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# AUDIO, VISUAL, NAVIGATION & TELEPHONE SYSTEM

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# SERVICE INFORMATION

### **PRECAUTIONS**

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-TFNSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

### **WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

### INFOID:0000000005975903

### NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYS-
- · Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.

For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.

If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

### OPERATION PROCEDURE

Connect both battery cables.

### NOTE:

- Supply power using jumper cables if battery is discharged.
- 2. Use the Intelligent Key or mechanical key to turn the ignition switch to the "ACC" position. At this time, the steering lock will be released.
- 3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
- Perform the necessary repair operation.

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AV-3 Revision: January 2010 2010 Versa

### **PRECAUTIONS**

### < SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

- 5. When the repair work is completed, return the ignition switch to the "LOCK" position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
- 6. Perform a self-diagnosis check of all control units using CONSULT-III.

### **PREPARATION**

### < SERVICE INFORMATION >

# [AUDIO WITHOUT NAVIGATION]

# PREPARATION

# **Commercial Service Tool**

INFOID:0000000005395	304

Tool name		Description
Power tool		Loosening bolts and nuts
	PBIC0191E	

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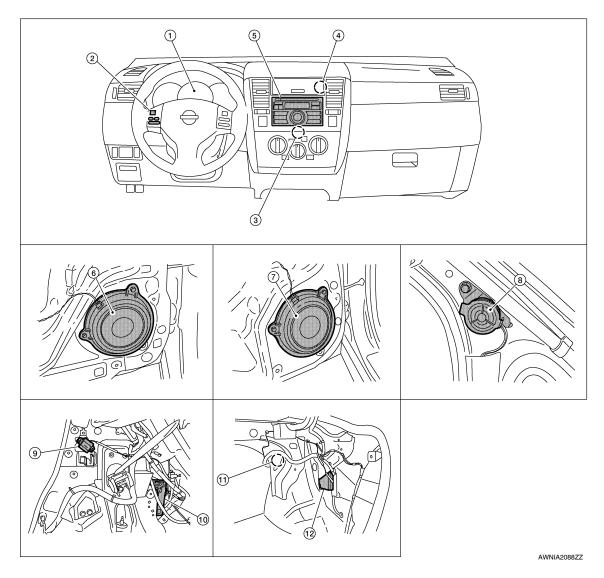
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### **AUDIO**

# **Component Parts Location**

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- 1. Combination meter M24
- 4. iPod® side M50 (premium system)
- 7. Rear door speaker LH D207, RH D307
- 10. Bluetooth control unit B121, B122 (hatchback)
- 2. Steering wheel audio control switch- 3. es (with Bluetooth)
- Audio unit M43 (base system)
   Audio unit M40, M43, M44 (premium system)
- Tweeter LH M46, RH M47 (premium 9. system) (view with front pillar garnish removed)
- 11. Bluetooth antenna (sedan) (view with trunk side finisher RH removed)
- iPod® adapter M49 (premium system)
- 6. Front door speaker LH D12, RH D112
- Bluetooth antenna (hatchback) [view with luggage side lower finisher (RH) removed]
- 12. Bluetooth control unit B121, B122 (sedan)

# System Description

### **BASE SYSTEM**

Refer to Owner's Manual for audio system operating instructions. Power is supplied at all times

- through 20A fuse (No. 27, located in the fuse and fusible link box)
- · to audio unit terminal 19.

With the ignition switch in the ACC or ON position, power is supplied

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### **AUDIO**

### < SERVICE INFORMATION >

### [AUDIO WITHOUT NAVIGATION]

through 10A fuse (No. 20, located in the fuse and fusible link box)
• to audio unit terminal 7.
Ground is supplied through the case of the audio unit.
Then audio signals are supplied
<ul> <li>through audio unit terminals 2, 3, 4, 5, 11, 12, 13 and 14</li> </ul>
to terminals + and - of front door speaker LH and RH and

### PREMIUM SYSTEM

Refer to Owner's Manual for audio system operating instructions.

to terminals + and - of rear door speaker LH and RH.

Power is supplied at all times

- through 20A fuse (No. 27, located in the fuse and fusible link box)
- · to audio unit terminal 19.

With the ignition switch in the ACC or ON position, power is supplied

- through 10A fuse (No. 20, located in the fuse and fusible link box)
- to audio unit terminal 7.

Ground is supplied

- to audio unit terminals 20 and 61
- through body grounds M57 and M61.

Then audio signals are supplied

- through audio unit terminals 2, 3, 4, 5, 11, 12, 13, and 14
- to terminals + and of front door speaker LH and RH and
- · to terminals + and of tweeter LH and RH and
- to terminals + and of rear door speaker LH and RH.

Steering Wheel Audio Control Switches (with Bluetooth)

When one of steering wheel audio control switches is pushed, the resistance in steering switch circuit changes depending on which button is pushed.

### SPEED SENSITIVE VOLUME SYSTEM (PREMIUM SYSTEM)

Volume level of this system goes up and down automatically in proportion to the vehicle speed. The control level can be selected by the customer. Refer to Owner's Manual for operating instructions.

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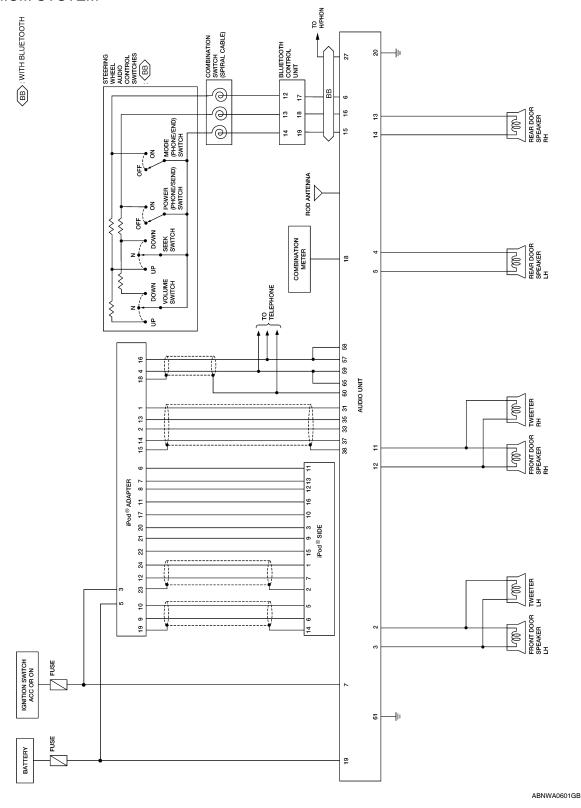
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Schematic

### PREMIUM SYSTEM



Wiring Diagram - AUDIO -

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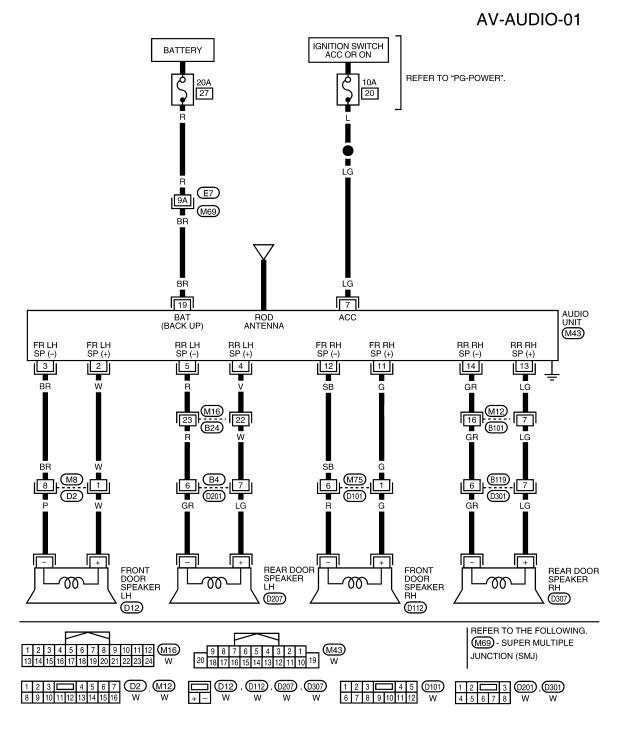
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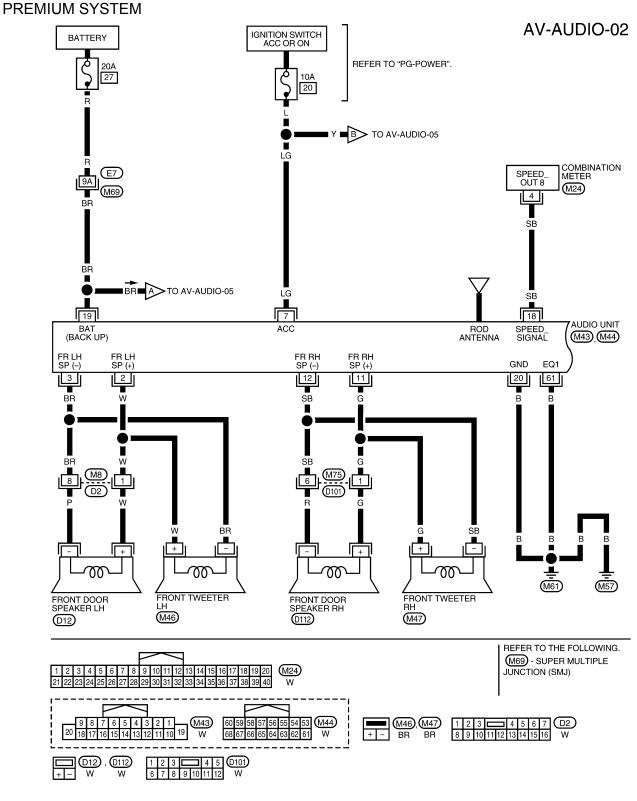
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### **BASE SYSTEM**



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ABNWA0603GB



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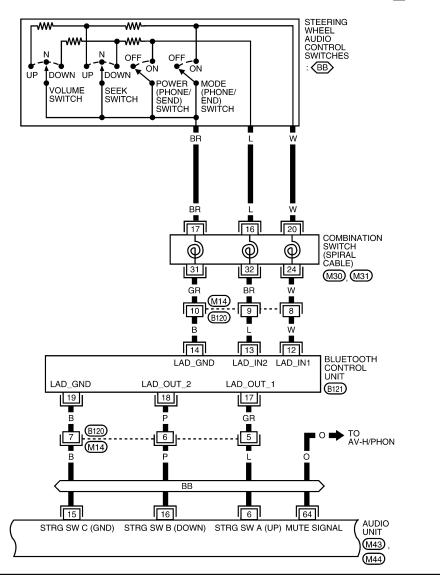
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(BB): WITH BLUETOOTH

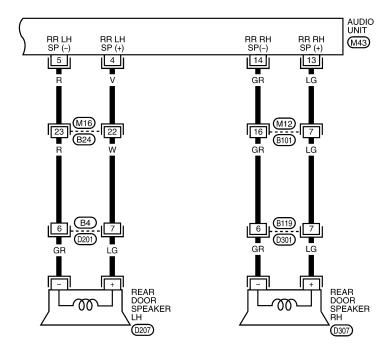


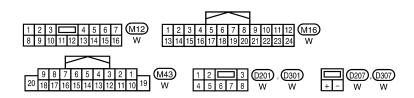


\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

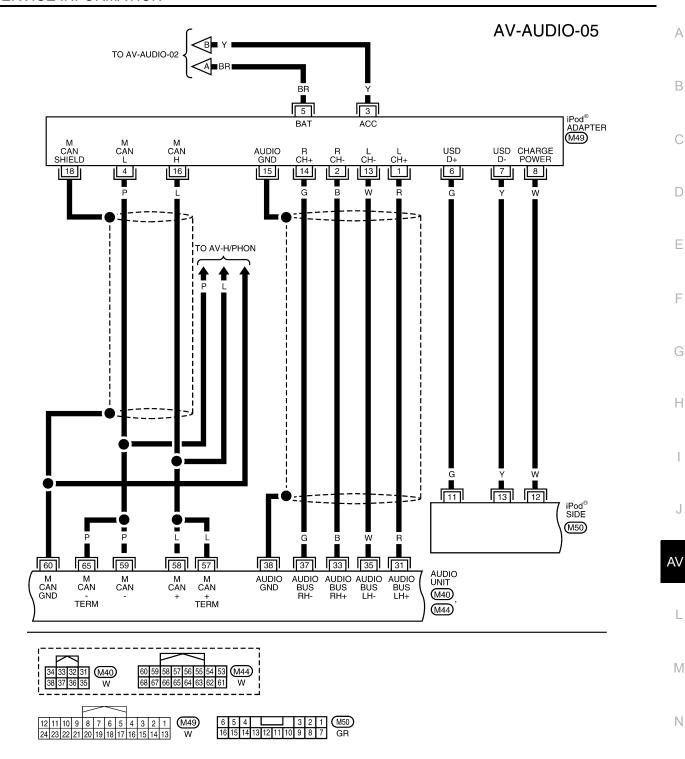
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### **AV-AUDIO-04**





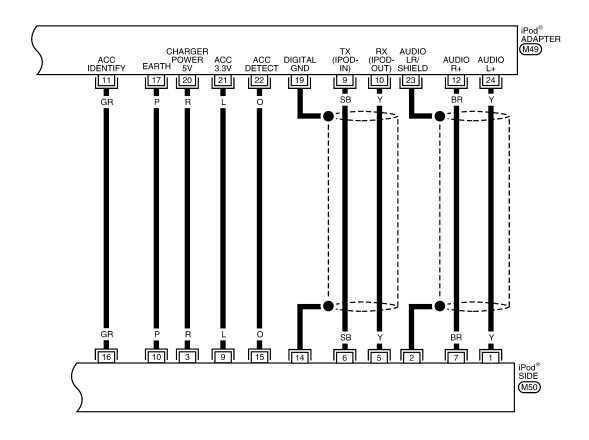
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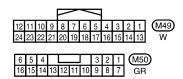


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### **AV-AUDIO-06**





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# Audio Unit (Base System) Harness Connector Terminal Layout 19 10 11 12 13 14 15 16 17 18 20 H.S.

# Terminal and Reference Value for Audio Unit (Base System)

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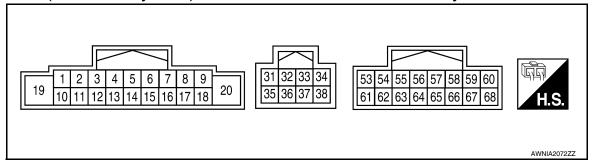
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	minal color)	14	Signal		Condition	Reference value
+	_	- Item	input/ output	Ignition switch	Operation	(Approx.)
2 (W)	3 (BR)	Audio signal front LH	Output	ON	Receive audio signal	(V) 1 0 -1 + 2ms SKIB3609E
4 (V)	5 (R)	Audio signal rear LH	Output	ON	Receive audio signal	(V) 1 0 -1 + 2ms SKIB3609E
7 (LG)	Ground	ACC power supply	Input	ACC	-	Battery voltage
11 (G)	12 (SB)	Audio signal front RH	Output	ON	Receive audio signal	(V) 1 0 -1 + 2ms SKIB3609E
13 (LG)	14 (GR)	Audio signal rear RH	Output	ON	Receive audio signal	(V) 1 0 -1 + 2ms SKIB3609E
19 (BR)	Ground	Battery power supply	Input	OFF	-	Battery voltage

# Audio Unit (Premium System) Harness Connector Terminal Layout

INFOID:0000000005395311



# Terminal and Reference Value for Audio Unit (Premium System)

INFOID:0000000005395312

	minal e color)	Item	Signal input/	(	Condition	Reference value	Example of symp-	
+	_	item	output	Ignition switch	Operation	(Approx.)	tom	
2 (W)	3 (BR)	Audio sound signal front LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker LH or tweeter LH.	
4 (V)	5 (R)	Audio sound signal rear LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms skia0177E	No sound from rear door speaker LH.	
	Ground	Remote control A	Input	ON	Press Phone/ End switch	0V		
6 (L)*1					Press SEEK UP switch	1.7V	Steering wheel au-	
0 (L) 1					Press VOL UP switch	3.3V	function	
					Except for above	5.0V		
7 (LG)	Ground	ACC signal	Input	ON	Ignition switch ACC or ON	Battery voltage	System does not work properly.	
11 (G)	12 (SB)	Audio sound signal front RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from front door speaker RH or tweeter RH.	

