

SECTION AV

AUDIO, VISUAL, NAVIGATION & TELEPHONE SYSTEM

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SERVICE INFORMATION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000007329183

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

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NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYSTEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT 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

1. 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.
4. Perform the necessary repair operation.

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PRECAUTIONS

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[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.

Precaution for Work

INFOID:000000007665770

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components.
 - Water soluble dirt: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the dirty area.
Then rub with a soft and dry cloth.
 - Oily dirt: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the dirty area.
Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol, or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

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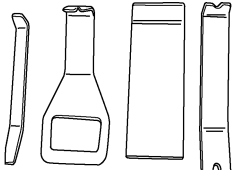
[AUDIO WITHOUT NAVIGATION]

PREPARATION

Special Service Tool

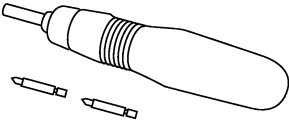
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
— (J-46534) Trim tool set  AWJIA0483ZZ	Removing trim components

Commercial Service Tool

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Tool name	Description
Power tool  PBIC0191E	Loosening bolts and nuts

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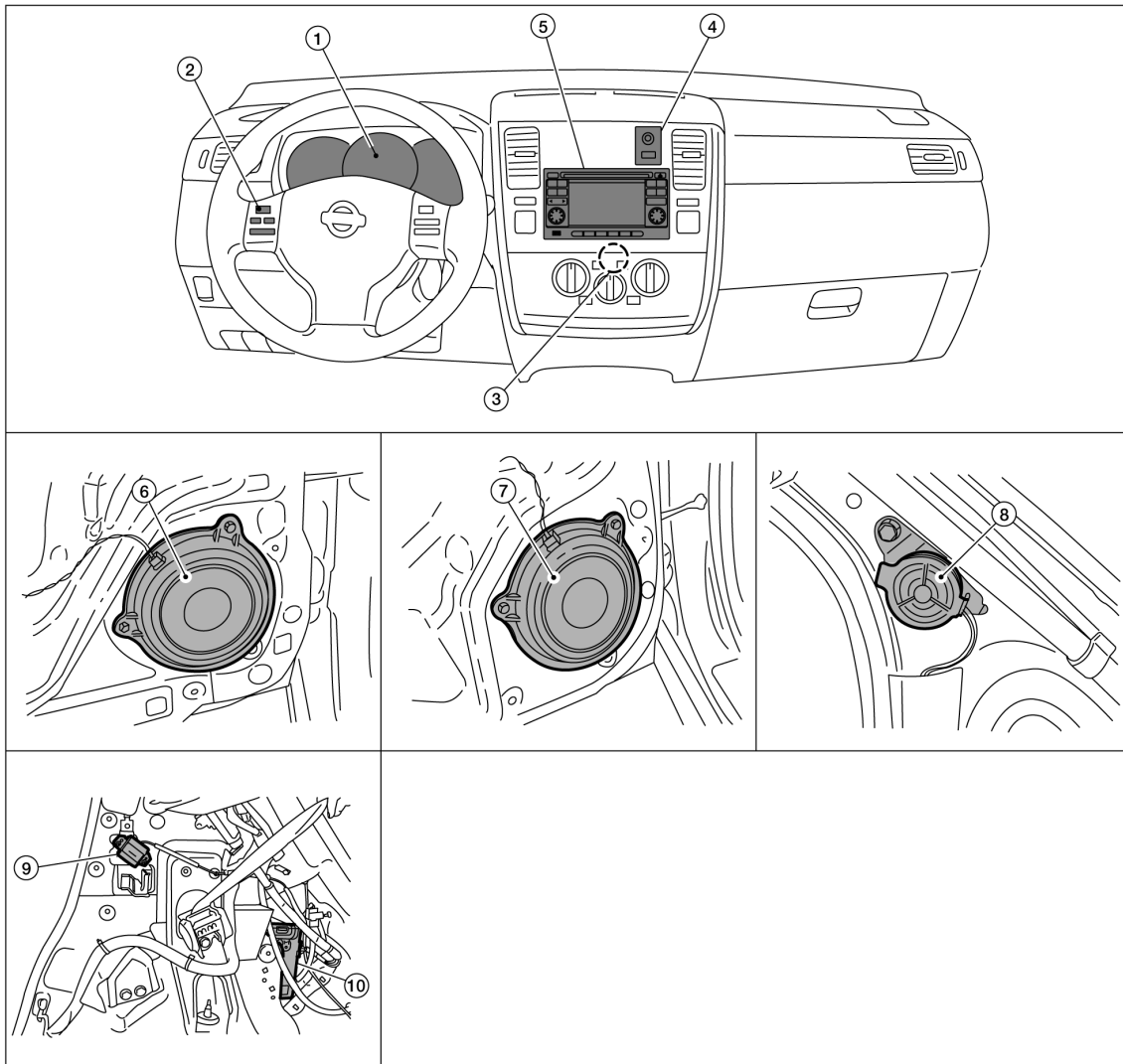
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AUDIO

Component Parts Location

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AWNIA2443GB

- | | | |
|---------------------------------------|---|---|
| 1. Combination meter M24 | 2. Steering wheel audio control switches (with Bluetooth) | 3. iPod® adapter M49 (premium system) |
| 4. iPod® side M50 (premium system) | 5. Audio unit M43 (base system)
Audio unit M40, M43, M44 (premium system) | 6. Front door speaker LH D12, RH D112 |
| 7. Rear door speaker LH D207, RH D307 | 8. Front tweeter LH M46, RH M47 (premium system) (view with front pillar garnish removed) | 9. Bluetooth antenna [view with luggage side lower finisher (RH) removed] |
| 10. Bluetooth control unit B121, B122 | | |

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

System Description

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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.

AUDIO

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

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 through the case of the audio unit.

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 rear door speaker LH and RH.

PREMIUM 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

- 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 front 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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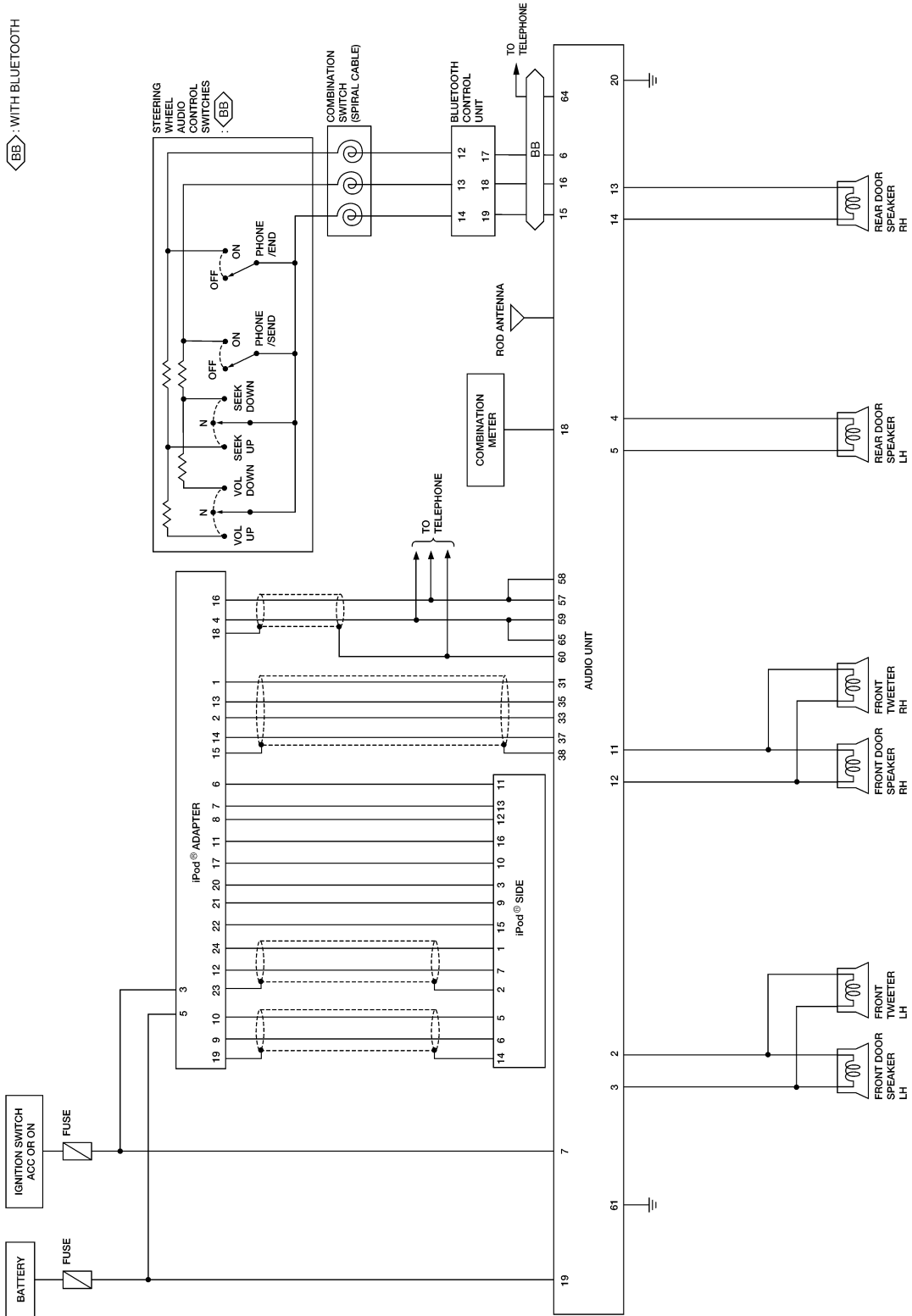
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[AUDIO WITHOUT NAVIGATION]

