/WMA disc)
    - INT: Play the intro of all the song in the disc in order for about 10 seconds
    - OFF: Deactivates playing intro

3. Press the [5RDM] button repeatedly to select the random play mode.
    - 🗀RDM: Play all the songs in the current folder in random order
    (applies only to MP3/WMA disc)
    - RDM: Play all the song in the disc in random order
    - OFF: Deactivates random play mode

▶ **Search for song and play it**

1. When [MENU] button is pressed after turning the [TUNE] dial to select the song number or name to play, the system begins playing the song.

▶ **MP3[WMA] song information view**

1. If you press the [INF] button briefly and repeatedly when a song is playing, other information (artist/album/genre/play time) for the song is displayed for 3 seconds.
2. If you press and hold the [INF] button when a song is playing, the data table for the song is displayed for 5 seconds.

▶ **To set scroll function**

1. When pressing the [SET] button, "Setup List" is displayed.
2. Turn the [TUNE] dial to select the desired "Scroll On/Off" and press the [ENTER] button to select ON or OFF.

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9. BLUETOOTH

▶ To register Bluetooth device

1. Press the [Call] button for more than 3 seconds.
   - "PAIRING" is displayed and followed by "KEY 00xx" to indicate stand-by mode.

2. Activate the Bluetooth device to register to carry out Bluetooth setting/device search and connect it to the audio system.
   - If the searched device selection item is displayed, carry out selecting/connecting "SSANGYONG".
   - If the device search fails for 60 seconds, "NO device paired" is displayed. If this is the case, carry out steps 1~2 above again.

3. Enter the pairing key, "00xx", displayed on the audio system screen to the *pin code input item of the Bluetooth device to connect and register it.
   - When the registration is completed normally, the audio system screen displays "BT CONNECT" and displays cellular phone model name or "BT MOBILE" together with the Bluetooth icon.
   - The Bluetooth device can be registered just once. Although several devices can be registered, you can select only 1 device to connect the system. If the registered Bluetooth device is set to connect to other device, disable the previous connection under Connect Bluetooth device and select "Car audio" or "Audio device" to connect the device to the system.

4. Check whether the Bluetooth connection is completed.

▶ To set Bluetooth mode

1. When pressing the [SET] button, "Setup List" is displayed.
   - The setting screen is displayed for 5 seconds.

2. Turn the [TUNE] dial to select a desired "Bluetooth Setup" and press the [ENTER] button.

3. Turn the [TUNE] dial to select a desired Bluetooth setup item and press the [ENTER] button.
   − Turn the dial to select one of the followings: Pair Device ↔ Select Device ↔ Delete Device ↔ Priority Device.
   For "Pair Device", see the steps 2~4 in "To register Bluetooth device".

4. Turn the [TUNE] dial to select the device list and press the [ENTER] button.
   - Select Device: Select the connected device.
   - Delete Device: Delete the registered device.
   - Priority Device: Set the connection priority for Bluetooth devices.

▶ Making phone call using recent call list

1. When you [Call] button for more than 3 seconds, the system displays "REDIAL" and makes a phone call to the recent calling party.

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▶ **Answering an incoming call**

- When the call is incoming, the bell rings and "CALL IN" and sender's telephone number are displayed.

1. To make a call, press the [Call] button.
   - "BT TEL" is displayed during a call and you can converse through the microphone and speaker connected to this system. If you don't want to receive a call, press the [End] button to reject it.
   - After "CALL REJECT" is displayed, the system returns to the previous screen.

▶ **Hang-up call**

1. To hang-up the call, press the [END] button.
   - The call is ended and system returns to the previous screen.
   - However, the connection between the audio system and the phone remains "connected".

▶ **To adjust volume**

1. Turn the [VOL] dial to adjust the volume.
   - The adjustable range is between BT VOL 06 to 32.

▶ **Mute function**

1. Press the [MUTE] button on the audio remote control to activate the mute function.
   - "MIC MUTE" is displayed and the other party can't hear your voice.
   - Press the [MUTE] button again to resume your conversation.

▶ **Private mode**

- You can change to private call using a cellular phone during hands-free call. (The other party's voice is coming through only the cellular phone, not speaker.)

1. When you press the [Call] button during hands-free call, "PRIVATE" is displayed and hands-free call is changed to cellular phone call. When you press the [Call] button during cellular phone call, "BT TEL" is displayed and cellular phone call is changed to hands-free call.
   - This function may not be available on some phone models.

▶ **To disconnect**

1. Press and hold the [End] button to disconnect the connection with Bluetooth device and press and hold it once again to turn off the Bluetooth function.
   - At this time, "BT DISCONNECT" is displayed and the Bluetooth icon disappears.

▶ **Playing music stored in cellular phone**

1. Press the [MEDIA] button repeatedly to select "BT AUDIO".
2. After playing the music using a music-playback function in the cellular phone, turn the [VOL] dial to adjust the volume.
3. To exit the function, press the [End] button or press the [BAND/AS], [MEDIA] or CD button to select other function.

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10. EXTERNAL DEVICE (USB/AUX & I-POD)

▶ **To playback USB/iPod**

1. Press and hold the power button to turn the audio off.
2. Insert the linking cable of the USB or iPod in which MP3/WMA file to play is stored to the USB terminal.
3. Press the [MEDIA] button repeatedly to select the USB or iPod function.
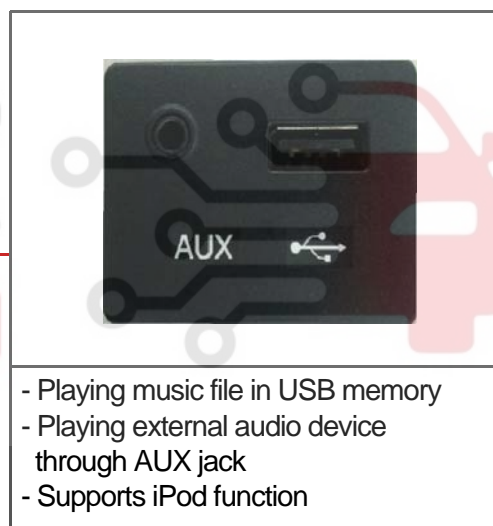   - "USB" or "I-POD" is displayed and the music files which has been played previously are played automatically.

▶ **To use AUX jack**

1. Turn off the external device's power supply and connect its sound output to the [AUX] jack.
2. Press the [MEDIA] button repeatedly and select the [AUX IN] function.
3. Turn the [VOL] dial to adjust the sound volume.

▶ **Layout with USB/iPod**

USB 2.0 cable

- Playing music file in USB memory
- Playing external audio device through AUX jack
- Supports iPod function

* Connect iPod to USB terminal

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> ⚠ **CAUTION**
>
> **Cautions for using USB memory/iPod**
>
> - Ensure that the connection or disconnection between the audio system and the USB memory/iPod is carried out only when the engine is switched off. If the engine is switched on or off while the USB memory is connected or disconnected, the USB memory may be damaged or not operate normally. The audio system may not recognize some USB memory depending on the comparability or
> - condition. Check whether the USB memory operates normally in the vehicle before using it. Take great care to ensure that the USB connection does not come in contact with the human body
> - or any object and the USB linking cable does not disturb a safe driving. When you connect and disconnect the USB memory to the audio system several times in a short
> - periods, it may cause the USB memory to corrupt. If you particularly disconnect USB memory during playback, it may be broken or operate incorrectly. When you use the USB device for charging or heating by using the USB terminal on the audio
> - system, it may cause the system to deteriorate or fail. iPod is a registered trademark of Apple Inc.
> - This audio system supports only the following iPod products: iPod Nano /iPod/iPod Touch/ iPhone.
> - This audio system may not support some iPod/iPhone products. Always use the linking cable included with the iPod product when connecting it to the audio system.
> - The other cables may not be compatible and cause the audio system to fail.
> - In some cases, the iPod product may be damaged or not operate normally when the engine is switched on while it is connected to the audio system. When not in use, always disconnect the iPod
> - product with the engine switched off. When you use the iPod by connecting it to the audio system, the playback function and information display may differ from original.
> - The iPod product can't be recharged using a iPod linking cable.
>
> -