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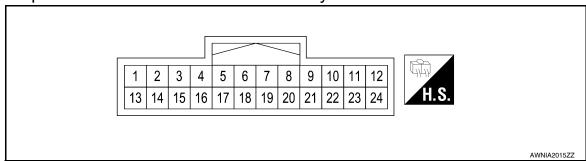
Terminal (Wire color)		lko m-	Signal	Condition		Reference value	Example of symp-	
+	_	Item	input/ output	Ignition switch	Operation	(Approx.)	tom	
13 (LG)	14 (GR)	Audio sound signal rear RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from rear door speaker RH.	
15 (B)*1	_	Remote control ground	Input	_	-	-	Steering wheel audio controls do not function	
					Press Phone/ Send switch	0V		
4C (D)*4	0	Remote	lanut	ON	Press SEEK DOWN switch	1.7V	Steering wheel au-	
16 (P)*1	Ground	control B	Input	ON	Press VOL DOWN switch	3.3V	dio controls do not function	
					Except for above	5.0V		
18 (SB)	Ground	Vehicle speed signal (8–pulse)	Input	ON	When vehicle speed is approx. 40 km/h (25 MPH)	(V) 6 4 2 0 20 ms PKIC0643E	Speed sensitive volume is inoperative.	
19 (BR)	Ground	Battery pow- er	Input	_	_	Battery voltage	Audio unit will not work properly.	
20 (B)	Ground	Ground	_	-	_	-	-	
31 (R)	35 (W)	iPod® au- dio signal LH	Input	ON	With iPod® op- erating	(V) 1 0 -1 + 2ms SKIB3609E	_	
33 (B)	37 (G)	iPod® au- dio signal RH	Input	ON	With iPod® operating	(V) 1 0 -1 ** 2ms SKIB3609E	_	
38	_	Shield	_	_	_	_	_	
57 (L)	_	AV commu- nication sig- nal 1 (H)	Input/ Output	_	_	_	_	
58 (L)	_	AV communication signal 1 (H)	Input/ Output	_	_	_	_	

	Terminal (Wire color)  Item   Signal   Condition		Reference value	Example of symp-				
+	_	item	output	Ignition switch	Operation	(Approx.)	tom	
59 (P)	_	AV commu- nication sig- nal 1 (L)	Input/ Output	_	_	_	_	
60	_	Shield	_	_	_	_	_	
61 (B)	Ground	Ground	_	_	_	-	_	
64 (O)*1	-	Bluetooth ON	Output	ON	Audio unit sends power signal to Bluetooth con- trol unit	_	Mute inoperative	
65 (P)	_	AV commu- nication sig- nal 1 (L)	Input/ Output	_	_	_	_	
66 (LG)*1	67 (V)*1	Audio out	Output	ACC/ ON	Audio unit re- ceives audio signal from Bluetooth con- trol unit	(V) 1 0 -1 → 2ms SKIB3609E	Bluetooth can not be heard.	
68*1	_	Shield	_	_	_	-	_	

<sup>\*1:</sup> With Bluetooth

# IPod Adapter Harness Connector Terminal Layout

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# Terminal and Reference Value for IPod Adapter

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	minal e color)	Description		Reference value		Reference value	В
+	_	Signal name	Input/ Output		Condition	(Approx.)	
1 (R)	13 (W)	iPod® sound signal LH	Output	Ignition switch ON	When iPod® mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E	C D
2 (B)	14 (G)	iPod® sound signal RH	Output	Ignition switch ON	When iPod® mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E	F
3 (Y)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage	Н
4 (P)	_	AV communication signal (L)	Input/ Output	_	_	_	I
5 (BR)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	J
6 (G)	7 (Y)	iPod® USD signal	_	Ignition switch ON	_	_	
8 (W)	Ground	iPod® battery charge	Output	Ignition switch ON	Connected to iPod®.	Battery voltage	AV
9 (SB)	Ground	Communication signal (iPod® adapter→iPod®)	Output	Ignition switch ON	The wave pattern is displayed just after iPod® connection.	NOTE:  After the wave pattern display, the value continues Approx 3.3V	M N
10 (Y)	Ground	Communication signal (iPod®→iPod® adapter)	Input	Ignition switch ON	Connected to iPod®.	(V) 3 2 1 0 ++2ms JPNIA0462GB	Ρ
11 (GR)	Ground	ACCESSORY-IDENTIFY	_	Ignition switch ON	Connected to iPod®.	0V	

< SERVICE INFORMATION >					[AUDIO	WITHOUT NAVIGATION]	
Terminal (Wire color)		Description		Condition		Reference value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
12 (BR)	Ground	iPod® sound signal RH	Input	Ignition switch ON	When iPod® mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E	
15	_	Shield	_	_	_	_	
16 (L)	_	AV communication signal (H)	Input/ Output	_	_	_	
17 (P)	Ground	Ground	_	Ignition switch ON	_	0V	
18	_	Shield	_	_	_	_	
19	_	Shield	_	_	_	_	
20 (R)	Ground	iPod® battery charge	Output	Ignition switch ON	Connected to iPod®.	5.0V	
21		iPod® connection recogni-		Ignition	Not connected to iPod®.	4.0V	
(L)	Ground	tion signal	Input	switch ON	Connected to iPod®.	0V	
22 (O)	Ground	ACCESSORY-DETECT	_	Ignition switch ON	Connected to iPod®.	0V	
23	_	Shield	_	_	_	_	
24 (Y)	Ground	iPod® sound signal LH	Input	Ignition switch ON	When iPod® mode is selected.	(V) 1 0 -1 * + 2ms	

# **Trouble Diagnosis**

INFOID:0000000005395317

SKIB3609E

The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check if noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment, and then determine the cause. NOTE:

The majority of the audio malfunctions are the result of outside causes (damaged CD, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.

Symptom	Check item	
Audio system does not work properly.	Audio unit power supply circuit. Refer to AV-22, "Power Supply Circuit Inspection".      Audio unit. Refer to AV-29, "Removal and Installation".	
No sound can be heard from all speakers.	<ul> <li>Speaker circuit shorted to ground. Refer to <u>AV-9</u>, "Wiring <u>Diagram - AUDIO -"</u>.</li> <li>Audio unit. Refer to <u>AV-29</u>, "Removal and Installation".</li> </ul>	

Symptom	Check item
No sound can be heard from one or several speakers.	<ul> <li>Open or short in audio signal circuit between audio unit and front speaker. Refer to AV-24, "Sound Is Not Heard from Front Door Speaker (Base System)" or AV-26, "Sound Is Not Heard from Front Door Speaker or Tweeter (Premium System)".</li> <li>Front speaker. Refer to AV-24, "Sound Is Not Heard from Front Door Speaker (Base System)" or AV-26, "Sound Is Not Heard from Front Door Speaker or Tweeter (Premium System)".</li> <li>Open or short in audio signal circuit between audio unit and rear speaker. Refer to AV-25, "Sound Is Not Heard from Rear Door Speaker (Base System)" or AV-27, "Sound Is Not Heard from Rear Door Speaker (Premium System)".</li> <li>Rear speaker. Refer to AV-25, "Sound Is Not Heard from Rear Door Speaker (Base System)" or AV-27, "Sound Is Not Heard from Rear Door Speaker (Premium System)".</li> <li>Tweeter (mid level and premium system) AV-26, "Sound Is Not Heard from Front Door Speaker or Tweeter (Premium System)" or AV-27, "Sound Is Not Heard from Rear Door Speaker (Premium System)".</li> <li>Audio unit. Refer to AV-29, "Removal and Installation".</li> </ul>
No sound can be heard from radio or noise is heard.	<ul> <li>Antenna feeder. Refer to <u>AV-33</u>.</li> <li>Antenna. Refer to <u>AV-33</u>.</li> <li>Audio unit. Refer to <u>AV-29</u>, "Removal and Installation".</li> </ul>

### NOTE:

Noise resulting from variations in field strength, such as fading noise and multi-path noise, or external noise from trains and other sources. It is not a malfunction.

- Fading noise: This noise occurs because of variations in the field strength in a narrow range due to mountains or buildings blocking the signal.
- Multi-path noise: This noise results from the waves sent directly from the broadcast station arriving at the antenna at a different time from the waves that reflect off of mountains or buildings.

Noise Inspection

INFOID:0000000005395318

The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check if noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment, and determine the cause.

### NOTE:

The source of the noise can be found easily by listening to the noise while removing the fuses of electrical components, one by one.

### TYPE OF NOISE AND POSSIBLE CAUSE

C	Occurrence condition	Possible cause	
	A continuous growling noise occurs. The speed of the noise varies with changes in the engine speed.	Ignition components	N
Occurs only when engine is ON.	A whistling noise occurs while the engine speed is high. A booming noise occurs while the engine is running and the lighting switch is ON.	Generator	N
Noise only occurs when various electrical components are operating.	A cracking or snapping sound occurs with the operation of various switches.	Relay malfunction, radio malfunction	
	The noise occurs when various motors are operating.	Motor case ground     Motor	_ (
The noise occurs constantly, not	just under certain conditions.	Rear defogger coil malfunction     Open circuit in printed heater	F
A cracking or snapping sound occit is vibrating excessively.	urs while the vehicle is being driven, especially when	<ul><li> Ground wire of body parts.</li><li> Ground due to improper part installation</li><li> Wiring connections or a short circuit</li></ul>	_

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# **Power Supply Circuit Inspection**

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# 1. CHECK FUSE

Check that the following fuses of the audio unit are not blown.

Unit Terminals Sign		Signal name	Fuse No.
Audio unit	.it 19 Battery power		27
Addio driit	7	Ignition switch ACC or ON	20

### OK or NG

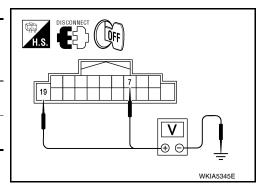
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of blown fuse before installing new fuse. Refer to  $\underline{PG}$ - $\underline{4}$ .

# 2.audio unit power supply circuit check

- 1. Disconnect audio unit connector.
- 2. Check voltage between the audio unit and ground.

	Terminal No.					
Unit	(	(+)		OFF	ACC	ON
	Connector	Terminal	(-)			
Audio unit	Audio unit M43	19	Ground	Battery voltage	Battery voltage	Battery voltage
Audio utilit	IVI43	7	Ground	0V	Battery voltage	Battery voltage



### OK or NG

OK >> With premium system, GO TO 3.

NG >> • Check connector housings for disconnected or loose

· Repair harness or connector.

# 3. GROUND CIRCUIT CHECK

Check continuity between audio unit (premium system) harness connectors M43 (A), M44 (B) terminals 20, 61 and ground.

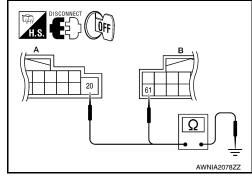
### Continuity should exist.

### OK or NG

OK >> Inspection End.

NG >> • Check conne

- >> Check connector housings for disconnected or loose terminals.
  - Repair harness or connector.



INFOID:0000000005395324

# Steering Switch Check (With Bluetooth) 1.CHECK HARNESS

- Turn ignition switch OFF.
- 2. Disconnect Bluetooth control unit connector and spiral cable connector M30.
- 3. Check continuity between Bluetooth control unit (A) connector B121 terminals 12, 14, and 13 and spiral cable (B) connector M30 terminals 24, 31, and 32.

Δ	A B			Continuity
Connector	Terminal	Connector		
	12		24	
B121	13	M30	32	Yes
	14		31	

4. Check continuity between Bluetooth control unit and ground.

H.S. CE DUFF
A 12 14 14 31 32 24 , 31 , 32

	Continuity			
Connector	Terminal	(-)		
5.10.1	12			
B121	13	Ground	No	
	14			

### OK or NG

OK >> GO TO 3.

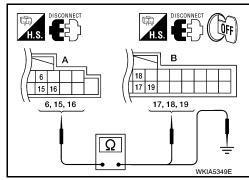
NG >> Repair harness.

# 2. CHECK HARNESS

1. Disconnect audio unit connector.

 Check continuity between audio unit (A) connector M43 terminals 6, 15, and 16 and Bluetooth control unit (B) connector B121 terminals 17, 19, and 18.

(A) (B)			Continuity	
Connector	Terminal	Connector		
	6		17	
M43	15	B121	19	Yes
	16		18	



### OK or NG

OK >> GO TO 4.

NG >> Repair harness.

# 3.SPIRAL CABLE CHECK

- Disconnect spiral cable connector M31.
- 2. Check continuity between spiral cable terminals.

16 - 32 : Continuity should exist.
17 - 31 : Continuity should exist.
20 - 24 : Continuity should exist.

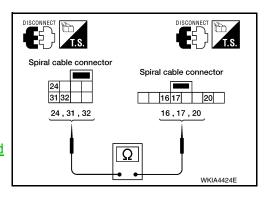
### OK or NG

OK >> GO TO 4.

NG >> Replace spiral cable. Refer to <u>SRS-37</u>, "Removal and <u>Installation"</u>.

# 4. CHECK STEERING SWITCH RESISTANCE

Check resistance between spiral cable connector M31 terminals.



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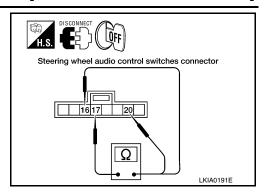
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Ten	minal	Signal name	Condition	Resistance $(\Omega)$ (Approx.)
		Seek (down)	Depress Seek down switch.	165
16	17	Phone/Send	Depress Phone/Send switch.	0
		Volume (down)	Depress volume down switch.	487
		Seek (up)	Depress Seek up switch.	165
20	17	Phone/End	Depress Phone/End switch.	0
	Volume (u		Depress volume up switch.	487



### OK or NG

OK >> Inspection End.

NG >> Replace steering switch. Refer to <u>AV-29</u>. "Removal and Installation".

# Sound Is Not Heard from Front Door Speaker (Base System)

INFOID:0000000005395325

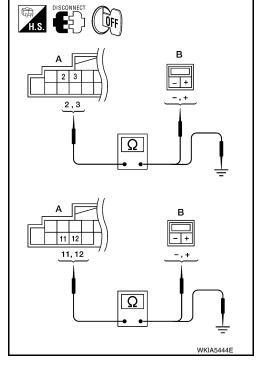
# 1. HARNESS CHECK

- 1. Disconnect audio unit connector and front door speaker connector (LH or RH).
- 2. Check continuity between audio unit connector M43 (A) terminal and suspect speaker connector (B) terminal.

	Tern			
	АВ			Continuity
Connector	Terminal	Connector		
	2	D12	+	
M43	3	D12	-	Yes
IVITO	11	D112	+	103
	12	DIIZ	-	

3. Check continuity between audio unit connector M43 terminal and ground.

	Continuity		
Connector	Terminal	_	
M43	2		No
	3	Ground	
	11	Giouna	
	12		



### OK or NG

NG

OK >> GO TO 2.

>> • Check connector housings for disconnected or loose terminals.

· Repair harness or connector.

# 2.FRONT SPEAKER SIGNAL CHECK

- 1. Connect audio unit connector and suspect speaker connector.
- Turn ignition switch to ACC.
- 3. Push "POWER" switch.

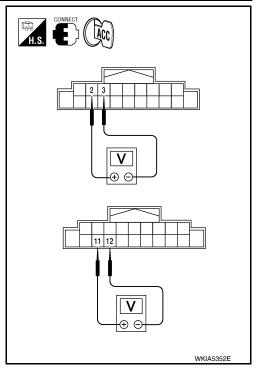
4. Check the signal between audio unit harness connector terminals with CONSULT-III or oscilloscope.

	Terminals					
	(+) (-)		(-)	Condi-	Reference	
Con- nec- tor	Termi- nal	Con- nec- tor	Termi- nal	tion	signal	
	2		3			
M43	11	M43	12	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	

### OK or NG

OK >> Replace speaker. Refer to AV-29, "Removal and Installation".

NG >> Replace audio unit. Refer to <u>AV-29, "Removal and Installation"</u>.



# Sound Is Not Heard from Rear Door Speaker (Base System)

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# 1. HARNESS CHECK

- 1. Disconnect audio unit connector and rear door speaker connector.
- 2. Check continuity between audio unit (A) connector terminal and rear door speaker (B) connector terminal.

	Tern			
	A	Continuity		
Connector	Terminal	Connector Terminal		
	5	D207	-	
M43	4	D201	+	Yes
IVI <del>4</del> 3	14	D307	-	165
	13	D307	+	

3. Check continuity between audio unit harness connector terminal and ground.

	Terminals							
	Audio unit							
Connector	Terminal	_						
	5	Ground	No					
M43	4							
IVITO	14							
	13							

# 

### OK or NG

OK >> GO TO 2.

NG >> • Check connector housings for disconnected or loose terminals.

Repair harness or connector.

# 2.REAR SPEAKER SIGNAL CHECK

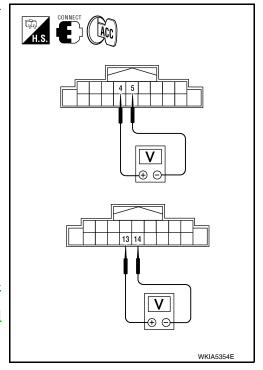
- 1. Connect audio unit connector and rear speaker connector.
- Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio unit harness connector terminals with CONSULT-III or oscilloscope.

	Terminals					
(+)		(-)		Condi-	Reference	
Con- nector	Termi- nal	Con- nector	Termi- nal	tion	signal	
	4		5			
M43	13	M43	14	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	

### OK or NG

OK >> Replace speaker. Refer to AV-29, "Removal and Installation".

NG >> Replace audio unit. Refer to <u>AV-29, "Removal and</u> Installation".



# Sound Is Not Heard from Front Door Speaker or Tweeter (Premium System)

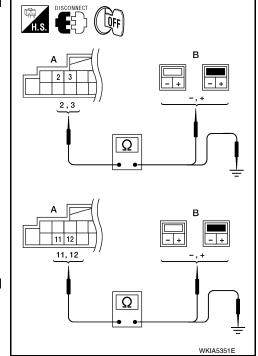
INFOID:000000005395327

# 1. HARNESS CHECK

- 1. Disconnect audio unit connector and front door speaker and tweeter connector (LH or RH).
- 2. Check continuity between audio unit harness connector terminal and front door speaker and tweeter harness connector terminal.

Audi	o unit.	Speaker	Continuity	
Connector	Terminal	Connector Terminal		
	2	M46	+	
	3	10140	-	Yes
	11	M47	+	
M43	12	IVI <del>~</del> /	-	
10143	2	D12	+	165
	3	DIZ	-	
	11	D112 +		
	12	DIIZ	-	

3. Check continuity between audio unit harness connector terminal and ground.



	Terminals							
	Audio unit							
Connector	Terminal	_						
	2	Ground	No					
M43	3							
IVI43	11							
	12							

### OK or NG

OK >> GO TO 2.