Schematic

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PREMIUM SYSTEM



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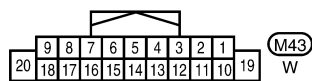
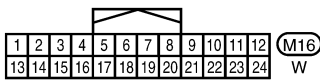
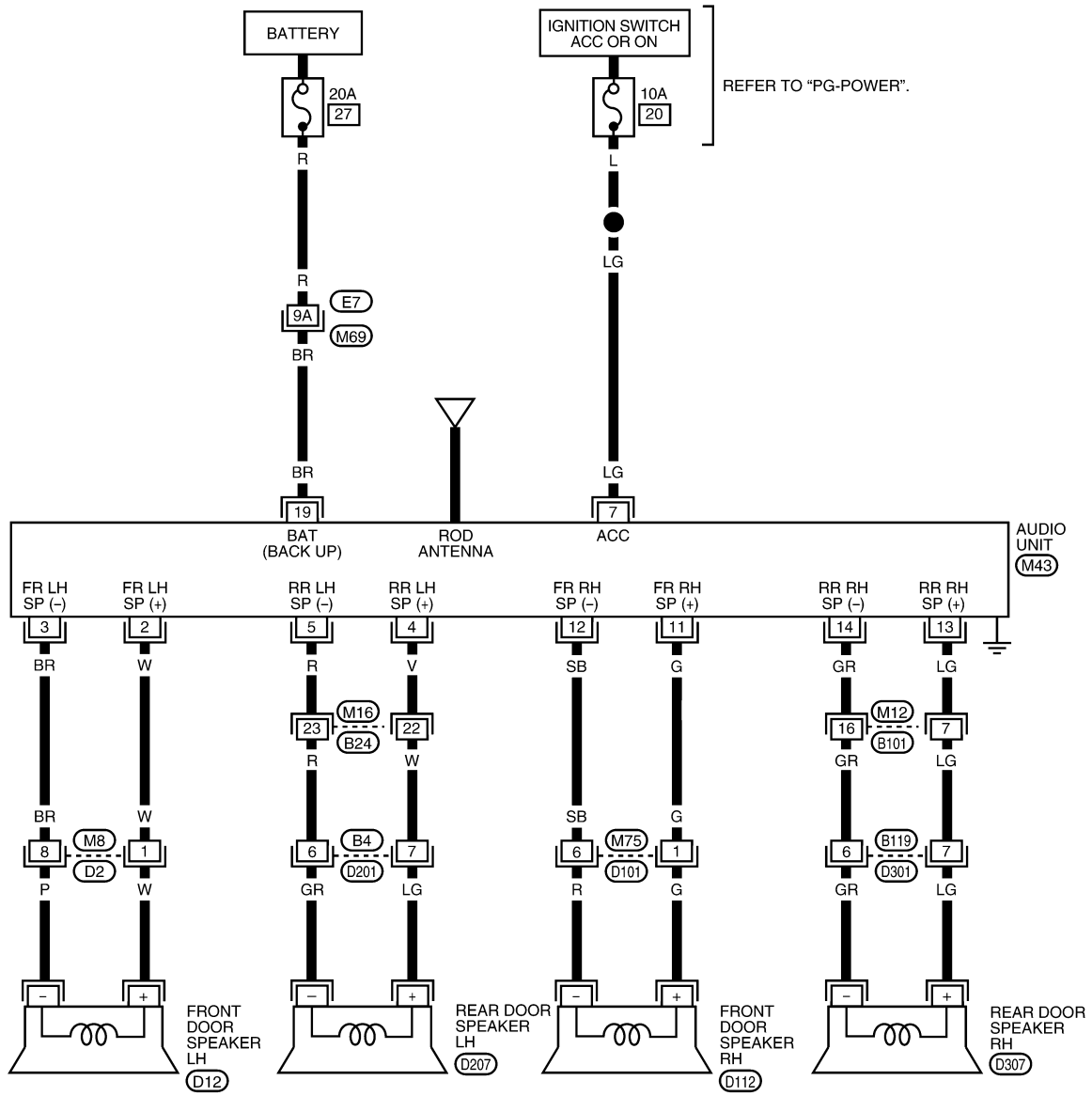
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 Wiring Diagram - AUDIO -

[AUDIO WITHOUT NAVIGATION]

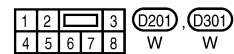
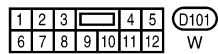
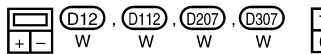
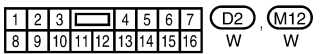
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BASE SYSTEM

AV-AUDIO-01



REFER TO THE FOLLOWING.
 (M69) - SUPER MULTIPLE JUNCTION (SMJ)



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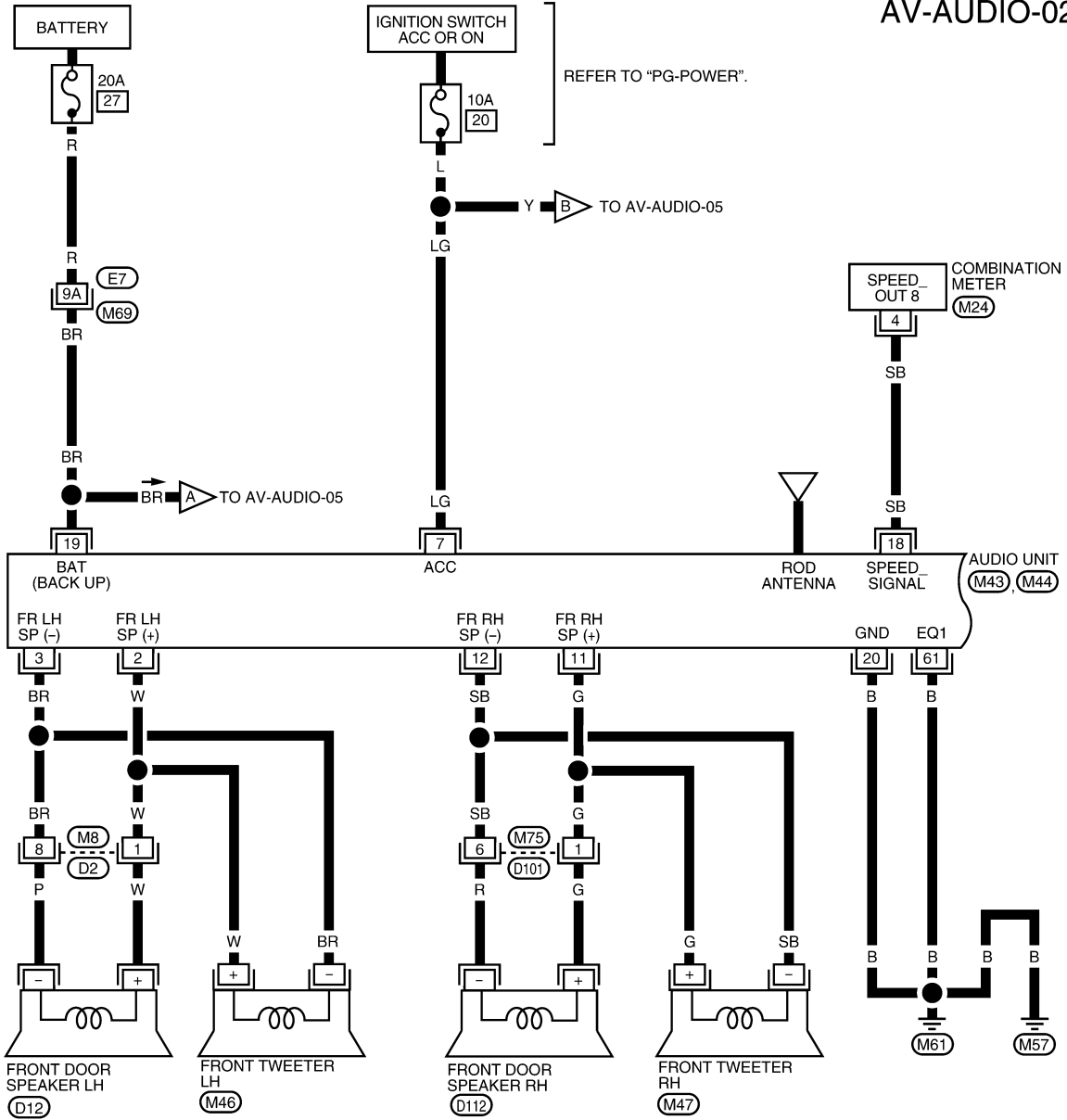
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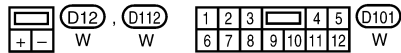
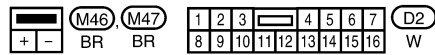
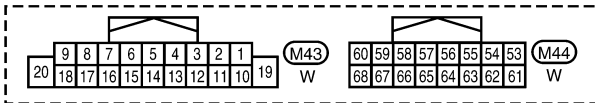
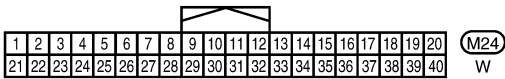
PREMIUM SYSTEM

AV-AUDIO-02



REFER TO THE FOLLOWING.

(M69) - SUPER MULTIPLE JUNCTION (SMJ)



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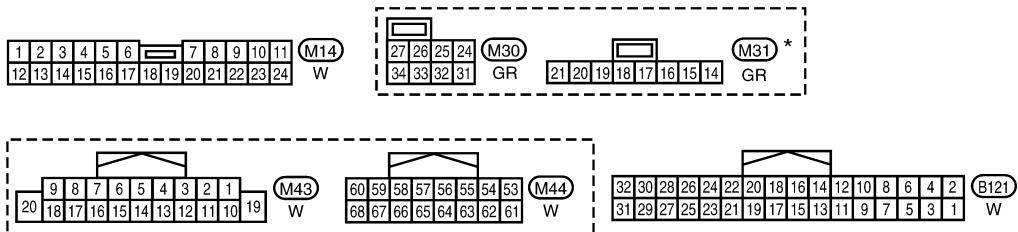
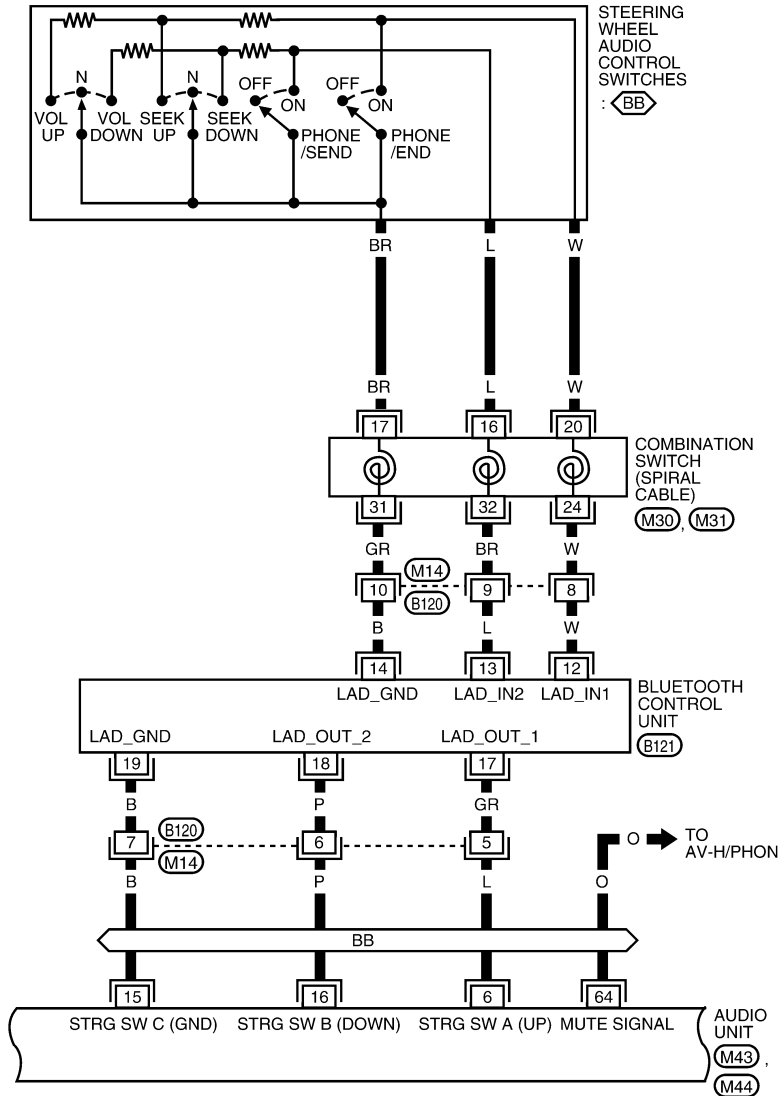
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[AUDIO WITHOUT NAVIGATION]