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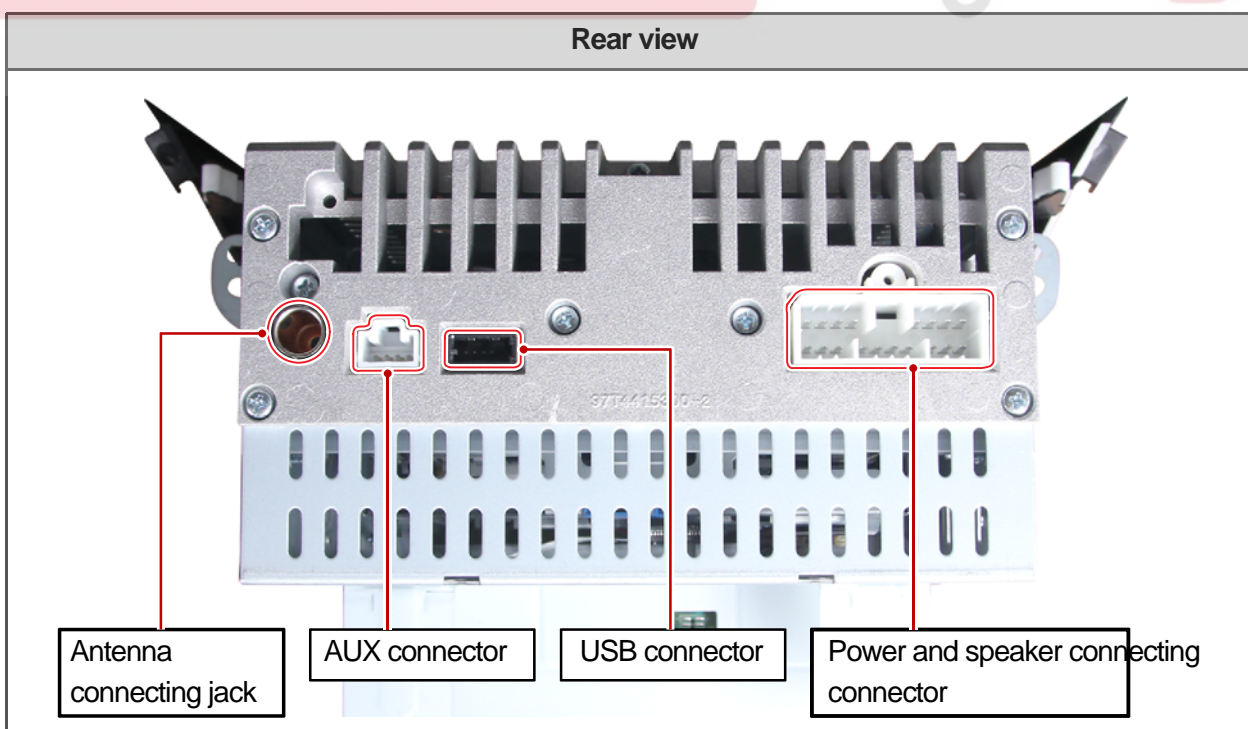| Modification basis	
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CONFIGURATION AND FUNCTIONS

8910-05   AUDIO HEAD UNIT ASSEMBLY

1) Overview

For the audio head unit, radio (AM/FM), MP3 [WMA] CD player, USB & AUX/iPod, Bluetooth (hands-free) devices are integrated into the one system.
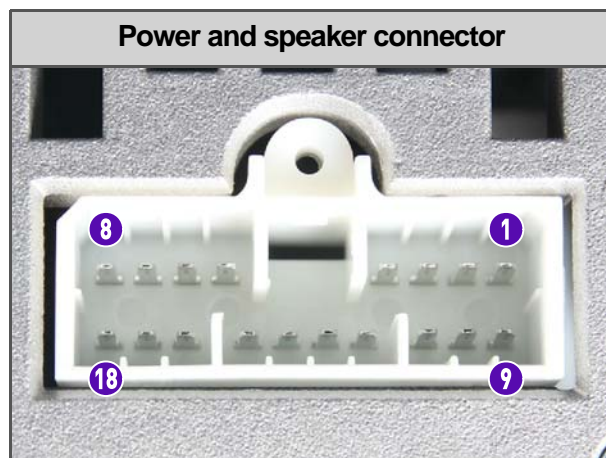
2) Mounting Location

Audio head unit assembly

Rear view

| Antenna connecting jack | AUX connector | USB connector | Power and speaker connecting connector |

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Side tabs: ELECTRONIC · FUSE · BCM · SKM · INSTRUMENT · SWITCH · LAMP · WIPER AND · PAS · AUDIO SYSTEM

3) Connector Function Description

Pin No.	Function
1	Front right speaker (+)
2	Rear right speaker (+)
3	ILL (+)
4	ACC
5	BACK UP (B+)
6	Bluetooth MIC (+)
7	Rear left speaker (+)
8	Front left speaker (+)
9	Front right speaker (-)
10	Rear right speaker (-)
11	ILL (-)
12	Antenna power
13	Audio remote control ground
14	Ground
15	Bluetooth MIC (-)
16	Audio remote control signal
17	Rear left speaker (-)
18	Front left speaker (-)

Power and speaker connector

Radio antenna connector
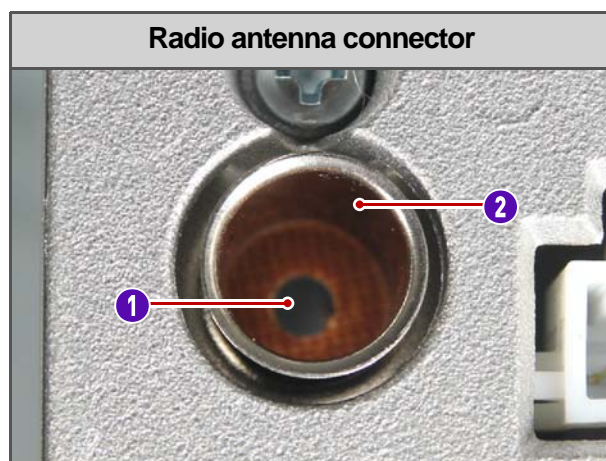
Pin No.	Function
1	FM/AM
2	Ground

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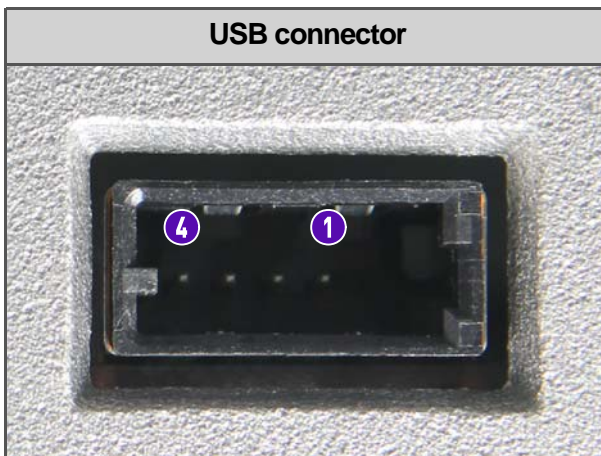
USB connector

Pin No.	Function
1	Ground
2	USB signal (+)
3	USB signal (-)
4	Power

AUX connector
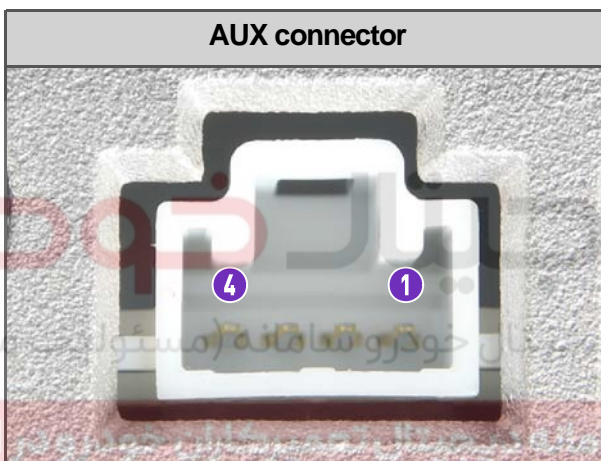
Pin No.	Function
1	Audio signal (LH)
2	Audio signal (RH)
3	Ground
4	Detection signal