NG >> • Check connector housings for disconnected or loose terminals.

Repair harness or connector.

# $2.\mathsf{FRONT}$ SPEAKER SIGNAL CHECK

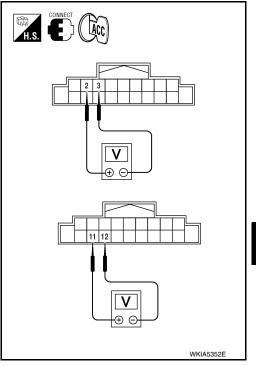
- 1. Connect audio unit connector, front door speaker connector and tweeter connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio unit connector terminals with CONSULT-III or oscilloscope.

	Terminals			Condi-		
(-	(+) (-)		Reference			
Con- nector	Termi- nal	Con- nector	Termi- nal	tion	signal	
	2		3			
M43	11	M43	12	Receive audio signal	1 0 -1 1 ms SKIA0177E	

### OK or NG

OK >> Replace front speaker. Refer to <u>AV-29, "Removal and Installation"</u>.

NG >> Replace audio unit. Refer to AV-29, "Removal and Installation".



# Sound Is Not Heard from Rear Door Speaker (Premium System)

INFOID:0000000005395328

# 1. HARNESS CHECK

1. Disconnect audio unit connector and rear door speaker connector.

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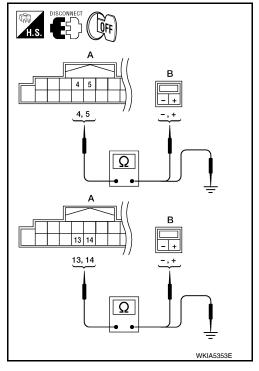
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2. Check continuity between audio unit harness connector terminal and speaker harness connector terminal.

Audi	Audio unit Speaker							
Connector	Terminal	Connector	Terminal					
	4	D207	+					
M43	5	DZUI	-	Yes				
IVITO	13	D307	+	165				
	14	D307	-					

3. Check continuity between audio unit harness connector terminal and ground.

	Audio unit								
Connector	Terminal	_							
	4	- Ground	No						
M43	5								
IVI43	13								
	14								



### OK or NG

NG

OK >> GO TO 2.

>> • Check connector housings for disconnected or loose terminals.

· Repair harness or connector.

# $2.\mathsf{REAR}$ SPEAKER SIGNAL CHECK

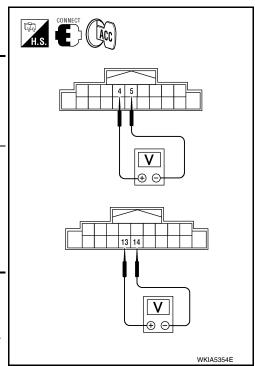
- 1. Connect audio unit connector and rear door speaker connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio unit harness connector terminals with CONSULT-III or oscilloscope.

	Terminals					
(	(+)		(-)	Condi-	Reference	
Con- nec- tor	Termi- nal	Con- nec- tor	Termi- nal	tion	signal	
	5		4			
M43	14	M43	13	Re- ceive audio signal	(V) 1 0 -1 1 ms i	

### OK or NG

OK >> Replace speaker. Refer to <u>AV-29, "Removal and Installation"</u>.

NG >> Replace audio unit. Refer to <u>AV-29</u>, "Removal and <u>Installation"</u>.



### Removal and Installation

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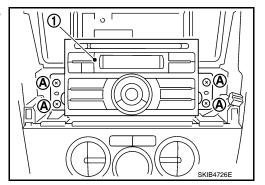
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### **AUDIO UNIT**

### Removal

- 1. Disconnect the battery negative terminal.
- 2. Remove cluster lid C. Refer to IP-11.
- 3. Remove the audio unit screws (A), disconnect the connectors and remove the audio unit (1).
- Remove the audio unit bracket.



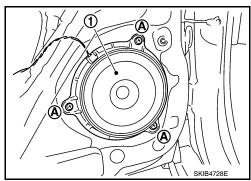
### Installation

Installation is in the reverse order of removal.

### FRONT DOOR SPEAKER

### Removal

- 1. Remove the front door finisher. Refer to El-34.
- 2. Remove the front door speaker screws (A), disconnect the connector and remove the front door speaker (1).



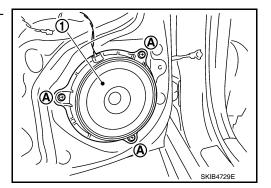
### Installation

Installation is in the reverse order of removal.

### REAR DOOR SPEAKER

### Removal

- 1. Remove the rear door finisher. Refer to <u>El-34</u>.
- Remove the rear door finisher screws (A), disconnect the connector and remove the rear door speaker (1).



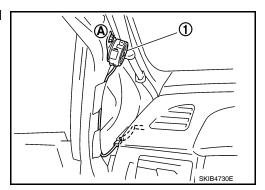
### Installation

Installation is in the reverse order of removal.

### **TWEETER**

### Removal

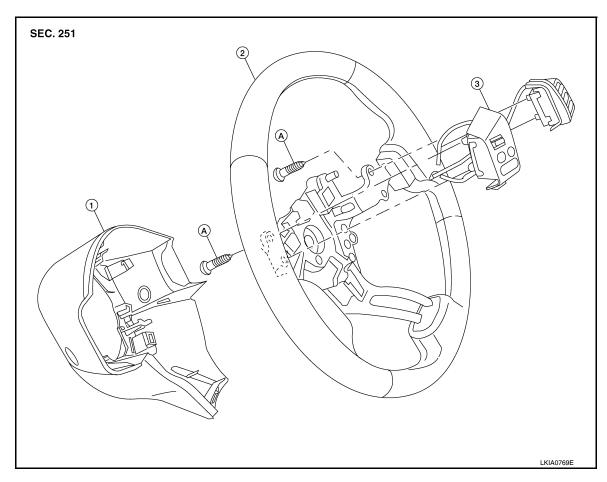
- Remove the front pillar garnish. Refer to <u>EI-39</u>.
- 2. Remove the tweeter screw (A), disconnect the connector and remove the tweeter (1).



### Installation

Installation is in the reverse order of removal.

### STEERING WHEEL AUDIO CONTROL SWITCHES



- 1. Steering wheel finisher cover
- 2. Steering wheel

Steering wheel audio control switches

A. Screws

### Removal

- Remove the steering wheel. Refer to <u>PS-7</u>. "Removal and Installation".
- 2. Remove the steering wheel finisher cover.
- 3. Remove the screws and the steering wheel audio control switches.

### Installation

Installation is in the reverse order of removal.

### **IPOD® CONNECTOR**

### < SERVICE INFORMATION >

# [AUDIO WITHOUT NAVIGATION]

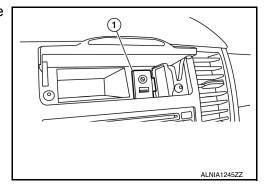
# **IPOD® CONNECTOR**

# Removal and Installation

### INFOID:0000000005715890

### **REMOVAL**

- 1. Remove the cluster lid C. Refer to IP-11, "Component Parts".
- 2. Push the pawl from the back of the cluster lid C to remove the iPod® connector (1).



### **INSTALLATION**

Installation is in the reverse order of removal.

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### **IPOD® ADAPTER**

[AUDIO WITHOUT NAVIGATION]

# **IPOD® ADAPTER**

# Removal and Installation

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### **REMOVAL**

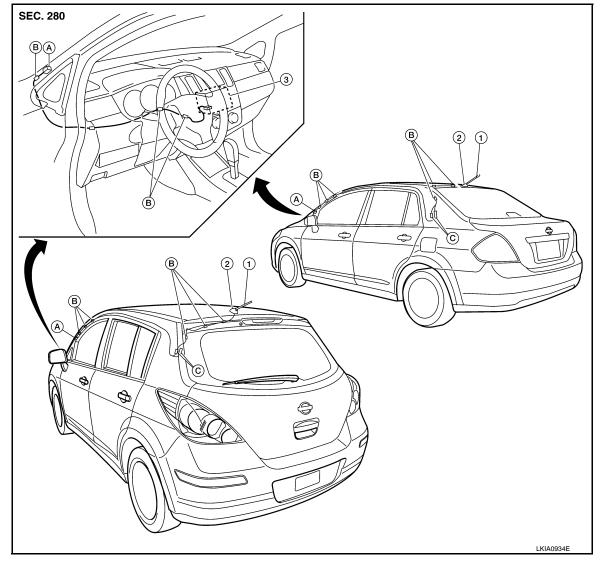
- 1. Disconnect the battery negative terminal.
- 2. Remove the audio unit. Refer to AV-29, "Removal and Installation".
- 3. Disconnect the iPod® adapter connector, then remove the iPod® adapter.

### **INSTALLATION**

Installation is in the reverse order of removal.

# **AUDIO ANTENNA**

### Location of Antenna



1. Roof antenna

- 2. Roof antenna base
- Harness clips

- 3. Audio unit
- C. Roof antenna harness connectors

### Removal and Installation of Roof Antenna

Audio antenna harness connector

REMOVAL

- 1. For hatchback, remove the luggage side upper finisher (LH). Refer to  $\underline{\text{El-}54}$ .
- 2. For sedan, remove the rear pillar finisher. Refer to EI-52, "Removal and Installation Sedan".
- 3. Remove rear assist grip (LH). Refer to <u>EI-48</u>.
- 4. Remove three clips of headlining (rear side). Pull down headlining (rear side) and obtain space for work between vehicle and headlining.
- 5. Disconnect the roof antenna harness connectors.
- 6. Remove nut (A) and clips (B).

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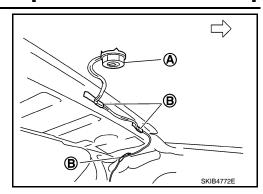
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### **AUDIO ANTENNA**

# [AUDIO WITHOUT NAVIGATION]

• <⊐: Vehicle front



### 7. Remove the roof antenna.

### **INSTALLATION**

Installation is in the reverse order of removal.

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> SEEK TRACE FILE

AUDIO

### **TELEPHONE**

(1)

# Component Parts and Harness Connector Location

PRESET A-B-C



1. Audio unit M43, M44

(7)

4. Bluetooth microphone R15

7. Bluetooth antenna (sedan)

2. Steering wheel audio control switches

5. Bluetooth antenna (hatchback)

 Bluetooth control unit B121, B122 (sedan) (view with trunk side finisher RH removed) Combination meter M24

Bluetooth control unit B121, B122 (hatchback) [view with luggage side lower finisher (RH) removed]

# System Description

### BLUETOOTH® HANDS-FREE PHONE SYSTEM

(8)

Refer to the Owner's Manual for Bluetooth telephone system operating instructions. **NOTE:** 

Cellular telephones must have their wireless connection set up (paired) before using the Bluetooth telephone system.

Bluetooth telephone system allows users who have a Bluetooth cellular telephone to make a wireless connection between their cellular telephone and the Bluetooth control unit. Hands-free cellular telephone calls can be sent and received. Personal memos can be created using the NISSAN Voice Recognition system. Some Blue-

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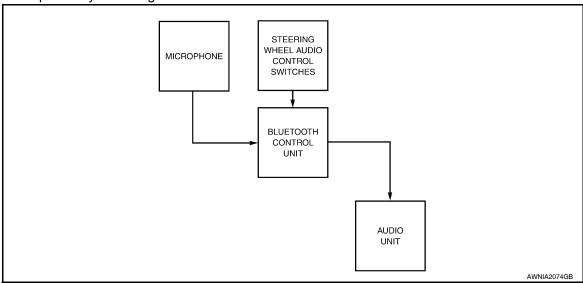
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tooth cellular telephones may not be recognized by the Bluetooth control unit. When a cellular telephone or the Bluetooth control unit is replaced, the telephone must be paired with the Bluetooth control unit. Different cellular telephones may have different pairing procedures. Refer to the cellular telephone operating manual.

Bluetooth Telephone System Diagram



### Bluetooth Control Unit

When the ignition switch is turned to ACC or ON, the Bluetooth control unit will power up. During power up, the Bluetooth control unit is initialized and performs various self checks. Initialization may take up to 10 seconds. If a phone is present in the vehicle and paired with the Bluetooth control unit, NISSAN Voice Recognition will then become active. Bluetooth telephone functions can be turned off using the NISSAN Voice Recognition system. For Bluetooth control unit location, refer to AV-35, "Component Parts and Harness Connector Location".

### Steering Wheel Audio Control Switches

When buttons on the steering wheel audio control switch are pushed, the resistance in steering wheel audio control switch circuit changes depending on which button is pushed. The Bluetooth control module uses this signal to perform various functions while navigating through the voice recognition system.

The following functions can be performed using the steering wheel audio control switch:

- Initiate Self Diagnosis of the Bluetooth telephone system
- · Start a voice recognition session
- Answer and end telephone calls
- · Adjust the volume of calls
- Record memos

### Volume Switch

Call volume can be adjusted using the audio unit volume switch.

### Bluetooth Microphone

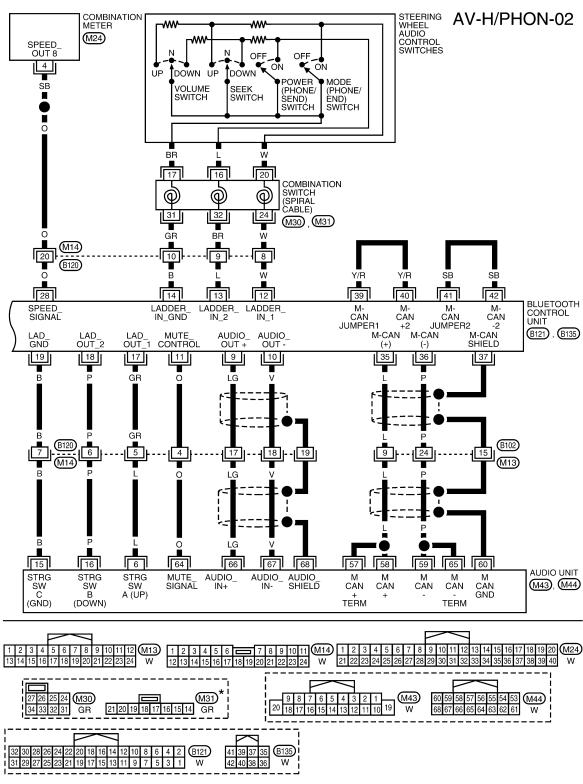
The Bluetooth microphone is located in the roof console assembly. The Bluetooth microphone sends a signal to the Bluetooth control unit. The Bluetooth microphone can be actively tested during self-diagnosis. For Bluetooth microphone location, refer to <u>AV-35</u>, "<u>Component Parts and Harness Connector Location</u>".

### Audio Unit

The audio unit receives signals from the Bluetooth control unit and sends audio signals to the speakers.

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Wiring Diagram - H/PHON -INFOID:0000000005395335 Α AV-H/PHON-01 IGNITION SWITCH ON OR START IGNITION SWITCH BATTERY ACC OR ON В REFER TO "PG-POWER". 20 D BLUETOOTH ANTENNA LG Е 2 33 BLUETOOTH CONTROL UNIT BT-ANTENNA (B121), (B122) MIC-SHIELD F MIC-POWER CONT-2 CONT-4 CONT-1 20 29 23 8 21 6 R/W R/L M14) 12 Н R/L R/W 4 2 MICROPHONE MIC-POWER MIC- MIC-OUT (+) OUT (-) (R15) ΑV B133 D400 ■B ■ 2 ■ B ■ (B117) (B132) (D402) M M14 W 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 31 29 27 25 23 21 19 17 15 13 11 9 7 5 3 1 Ν R1 0 AANWA0309GB



#### **TELEPHONE**

# [AUDIO WITHOUT NAVIGATION]

# Bluetooth Control Unit Harness Connector Terminal Layout

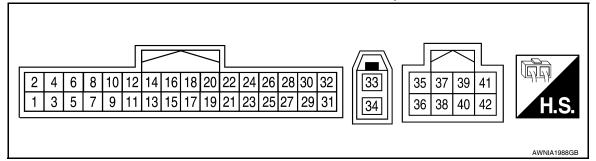
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# Terminal and Reference Value for Bluetooth Control Unit

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	minal e color)	- Item	Signal input/		Condition	Reference value	Example of symptom	
+	_	- item	output	Ignition switch	Operation	(Approx.)	Example of Symptom	F
1 (R)	Ground	Battery pow- er	Input	_	_	Battery voltage	System does not work properly.	
2 (L)	Ground	ACC power	Input	ACC/ ON	-	Battery voltage	System does not work properly.	
3 (LG)	Ground	IGN power	Input	ON/ START	_	Battery voltage	System does not work properly.	ŀ
4 (B)	_	Ground	_	_	_	-	-	
6	-	Shield	_	_	_	-	_	
7 (R/W)	8 (R/L)	Mic-in signal	Input	_	-	-	Bluetooth Micro- phone inoperative.	
9 (LG)	10 (V)	Audio out	Output	ACC/ ON	Bluetooth control unit sends audio signal	(V) 1 0 -1 2ms SKIB3609E	Audio can not be heard.	Α\
11(O)	-	Mute	Output	_	_	5V	Mute inoperative.	
					Press MODE switch	0V		1
12 (W)	Ground	Remote control	Input	ACC/ ON	Press SEEK UP switch	0.75V	Steering wheel audio control switches do	
		switch 1		ON	Press VOL UP switch	2V	not function.	١
					Except for above	5V		(
					Press POWER switch	0V		
13 (L)	Ground	Remote control	Input	ACC/	Press SEEK DOWN switch	0.75V	Steering wheel audio control switches do	F
		switch 2		ON	Press VOL DOWN switch	2V	not function.	
					Except for above	5V		
14 (B)	_	Remote control ground	Input	_	-	-	Steering wheel audio control switches do not function.	

	ninal color)	Itom	Signal			Reference value	Everale of everators
+	_	Item	input/ output	Ignition switch	Operation	(Approx.)	Example of symptom
					Press Phone/End switch	0V	
17 (GR) Ground	Ground	Audio unit	Output	ACC/	Press SEEK UP switch	0.75V	Steering wheel audio controls do not func-
, ,	switch 1	SWITCH 1		ON	Press VOL UP switch	2V	tion.
					Except for above	5V	
					Press Phone/ Send switch	0V	
18 (P)	Ground	Audio unit	Output	ACC/	Press SEEK DOWN switch	0.75V	Steering wheel audio controls do not func-
		switch 2		ON	Press VOL DOWN switch	2V	tion.
					Except for above	5V	-
19 (B)	Ground	Audio unit switch ground	Output	-	-	-	Steering wheel audio controls do not function.
20 (B)	_	Cont-1	_	_	_	-	-
21 (B)	_	Cont-2	_	_	_	-	_
23 (B)	_	Cont-4	_	_	_	-	_
28 (O)	Ground	Vehicle speed signal (8-pulse)	Input	ON	When vehicle speed is approx. 40 km/h (25 MPH)	(V) 6 4 2 0 20 ms	Speed sensitive volume is inoperative.
29 (B)	Ground	Bluetooth Microphone power	Output	_	-	5V	Bluetooth Micro- phone inoperative.
33	_	Bluetooth antenna sig- nal	Input	_	-	-	-
35 (L)	_	M CAN +	_	_	_	_	_
36 (P)	_	M CAN -	_	_	_		_
37	_	M CAN shield	_	_	_	_	_
39 (Y/R)	_	M CAN jumper 1	_	_	_	_	_
40 (Y/R)	_	M CAN 1	_	_	_	_	_
41 (SB)	_	M CAN jumper 2	_	_	_	_	_
42 (SB)	_	M CAN 2	_	_	_		<u> </u>

# Bluetooth Control Unit Self-Diagnosis Function

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The Bluetooth control unit has two diagnostic checks. The first diagnostic check is performed automatically every ignition cycle during control unit initialization. The second diagnostic check is performed by the technician using the steering wheel audio control switches prior to trouble diagnosis.