AV-AUDIO-03

Ⓟ : WITH BLUETOOTH



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

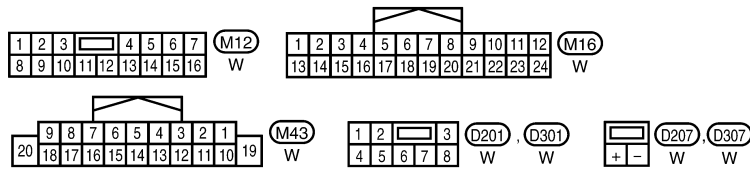
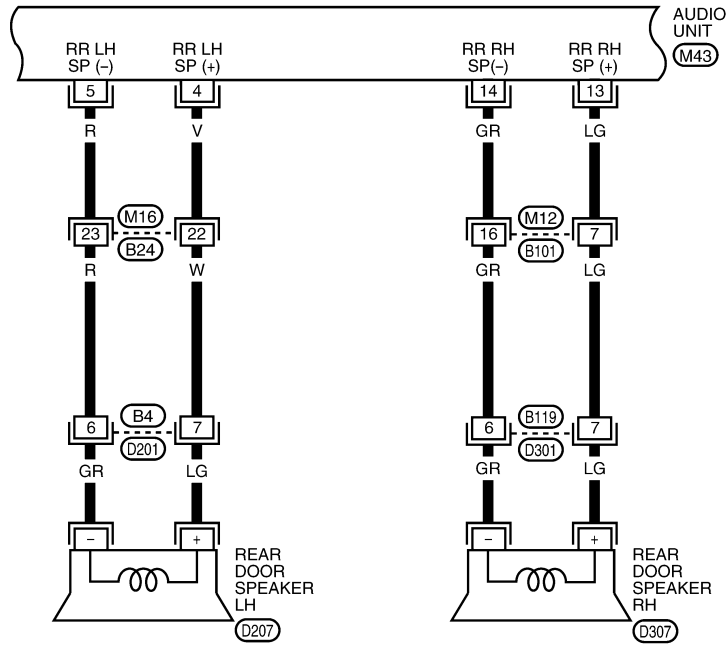
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[AUDIO WITHOUT NAVIGATION]

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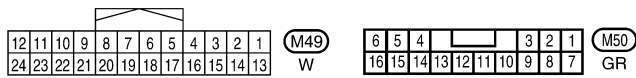
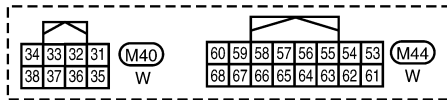
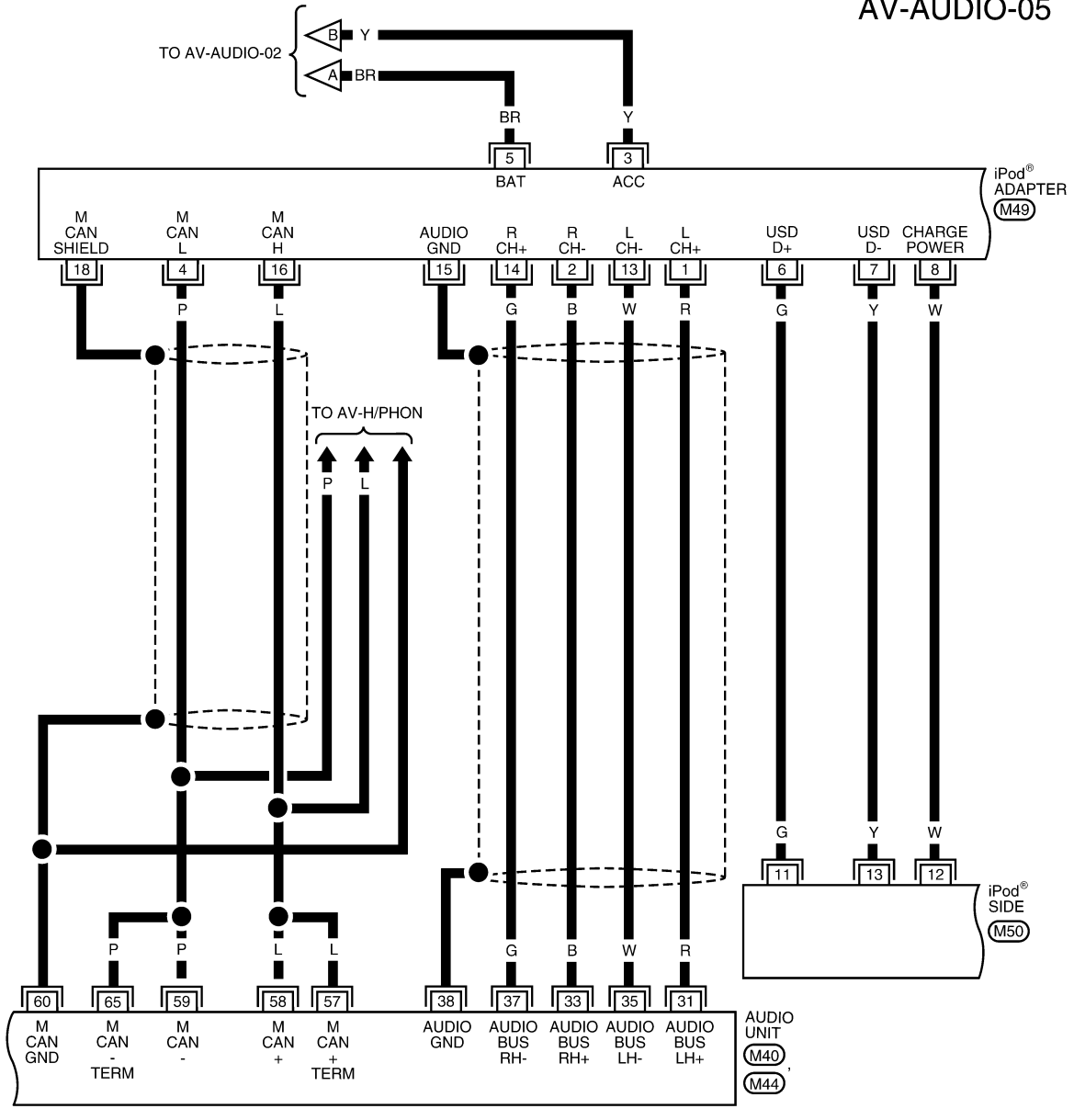
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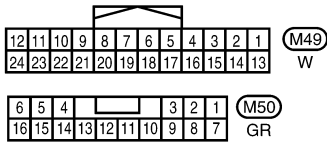
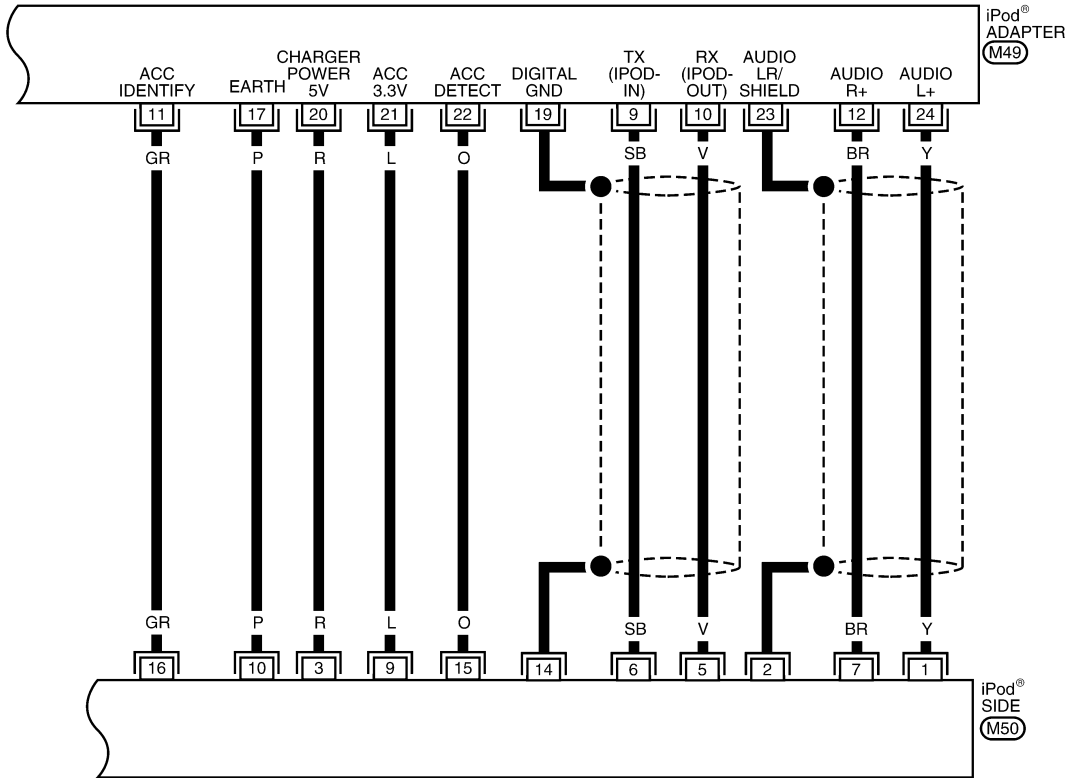
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AV-AUDIO-05



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AV-AUDIO-06



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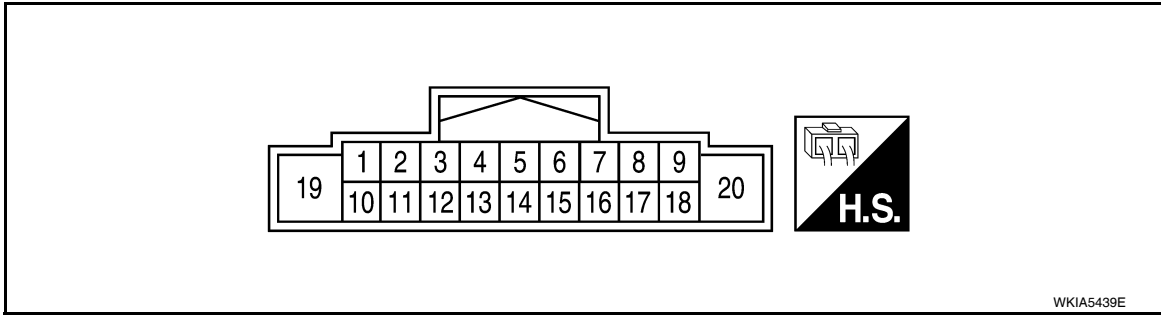
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[AUDIO WITHOUT NAVIGATION]

Audio Unit (Base System) Harness Connector Terminal Layout

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Terminal and Reference Value for Audio Unit (Base System)