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4) Circuit Diagram
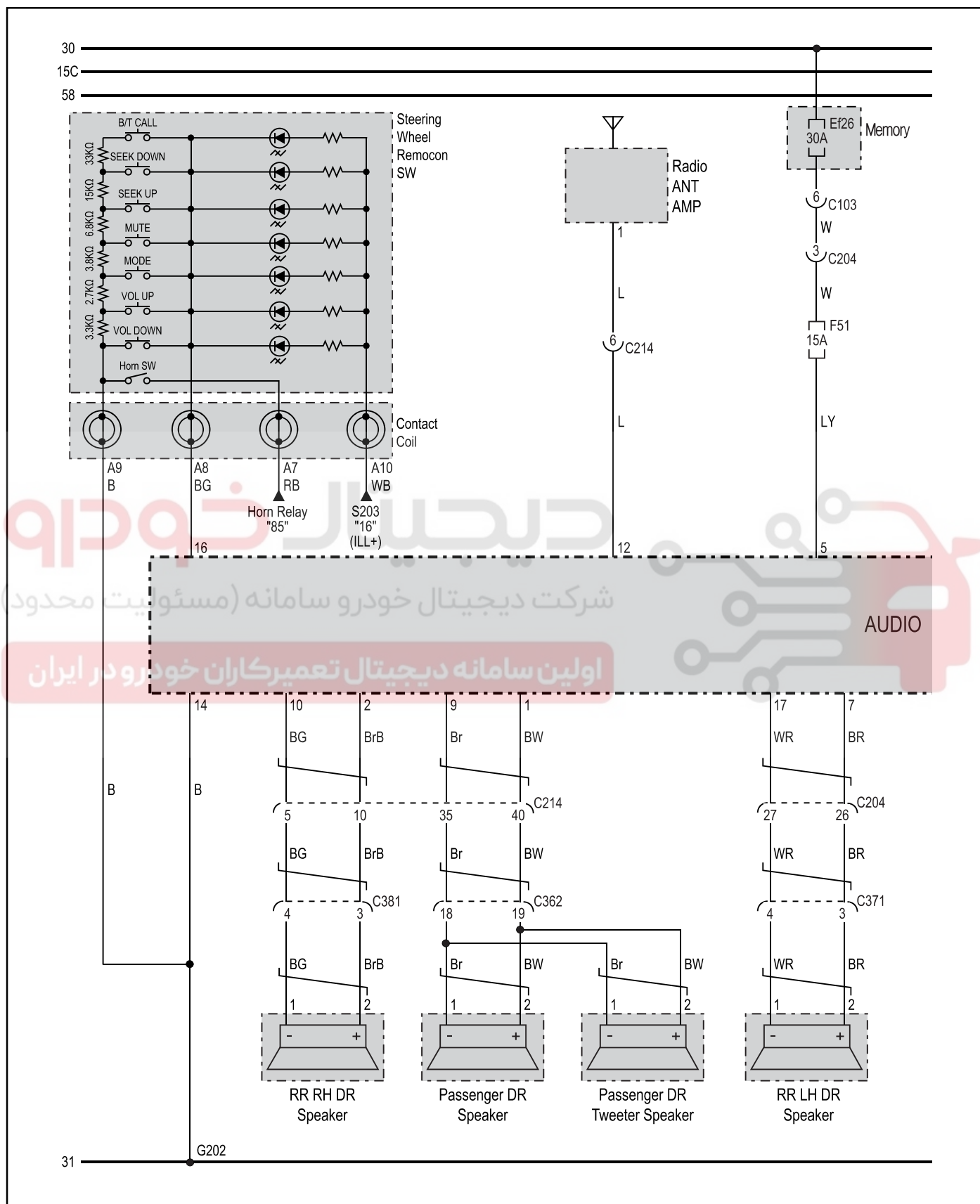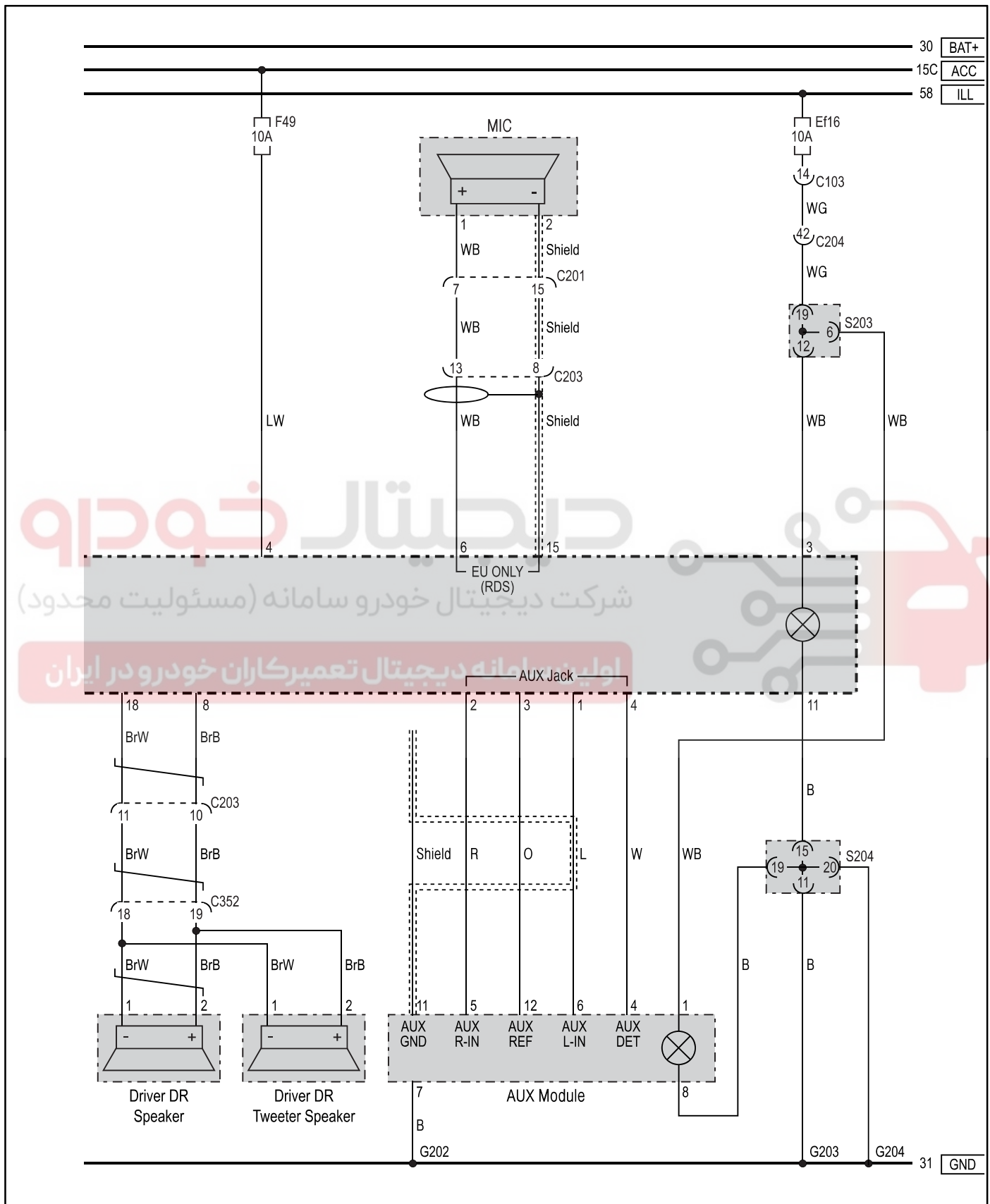
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		30	BAT+
		15C	ACC
		58	ILL

F49
10A

MIC
+ −

Ef16
10A

14 C103
WG

42 C204
WG

1 2
WB Shield

7 C201 15
WB Shield

13 C203 8
WB Shield

19 S203
12 6

LW

WB Shield

WB WB

6 EU ONLY 15
(RDS)

3

11

18 8
BrW BrB

11 C203 10
BrW BrB

18 C352 19

BrW BrB BrW BrB

1 2 1 2
− + − +

Driver DR
Speaker

Driver DR
Tweeter Speaker

AUX Jack

2 3 1 4

Shield R O L W WB

15 S204
19 20
11

B B B

11 5 12 6 4 1
AUX AUX AUX AUX AUX
GND R-IN REF L-IN DET

AUX Module

7 8

B

G202

G203 G204

31 GND

Modification basis	
Application basis	
Affected VIN	

8910-10   USB AUX JACK ASSEMBLY

1) Overview

You can use the USB memory to enjoy the MP3 files through the audio system. The AUX jack consists of one terminal which enables the user to listen the audio signal for the connected device.