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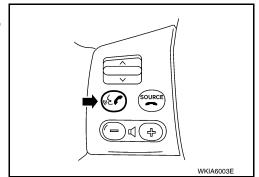
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#### BLUETOOTH CONTROL UNIT INITIALIZATION CHECKS

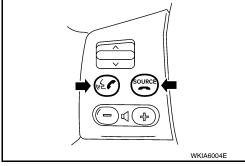
- · Internal control unit failure
- Bluetooth antenna connection open or shorted
- · Steering wheel audio control switches (SEND/END) stuck closed
- Vehicle speed pulse count
- Bluetooth Microphone connection test (with playback to operator)
- Bluetooth inquiry check

#### **SELF-DIAGNOSIS MODE**

- Turn ignition switch to ACC or ON.
- Wait for the Bluetooth system to complete initialization and the Bluetooth ON indicator to stop flashing. This may take up to 10 seconds.
- Press and hold the steering wheel audio control switch SEND button for at least 5 seconds. The Bluetooth system will begin to play a verbal prompt.



- 4. While the prompt is playing, momentarily press both the steering wheel audio control switches SEND and END buttons simultaneously. The Bluetooth system will sound a 5 second beep.
- While the beep is sounding, momentarily press both the steering wheel audio control switches SEND and END buttons simultaneously again.
- 6. The Bluetooth system has now entered into the diagnostic mode. Results of the diagnostic checks will be verbalized to the technician. Refer to AV-41, "Workflow".
- 7. If there are no failure records to report, the speed pulse count will be reported next.
- 8. After the speed pulse count is reported, an interactive Bluetooth microphone test will be performed. Follow the voice prompt. If the Bluetooth microphone test fails refer to AV-41, "Workflow".
- Self-diagnosis mode is complete when the voice prompt says "All diagnostic functions completed". A short beep is heard.



Workflow INFOID:0000000005395339

Flashing Pattern (Bluetooth ON indicator)	Failure Message	Action	
1	"Internal failure"	Replace Bluetooth control unit. Refer to AV-45. "Removal and Installation".	
2	"Bluetooth antenna open"	Inspect harness connection.     Replace Bluetooth antenna. Refer to AV-45, "Removal and Installation".	
3	"Bluetooth antenna shorted"		
4	"Phone/Send for the Hands Free Phone System is stuck"	Check steering wheel audio control switch	
5	"Phone/End for the Hands Free Phone System is stuck"	es. Refer to AV-22, "Steering Switch Check (With Bluetooth)".	
-	"Bluetooth Microphone test" (failed interactive test)	Inspect harness between Bluetooth control unit and Bluetooth microphone.     Replace Bluetooth microphone. Refer to AV-45, "Removal and Installation".	

# Power Supply and Ground Circuit Inspection for Bluetooth Control Unit

INFOID:0000000005395340

# 1. CHECK FUSES

Make sure the following fuses for the Bluetooth control unit are not blown.

	Terminals	Ignition Switch	Fuse No.
Connector	Terminal	ignition owiten	
	1	All positions	27
B121	2	ACC/ON	20
	3	ON/START	3

#### OK or NG

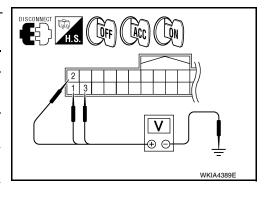
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-4.

# 2. CHECK POWER SUPPLY CIRCUIT

- 1. Disconnect Bluetooth control unit connector B121.
- 2. Check voltage between connector terminals and ground as follows.

	Terminals		Ignit	ion switch pos	sition		
	(+)		(+)		OFF	ACC	ON
Connector	Terminal	(-)	OH	700	ON		
	1		Battery voltage	Battery voltage	Battery voltage		
B121	2	Ground	0V	Battery voltage	Battery voltage		
	3	-	0V	0V	Battery voltage		



#### OK or NG

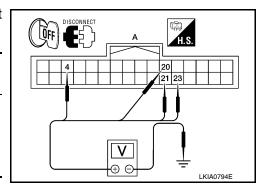
OK >> GO TO 3.

NG >> Check harness for open between Bluetooth control unit and fuse.

# 3. CHECK GROUND CIRCUITS

- 1. Turn ignition switch OFF.
- 2. Check continuity between the following Bluetooth control unit terminals and ground.

	Continuity		
Connector	Terminal	_	Continuity
	4		
B121	20	Ground	Yes
БІСІ	21	Giodila	
	23		



#### OK or NG

OK >> Inspection End.

NG >> Repair or replace harness.

# Steering Wheel Audio Control Switch Does Not Operate

INFOID:0000000005395342

# 1. CHECK STEERING WHEEL AUDIO CONTROL SWITCH RESISTANCE

- 1. Turn ignition switch OFF.
- 2. Disconnect steering wheel audio control switch connector.

3. Check steering wheel audio control switch. Refer to AV-22, "Steering Switch Check (With Bluetooth)".

#### OK or NG

OK >> GO TO 2.

NG >> Replace steering wheel audio control switch. AV-29, "Removal and Installation".

# 2. CHECK AUDIO UNIT

1. Turn ignition switch ON.

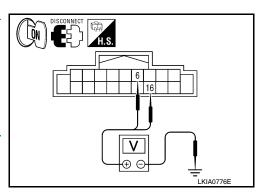
2. Check voltage between audio unit harness connector M43 terminals 6, 16 and ground.

6 - Ground : Approx. 5 V 16 - Ground : Approx. 5 V

#### OK or NG

OK >> Replace audio unit. Refer to <u>AV-29, "Removal and Installation".</u>

NG >> GO TO 5.



# 3.check bluetooth control unit

1. Turn ignition switch ON.

2. Check voltage between Bluetooth control unit harness connector B121 terminals 17, 18 and ground.

17 - Ground : Approx. 5 V 18 - Ground : Approx. 5 V

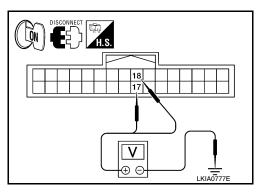
#### OK or NG

NG

OK >> Repair or replace harness.

>> Replace Bluetooth control unit. <u>AV-45, "Removal and Installation"</u>.

Installation.



INFOID:0000000005395343

# Voice Activated Control Function Does Not Operate

#### NOTE:

Even under the normal condition, Bluetooth voice guidance may not occur when pressing steering wheel audio control switch.

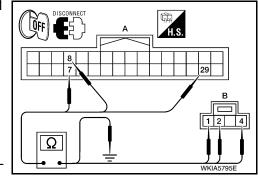
BLUETOOTH VOICE GUIDANCE IS HEARD WHEN PRESSING STEERING WHEEL AUDIO CONTROL SWITCH

# 1.check harness between bluetooth control unit and bluetooth microphone

- Turn ignition switch OFF.
- Disconnect Bluetooth control unit connector and Bluetooth microphone connector.
- 3. Check continuity between Bluetooth control unit connector B121 (A) and Bluetooth microphone connector R15 (B).

	Continuity				
Connector	nnector Terminal Connector Terminal				
	7		1		
A: B121	8	B: R15	2	Yes	
	29		4		

 Check continuity between Bluetooth control unit harness connector B121 and ground.



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	Continuity		
Connector	Continuity		
	7		
A: B121	8	Ground	No
	29		

#### OK or NG

OK >> GO TO 2.

NG >> Repair harness or connector.

# 2.CHECK BLUETOOTH MICROPHONE POWER SUPPLY

- 1. Connect Bluetooth control unit connector and Bluetooth microphone connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between Bluetooth microphone connector R15 terminal 4 and ground.

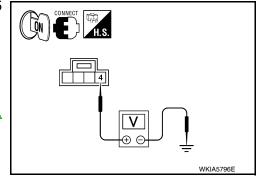
#### 4 - Ground

#### : Approx. 5 V

#### YES or NO

YES >> GO TO 3.

NO >> Replace Bluetooth control unit. Refer to <u>AV-45.</u> "Removal and Installation".

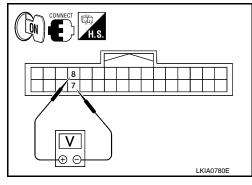


# 3. CHECK MIC. SIGNAL

1. Check signal between Bluetooth control unit harness connector B121 terminals 7 and 8.

#### When giving a voice

(V) 2.5 2.0 1.5 1.0 0.5 0



7 – 8:

#### OK or NG

OK >> Replace Bluetooth control unit. Refer to AV-45, "Removal and Installation".

NG >> Replace Bluetooth microphone. Refer to AV-45, "Removal and Installation".

BLUETOOTH VOICE GUIDANCE IS NOT HEARD WHEN PRESSING STEERING WHEEL AUDIO CONTROL SWITCH

1.check steering wheel audio control switch circuit

Refer to AV-22, "Steering Switch Check (With Bluetooth)".

#### OK or NG

OK >> GO TO 2.

NG >> Replace applicable parts.

2.CHECK BLUETOOTH VOICE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect Bluetooth control unit connector and audio unit connector.

#### < SERVICE INFORMATION >

#### [AUDIO WITHOUT NAVIGATION]

Check continuity between Bluetooth control unit harness connector B121 (A) and audio unit harness connector M44 (B).

	Continuity				
Connector	Connector Terminal Connector Terminal				
	9		66		
A: B121	10	B: M44	67	Yes	
	11		64		

Check continuity between Bluetooth control unit harness connector B121 (A) and ground.

10 9 11	A DISCONNECT H.S.
Ω	B 64 66 67
	AWNIA2076ZZ

	Terminals						
Connector	Terminal	_	Continuity				
	9						
A: B121	10	Ground	No				
	11						

#### OK or NG

OK >> GO TO 3.

NG >> Repair harness or connector.

# 3. CHECK MUTE SIGNAL

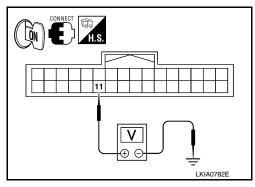
- Connect Bluetooth control unit connector and audio unit connector.
- Turn ignition switch ON.
- Check voltage between Bluetooth control unit connector B121 terminal 11 and ground.

#### 11 - Ground : Approx. 5 V

#### OK or NG

OK >> GO TO 4.

NG >> Replace audio unit. Refer to AV-29, "Removal and Installation".

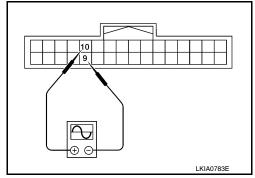


# 4. CHECK BLUETOOTH VOICE SIGNAL

Check signal between Bluetooth control unit harness connector B121 terminals 9 and 10.

# When giving a voice





#### OK or NG

OK >> Replace audio unit. Refer to AV-29, "Removal and Installation".

NG >> Replace Bluetooth control unit. Refer to AV-45, "Removal and Installation".

#### Removal and Installation

#### **BLUETOOTH CONTROL UNIT**

**AV-45** 2010 Versa Revision: January 2010

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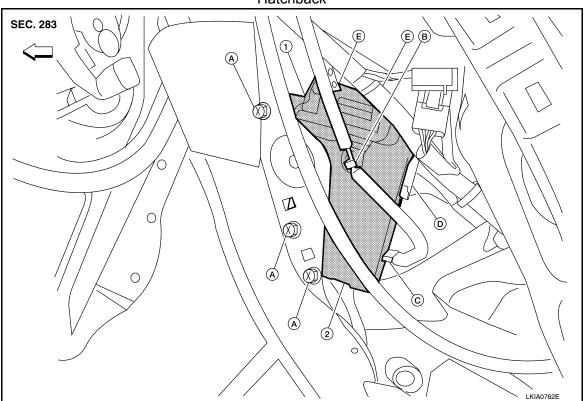
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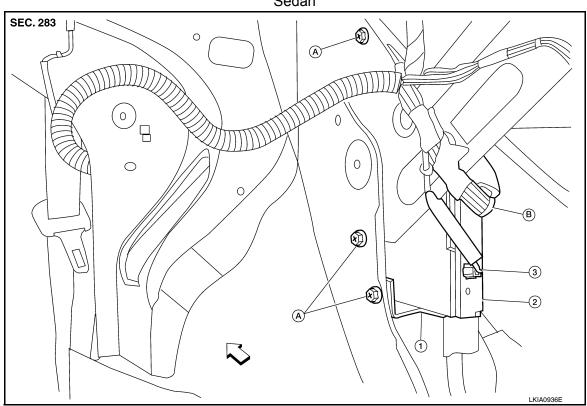
#### Hatchback



- Bluetooth control unit bracket 1.
- BLuetooth antenna feeder harness C. clip (hatchback only)
- Bluetooth control unit bracket E. screws
- 2. Bluetooth control unit
- Bluetooth antenna feeder harness con- D. nector
- Front

- Blue tooth control unit bolts
- Bluetooth control unit connector

#### Sedan



#### **TELEPHONE**

#### < SERVICE INFORMATION >

#### [AUDIO WITHOUT NAVIGATION]

- 1. Bluetooth control unit bracket
- A. Bluetooth control unit bolts
- 2. Bluetooth control unit
- 3. Bluetooth antenna feeder connector
- B. Bluetooth control unit connector
- ← Front

#### Removal

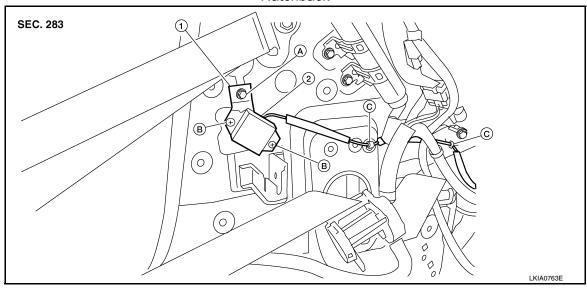
- 1. For hatchback, remove luggage side lower finish (RH). Refer to El-54, "Removal and Installation".
  - Disconnect Bluetooth antenna harness clip.
- For sedan, remove the trunk room side finisher (RH). Refer to EI-57, "Removal and Installation".
  - Disconnect the Bluetooth antenna harness connector.
- 3. Disconnect the Bluetooth control unit harness connector.
- 4. Remove the Bluetooth control unit upper and lower bracket bolts.
- 5. Unhook the Bluetooth control unit upper and lower brackets and remove Bluetooth control unit.
- 6. Remove Bluetooth control unit bracket screws and remove the upper and lower brackets from unit.

#### Installation

Installation is in the reverse order of removal.

#### **BLUETOOTH ANTENNA**

#### Hatchback



- 1. Bluetooth antenna bracket
- B. Bluetooth antenna screws
- 2. Bluetooth antenna
- C. Bluetooth antenna feeder harness clips
- A. Bluetooth antenna bracket bolts

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# SEC. 283

- 1. Bluetooth antenna bracket
- B. Bluetooth antenna screws
- Bluetooth antenna
- C. Bluetooth antenna feeder harness clip
- A. Bluetooth antenna bracket bolts
- ⇒ Front

#### Removal

- Disconnect the battery negative terminal.
- For hatchback, remove luggage side lower finisher (RH). Refer to El-54, "Removal and Installation".
- 3. For sedan, fold the rear seat back down, remove the seat back finisher (RH). Refer to EI-57, "Removal and Installation".
- 4. Disconnect the Bluetooth antenna feeder harness clips.
- 5. Disconnect the Bluetooth antenna feeder harness connector.
- 6. Remove the Bluetooth antenna bracket bolt(s) and remove antenna.
- Remove the Bluetooth antenna screws and remove bracket.