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

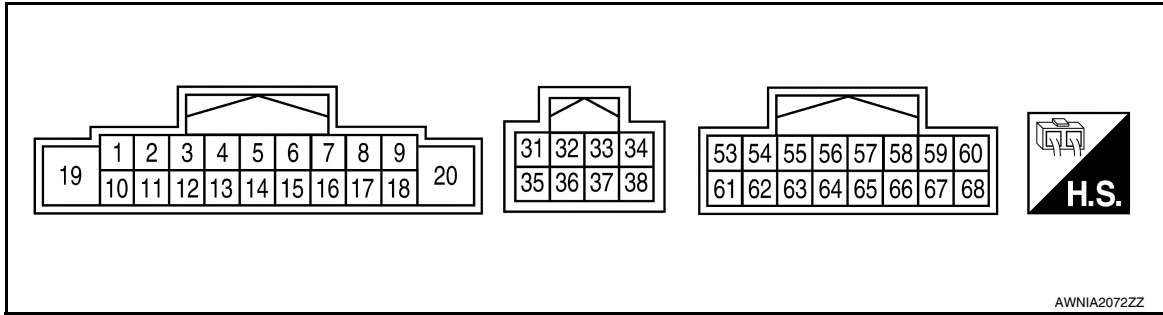
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[AUDIO WITHOUT NAVIGATION]

Audio Unit (Premium System) Harness Connector Terminal Layout

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Terminal and Reference Value for Audio Unit (Premium System)

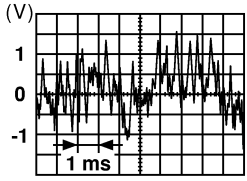
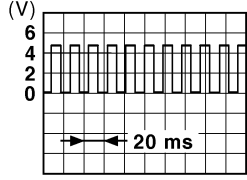
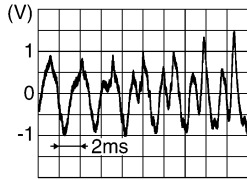
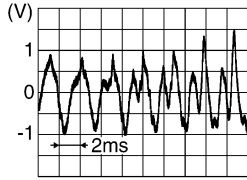
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Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symp- tom
+	-			Ignition switch	Operation		
2 (W)	3 (BR)	Audio sound signal front LH	Output	ON	Receive audio signal	<p style="text-align: right; font-size: small;">SKIA0177E</p>	No sound from front door speaker LH or tweeter LH.
4 (V)	5 (R)	Audio sound signal rear LH	Output	ON	Receive audio signal	<p style="text-align: right; font-size: small;">SKIA0177E</p>	No sound from rear door speaker LH.
6 (L)*1	Ground	Remote control A	Input	ON	Press Phone/ End switch	0V	Steering wheel au- dio controls do not function
					Press SEEK UP switch	1.7V	
					Press VOL UP switch	3.3V	
					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	<p style="text-align: right; font-size: small;">SKIA0177E</p>	No sound from front door speaker RH or tweeter RH.

AUDIO

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[AUDIO WITHOUT NAVIGATION]

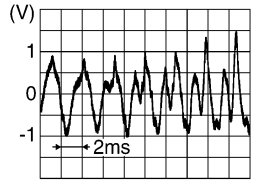
Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symp- tom
+	-			Ignition switch	Operation		
13 (LG)	14 (GR)	Audio sound signal rear RH	Output	ON	Receive audio signal	 <small>SKIA0177E</small>	No sound from rear door speaker RH.
15 (B)*1	-	Remote control ground	Input	-	-	-	Steering wheel au- dio controls do not function
16 (P)*1	Ground	Remote control B	Input	ON	Press Phone/ Send switch	0V	Steering wheel au- dio controls do not function
					Press SEEK DOWN switch	1.7V	
					Press VOL DOWN switch	3.3V	
					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)	 <small>PKIC0643E</small>	Speed sensitive volume is inopera- tive.
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	 <small>SKIB3609E</small>	-
33 (B)	37 (G)	iPod® au- dio signal RH	Input	ON	With iPod® op- erating	 <small>SKIB3609E</small>	-
38	-	Shield	-	-	-	-	-
57 (L)	-	AV commu- nication sig- nal 1 (H)	Input/ Output	-	-	-	-
58 (L)	-	AV commu- nication sig- nal 1 (H)	Input/ Output	-	-	-	-

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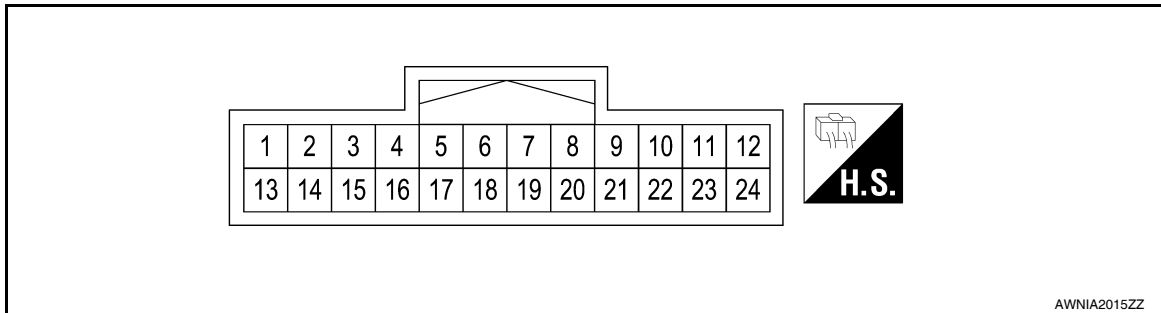
[AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symp- tom
+	-			Ignition switch	Operation		
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 rece- ives audio signal from Bluetooth con- trol unit		Bluetooth can not be heard.
68*1	-	Shield	-	-	-	-	-

*1: With Bluetooth

IPod Adapter Harness Connector Terminal Layout

INFOID:000000007329194



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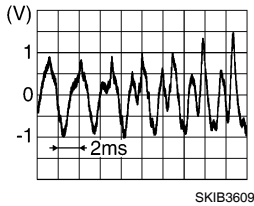
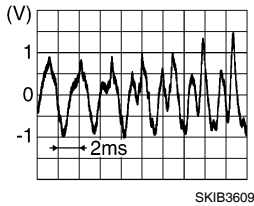
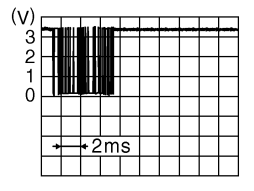
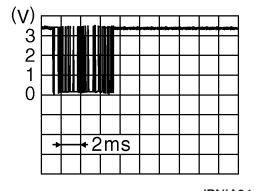
AUDIO

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Terminal and Reference Value for iPod Adapter

INFOID:000000007329195

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (R)	13 (W)	iPod® sound signal LH	Output	Ignition switch ON	When iPod® mode is se- lected.	
2 (B)	14 (G)	iPod® sound signal RH	Output	Ignition switch ON	When iPod® mode is se- lected.	
3 (Y)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
4 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
5 (BR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
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
9 (SB)	Ground	Communication signal (iPod® adapter→iPod®)	Output	Ignition switch ON	The wave pattern is dis- played just after iPod® con- nection.	 <p>NOTE: After the wave pattern display, the value continues Approx 3.3V</p>
10 (V)	Ground	Communication signal (iPod®→iPod® adapter)	Input	Ignition switch ON	Connected to iPod®.	
11 (GR)	Ground	ACCESSORY-IDENTIFY	—	Ignition switch ON	Connected to iPod®.	0V

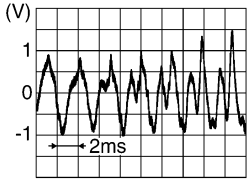
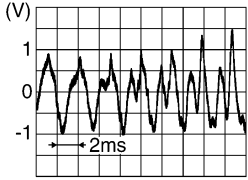
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AV

AUDIO

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
12 (BR)	Ground	iPod® sound signal RH	Input	Ignition switch ON	When iPod® mode is se- lected.	 <small>SKIB3609E</small>
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 (L)	Ground	iPod® connection recogni- tion signal	Input	Ignition switch ON	Not connected to iPod®.	4.0V
					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 se- lected.	 <small>SKIB3609E</small>

Trouble Diagnosis

INFOID:000000007329196

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.	<ul style="list-style-type: none"> • Audio unit power supply circuit. Refer to AV-22, "Power Supply Circuit Inspection". • Audio unit. Refer to AV-30, "Removal and Installation".
No sound can be heard from all speakers.	<ul style="list-style-type: none"> • Speaker circuit shorted to ground. Refer to AV-9, "Wiring Diagram - AUDIO -". • Audio unit. Refer to AV-30, "Removal and Installation".

AUDIO

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Symptom	Check item
No sound can be heard from one or several speakers.	<ul style="list-style-type: none"> • 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-27, "Sound Is Not Heard from Front Door Speaker or Tweeter (Premium System)". • Front speaker. Refer to AV-24, "Sound Is Not Heard from Front Door Speaker (Base System)" or AV-27, "Sound Is Not Heard from Front Door Speaker or Tweeter (Premium System)". • 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-28, "Sound Is Not Heard from Rear Door Speaker (Premium System)". • Rear speaker. Refer to AV-25, "Sound Is Not Heard from Rear Door Speaker (Base System)" or AV-28, "Sound Is Not Heard from Rear Door Speaker (Premium System)". • Tweeter (mid level and premium system) AV-27, "Sound Is Not Heard from Front Door Speaker or Tweeter (Premium System)" or AV-28, "Sound Is Not Heard from Rear Door Speaker (Premium System)". • Audio unit. Refer to AV-30, "Removal and Installation".
No sound can be heard from radio or noise is heard.	<ul style="list-style-type: none"> • Antenna feeder. Refer to AV-34, "Location of Antenna". • Antenna. Refer to AV-34, "Location of Antenna". • Audio unit. Refer to AV-30, "Removal and Installation".
Buzz/rattle sound from speaker.	The majority of buzz/rattle sounds are not indicative of an issue with the speaker, usually something nearby the speaker is causing the buzz/rattle. Refer to "SQUEAK AND RATTLE TROUBLE DIAGNOSIS" in appropriate interior trim section.

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:000000007329197

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

Occurrence condition	Possible cause
Occurs only when engine is ON.	A continuous growling noise occurs. The speed of the noise varies with changes in the engine speed. Ignition components
	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
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. <ul style="list-style-type: none"> • Motor case ground • Motor
The noise occurs constantly, not just under certain conditions.	<ul style="list-style-type: none"> • Rear defogger coil malfunction • Open circuit in printed heater
A cracking or snapping sound occurs while the vehicle is being driven, especially when it is vibrating excessively.	<ul style="list-style-type: none"> • Ground wire of body parts. • Ground due to improper part installation • Wiring connections or a short circuit

Power Supply Circuit Inspection

1. CHECK FUSE

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

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

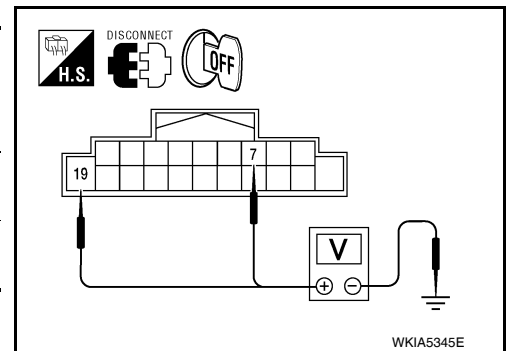
OK or NG

- OK >> GO TO 2.
 NG >> If fuse is blown, be sure to eliminate cause of blown fuse before installing new fuse. Refer to [PG-4. "Schematic"](#) .