2) Mounting Location

USB & AUX jack assembly

AUX

3) Connector Function Description

AUX connector
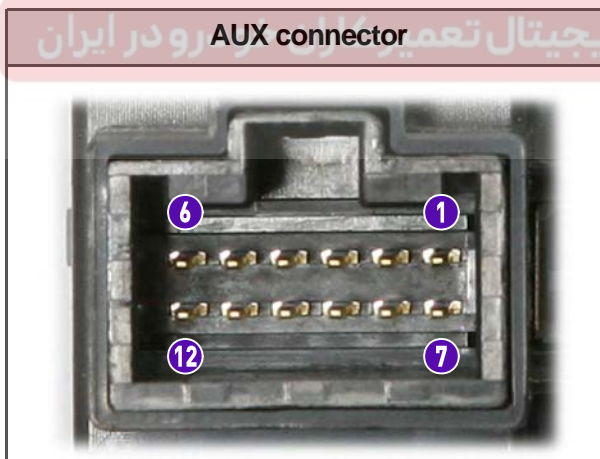
Pin No.	Function
1	Tail lamp (+)
2	-
3	AUX_VIDEO
4	AUX_DETECT (Detects whether external device is connected)
5	AUX_R_IN
6	AUX_L_IN
7	GND
8	Tail lamp (-)
9	AUX_VGND
10	-
11	GND_AUX_SHIELD
12	AUX_REF (reference voltage)

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

	USB connector
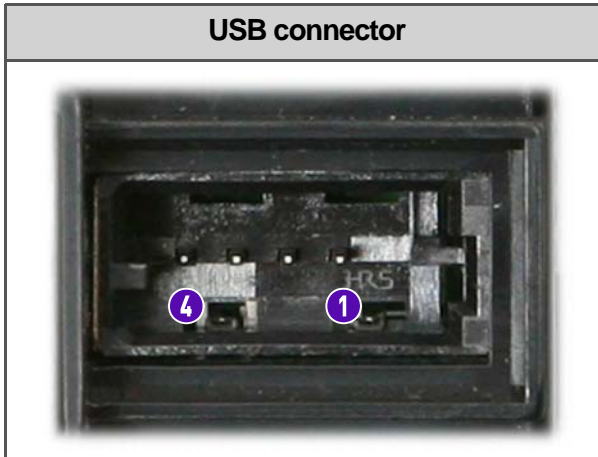
Pin No.	Function
1	USB ground
2	USB data (+)
3	USB data (-)
4	USB power

ELECTRO NIC

FUSE

BCM

SKM

INSTRUMENT

SWITCH

LAMP

WIPER AND

PAS

AUDIO SYSTEM

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

8930-26   MICRO POLE ANTENNA ASSEMBLY

1) Overview

There are two types of micro pole antenna, with audio and with AVN, depending on whether the vehicle has the audio system. It is fitted to the roof panel.

2) Mounting Location

MICRO POLE ANTENNA
ASSEMBLY

3) Type

With audio	With AVN
Radio connector	Integrated connector

Modification basis	
Application basis	
Affected VIN	

8610-22   FRONT DOOT SPEAKER ASSEMBLY

1) Front Door Speaker

Front door speaker assembly

2) Connector Function Description

To front door speaker wiring	Pin No.	Function
	1	Ground -
	2	Power +
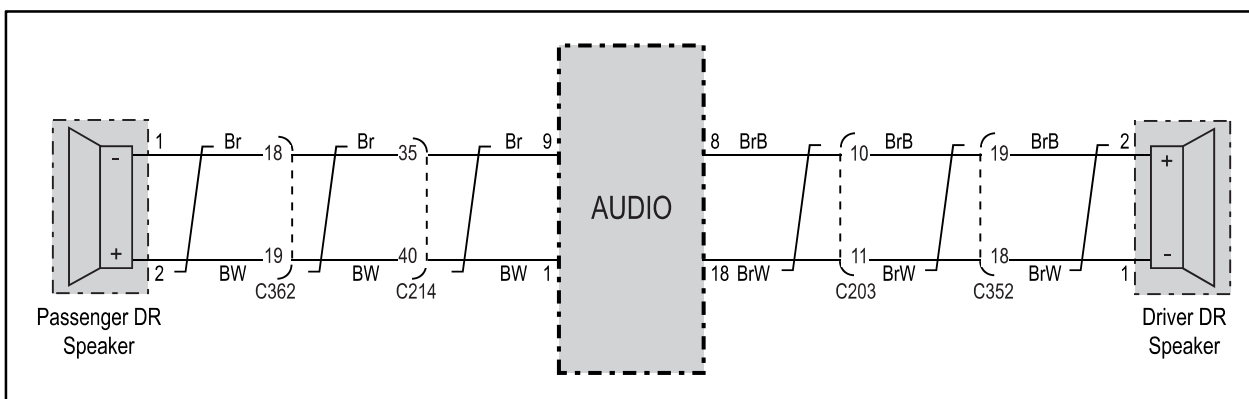
3) Circuit Diagram

1 Br 18	Br 35	Br 9	8 BrB 10
		AUDIO	
2 BW 19	BW 40	BW 1	18 BrW 11
C362	C214		C203

Passenger DR Speaker   Driver DR Speaker

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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8610-23   REAR DOOR SPEAKER ASSEMBLY

1) Rear Door Speaker

Rear door speaker assembly

2) Connector Function Description

To rear door speaker wiring	Pin No.	Function
	1	Ground -
	2	Power +

3) Circuit Diagram

RR RH DR Speaker — 1 BG 4 — BG 5 — BG 10 AUDIO 7 BR — 26 BR — 3 BR — 2 + RR LH DR Speaker
2 BrB 3 C381 BrB 10 C214 BrB 2 — 17 WR — 27 WR C204 — 4 WR C371 — 1

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	
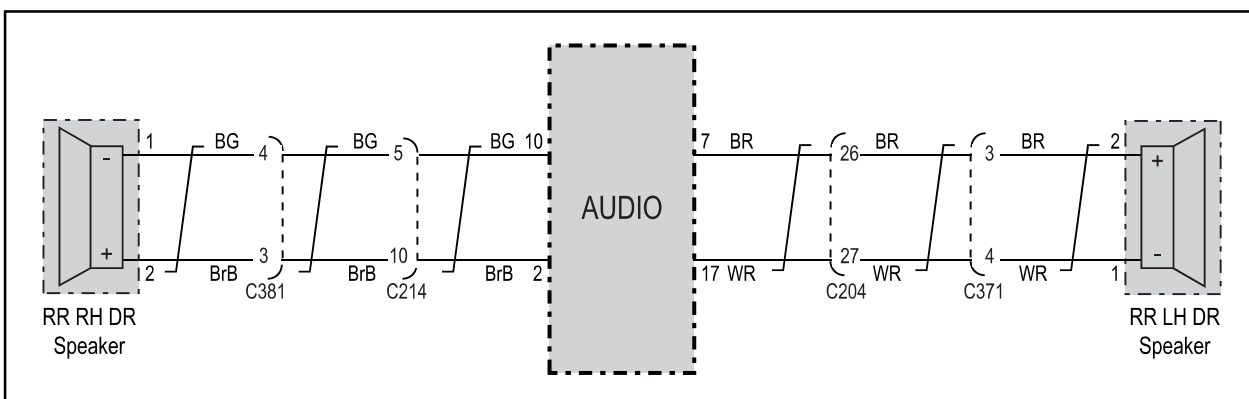
8610-25 FRONT TWEETER SPEAKER ASSEMBLY

1) Front Tweeter Speaker

Front tweeter speaker assembly

2) Connector Function Description

To front tweeter speaker wiring

Pin No.	Function
1	Ground -
2	Power +

3) Circuit Diagram

Passenger DR Tweeter Speaker
Passenger DR Speaker
AUDIO
Driver DR Tweeter Speaker
Driver DR Speaker
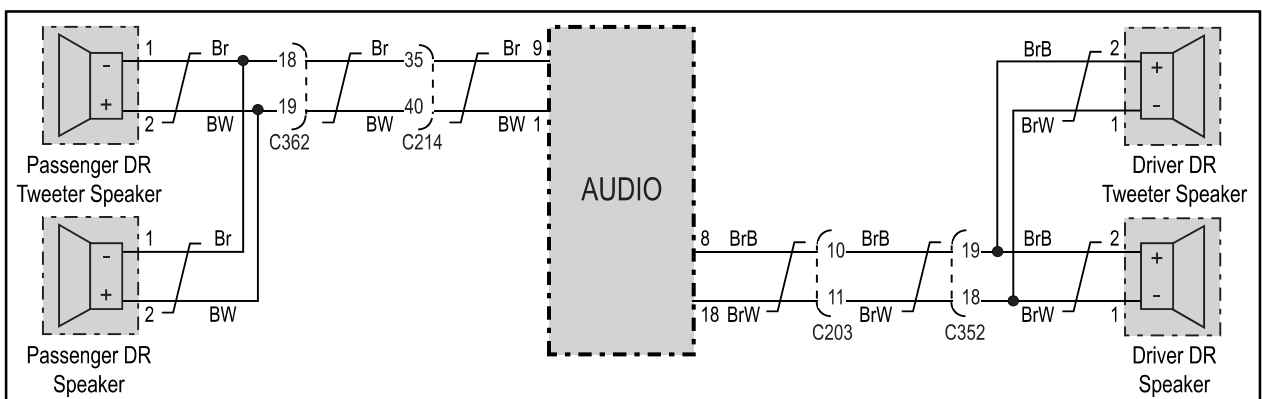
Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM
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8610-47 BLUETOOTH (HANDS-FREE) MICROPHONE ASSEMBLY

1) Overview

This enables the driver to converse comfortably by putting the cellular phone at the designated place or on holder without having to hold it during driving to accommodate the customer's safety and convenience.