#### Installation

Installation is in the reverse order of removal.

#### **BLUETOOTH MICROPHONE**

#### Removal

- 1. Remove over-head console assembly, roof finisher. Refer to EI-48.
- Remove the Bluetooth microphone.

#### Installation

Installation is in the reverse order of removal.

# SERVICE INFORMATION

#### **PRECAUTIONS**

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-TFNSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

#### **WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000005975904

#### NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYS-
- · Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.

For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.

If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

#### OPERATION PROCEDURE

Connect both battery cables.

#### NOTE:

- Supply power using jumper cables if battery is discharged.
- 2. Use the Intelligent Key or mechanical key to turn the ignition switch to the "ACC" position. At this time, the steering lock will be released.
- 3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be
- 4. Perform the necessary repair operation.

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rotated.

**AV-49** Revision: January 2010 2010 Versa

#### **PRECAUTIONS**

#### < SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

- 5. When the repair work is completed, return the ignition switch to the "LOCK" position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
- 6. Perform a self-diagnosis check of all control units using CONSULT-III.

#### **PREPARATION**

#### < SERVICE INFORMATION >

# [AUDIO WITH NAVIGATION]

# **PREPARATION**

# **Commercial Service Tool**

INFOID:000000000592	24392

Tool name		Description	
Power tool		Loosening bolts and nuts	
	PBIC0191E		

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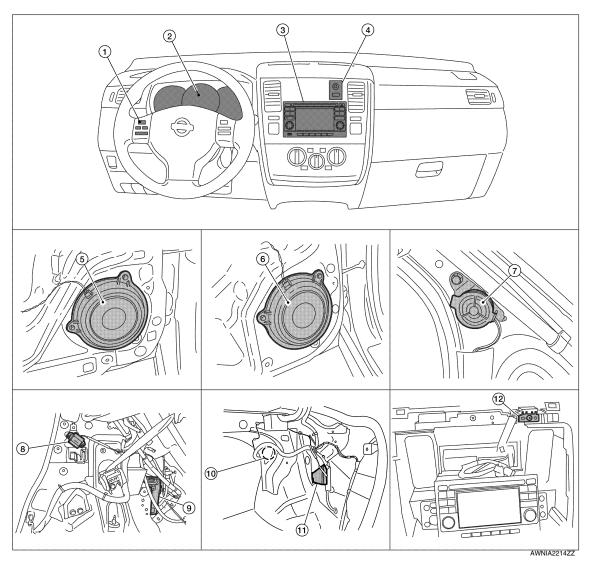
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#### **AUDIO**

# **Component Parts Location**

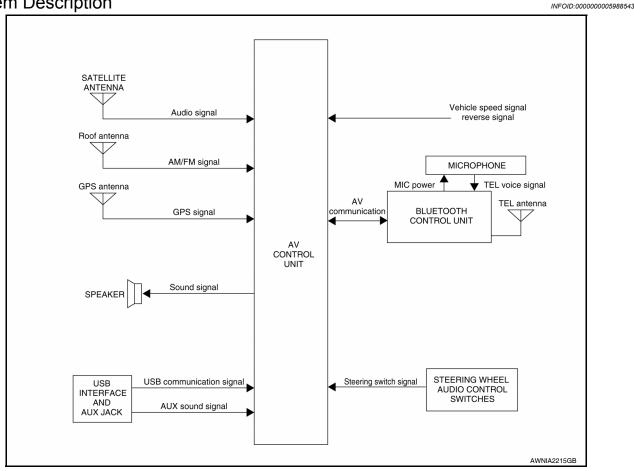
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- Steering wheel audio control switch- 2. es
- USB interface and AUX jack M72, M76
- 7. Front tweeter LH M46, RH M47 (view 8. with front pillar garnish removed)
- 10. Bluetooth antenna (sedan) (view with trunk side finisher RH removed)
- Combination meter M24
- 5. Front door speaker LH D12, RH
- Bluetooth antenna (hatchback) [view 9. with luggage side lower finisher (RH) removed]
- 11. Bluetooth control unit B121, B122, B135 (sedan)
- AV control unit M43, M70, M71, M87, M88, M89
- Rear door speaker LH D207, RH D307
- 9. Bluetooth control unit B121, B122, B135 (hatchback)
- GPS antenna (view with cluster lid C removed)

iPod® is a trademark of Apple inc., registered in the U.S. and other countries.





**AUDIO SYSTEM** 

Refer to Owner's Manual for audio system operating instructions.

Navigation is built into AV control unit.

This navigation has the following functions.

- Full support for playback of music from iPod<sup>®</sup> and USB device.
- High resolution full color touch panel 5 "WQVGA" display.
- FM/AM twin digital tuner.
- USB mass storage.
- · XM traffic.
- POI Support is included. User POI download.

Power is supplied at all times

- through 20A fuse (No. 27, located in the fuse and fusible link box)
- to AV control unit terminal 19.

With the ignition switch in the ACC or ON position, power is supplied

- through 10A fuse [No. 20, located in the fuse block (J/B)]
- to AV control unit terminal 7.

Ground is supplied to

- to AV control unit terminals 20 and 32
- through grounds M57 and M61.

Then audio signals are supplied

- through AV control unit terminals 2, 3, 4, 5, 11, 12, 13 and 14
- · to terminals + and of front door speaker LH and RH
- to terminals + and of front tweeter LH and RH and
- to terminals + and of rear door speaker LH and RH.

#### STEERING WHEEL AUDIO CONTROL SWITCHES

When one of steering wheel audio control switches is pushed, the resistance in steering switch circuit changes depending on which button is pushed.

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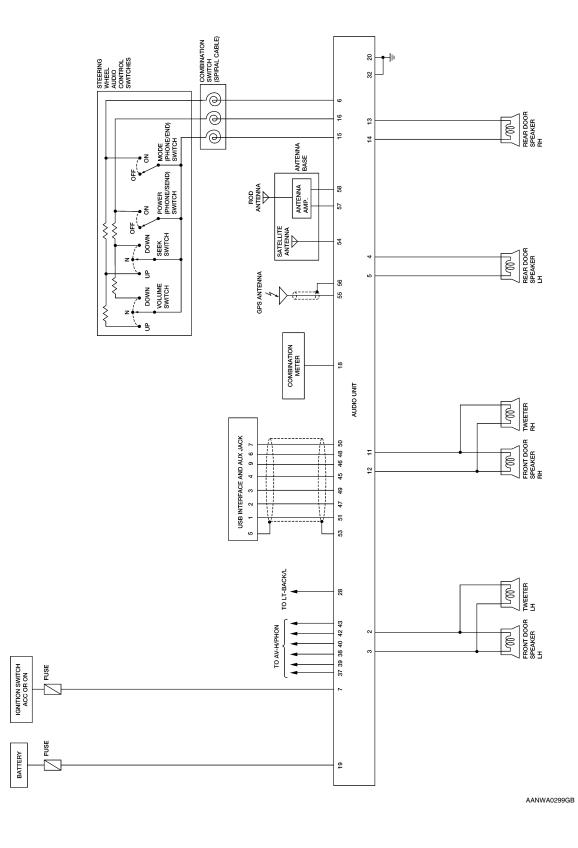
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# SPEED SENSITIVE VOLUME SYSTEM

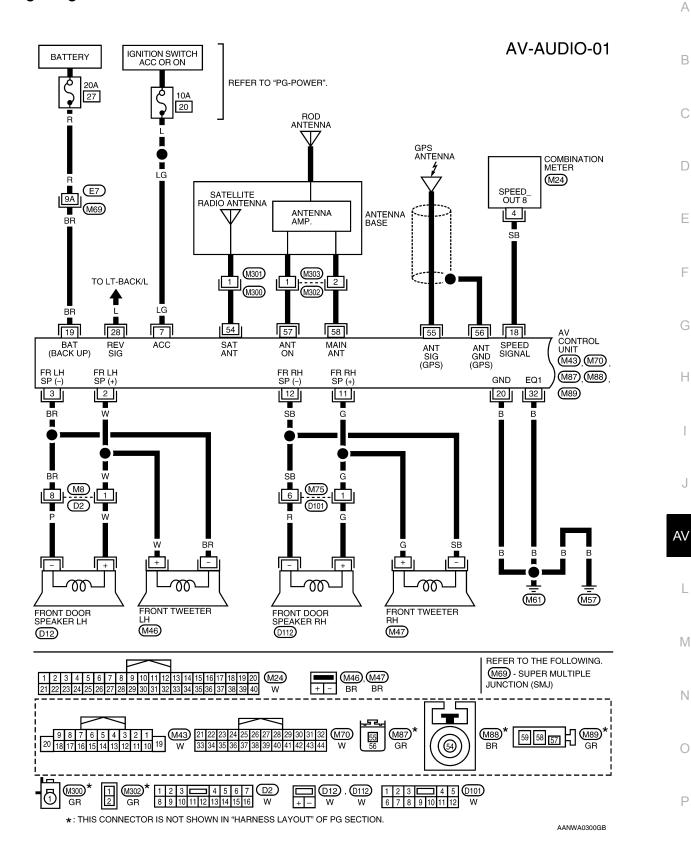
Volume level of this system goes up and down automatically in proportion to the vehicle speed. The control level can be selected by the customer. Refer to Owner's Manual for operating instructions.

Schematic INFOID:000000005924395

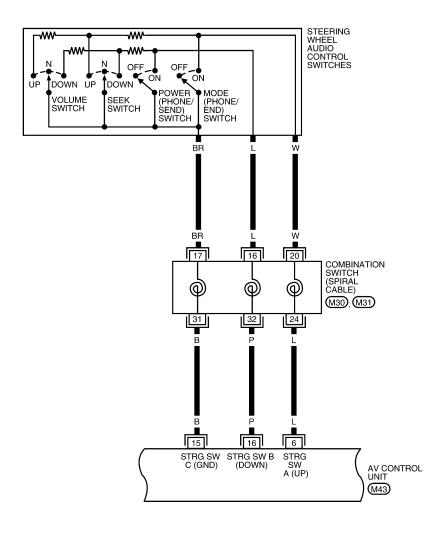


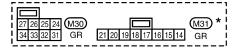
Wiring Diagram - AUDIO -

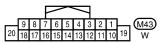
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#### **AV-AUDIO-02**



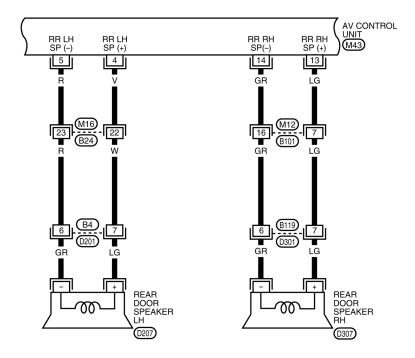




\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

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#### **AV-AUDIO-03**



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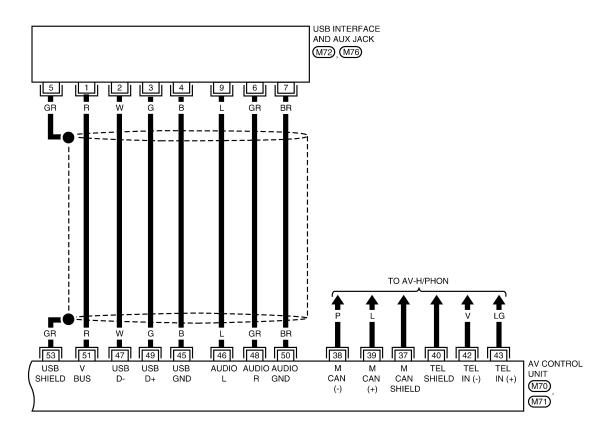
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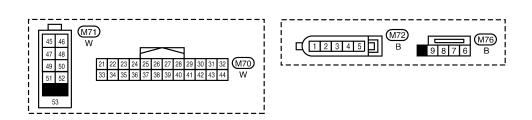
1 2 3 4 5 6 7 M12 1 2 3 4 5 6 7 8 9 10 11 12 M16 8 9 10 11 12 13 14 15 16 W 13 14 15 16 17 18 19 20 21 22 23 24 W 19 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 W 19 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 W 19 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 W 19 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 W 19 10 11 12 10 19 W 19 10 11 12 11 10 19 W 19 10 11 11 12 11 10 19 W 19 10 11 11 12 11 10 19 W 19 10 11 11 12 11 10 19 W 19 10 11 12 11 10 19 W 19 10 11 11 12 11 10 19 W 19 10 11 11 11 10 19 W 19 10 11 11 11 11 10 19 W 19 10 11 11 11 11 10 19 W 19 10 11 11 11 11 10 11 11 11 10 19 W 19 10 11 11 11 11 10 19 W 19 10 11 11 11 11 10 19 W 19 10 11 11 11 11 10 11 11 11 10 19 W 19 10 11 11 11 11 10 19 W

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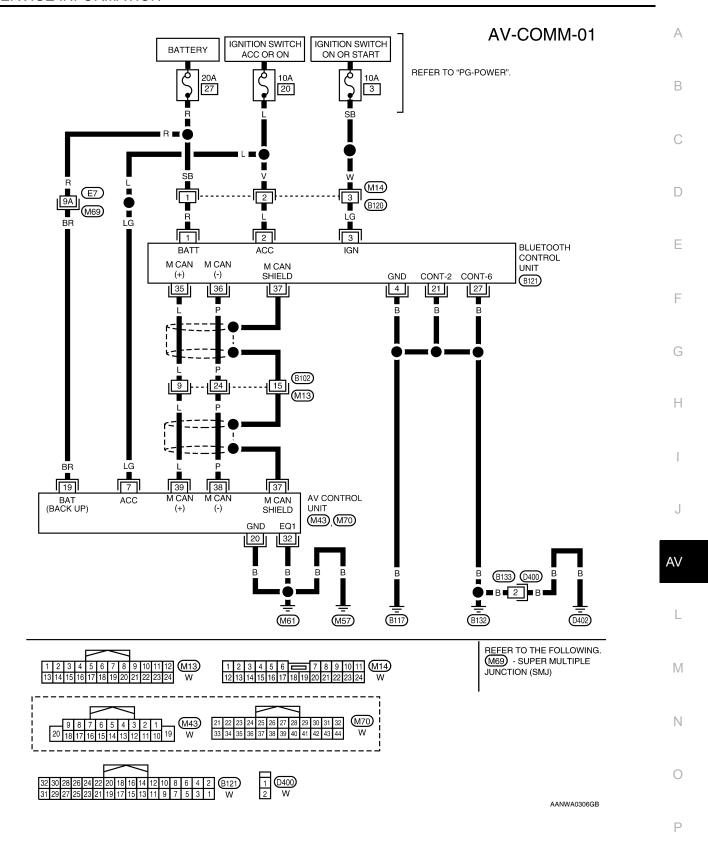
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# **AV-AUDIO-04**



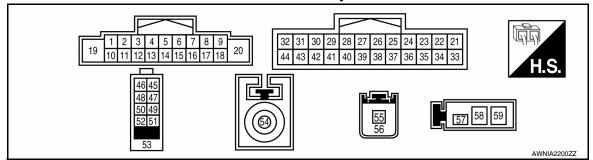


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# **AV Control Unit Harness Connector Terminal Layout**

INFOID:0000000005988544



# Terminal and Reference Value for AV Control Unit

INFOID:0000000005988545

	minal e color)	Itom	Signal	(	Condition	Reference value	Example of symp-					
+	_	Item	input/ output	Ignition switch	Operation	(Approx.)	tom					
2 (W)	3 (BR)	Audio sound signal front LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker LH or tweeter LH.					
4 (V)	5 (R)	Audio sound signal rear LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from rear speaker LH.					
					Press Phone/ End switch	0V						
6 (L)	Ground	Remote	iround	(Fround		Input	Input	Input	ON	Press SEEK UP switch	1.7V	Steering wheel au-
O (L)	Ground	control A	IIIput	ON	Press VOL UP switch	3.3V	function					
					Except for above	5.0V						
7 (LG)	Ground	ACC signal	Input	ON	Ignition switch ACC or ON	Battery voltage	System does not work properly.					
11 (G)	12 (SB)	Audio sound signal front RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker RH or tweeter RH.					

	minal e color)	lk	Signal		Condition	Reference value	Example of symp-		
+	_	Item	input/ output	Ignition switch	Operation	(Approx.)	tom		
13 (LG)	14 (GR)	Audio sound signal rear RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from rear speaker RH.		
15 (B)	_	Remote control ground	Input	_	_	_	Steering wheel au- dio controls do not function		
					Press Phone/ Send switch	0V			
16 (P)	Ground	Remote	Input	ON	Press SEEK DOWN switch	1.7V	Steering wheel au-		
10 (F)	Giodila	control B	control B	control B	iliput	ON	Press VOL DOWN switch	3.3V	function
					Except for above	5.0V			
18 (SB)	Ground	Vehicle speed signal (8-pulse)	Input	ON	When vehicle speed is approx. 40 km/h (25 MPH)	(V) 4 2 0 ** 20ms SKIA6649J	Ground		
19 (BR)	Ground	Battery pow- er	Input	_	_	Battery voltage	System does not work properly.		
20 (B)	Ground	Ground	_	ON	_	_	_		
28 (L)	Ground	Reverse sig- nal	Input	ON	R position	Battery voltage Other than R position	Ground 0V		
32 (B)	Ground	Ground	_	ON	_		_		
37	_	Shield			_	_	_		
38 (P)	_	AV communication signal 1 (-)	Input/ Output	_	_	_	_		
39 (L)	_	AV communication signal 1 (+)	Input/ Output	_	_	_	_		
40	_	Shield	_	_	_	_	_		
43 (LG)	42 (V)	TEL voice audio signal	Input	ON	Start confirmation/adjustment mode, and then Voice Microphone Test by selecting "Voice Microphone Test" on Hands-	(V) 1 0 -1 + 2ms	TEL voice audio signal		
					free Microphone screen.	SKIB3609E			

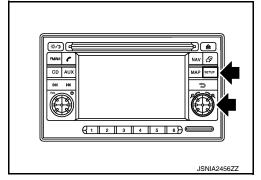
	minal e color)	Item	Signal input/	(	Condition	Reference value	Example of symp-
+	_	item	output	Ignition switch	Operation	(Approx.)	tom
46 (L)	_	AUX sound signal LH	_	_	_	_	_
47 (W)	_	USB D-		_	_	_	_
48 (GR)	_	AUX sound signal RH	_	_	_	_	_
49 (G)	_	USB D+	_	_	_	_	_
50 (BR)	_	AUX sound signal ground	_	_	_	_	_
51 (R)	_	USB V BUS signal	_	_	_	_	_
53 (GR)	_	SHIELD	_	_	_	_	_
54	_	Satellite an- tenna signal	_	_	_	_	_
55	_	GPS anten- na signal	_		_	_	_
56	_	SHIELD	_	_	_	_	_
57	_	Antenna on signal	_	_	_	_	_
58	_	Main anten- na signal	_	_	_	_	_

# **On-Board Diagnosis**

INFOID:0000000005988546

#### METHOD OF STARTING

- 1. Start the engine.
- 2. Turn OFF audio.
- 3. While pressing the "SET UP" switch, turn the MENU dial counterclockwise 3 clicks or more first, then clockwise and counterclockwise 3 clicks or more, respectively. (After the diagnosis mode starts, the initial screen of the diagnosis mode appears.)