2. AUDIO UNIT POWER SUPPLY CIRCUIT CHECK

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

Unit	Terminal No.		OFF	ACC	ON	
	(+)					
	Connector	Terminal				(-)
Audio unit	M43	19	Ground	Battery voltage	Battery voltage	Battery voltage
		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 terminals.
 • Repair harness or connector.

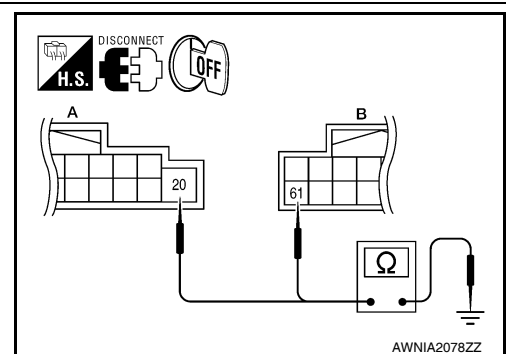
3. GROUND CIRCUIT CHECK

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 connector housings for disconnected or loose terminals.
 • Repair harness or connector.



Steering Switch Check (With Bluetooth)

1. CHECK HARNESS

1. 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.

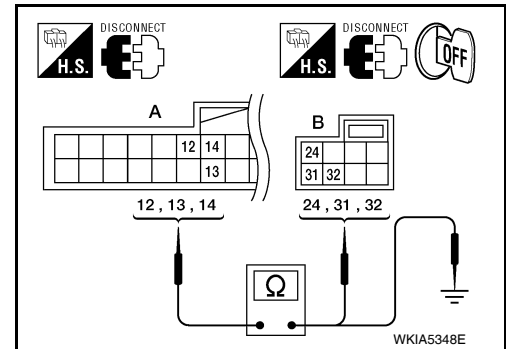
AUDIO

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

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

4. Check continuity between Bluetooth control unit and ground.



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

OK or NG

- OK >> GO TO 2.
- NG >> Repair harness.

2. CHECK HARNESS

1. Disconnect audio unit connector.
2. 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.

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

OK or NG

- OK >> GO TO 3.
- NG >> Repair harness.

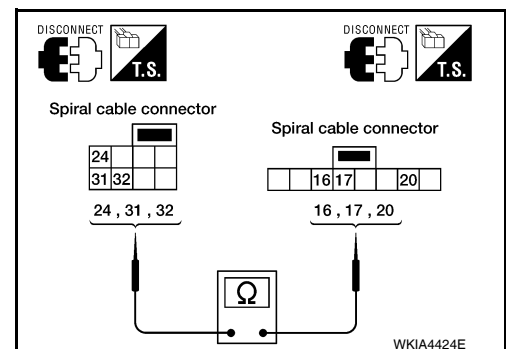
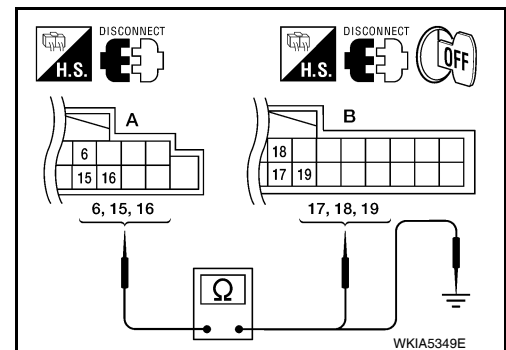
3. SPIRAL CABLE CHECK

1. 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 [SRS-37, "Removal and Installation"](#).



4. CHECK STEERING SWITCH RESISTANCE

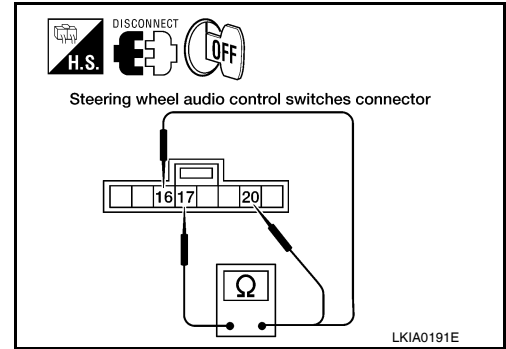
Check resistance between spiral cable connector M31 terminals.

AUDIO

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Terminal	Signal name	Condition	Resistance (Ω) (Approx.)	
16	17	Seek (down)	Depress Seek down switch.	165
		Phone/Send	Depress Phone/Send switch.	0
		Volume (down)	Depress VOL down switch.	487
20	17	Seek (up)	Depress Seek up switch.	165
		Phone/End	Depress Phone/End switch.	0
		Volume (up)	Depress VOL up switch.	487



OK or NG

OK >> Inspection End.

NG >> Replace steering switch. Refer to [AV-30. "Removal and Installation"](#).

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

INFOID:000000007329200

1. CONNECTOR CHECK

Check the audio unit and speaker connectors for the following:

- Proper connection
- Damage
- Disconnected or loose terminals

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair the terminal and connector.

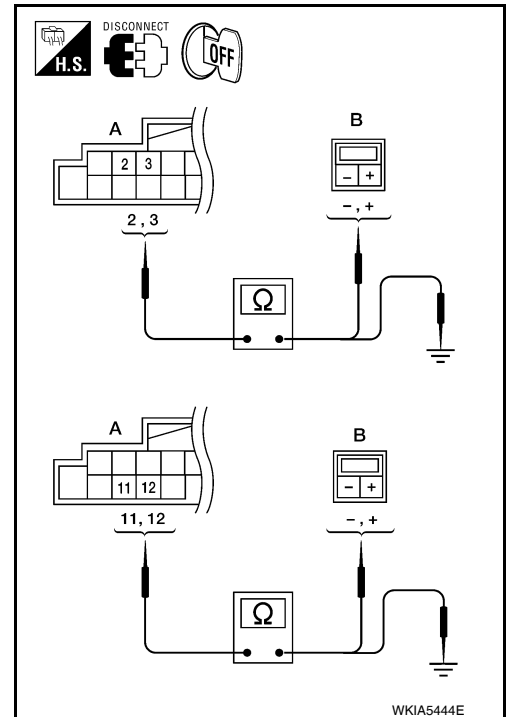
2. HARNESS CHECK

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.

Terminals				Continuity
A		B		
Connector	Terminal	Connector	Terminal	
M43	2	D12	+	Yes
	3		-	
	11	D112	+	
	12		-	

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

Terminals			Continuity
Audio unit		-	
Connector	Terminal		
M43	2	Ground	No
	3		
	11		
	12		



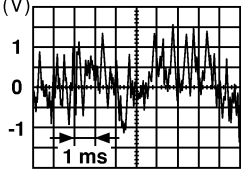
OK or NG

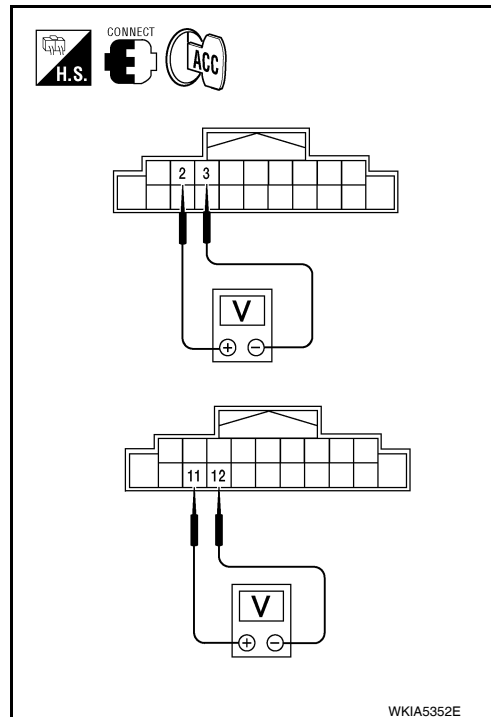
OK >> GO TO 3.

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

3. FRONT SPEAKER SIGNAL CHECK

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

Terminals				Condi- tion	Reference signal
(+)		(-)			
Con- nec- tor	Termi- nal	Con- nec- tor	Termi- nal		
M43	2	M43	3	Receive audio signal	 <p style="text-align: right; font-size: small;">SKIA0177E</p>
	11		12		



OK or NG

- OK >> Replace front door speaker. Refer to [AV-30, "Removal and Installation"](#).
- NG >> Replace audio unit. Refer to [AV-30, "Removal and Installation"](#).

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

INFOID:000000007329201

1. CONNECTOR CHECK

Check the audio unit and speaker connectors for the following:

- Proper connection
- Damage
- Disconnected or loose terminals

Is the inspection result normal?

- YES >> GO TO 2
- NO >> Repair the terminal and connector.

2. HARNESS CHECK

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

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AUDIO

< SERVICE INFORMATION >

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

Terminals				Continuity
A		B		
Connector	Terminal	Connector	Terminal	
M43	5	D207	-	Yes
	4		+	
	14	D307	-	
	13		+	

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

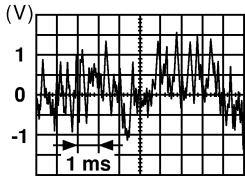
Terminals				Continuity
Audio unit		-		
Connector	Terminal			
M43	5	Ground		No
	4			
	14			
	13			

OK or NG

- OK >> GO TO 3.
 NG >> • Check connector housings for disconnected or loose terminals.
 • Repair harness or connector.

3. REAR SPEAKER SIGNAL CHECK

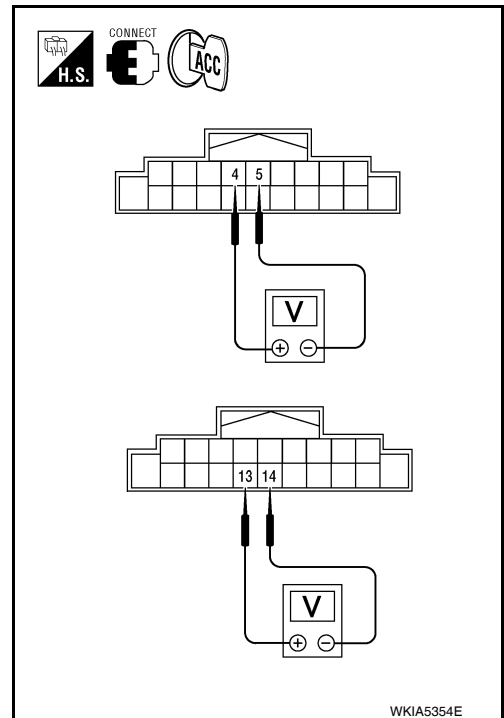
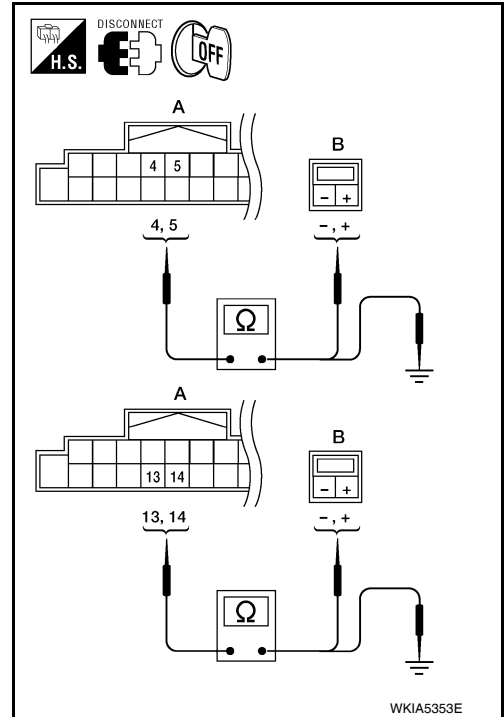
- Connect audio unit connector and rear speaker connector.
- Turn ignition switch to ACC.
- Push "POWER" switch.
- Check the signal between audio unit harness connector terminals with CONSULT or oscilloscope.