2) Mounting Location

Bluetooth (hands-free) microphone assembly

3) Connector Function Description

Bluetooth (hands-free) microphone connector
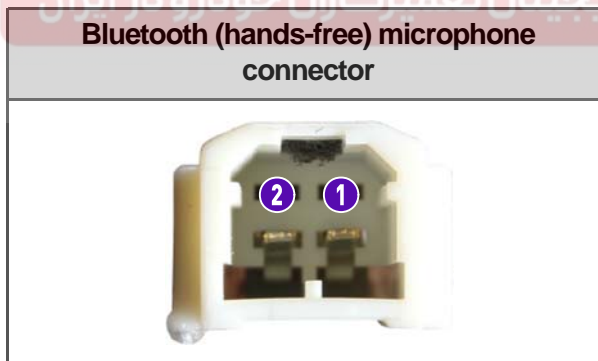
Pin No.	Function
1	MIC +
2	MIC - (shield ground)

4) Circuit Diagram

Modification basis	
Application basis	
Affected VIN	
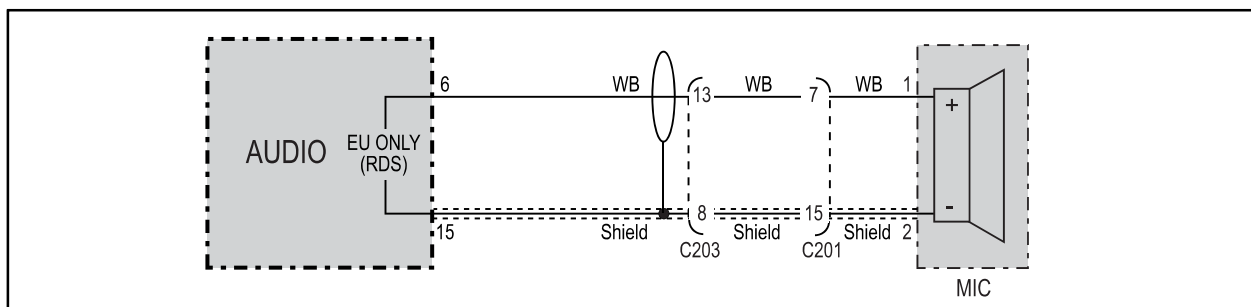
S.G.N.
8530-10　AUDIO REMOTE CONTROL SWITCH ASSEMBLY

1) Overview

The remote control switch on the steering wheel is activated by a rated voltage of about 5 V and consists of the power switch (with MUTE), mode switch, volume UP/DOWN switch, Bluetooth hands-free switch, SEEK UP/DOWN switch and gear tip switch (D-, D+).

2) Mounting Location & Configuration

Audio remote control switch assembly
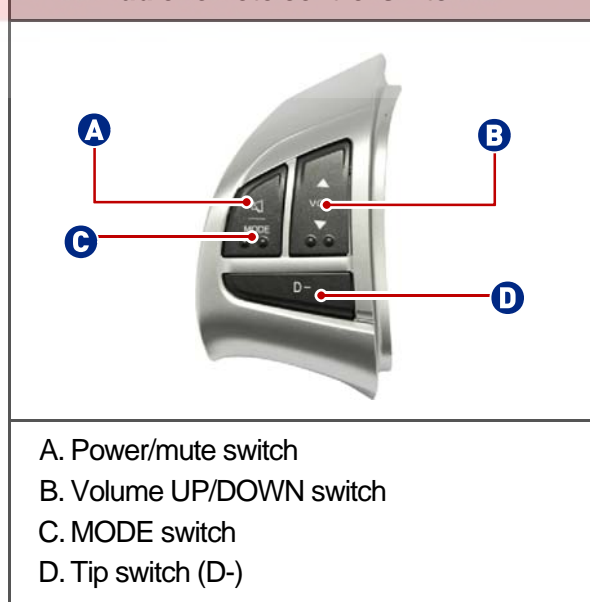
Audio remote control switch LH	Audio remote control switch RH
A. Power/mute switch	A. SEEK UP/DOWN switch
B. Volume UP/DOWN switch	B. Bluetooth (hands-free) switch
C. MODE switch	C. Tip switch (D+)
D. Tip switch (D-)	
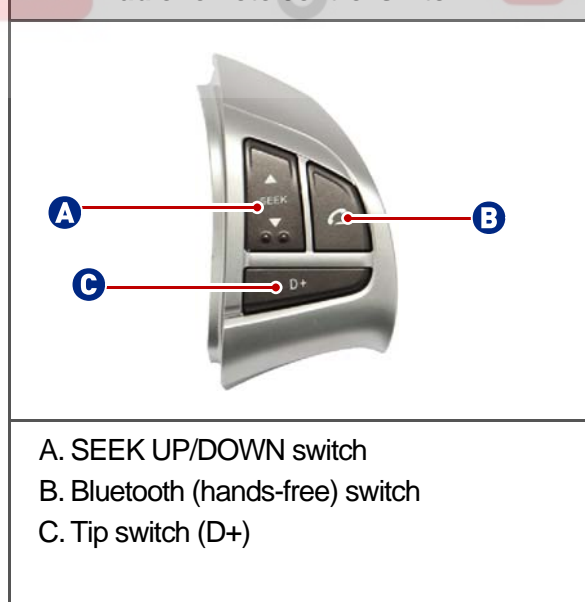
Modification basis	
Application basis	
Affected VIN	

3) Function

Power/mute switch	
	▷ Power (audio ON/OFF) - When pressing and holding the button, the audio system is switched on. And, when pressing and holding the button with the system on, the system is swtiched off. ▷ Mute - When pressing the button briefly, the volume will be turned off and pressing it again turns on the volume. - Press the button breifly to activate the mute function. - Activate or deactivate the sound block function during listening music or the pause function of CD/USB and iPod/BT during playing the music.

MODE switch	
	▷ Press the button to select the desired mode. − CD → USB/I−POD → AUX → BT AUDIO → RADIO → CD ▷ Press and hold the button to select radio frequency band: − FM1 → FM2 → AM → FM1

SEEK UP/DOWN switch	
	▷ Listening radio - Press the button to select the previous or next station registered to the station preset buttons. - Press and hold the button to select the broadcasting with good signal strength. ▷ To play CD/USB and iPod/BT audio - Press the button to select the previous or next song. - Press and hold the button to fast-forward or rewind the playing song while the CD player or USB is playing.

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

| Volume UP/DOWN switch	

	▷ Press the button to adjust volume.
	▷ Adjustable range
	  - Audio mode (00~45)
	  - Call mode (06~32)

Bluetooth (hands-free) switch	
	▷ Press the button briefly to activate the voice recognition function or press and hold it to redial in a call standby mode. ▷ When the call is incoming, you can press the button briefly to answer it or press and hold the button to reject it. ▷ Press the button to end the call.