- On-board diagnosis can be performed in the service test mode.
- On-board diagnosis checks that the system can be operated normally.

#### Service test mode

Mode	Item	Content
Service version	_	The version data of the parts is shown displayed.

# **AUDIO**

#### < SERVICE INFORMATION >

# [AUDIO WITH NAVIGATION]

	Mode	Item	Content
	FM monitor	_	The Change Mediator monitors the dy-
Radio	AM monitor	_	namic values of the current tuner. If the band is switched within the radio monitor context, the active monitor is switched as well.
	XM monitor	_	The version data is displayed.
	XM functions	Clear XM Chipset NVM     Reset all XM settings     XM CBM debug mode ON/OFF     External Diag mode ON/OFF	The current system status is displayed.
User Configuration	Touch Display Calibration	_	The function allows connection of the position detection accuracy of the touch panel.

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	Mode	Item	Content
	Running system status	SD card slot Access     Power Supply     Speed Signal     Direction Signal     Illumination Signal     GPS Antenna     EXT. Phone Sig     Microphone Current     Radio Antenna     USB Device     iPod® firmware version     Steering wheel X11C	The current system status is displayed.
System state	System history	Bluetooth® Module - Sub-Unit Connection Malfunction SD-card Slot - Sub-Unit Connection Malfunction Programming Error Radio-Antenna Circuit Malfunction FM-Antenna 1 Connection Malfunction Satellite Antenna Connection Failure GPS Antenna Circuit Malfunction CD-Drive Mechanical Malfunction CD Read Malfunction CD Read Malfunction Power Supply voltage: Lower Limit Exceeded Power Supply voltage: Upper Limit Exceeded Reduced system Functionality due to over temperature Display switched OFF due to over temperature SD card removed without being de-mounted Code plug missing	The history of the system status is reported in the report memory, displayed.
	Speaker test 100Hz Speaker test 4KHz	_	This activates a sequence of test tone outputs to the four speaker lines one after the other for 1 second.  The frequency can be chosen by user selection (100Hz and 4KHz).
	Display test	_	This provides a test sequence where test displays (plain colored display: e.g. white, black, red, blue, green) are shown one after the other.  The respective color is shown for an indicated period of time (parameter).  After the display test, the design of the display previously available is stored.  While the screen shows a plain colored display, a pixel malfunction may be detected.

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Mode	Item	Content
System configuration	8 pulses speed     Clock ON/OFF     Equalizer setup X11C     RF tuning     Antenna type     Sound system     Sub Out: Code     Steering wheel	The device is configured by a connected hardware circuit. The parameter is influenced.
Self test	Bluetooth® module Access Malfunction     SD-card Access Malfunction     Radio-Antenna Circuit Malfunction     GPS Antenna Circuit Malfunction     Microphone Circuit Malfunction	A system self test is executed: the result is stored into the error memory which is shown afterwards as a list of codes of the detected malfunctions.

END ON-BOARD DIAGNOSIS

Turn OFF ignition switch.

Symptom Chart

#### MALFUNCTION WITH NAVIGATION

Symptoms	Ch	neck items	Probable malfunction location / Action to take	Н
Display does not turn ON.	All switches cannot be o	perated.	AV control unit power supply and ground circuit. Refer to AV-67.	
	All switches can be open	rated.	AV control unit. Refer to AV-67.	- 1
All switches cannot be operated.	Display does not turn Ol	N.	AV control unit power supply and ground circuit. Refer to AV-67.	J
	Display turn ON.		AV control unit. Refer to AV-67.	
Only specified switch cannot be operated.		-	AV control unit. Refer to AV-67.	AV
Voice guidance is not heard.	Audio sound is normal.		AV control unit. Refer to AV-67.	
Display does not dim.	Check "Illumination Signal" in "SERVICE	"Illumination Signal" reaches 100% when the lighting switch is ON.	AV control unit. Refer to AV-67.	L
Display does not dim.	SYSTEM STATUS", "SERVICE MENU".	"Illumination Signal" does not reach 100% when the lighting switch is ON.	Illumination signal circuit. Refer to LT-113.	M
Vehicle icon does not move.	Check "Speed Signal" in "SERVICE SYSTEM	A value of "Speed Signal" changes according to vehicle speeds.	AV control unit. Refer to AV-67.	N
vehicle icon does not move.	STATUS", "SERVICE MENU".	A value of "Speed Signal" does not change according to vehicle speeds.	Vehicle speed signal circuit. Refer to DI-16.	0
Map matching is not complete	Check "GPS Antenna" in "SERVICE SYSTEM	"Connected" is displayed for "GPS Antenna".	AV control unit. Refer to AV-67.	
GPS icon is not displayed	SELF TEST", "SER- VICE MENU".	"Connected" is not displayed for "GPS Antenna".	GPS antenna. Refer to AV-92.	Р
Traffic information (VM Traffic) is	Radio broadcasts are re	ceived.	AV control unit. Refer to AV-67.	
Traffic information (XM Traffic) is not received.	Radio broadcasts are not received.		<ul> <li>Radio antenna. Refer to <u>AV-90</u>.</li> <li>Antenna feeder. Refer to <u>AV-90</u>.</li> </ul>	

# **MALFUNCTION WITH AUDIO**

#### < SERVICE INFORMATION >

- The majority of the audio malfunctions are the result of outside causes (Malfunction CD, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.
- The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning.
   Check if noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment, and then determine the cause.

#### NOTE:

- CD-R is not guaranteed to play because they can contain compressed audio (MP3, WMA) or could be incorrectly mastered by the customer on a computer.
- Check if the CDs have the Compact Disc logo. If not, the disc is not mastered to the "red book" Compact Disc standard and may not play.

Symptom	Probable malfunction location
Audio system does not work normally.	<ul> <li>AV control unit power supply and ground circuit. Refer to <u>AV-67</u>.</li> <li>AV control unit. Refer to <u>AV-67</u>.</li> </ul>
Audio steering wheel switch does not operate properly.	<ul> <li>Remote control signal circuit between steering switch and AV control unit. Refer to AV-68.</li> <li>Steering wheel audio control switch. Refer to AV-72.</li> <li>AV control unit. Refer to AV-72.</li> </ul>
No sound can be heard from any speakers.	<ul> <li>Speaker circuit shorted to ground. Refer to <u>AV-55</u>.</li> <li>AV control unit. Refer to <u>AV-72</u>.</li> </ul>
No sound can be heard from front speakers.	<ul> <li>Audio signal circuit between AV control unit and front speakers. Refer to AV-69.</li> <li>Front speaker. Refer to AV-72.</li> <li>Front tweeter. Refer to AV-72.</li> <li>AV control unit. Refer to AV-72.</li> </ul>
No sound can be heard from rear speakers.	<ul> <li>Audio signal circuit between AV control unit and rear speakers. Refer to AV-71.</li> <li>Rear speaker. Refer to AV-72.</li> <li>AV control unit. Refer to AV-72.</li> </ul>
No sound can be heard from radio or noise is heard.	<ul> <li>Antenna feeder. Refer to <u>AV-90</u>.</li> <li>Roof antenna. Refer to <u>AV-90</u>.</li> <li>AV control unit. Refer to <u>AV-72</u>.</li> </ul>
Speed dependent volume system does not function.	<ul> <li>Vehicle speed signal circuit between combination meter and AV control unit. Refer to <u>DI-16</u>.</li> <li>AV control unit. Refer to <u>AV-72</u>.</li> <li>Combination meter. Refer to <u>DI-20</u>.</li> </ul>
There is no sound from the iPod <sup>®</sup> or Aux jack.	<ul> <li>iPod<sup>®</sup> sound signal circuit between AV control unit and Auxiliary jack assembly. Refer to <u>AV-89</u>.</li> <li>AV control unit. Refer to <u>AV-72</u>.</li> </ul>

#### NOTE:

Noise resulting from variations in field strength, such as fading noise and multi-path noise, or external noise from trains and other sources, is not a malfunction.

- Fading noise: This noise occurs because of variations in the field strength in a narrow range due to mountains or buildings blocking the signal.
- Multi-path noise: This noise results from a time difference between the broadcast waves directly from the station arriving at the antenna and the waves reflected by mountains or buildings.

#### MALFUNCTION WITH USB

#### NOTE

Check that there is no malfunction of USB equipment main body before performing a diagnosis.

Symptoms	Check items		Probable malfunction location / Action to take
iPod <sup>®</sup> or USB memory can not be recognized.	With iPod <sup>®</sup> or USB memory Connected, check "USB Device" in	iPod <sup>®</sup> or USB memory name is displayed for "USB Device".	<ul> <li>USB interface and AUX jack harness</li> <li>USB interface and AUX jack. Refer to AV-89.</li> <li>AV control unit. Refer to AV-72.</li> </ul>
	"SERVICE STATUS", "SERVICE MENU".	"Removed" is displayed for "USB Device".	USB interface and AUX jack harness     USB interface and AUX jack. Refer to     AV-89.
	_	_	Generation of iPod <sup>®</sup> not supported

#### MALFUNCTION WITH AUXILIARY INPUT

#### NOTE:

Check that there is no malfunction of AUX equipment main body before performing a diagnosis.

Symptoms	Check items	Probable malfunction location
No voice sound is heard when AUX mode is selected.	Voice sound is heard when other modes are selected.	<ul> <li>USB interface and AUX jack harness</li> <li>USB interface and AUX jack. Refer to <u>AV-89</u>.</li> </ul>

#### MALFUNCTION WITH STEERING SWITCH

Symptoms	Possible malfunction location / Action to take
All steering switches are not operated.	
Only specified switch cannot be operated.	
"SEEK UP", "VOL UP" and "SOURCE" switches are not operated.	Steering switch. Refer to AV-68.
"SOURCE", "SEEK DOWN" and "VOL DOWN" switches are not operated.	

# AV Control Unit Power and Ground Supply Circuit Inspection

INFOID:0000000005988548

#### 1.CHECK FUSE

Check that the following fuses of the AV control unit are not blown.

Unit	Terminals	Signal name	Fuse No.
AV control unit	19	Battery power	27
AV CONTROL UNIT	7	Ignition switch ACC or ON	20

#### OK or NG

OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to AV54.

# $2.\mathsf{AV}$ CONTROL UNIT POWER SUPPLY CIRCUIT CHECK

- 1. Disconnect AV control unit connector.
- 2. Check voltage between the AV control unit connector and ground.

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Terminal No.						
Unit	(+)		()	OFF	ACC	ON
	Connector	Terminal (-)				
AV control	M43	19	Ground	Battery voltage	Battery voltage	Battery voltage
unit M43		7	Ground	0V	Battery voltage	Battery voltage

# DISCONNECT OFF CACC ON 19 WKIA5769E

#### OK or NG

NG

OK >> GO TO 3.

>> • Check connector housings for disconnected or loose terminals.

· Repair harness or connector.

# 3. GROUND CIRCUIT CHECK

Check continuity between AV control unit harness connectors M43 (A), M70 (B) terminals 20, 32 and ground.

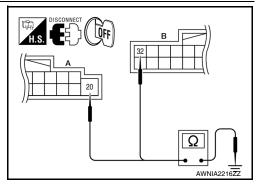
#### Continuity should exist.

#### OK or NG

OK >> Inspection End.

NG >> • Check conn

- >> Check connector housings for disconnected or loose terminals.
  - Repair harness or connector.



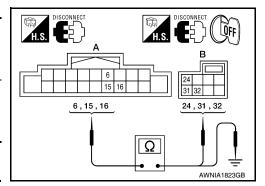
INFOID:0000000005988558

# Steering Switch Check

# 1. CHECK HARNESS

- 1. Turn ignition switch OFF.
- 2. Disconnect audio unit connector and combination switch (spiral cable) connector.
- Check continuity between audio unit harness connector (A) terminals and combination switch (spiral cable) harness connector (B) terminals.

А	1	В		В		В		Continuity
Connector	Terminal	Connector						
	6		24					
M43	15	M30	31	Yes				
	16		32					



4. Check continuity between audio unit and ground.

	(+)				
Connector	Terminal	(–)			
	6				
M43	15	Ground	No		
	16				

#### OK or NG

OK >> GO TO 3.

NG >> Repair harness.

Spiral cable connector

16,17,20

16 17 20

WKIA4424E

Spiral cable connector

24,31,32

31 32

# 2.SPIRAL CABLE CHECK

1. Disconnect combination switch (spiral cable) connector M31.

Check continuity between combination switch (spiral cable) terminals.

16 - 32 : Continuity should exist.
17 - 31 : Continuity should exist.
20 - 24 : Continuity should exist.

#### OK or NG

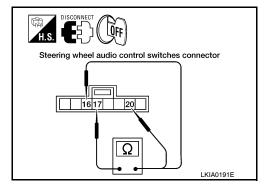
OK >> GO TO 4.

NG >> Replace combination switch (spiral cable). Refer to SRS-37, "Removal and Installation".

# 3. CHECK STEERING SWITCH RESISTANCE

Check resistance between combination switch (spiral cable) connector M31 terminals.

Terminal Signal name		Signal name	Condition	Resistance (Ω) (Approx.)
		Seek (down)	Depress Seek down switch.	165
16	16 17 Phone/ Send		Depress Phone/ Send switch.	0
Volume (down		Volume (down)	Depress volume down switch.	652
		Seek (up)	Depress Seek up switch.	165
20	17	Phone/ End	Depress Phone/ End switch.	0
		Volume (up)	Depress volume up switch.	652



Ω

#### OK or NG

OK >> Inspection End.

NG >> Replace steering wheel audio control switch. Refer to <u>AV-72, "Removal and Installation"</u>.

# Sound Is Not Heard from Front Door Speaker or Front Tweeter

INFOID:0000000005988550

# 1. HARNESS CHECK

1. Disconnect AV control unit connector and front door speaker and front tweeter connector (LH or RH).

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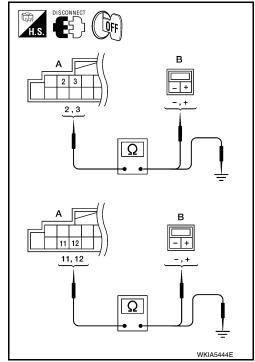
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Check continuity between AV control unit harness connector terminal and front door speaker and front tweeter harness connector terminal.

	Terminals					
AV cor	AV control unit		Speaker or tweeter			
Connector	Terminal	Connector	Terminal			
	2	B: M46	+			
	3	D. IVI40	-			
	11	B: M47	+			
A: M43	12	D. WI47	-	Yes		
A. W43	2	B: D12	+	165		
	3	D. D12	-			
	11	B: D112	+			
	12	D. D112	-			

Check continuity between AV control unit harness connector terminal and ground.

	Terminals				
A	AV control unit				
Connector	Terminal	_			
	2				
A: M43	3 Ground		No		
A. W43	11	Glound	NO		
	12				



#### OK or NG

OK >> GO TO 2.

NG >> • Check connector housings for disconnected or loose terminals.

· Repair harness or connector.

# 2.FRONT SPEAKER SIGNAL CHECK

- 1. Connect AV control unit connector, front door speaker connector and front tweeter connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.

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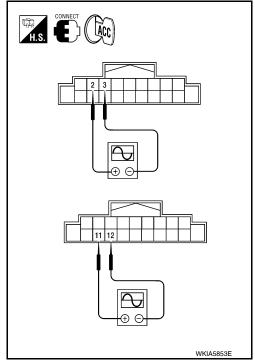
4. Check the signal between AV control unit connector terminals with CONSULT-III or oscilloscope.