Terminals				Condition	Reference signal
(+) (+)		(-) (-)			
Con-connector	Terminal	Con-connector	Terminal		
M43	4	M43	5	Receive audio signal	
	13		14		

OK or NG

- OK >> Replace rear door speaker. Refer to [AV-30. "Removal and Installation"](#) .
 NG >> Replace audio unit. Refer to [AV-30. "Removal and Installation"](#) .

[AUDIO WITHOUT NAVIGATION]



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

INFOID:000000007329202

1. CONNECTOR CHECK

Check the audio unit and speaker connectors for the following:

- Proper connection
- Damage
- Disconnected or loose terminals

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair the terminal and connector.

2. 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.

Terminals				Continuity
Audio unit.		Speaker or tweeter		
Connector	Terminal	Connector	Terminal	
A:M43	2	B:M46	+	Yes
	3		-	
	11	B:M47	+	
	12		-	
	2	B:D12	+	
	3		-	
	11	B:D112	+	
	12		-	

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

Terminals			Continuity
Audio unit		—	
Connector	Terminal	Ground	
M43	2	Ground	No
	3		
	11		
	12		

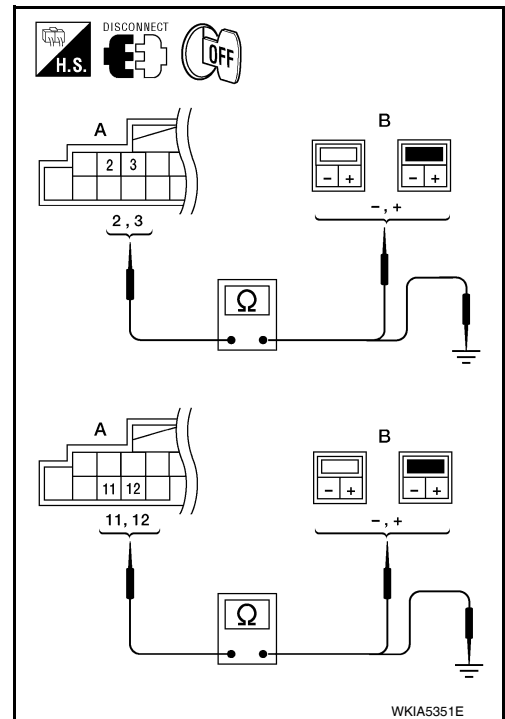
OK or NG

OK >> GO TO 3.

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

3. 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.

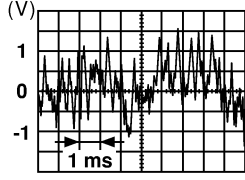


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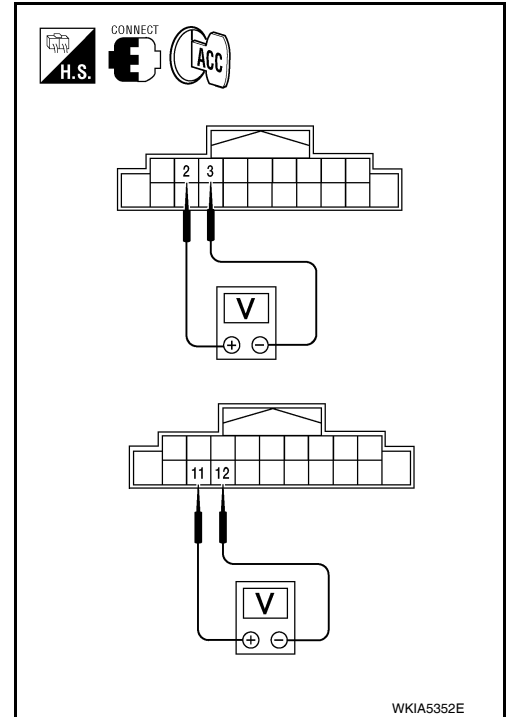
[AUDIO WITHOUT NAVIGATION]

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

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

OK or NG

- OK >> Replace front speaker. Refer to [AV-30, "Removal and Installation"](#).
- NG >> Replace audio unit. Refer to [AV-30, "Removal and Installation"](#).



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

INFOID:000000007329203

1.CONNECTOR CHECK

Check the audio unit and speaker connectors for the following:

- Proper connection
- Damage
- Disconnected or loose terminals

Is the inspection result normal?

- YES >> GO TO 2
- NO >> Repair the terminal and connector.

2.HARNES CHECK

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

AUDIO

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

Terminals				Continuity
Audio unit		Speaker		
Connector	Terminal	Connector	Terminal	
M43	4	D207	+	Yes
	5		-	
	13	D307	+	
	14		-	

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

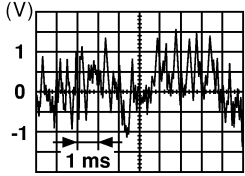
Terminals				Continuity
Audio unit		—		
Connector	Terminal			
M43	4	Ground		No
	5			
	13			
	14			

OK or NG

- OK >> GO TO 3.
 NG >> • Check connector housings for disconnected or loose terminals.
 • Repair harness or connector.

3. REAR SPEAKER SIGNAL CHECK

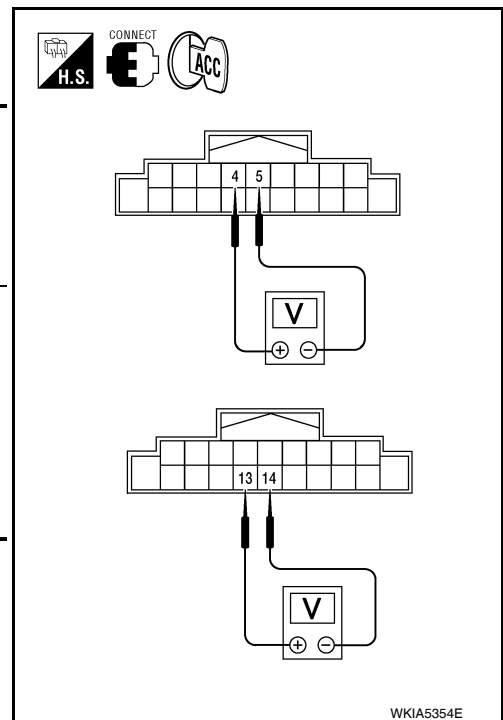
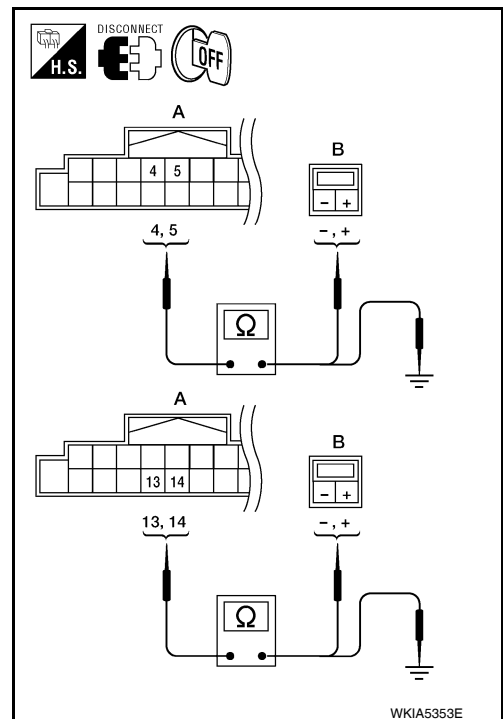
- Connect audio unit connector and rear door speaker connector.
- Turn ignition switch to ACC.
- Push "POWER" switch.
- Check the signal between audio unit harness connector terminals with CONSULT or oscilloscope.

Terminals				Condition	Reference signal
(+) (+)		(-) (-)			
Con- nec- tor	Termi- nal	Con- nec- tor	Termi- nal		
M43	5	M43	4	Re- ceive audio signal	
	14		13		

OK or NG

- OK >> Replace speaker. Refer to [AV-30. "Removal and Installation"](#).
 NG >> Replace audio unit. Refer to [AV-30. "Removal and Installation"](#).

[AUDIO WITHOUT NAVIGATION]

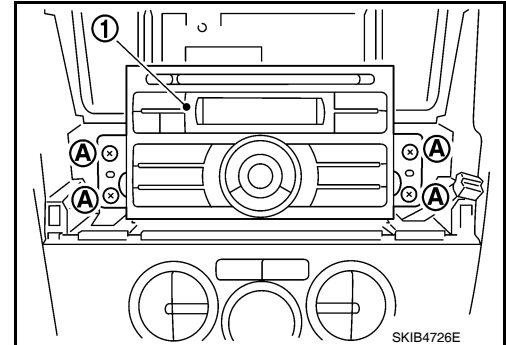


Removal and Installation

AUDIO UNIT

Removal

1. Remove cluster lid C. Refer to [IP-12. "Removal and Installation"](#).
2. Remove the audio unit screws (A), disconnect the connectors and remove the audio unit (1).
3. Remove the audio unit bracket.



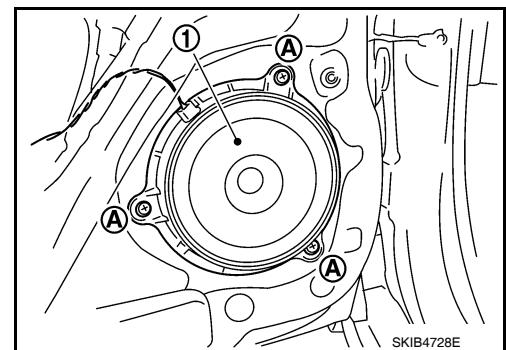
Installation

Installation is in the reverse order of removal.

FRONT DOOR SPEAKER

Removal

1. Remove the front door finisher. Refer to [EI-30. "Removal and Installation"](#).
2. Remove the front door speaker screws (A), disconnect the connector and remove the front door speaker (1).



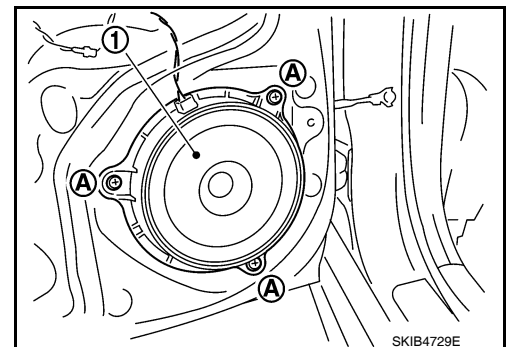
Installation

Installation is in the reverse order of removal.