AUDIO SYSTEM
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Modification basis	
Application basis	
Affected VIN	

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4) Resistance & Output Voltage At Audio Remote Control

	Switch	Resistance	Output voltage
1	VOL -	0 Ω ± 5%	0 to 0.3 V
2	VOL +	3.3 KΩ ± 5%	0.4 to 1.0 V
3	MODE	6 KΩ ± 5%	1.1 to 1.4 V
4	MUTE	9.9 KΩ ± 5%	1.5 to 1.8 V
5	SEEK UP	16.7 KΩ ± 5%	1.9 to 2.25 V
6	SEEK DOWN	31.3 KΩ ± 5%	2.26 to 2.64 V
7	TIP -	670 Ω ± 5%	-
8	TIP +	1.08 KΩ ± 5%	-
9	Bluetooth (hands-free)	64.7 KΩ ± 5%	2.66 to 3.0 V

5) Connector Function Description

Switch connector LH	Switch connector RH
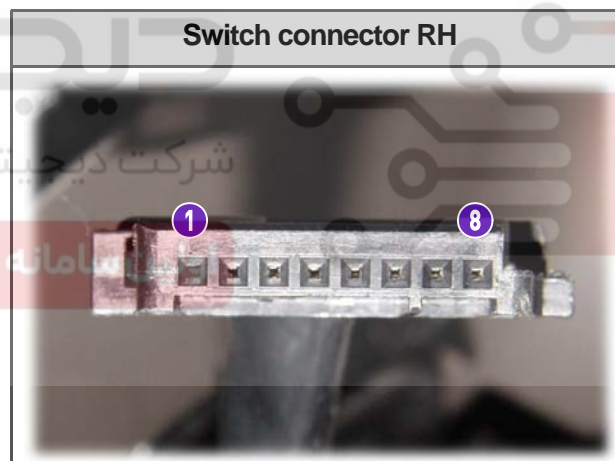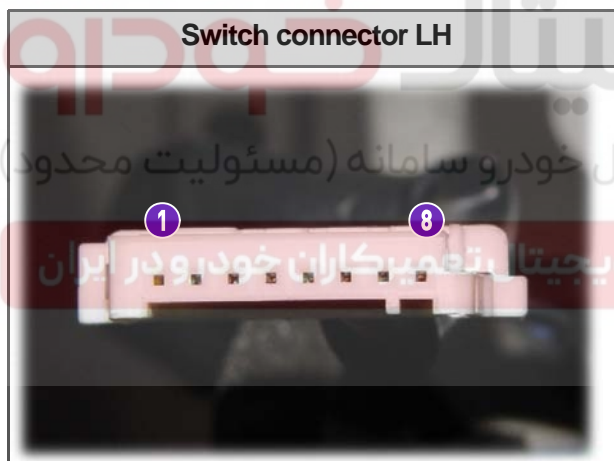
Pin No.	Function
1	-
2	Audio (signal output)
3	Audio (ground)
4	Audio (signal input)
5	Tip switch ground
6	Tip switch signal
7	ILL (-)
8	ILL (+)

Pin No.	Function
1	-
2	-
3	Audio (ground)
4	Audio (signal output)
5	Tip switch ground
6	Tip switch signal
7	ILL (-)
8	ILL (+)
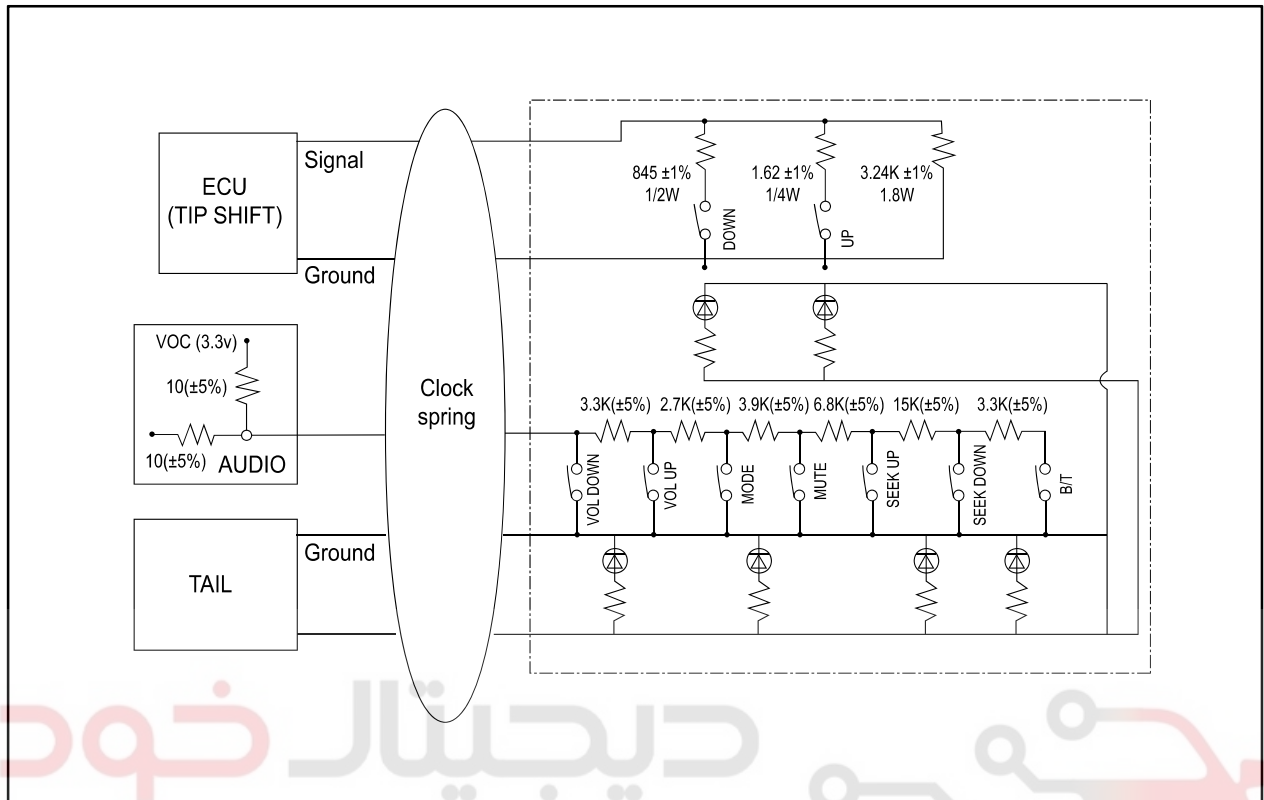
AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

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6) Circuit Diagram

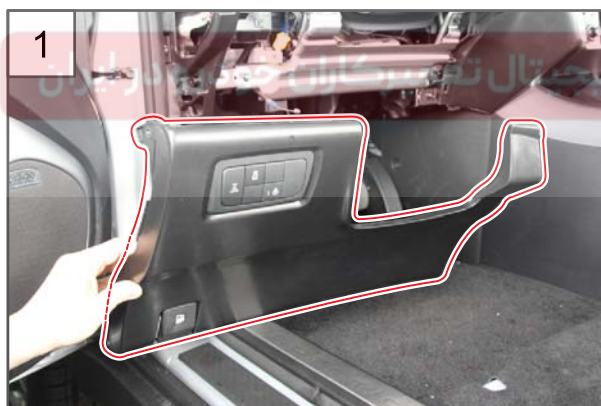| Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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REMOVAL AND INSTALLATION

8910-05 AUDIO HEAD UNIT ASSEMBLY

Preceding work - Disconnect the negative battery cable.

Audio head unit assembly

1

1. Remove the lower main panel assembly.

> 💡 **NOTE**
>
> Refer to "INSTRUMENT PANEL" under "REMOVEAL AND INSTALLATION" in "BODY INTERIOR" chapter.

2

2. Remove the LH side fascia molding.

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

3. Unscrew the one mounting screw on the LH center fascia panel.

4. Remove the LH center fascia panel.

5. Remove the RH crash pad side cover.

6. Unscrew the one RH center fascia panel mounting screw to remove the center fascia panel.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

KORANDO 2015.01
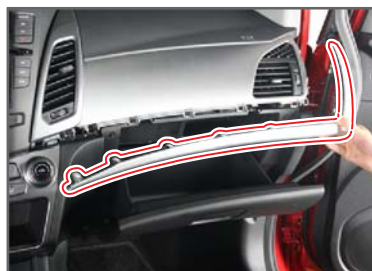
7. Unscrew the one RH center fascia panel mounting screw to remove the center fascia panel.