	Terminals				
(	+)	(-)		Condi-	Reference
Con- nector	Termi- nal	Con- nector	Termi- nal	tion	signal
	2		3		
M43	11	M43	12	Receive audio signal	(V) 1 0 -1 1 ms skia0177E

#### OK or NG

OK >> Replace front speaker. Refer to <u>AV-72, "Removal and Installation"</u>.

NG >> Replace AV control unit. Refer to AV-72, "Removal and Installation".



INFOID:0000000005988551

# Sound Is Not Heard from Rear Speaker

# 1. HARNESS CHECK

- 1. Disconnect AV control unit connector and rear speaker connector.
- 2. Check continuity between AV control unit harness connector terminal and rear speaker harness connector terminal.

	Terminals					
AV con	ntrol unit	Spe	aker	Continuity		
Connector	Terminal	Connector	Terminal			
	4	B: D207	+			
A: M43	5	D. D201	-	Yes		
A. 1V143	13	B: D307	+	165		
	14	D. D307	-			

Check continuity between AV control unit harness connector terminal and ground.

	Terminals				
AV	AV control unit				
Connector	Terminal	_			
	4				
A: M43	5	Ground	No		
A. W43	13				
	14				

# 

#### OK or NG

OK >> GO TO 2.

NG >> • Check connector housings for disconnected or loose terminals.

Repair harness or connector.

# 2.REAR SPEAKER SIGNAL CHECK

- 1. Connect AV control unit connector and rear speaker connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between AV control unit harness connector terminals with CONSULT-III or oscilloscope.

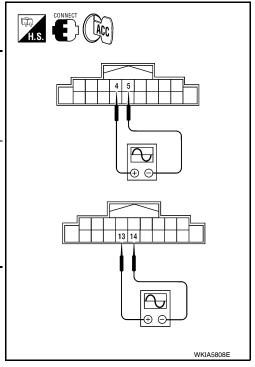
	Tern	ninals					
	(+)		(-) Condi-		(-)		Reference
Con- nec- tor	Termi- nal	Con- nec- tor	Termi- nal	tion	signal		
	4		5				
M43	13	M43	14	Re- ceive audio signal	(V) 1 0 -1 1 ms		

#### OK or NG

NG

OK >> Replace speaker. Refer to <u>AV-72, "Removal and Installation"</u>.

>> Replace AV control unit. Refer to <u>AV-72, "Removal and Installation"</u>.



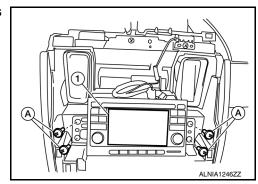
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#### Removal and Installation

#### **AUDIO UNIT**

#### Removal

- 1. Disconnect the battery negative terminal.
- 2. Remove cluster lid C. Refer to IP-11.
- 3. Remove the audio unit screws (A), disconnect the connectors and remove the audio unit (1).
- 4. Remove the audio unit bracket.



#### Installation

Installation is in the reverse order of removal.

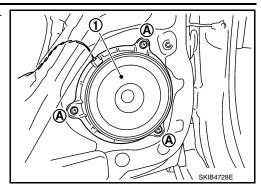
#### FRONT DOOR SPEAKER

#### Removal

1. Remove the front door finisher. Refer to El-34.

#### [AUDIO WITH NAVIGATION]

2. Remove the front door speaker screws (A), disconnect the connector and remove the front door speaker (1).



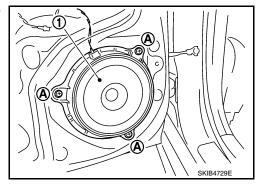
Installation

Installation is in the reverse order of removal.

#### REAR DOOR SPEAKER

#### Removal

- 1. Remove the rear door finisher. Refer to El-34.
- 2. Remove the rear door finisher screws (A), disconnect the connector and remove the rear door speaker (1).



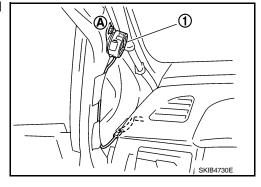
Installation

Installation is in the reverse order of removal.

#### **TWEETER**

#### Removal

- 1. Remove the front pillar garnish. Refer to <u>El-39</u>.
- 2. Remove the tweeter screw (A), disconnect the connector and remove the tweeter (1).



Installation

Installation is in the reverse order of removal.

STEERING WHEEL AUDIO CONTROL SWITCHES

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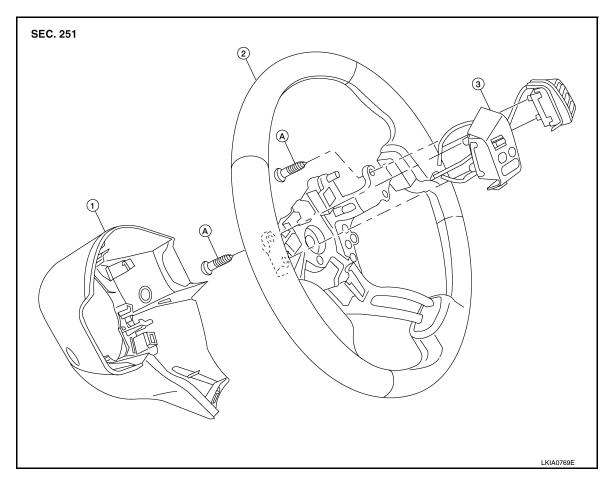
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- 1. Steering wheel finisher cover
- 2. Steering wheel

3. Steering wheel audio control switches

A. Screws

#### Removal

- 1. Remove the steering wheel. Refer to PS-7, "Removal and Installation".
- 2. Remove the steering wheel finisher cover.
- 3. Remove the screws and the steering wheel audio control switches.

## Installation

Installation is in the reverse order of removal.

## **NAVIGATION SYSTEM**

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# [AUDIO WITH NAVIGATION]

# **NAVIGATION SYSTEM**

How to Proceed with Trouble Diagnosis

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Refer to AV-65, "Symptom Chart".

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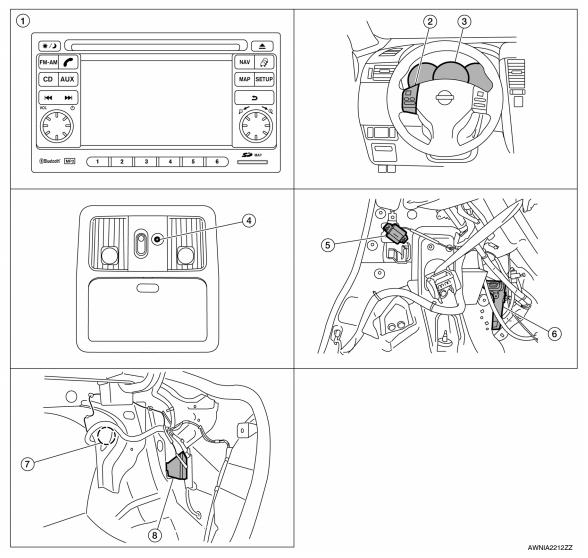
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# **TELEPHONE**

# Component Parts and Harness Connector Location

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- 1. AV control unit M70
- 4. Bluetooth microphone R15
- Bluetooth antenna (sedan)
- 2. Steering wheel audio control switches
- 5. Bluetooth antenna (hatchback)
- Bluetooth control unit B121, B122, B135 (sedan) (view with trunk side finisher RH removed)
- Combination meter M24
- Bluetooth control unit B121, B122, B135 (hatchback) [view with luggage side lower finisher (RH) removed]

# System Description

INFOID:0000000005988553

#### BLUETOOTH® HANDS-FREE PHONE SYSTEM

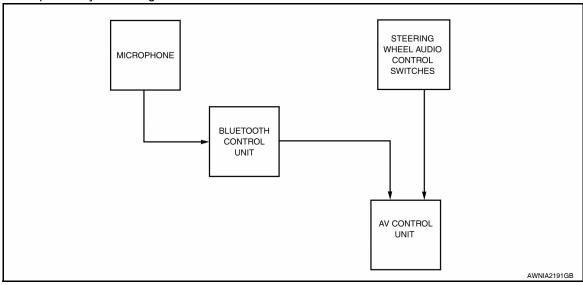
Refer to the Owner's Manual for Bluetooth telephone system operating instructions. **NOTE:** 

Cellular telephones must have their wireless connection set up (paired) before using the Bluetooth telephone system.

Bluetooth telephone system allows users who have a Bluetooth cellular telephone to make a wireless connection between their cellular telephone and the Bluetooth control unit. Hands-free cellular telephone calls can be sent and received. Some Bluetooth cellular telephones may not be recognized by the Bluetooth control unit.

When a cellular telephone or the Bluetooth control unit is replaced, the telephone must be paired with the Bluetooth control unit. Different cellular telephones may have different pairing procedures. Refer to the cellular telephone operating manual.

Bluetooth Telephone System Diagram



#### Bluetooth Control Unit

When the ignition switch is turned to ACC or ON, the Bluetooth control unit will power up. During power up, the Bluetooth control unit is initialized and performs various self checks. Initialization may take up to 20 seconds. If a phone is present in the vehicle and paired with the Bluetooth control unit, Nissan Voice Recognition will then become active. Bluetooth telephone functions can be turned off using the Nissan Voice Recognition system. For Bluetooth control unit location, refer to AV-76, "Component Parts and Harness Connector Location".

#### Steering Wheel Audio Control Switches

When buttons on the steering wheel audio control switch are pushed, the resistance in steering wheel audio control switch circuit changes depending on which button is pushed. The Bluetooth control module uses this signal to perform various functions while navigating through the voice recognition system.

The following functions can be performed using the steering wheel audio control switch:

- Initiate Self Diagnosis of the Bluetooth telephone system
- · Start a voice recognition session
- · Answer and end telephone calls
- Adjust the volume of calls

#### Volume Switch

Call volume can be adjusted using the AV control unit volume switch.

#### Bluetooth Microphone

The Bluetooth microphone is located in the roof console assembly. The Bluetooth microphone sends a signal to the Bluetooth control unit. The Bluetooth microphone can be actively tested during self-diagnosis. For Bluetooth microphone location, refer to AV-76, "Component Parts and Harness Connector Location".

#### **AV Control Unit**

The AV control unit receives signals from the Bluetooth control unit and sends audio signals to the speakers.

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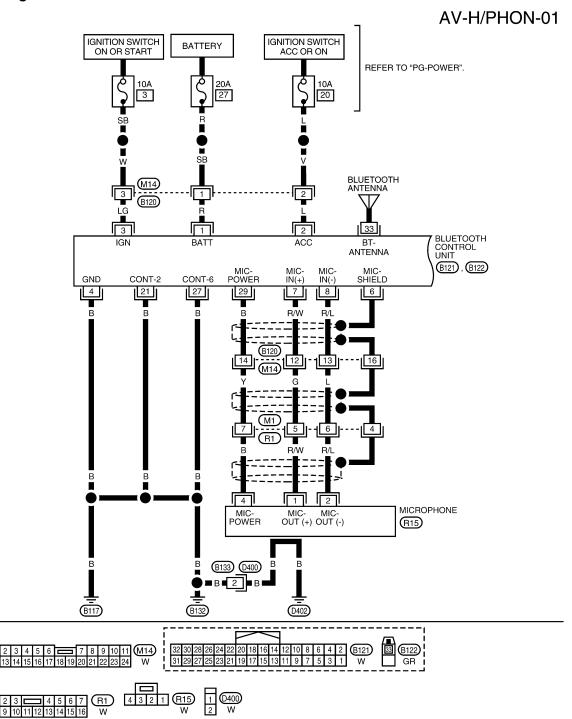
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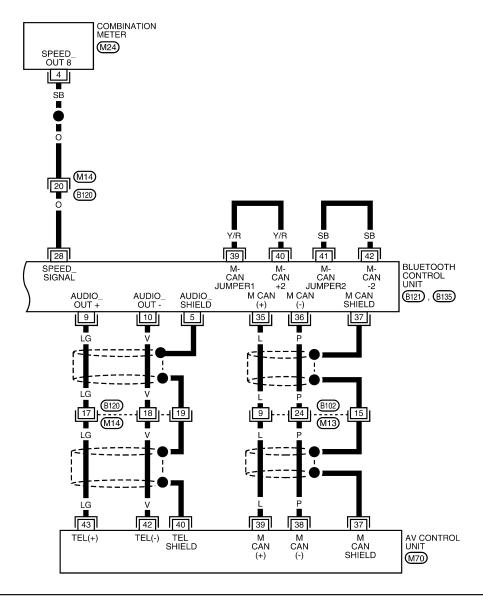
Wiring Diagram - H/PHON -

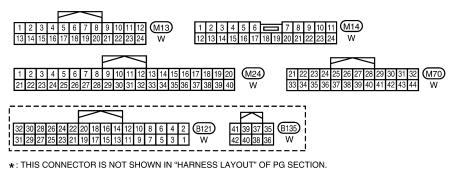
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AANWA0304GB

# AV-H/PHON-02





AANWA0305GB

Revision: January 2010 AV-79 2010 Versa

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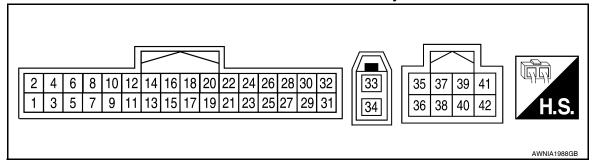
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# Bluetooth Control Unit Harness Connector Terminal Layout

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# Terminal and Reference Value for Bluetooth Control Unit

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	ninal color)		Signal		Condition	Reference value	<b>5</b>
+	_	Item	input/ output	Ignition switch	Operation	(Approx.)	Example of symptom
1 (R)	Ground	Battery pow- er	Input	_	_	Battery voltage	System does not work properly.
2 (L)	Ground	ACC power	Input	ACC/ ON	_	Battery voltage	System does not work properly.
3 (LG)	Ground	IGN power	Input	ON/ START	_	Battery voltage	System does not work properly.
4 (B)	_	Ground	_	_	_	_	_
5	_	Shield	_	1	_	-	-
6	_	Shield	_	_	_	-	_
7 (R/W)	8 (R/L)	Mic-in signal	Input	_	_	-	Bluetooth Micro- phone inoperative.
9 (LG)	10 (V)	Audio out	Output	ACC/ ON	Bluetooth control unit sends audio signal	(V) 1 0 -1 ** 2ms SKIB3609E	Audio can not be heard.
21 (B)	_	Cont-2	_	I	_	1	-
27 (B)	_	Cont-6	_	_	_	_	_
28 (O)	Ground	Vehicle speed signal (8–pulse)	Input	ON	When vehicle speed is approx. 40 km/h (25 MPH)	(V) 6 4 2 0 2 0 ms	Speed sensitive volume is inoperative.
29 (B)	Ground	Bluetooth Microphone power	Output	_	_	5V	Bluetooth Micro- phone inoperative.
33	_	Bluetooth antenna sig- nal	Input	_	_	-	-
35 (L)	_	M CAN +	_	_	_	_	_

#### [AUDIO WITH NAVIGATION]

Terminal (Wire color)		- Item	Signal	Condition		Reference value	Example of symptom	
+	-	- item	input/ output	Ignition switch	Operation	(Approx.)	Example of Symptom	
36 (P)	_	M CAN -	_	_	_	_	_	
37	_	M CAN shield	_	_	_	_	_	
39 (Y/R)	_	M CAN jumper 1	_	_	_	_	_	
40 (Y/R)	_	M CAN 1	_	_	_	_	_	
41 (SB)	_	M CAN jumper 2	_	_	_	_	_	
42 (SB)		M CAN 2	_	_	_	_	_	

# Bluetooth Control Unit Self-Diagnosis Function

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The Bluetooth control unit has two diagnostic checks. The first diagnostic check is performed automatically every ignition cycle during control unit initialization. The second diagnostic check is performed by the technician using the steering wheel audio control switches prior to trouble diagnosis.

#### BLUETOOTH CONTROL UNIT INITIALIZATION CHECKS

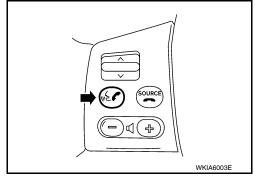
- · Internal control unit failure
- Bluetooth antenna connection open or shorted
- Steering wheel audio control switches (PHONE/SEND, PHONE/END) stuck closed
- Vehicle speed pulse count
- Bluetooth Microphone connection test (with playback to operator)
- · Bluetooth inquiry check

#### SELF-DIAGNOSIS MODE

- 1. Turn ignition switch to ACC or ON.
- Wait for the Bluetooth system to complete initialization. This may take up to 20 seconds.
- Press and hold the steering wheel audio control switch PHONE/ SEND button for at least 5 seconds. The Bluetooth system will begin to play a verbal prompt.

#### NOTE:

At any time, press and hold the steering wheel audio control switch PHONE/SEND button for at least 5 seconds to exit diagnostic mode.



- 4. While the prompt is playing, press and hold the steering wheel audio control switch PHONE/END button for at least 5 seconds. The Bluetooth system will sound a 5 second beep.
- While the beep is sounding, press and hold the steering wheel audio control switch PHONE/END button for at least 5 seconds again.
- The Bluetooth system has now entered into the diagnostic mode. Results of the diagnostic checks will be verbalized to the technician. Refer to AV-82, "Workflow".
- 7. If there are no failure records to report, the speed pulse count will be reported next.
- 8. After the speed pulse count is reported, an interactive Bluetooth microphone test will be performed. Follow the voice prompt. If the Bluetooth microphone test fails refer to AV-82, "Workflow".
- Self-diagnosis mode is complete when the voice prompt says "All diagnostic functions completed". A short beep is heard.