REAR DOOR SPEAKER

Removal

1. Remove the rear door finisher. Refer to [EI-30. "Removal and Installation"](#).
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

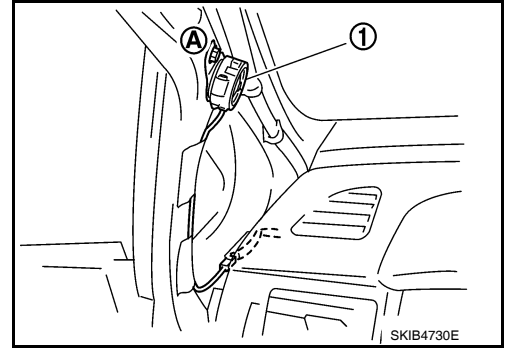
Removal

AUDIO

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

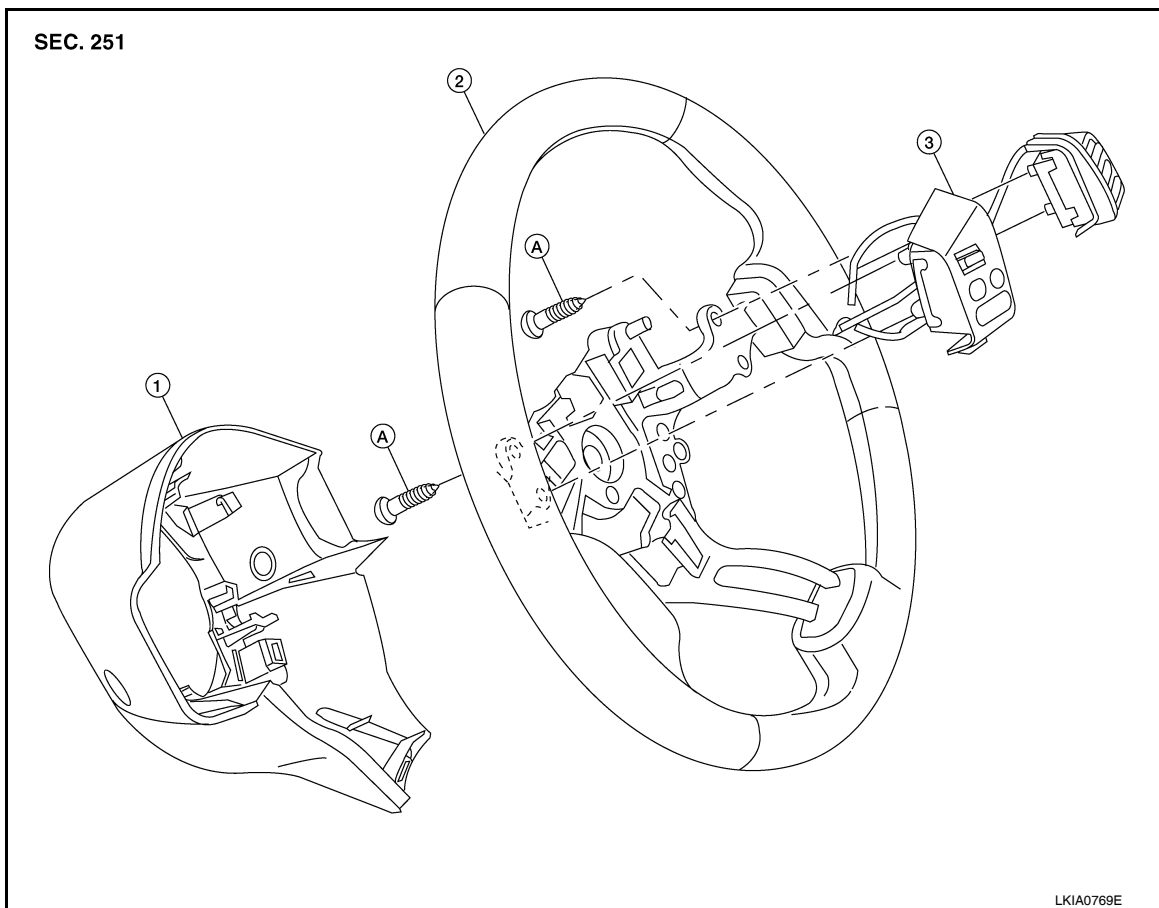
1. Remove the front pillar garnish. Refer to [EI-35. "Component"](#).
2. Remove the tweeter screw (A), disconnect the connector and remove the tweeter (1).



Installation

Installation is in the reverse order of removal.

STEERING WHEEL AUDIO CONTROL SWITCHES



1. Steering wheel finisher cover
 2. Steering wheel
 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.

< SERVICE INFORMATION >

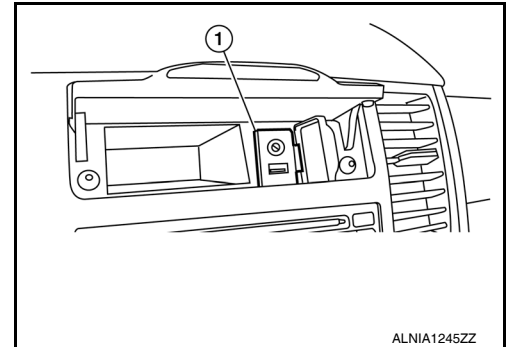
IPOD® CONNECTOR

Removal and Installation

INFOID:000000007329205

REMOVAL

1. Remove the cluster lid C. Refer to [IP-12. "Removal and Installation"](#).
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.

IPOD® ADAPTER

Removal and Installation

INFOID:000000007329206

REMOVAL

1. Disconnect the battery negative terminal.
2. Remove the audio unit. Refer to [AV-30, "Removal and Installation"](#).
3. Disconnect the iPod® adapter connector, then remove the iPod® adapter.

INSTALLATION

Installation is in the reverse order of removal.

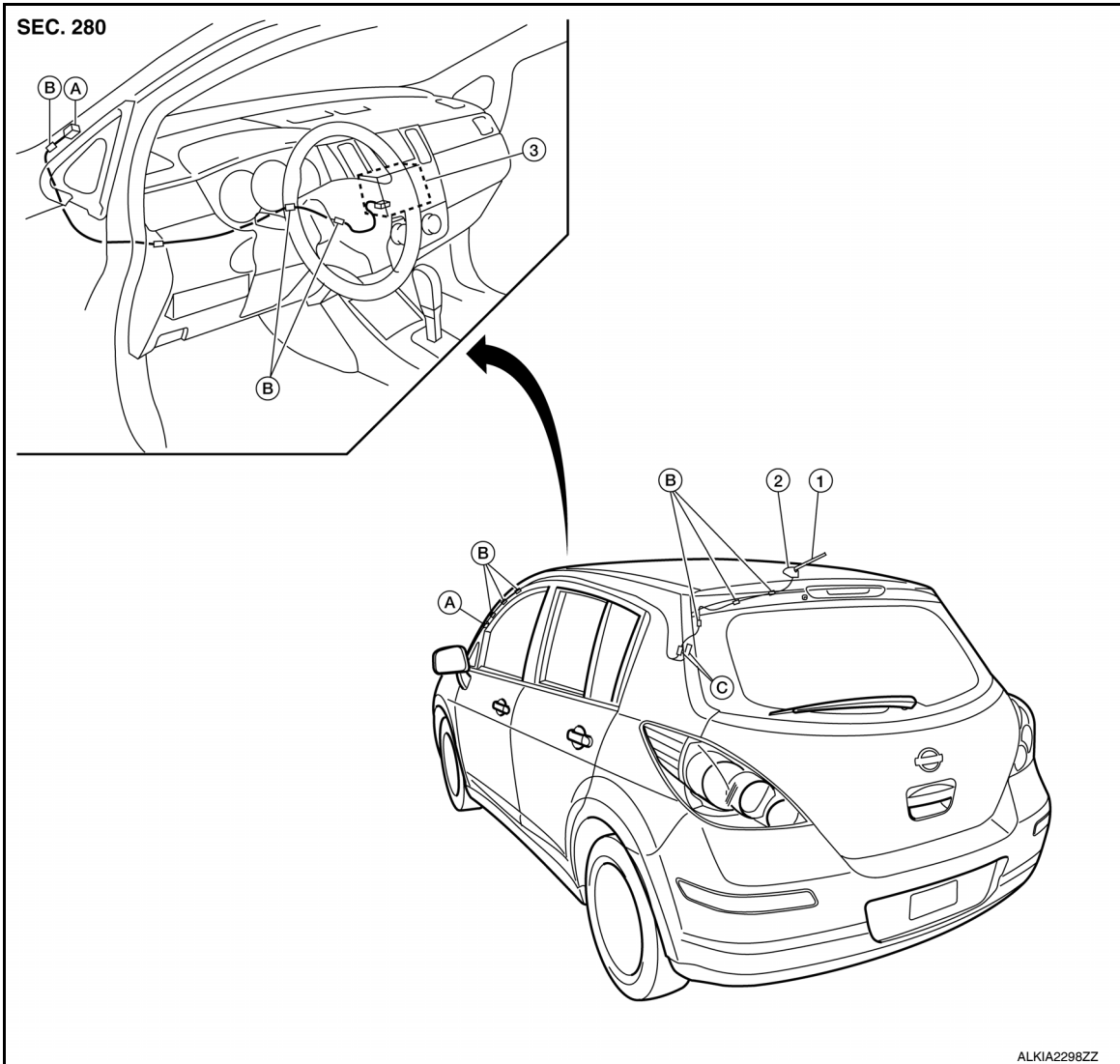
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P



AUDIO ANTENNA

Location of Antenna

INFOID:000000007329207



- | | | |
|------------------------------------|----------------------|------------------------------------|
| 1. Roof antenna | 2. Roof antenna base | 3. Audio unit |
| A. Audio antenna harness connector | B. Harness clips | C. Roof antenna harness connectors |

Removal and Installation of Roof Antenna

INFOID:000000007329208

REMOVAL

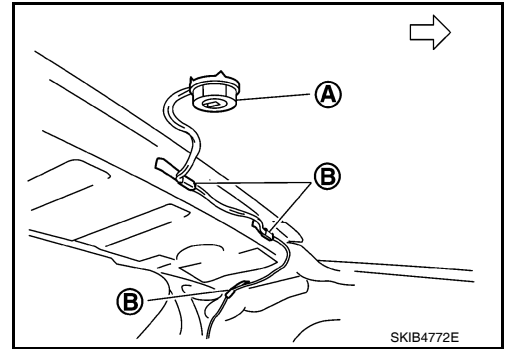
1. Remove the luggage side upper finisher (LH). Refer to [EI-44, "Removal and Installation"](#).
2. Remove rear assist grip (LH). Refer to [EI-41, "Component"](#).
3. Remove three clips of headlining (rear side). Pull down headlining (rear side) and obtain space for work between vehicle and headlining.
4. Disconnect the roof antenna harness connectors.
5. Remove nut (A) and clips (B).