8. Unscrew the 4 audio head unit mounting screws.
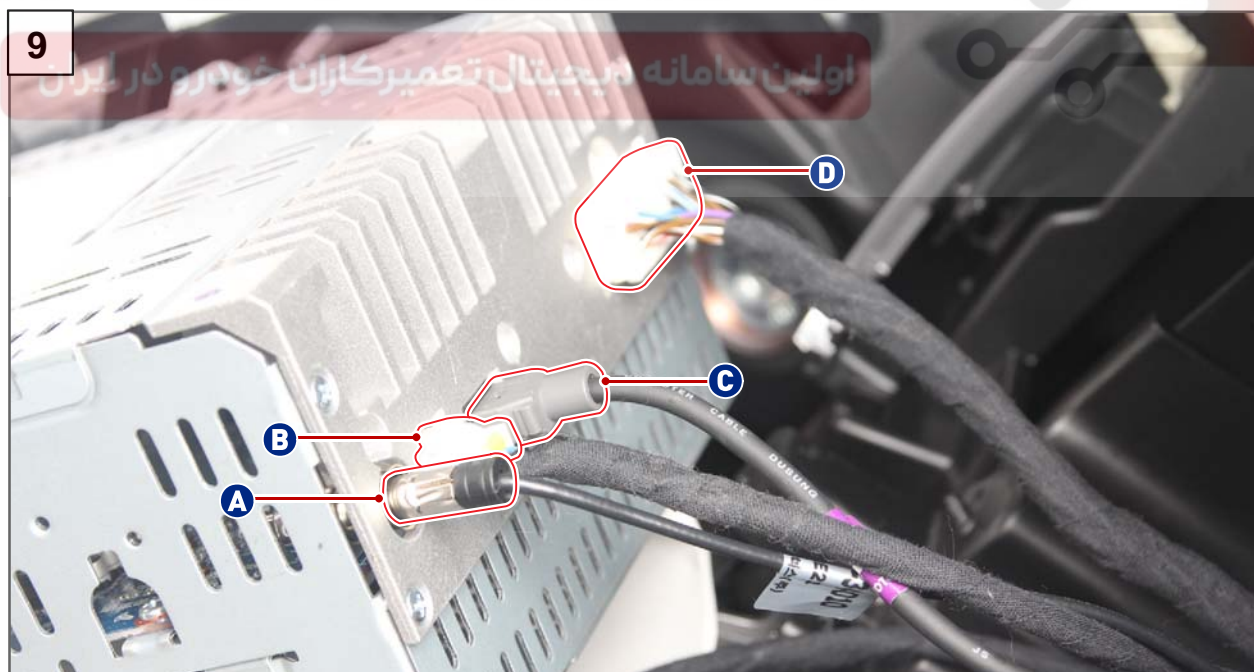
9. Disconnect the antenna connecting jack (A), AUX connector (B), USB connector (C) and power & speaker connecting connector (D).

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

10.Remove the center fascia switch.

11.Remove the audio head unit assembly.

12.Unscrew the 4 center fascia switch assembly mounting screws on the removed audio head unit assembly.
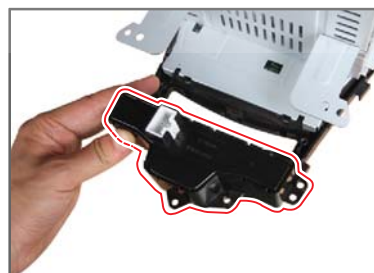
13.Install in the reverse order of removal.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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S.G.N.
8910-10 USB AUX JACK ASSEMBLY

Preceding work - Disconnect the negative battery cable.

USB & AUX jack assembly

AUX

1. Remove the audio head unit assembly.

💡 **NOTE**

Refer to "INSTRUMENT PANEL" under "REMOVEAL AND INSTALLATION" in "BODY INTERIOR" chapter.

2. Unscrew the two mounting screws on the center fascia lower panel assembly.

AUDIO SYSTEM

KORANDO 2015.01

Modification basis	
Application basis	
Affected VIN	

ELECTRONIC

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INSTRUMENT

SWITCH

LAMP

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AUDIO SYSTEM
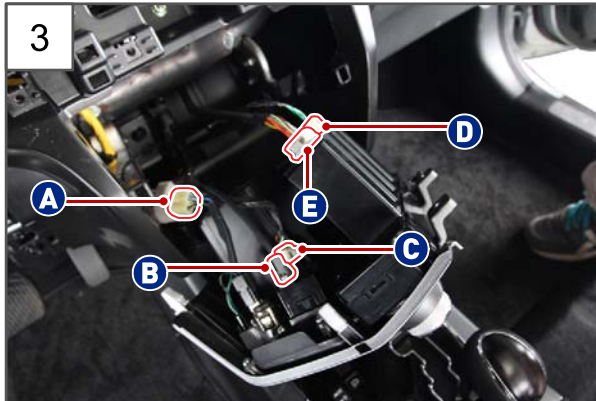
3. Remove the cigarette lighter (A), USB (B), AUX (C), heater (D) and air control (E) connectors.

4. Remove the center fascia lower panel assembly.

5. Unscrew the 4 USB & AUX jack mounting screws on the rear of the center fascia lower panel assembly to remove it.

6. Install in the reverse order of removal.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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S.G.N.
8930-26   **MICRO POLE ANTENNA ASSEMBLY**

Preceding work   - Disconnect the negative battery cable.

⚠ **CAUTION**

Do not apply the excessive force to the quarter lower trim and headlining to remove them. If so, these parts can be damaged.
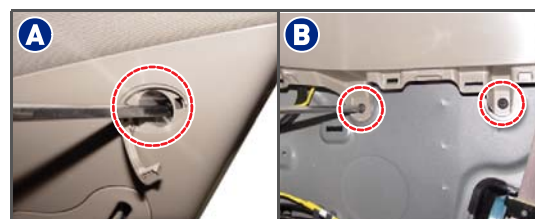

Micro pole antenna assembly

1

1. Unscrew the one quarter lower trim mounting screw.

💡 **NOTE**

Refer to "QUARTER UPPER TRIM" under "REMOVAL AND INSTALLATION" in "BODY INTERIOR" chapter.

2

Ⓐ

Ⓑ

2. Open the cutter upper cap to unscrew the one mounting bolt (A, 10 mm) and two quarter upper trim mounting screws (B).

Ⓐ   Ⓑ

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

ELECTRO NIC

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AUDIO SYSTEM

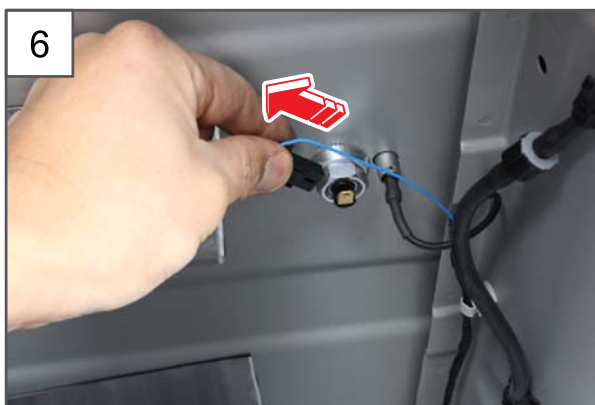3. Remove the quarter upper trim.

> ⚠ **CAUTION**
>
> Removal and installation is carried out after separating the quarter lower trim with these parts fitted. Therefore, do not apply the excessive force to the quarter lower trim.
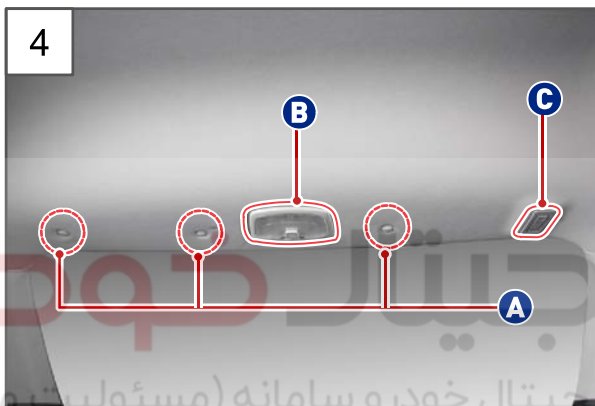
4. Remove the 3 headlining end fasteners (A), luggage lamp (B) and coat hook (C).

5. Lower the grip assembly and unscrew the 2 mounting screws.

6. Remove the micro pole antenna power terminal.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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7. Remove the radio antenna terminal.

8. Unscrew the one mounting nut (19 mm) on the micro pole antenna.

⚠ **CAUTION**

- Use a tool, such as long-nose plier, onto the connections when removing the micro pole antenna mounting nut to prevent cable from being damaged. If you hold the wiring to remove the mounting nut, it causes the cable to break.
- Be sure to clean the vehicle roof surface before mounting the integrated antenna.

9. Remove the micro pole antenna from outside the vehicle.

10. Install in the reverse order of removal.

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

S.G.N.
8610-22   FRONT DOOR SPEAKER ASSEMBLY

Preceding work   -   Disconnect the negative battery cable.

Front door speaker assembly

1. Remove the front door trim assembly.

> 🔔 **NOTE**
>
> Refer to "FRONT DOOR TRIM" under "REMOVAL AND INSTALLATION" in "BODY INTERIOR" chapter.