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**AV-81** 2010 Versa Revision: January 2010

#### [AUDIO WITH NAVIGATION]

Workflow (INFOID:0000000005924431

Failure Message	Action			
"Internal failure"	Replace Bluetooth control unit. Refer to AV-85, "Removal and Installation".			
"Bluetooth antenna open"	Inspect harness connection.			
"Bluetooth antenna shorted"	2. Replace Bluetooth antenna. Refer to AV-85, "Removal and Installation".			
"Phone/Send for Hands Free System is stuck"	Check steering wheel audio control switches. Refer to AV-68, "Steering Switch Check".			
"Phone/End for the Hands Free System is stuck"				
"Microphone test" (failed interactive test)	<ol> <li>Inspect harness between Bluetooth control unit and microphone.</li> <li>Replace microphone. Refer to <u>AV-85</u>, "<u>Removal and Installation</u>".</li> </ol>			

# Power Supply and Ground Circuit Inspection for Bluetooth Control Unit

INFOID:0000000005924432

# 1. CHECK FUSES

Make sure the following fuses for the Bluetooth control unit are not blown.

	Terminals	Ignition Switch	Fuse No.
Connector	Terminal	ignition Switch	i use no.
	1	All positions	27
B121	2	ACC/ON	20
	3	ON/START	3

#### OK or NG

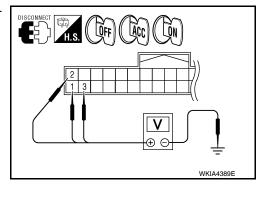
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to  $\underline{PG}$ - $\underline{4}$ .

# 2. CHECK POWER SUPPLY CIRCUIT

- 1. Disconnect Bluetooth control unit connector B121.
- Check voltage between connector terminals and ground as follows.

	Terminals		Ignition switch position		
	(+)	(-)	OFF	ACC	ON
Connector	Connector Terminal		OH	ACC	ON
	1		Battery voltage	Battery voltage	Battery voltage
B121	2	Ground	0V	Battery voltage	Battery voltage
	3		0V	0V	Battery voltage



#### OK or NG

OK >> GO TO 3.

NG >> Check harness for open between Bluetooth control unit and fuse.

# 3.CHECK GROUND CIRCUITS

1. Turn ignition switch OFF.

#### **TELEPHONE**

#### < SERVICE INFORMATION >

#### [AUDIO WITH NAVIGATION]

Check continuity between the following Bluetooth control unit terminals and ground.

	Terminals		Continuity
Connector	Terminal	_	Continuity
	4		
B121	21	Ground	Yes
	27		

# Ω

#### OK or NG

OK >> Inspection End.

NG >> Repair or replace harness.

# Steering Wheel Audio Control Switch Does Not Operate

Refer to AV-68, "Steering Switch Check".

# Voice Activated Control Function Does Not Operate

## INFOID:0000000005924435

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#### NOTE:

Even under the normal condition, Bluetooth voice guidance may not occur when pressing steering wheel audio control switch.

BLUETOOTH VOICE GUIDANCE IS HEARD WHEN PRESSING STEERING WHEEL AUDIO CON-TROL SWITCH

# 1. CHECK HARNESS BETWEEN BLUETOOTH CONTROL UNIT AND BLUETOOTH MICROPHONE

- Turn ignition switch OFF.
- 2. Disconnect Bluetooth control unit connector and Bluetooth microphone connector.
- Check continuity between Bluetooth control unit connector B12 (A) and Bluetooth microphone connector R15 (B).

	Continuity			
Connector	Terminal	Connector	Terminal	Continuity
	7		1	
A: B121	8	B: R15	2	Yes
	29		4	

Check continuity between Bluetooth control unit harness con nector B121 and ground.

1	DISCONNECT H.S.	29
1-		B 1 2 4 4 WKIA5795E

	Terminals				
Connector	Terminal	_	Continuity		
	7				
A: B121	8	Ground	No		
	29				

#### OK or NG

OK >> GO TO 2.

NG >> Repair harness or connector.

# 2.CHECK BLUETOOTH MICROPHONE POWER SUPPLY

- Connect Bluetooth control unit connector and Bluetooth microphone connector.
- Turn ignition switch ON.

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**AV-83** 2010 Versa Revision: January 2010

#### < SERVICE INFORMATION >

3. Check voltage between Bluetooth microphone connector R15 terminal 4 and ground.

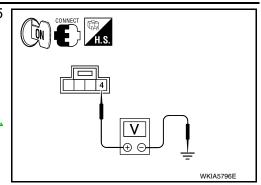
#### 4 - Ground

: Approx. 5 V

#### YES or NO

YES >> GO TO 3.

NO >> Replace Bluetooth control unit. Refer to <u>AV-85.</u> "Removal and Installation".

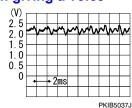


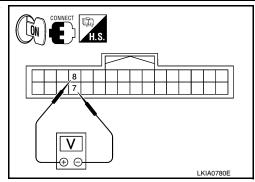
# 3. CHECK MIC. SIGNAL

1. Check signal between Bluetooth control unit harness connector B121 terminals 7 and 8.

#### When giving a voice

7 – 8:





#### OK or NG

OK >> Replace Bluetooth control unit. Refer to AV-85, "Removal and Installation".

NG >> Replace Bluetooth microphone. Refer to AV-85, "Removal and Installation".

BLUETOOTH VOICE GUIDANCE IS NOT HEARD WHEN PRESSING STEERING WHEEL AUDIO CONTROL SWITCH

1. CHECK STEERING WHEEL AUDIO CONTROL SWITCH CIRCUIT

Refer to AV-68, "Steering Switch Check".

#### OK or NG

OK >> GO TO 2.

NG >> Replace applicable parts.

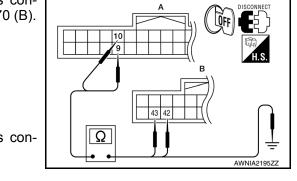
# 2.check bluetooth voice signal circuit

- 1. Turn ignition switch OFF.
- Disconnect Bluetooth control unit connector and AV control unit connector.
- Check continuity between Bluetooth control unit harness connector B121 (A) and AV control unit harness connector M70 (B).

	Continuity			
Connector	Terminal	Connector	Terminal	Continuity
A: B121	9	B: M70	43	Yes
A. DIZI	10	D. IVI7U	42	162

Check continuity between Bluetooth control unit harness connector B121 (A) and ground.

	(. 1) 9		
	Continuity		
Connector	Terminal	_	Continuity
A: B121	9	Cround	No
A. BIZI	10	Ground	No



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#### < SERVICE INFORMATION >

OK >> GO TO 3.

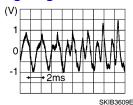
9 - 10:

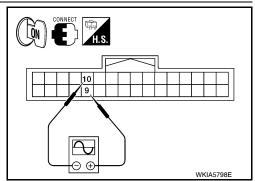
NG >> Repair harness or connector.

# 3. CHECK BLUETOOTH VOICE SIGNAL

Check signal between Bluetooth control unit harness connector B121 terminals 9 and 10.

#### When giving a voice





#### OK or NG

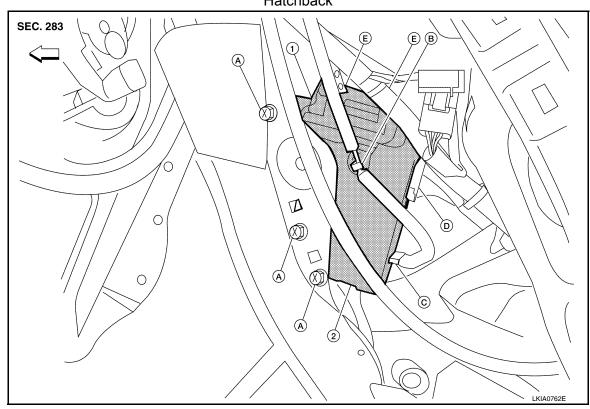
OK >> Replace AV control unit. Refer to AV-72, "Removal and Installation".

>> Replace Bluetooth control unit. Refer to AV-85, "Removal and Installation". NG

#### Removal and Installation

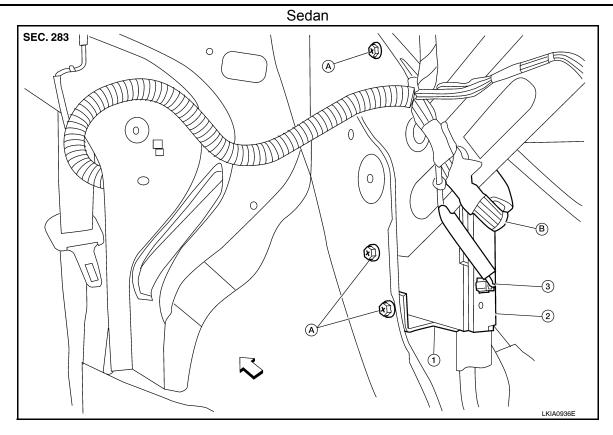
#### **BLUETOOTH CONTROL UNIT**

#### Hatchback



- 1. Bluetooth control unit bracket
- BLuetooth antenna feeder harness C. clip (hatchback only)
- Bluetooth control unit bracket screws
- Bluetooth control unit
- Bluetooth antenna feeder harness connector
- Front

- Blue tooth control unit bolts
- - Bluetooth control unit connector



- 1. Bluetooth control unit bracket
- A. Bluetooth control unit bolts
- 2. Bluetooth control unit
- B. Bluetooth control unit connector
- Bluetooth antenna feeder connector

#### Removal

- 1. For hatchback, remove luggage side lower finisher (RH). Refer to El-54, "Removal and Installation".
  - Disconnect Bluetooth antenna harness clip.
- 2. For sedan, remove the trunk room side finisher (RH). Refer to EI-57, "Removal and Installation".
  - · Disconnect the Bluetooth antenna harness connector.
- 3. Disconnect the Bluetooth control unit harness connector.
- 4. Remove the Bluetooth control unit upper and lower bracket bolts.
- 5. Unhook the Bluetooth control unit upper and lower brackets and remove Bluetooth control unit.
- 6. Remove Bluetooth control unit bracket screws and remove the upper and lower brackets from unit.

#### Installation

Installation is in the reverse order of removal.

## **BLUETOOTH ANTENNA**

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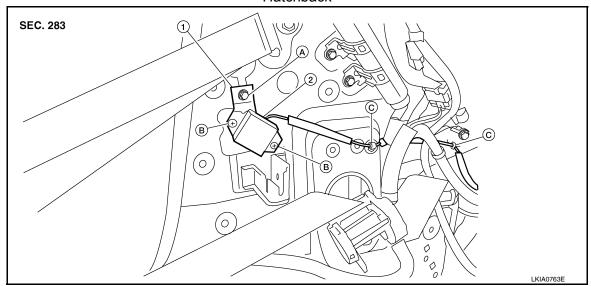
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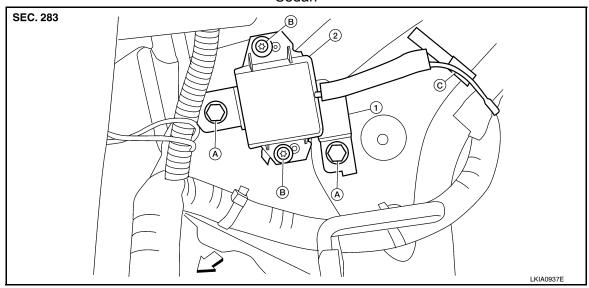
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#### Hatchback



- 1. Bluetooth antenna bracket
- B. Bluetooth antenna screws
- Bluetooth antenna
- Bluetooth antenna feeder harness clips
- A. Bluetooth antenna bracket bolts

Sedan



- 1. Bluetooth antenna bracket
- B. Bluetooth antenna screws
- 2. Bluetooth antenna
- Bluetooth antenna feeder harness clip
- A. Bluetooth antenna bracket bolts
- $\Rightarrow$  Front

#### Removal

- Disconnect the battery negative terminal.
- 2. For hatchback, remove luggage side lower finisher (RH). Refer to El-54, "Removal and Installation".
- 3. For sedan, fold the rear seat back down, remove the seat back finisher (RH). Refer to EI-57, "Removal and Installation".
- 4. Disconnect the Bluetooth antenna feeder harness clips.
- 5. Disconnect the Bluetooth antenna feeder harness connector.
- 6. Remove the Bluetooth antenna bracket bolt(s) and remove antenna.
- 7. Remove the Bluetooth antenna screws and remove bracket.

#### Installation

Installation is in the reverse order of removal.

## **TELEPHONE**

## < SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

# **BLUETOOTH MICROPHONE**

#### Removal

- 1. Remove over-head console assembly, roof finisher. Refer to <u>EI-48</u>.
- 2. Remove the Bluetooth microphone.

#### Installation

Installation is in the reverse order of removal.

#### **USB CONNECTOR AND AUX JACK**

< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

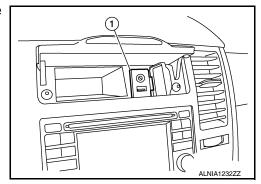
# **USB CONNECTOR AND AUX JACK**

# Removal and Installation

#### INFOID:0000000005924421

## **REMOVAL**

- 1. Remove the cluster lid C. Refer to IP-11, "Component Parts".
- 2. Push the pawl from the back of the cluster lid C to remove the USB connector and aux jack (1).



#### **INSTALLATION**

Installation is in the reverse order of removal.

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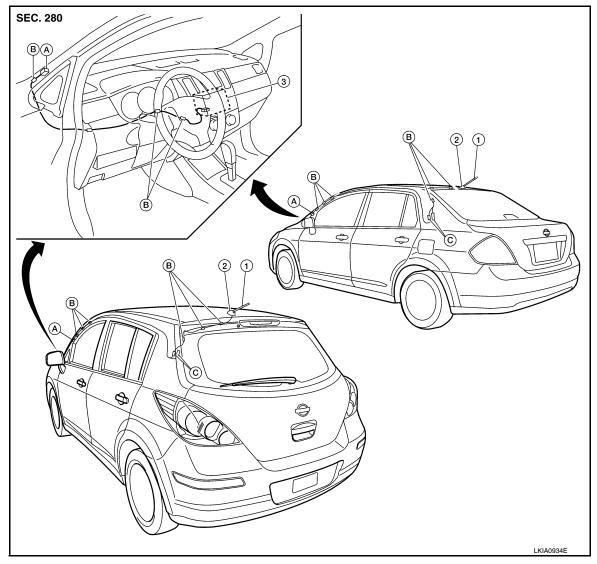
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# **AUDIO ANTENNA**

## Location of Antenna

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1. Roof antenna

- 2. Roof antenna base
- A. Audio antenna harness connector
- B. Harness clips

- 3. AV control unit
- C. Roof antenna harness connectors

## Removal and Installation of Roof Antenna

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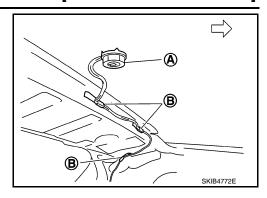
#### **REMOVAL**

- 1. For hatchback, remove the luggage side upper finisher (LH). Refer to EI-54.
- For sedan, remove the rear pillar finisher. Refer to EI-52, "Removal and Installation Sedan".
- 3. Remove rear assist grip (LH). Refer to <u>EI-48</u>.
- 4. Remove three clips of headlining (rear side). Pull down headlining (rear side) and obtain space for work between vehicle and headlining.
- 5. Disconnect the roof antenna harness connectors.
- 6. Remove nut (A) and clips (B).

## **AUDIO ANTENNA**

# [AUDIO WITH NAVIGATION]

• <⊐: Vehicle front



7. Remove the roof antenna.

#### **INSTALLATION**

Installation is in the reverse order of removal.

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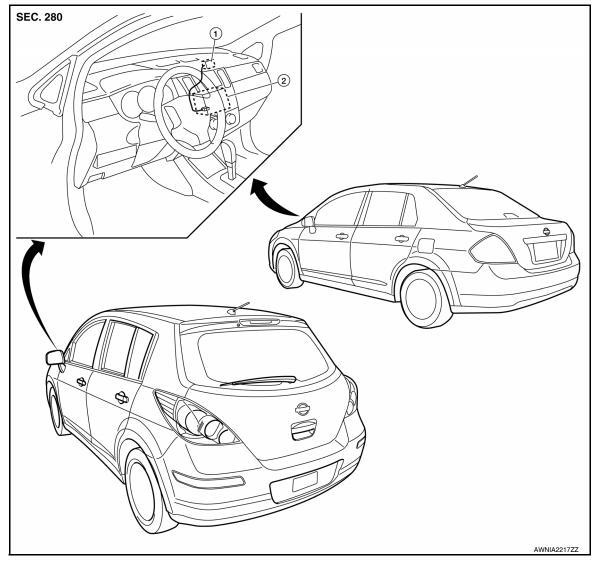
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# **GPS ANTENNA**

# Location of Antenna



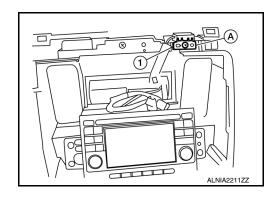


1. GPS antenna

2. AV control unit

# Removal and Installation of GPS Antenna

- 1. Remove cluster lid C.Refer to <a href="IP-11">IP-11</a>, "Component Parts"
- 2. Remove audio unit and disconnect GPS antenna connector.
- 3. Remove screw (A) and remove GPS antenna (1).



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