1

2

2. Disconnect the front door speaker connector.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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3. Unscrew the 4 mounting screws on the front door speaker.

4. Remove the front door speaker assembly.

5. Install in the reverse order of removal.

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

ELECTRONIC

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INSTRUMENT

SWITCH

LAMP

WIPER AND

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AUDIO SYSTEM

S.G.N. 8610-25 FRONT TWEETER SPEAKER ASSEMBLY

Preceding work - Disconnect the negative battery cable.

Front tweeter speaker assembly

1. Remove the front door trim assembly.

> **NOTE**
>
> Refer to "FRONT DOOR TRIM" under "REMOVAL AND INSTALLATION" in "BODY INTERIOR" chapter.

2. Unscrew the 2 mounting screws on the front tweeter speaker.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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3. Remove the front tweeter speaker assembly.

4. Install in the reverse order of removal.

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

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WIPER AND
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AUDIO SYSTEM

S.G.N.

8610-47　BLUETOOTH (HANDS-FREE) MICROPHONE ASSEMBLY

Preceding work　- Disconnect the negative battery cable.

Bluetooth (hands-free) microphoneassembly

1. Remove the sun visor assembly.

💡 **NOTE**

Refer to "SUN VISOR" under "REMOVEAL AND INSTALLATION" in "BODY INTERIOR" chapter.

2. Remove the one headlining mounting fastener on the driver's sun visor.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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3. Remove the A-pillar trim assembly.

> 💡 **NOTE**
>
> Refer to "A-PILLAR TRIM" under "REMOVAL AND INSTALLATION" in "BODY INTERIOR" chapter.

Front | Rear
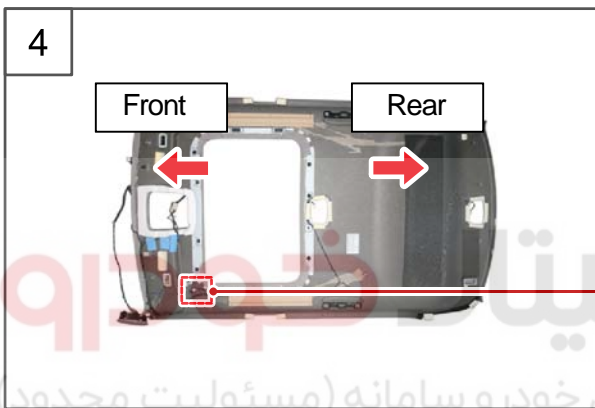
4. Separate the headlining and disconnect the Bluetooth (hands-free) connector.

5. Remove the Bluetooth (hands-free) assembly.

6. Install in the reverse order of removal.

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

ELECTRONIC

FUSE

BCM

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INSTRUMENT

SWITCH

LAMP

WIPER AND

PAS

AUDIO SYSTEM

8530-10　AUDIO REMOTE CONTROL SWITCH ASSEMBLY REMOVAL AND INSTALLATION

Preceding work　- Disconnect the negative battery cable.
- Remove the steering wheel. (See "INSTRUMENT PANEL" under "REMOVEAL AND INSTALLATION" in "BODY INTERIOR" chapter)

Audio remote control switch assembly

1. Remove the cruise control switch cover from the removed steering wheel.

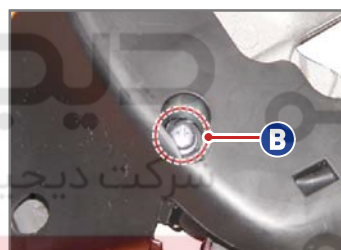| Modification basis	
Application basis	
Affected VIN	
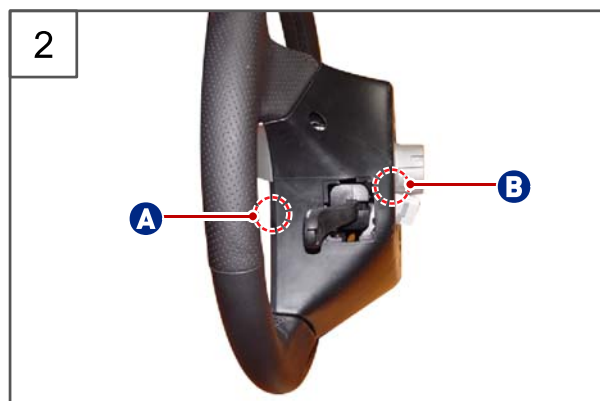
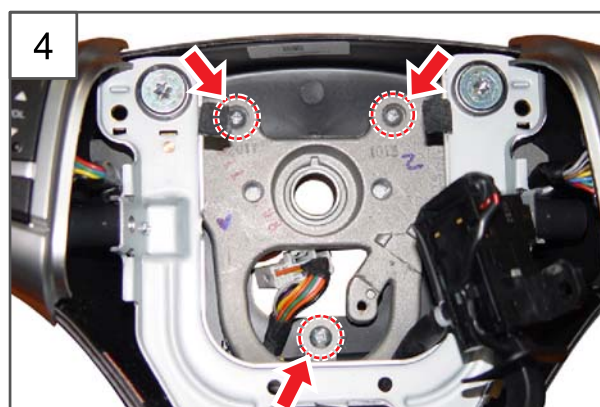2. Unscrew the mounting screws (A, B) on the cruise control switch.
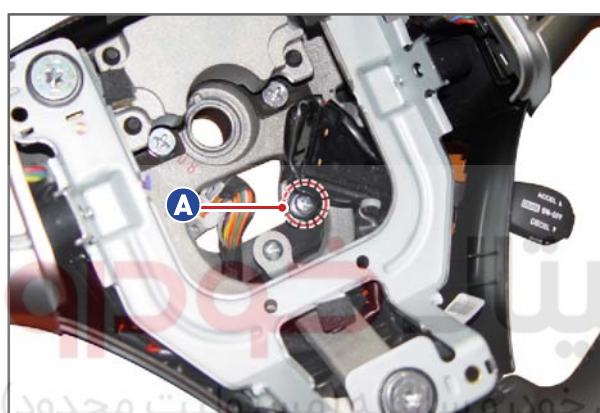
> ### 💡 NOTE
> The mounting screws for the cruise control switch are tightened to the front and rear of the steering wheel.
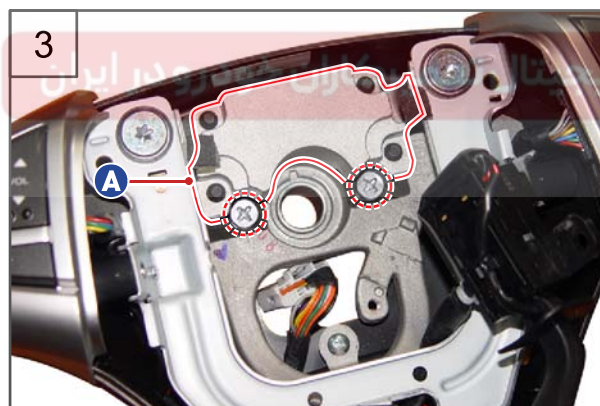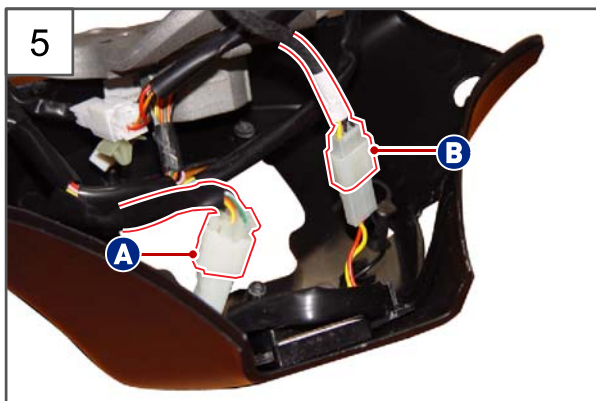

3. Separate the cruise control switch, unscrew the 2 mounting screws and remove the steering wheel damper (A).

4. Unscrew the three steering wheel lower cover mounting screws.

AUDIO SYSTEM

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Modification basis	
Application basis	
Affected VIN	

5. Separate the steering wheel lower cover and disconnect the steering wheel heating unit connectors (A, B).

6. Remove the steering lower cover.

7. Unscrew the 2 mounting screws (LH/RH) and remove the audio remote control switch.

8. Install in the reverse order of removal.

Modification basis	
Application basis	
Affected VIN	

AUDIO SYSTEM

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Memo