AUDIO ANTENNA

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

- : Vehicle front



6. Remove the roof antenna.

INSTALLATION

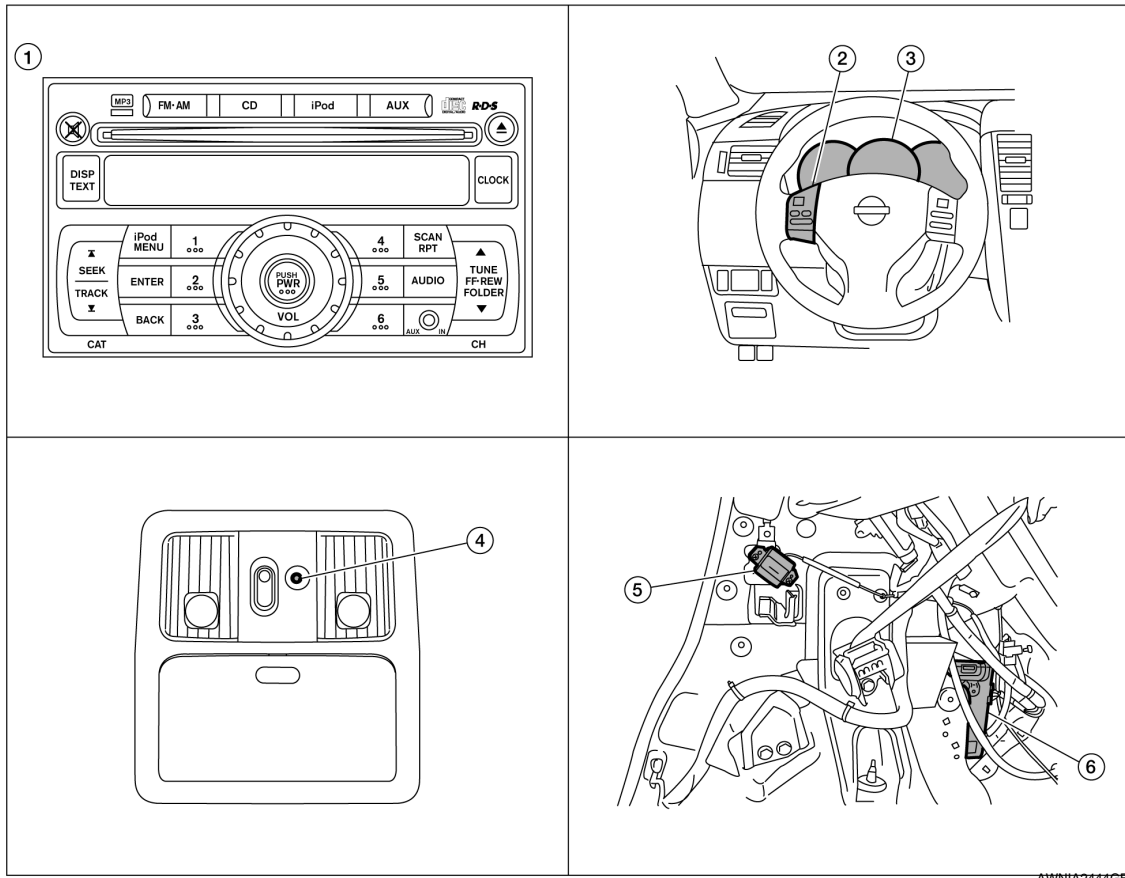
Installation is in the reverse order of removal.

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TELEPHONE

Component Parts and Harness Connector Location

INFOID:000000007329209



AWNIA2444GB

- | | | |
|-----------------------------|--|---|
| 1. Audio unit M43, M44 | 2. Steering wheel audio control switches | 3. Combination meter M24 |
| 4. Bluetooth microphone R15 | 5. Bluetooth antenna | 6. Bluetooth control unit B121, B122 [view with luggage side lower finisher (RH) removed] |

System Description

INFOID:000000007329210

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.

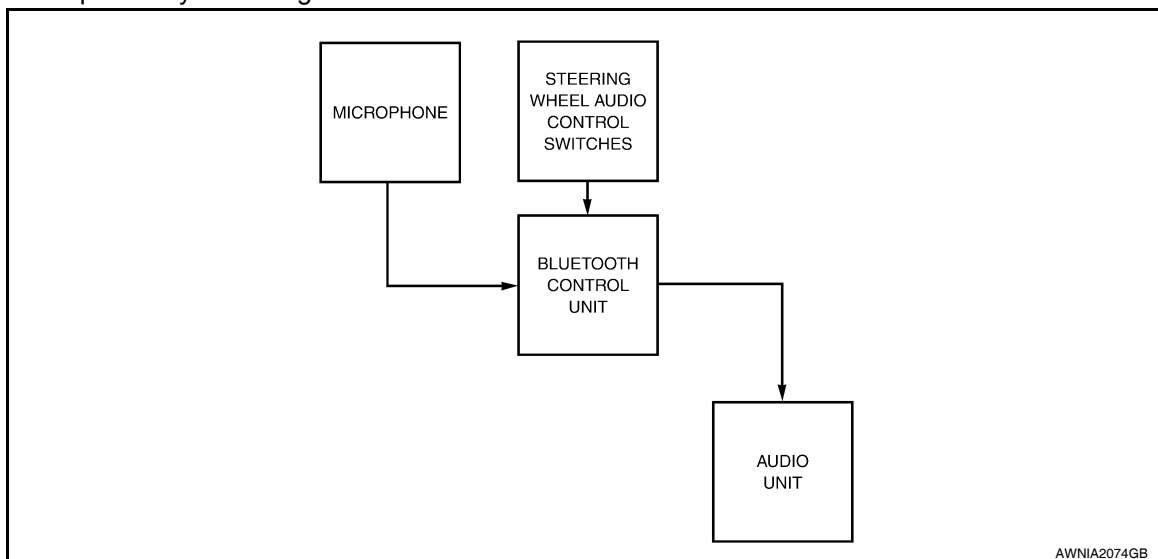
Bluetooth telephone system allows users who have a Bluetooth cellular telephone to make a wireless connection between their cellular telephone and the Bluetooth control unit. Hands-free cellular telephone calls can be sent and received. Personal memos can be created using the NISSAN Voice Recognition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

TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

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-36, "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 [AV-36, "Component Parts and Harness Connector Location"](#).

Audio Unit

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

TELEPHONE

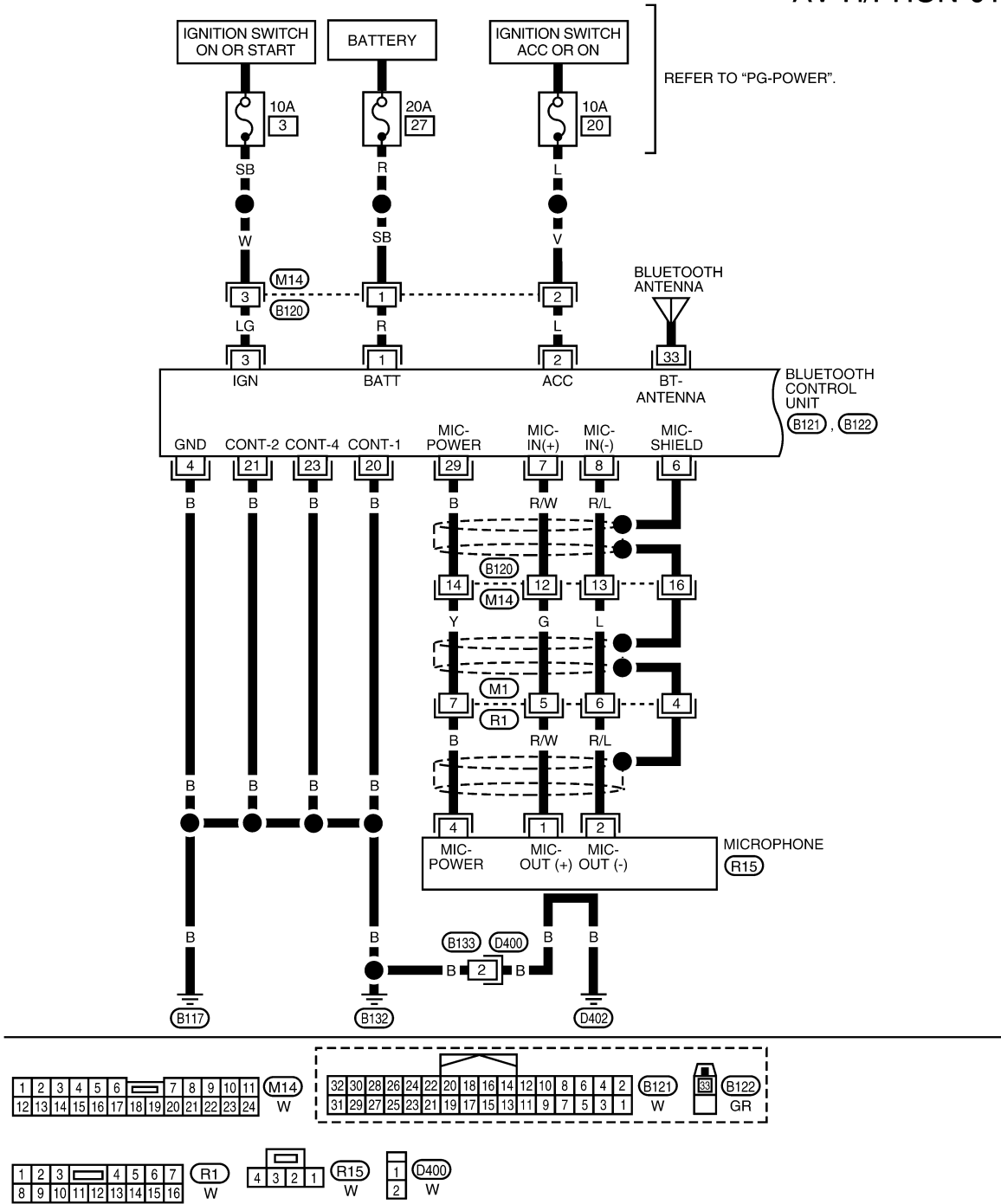
< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Wiring Diagram - H/PHON -

INFOID:000000007329211

AV-H/PHON-01

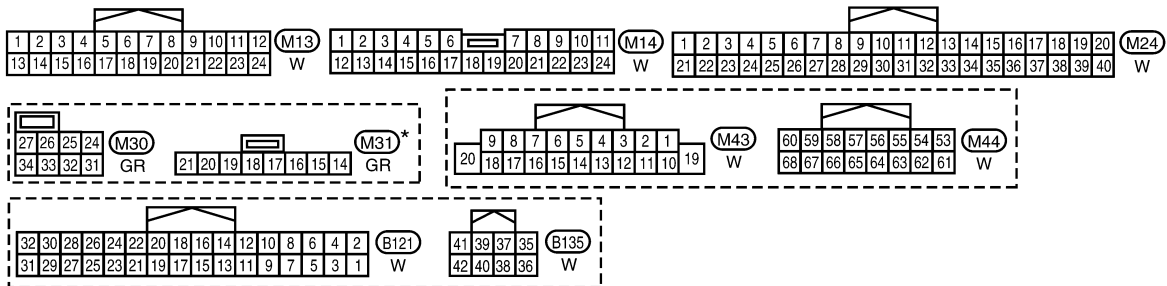
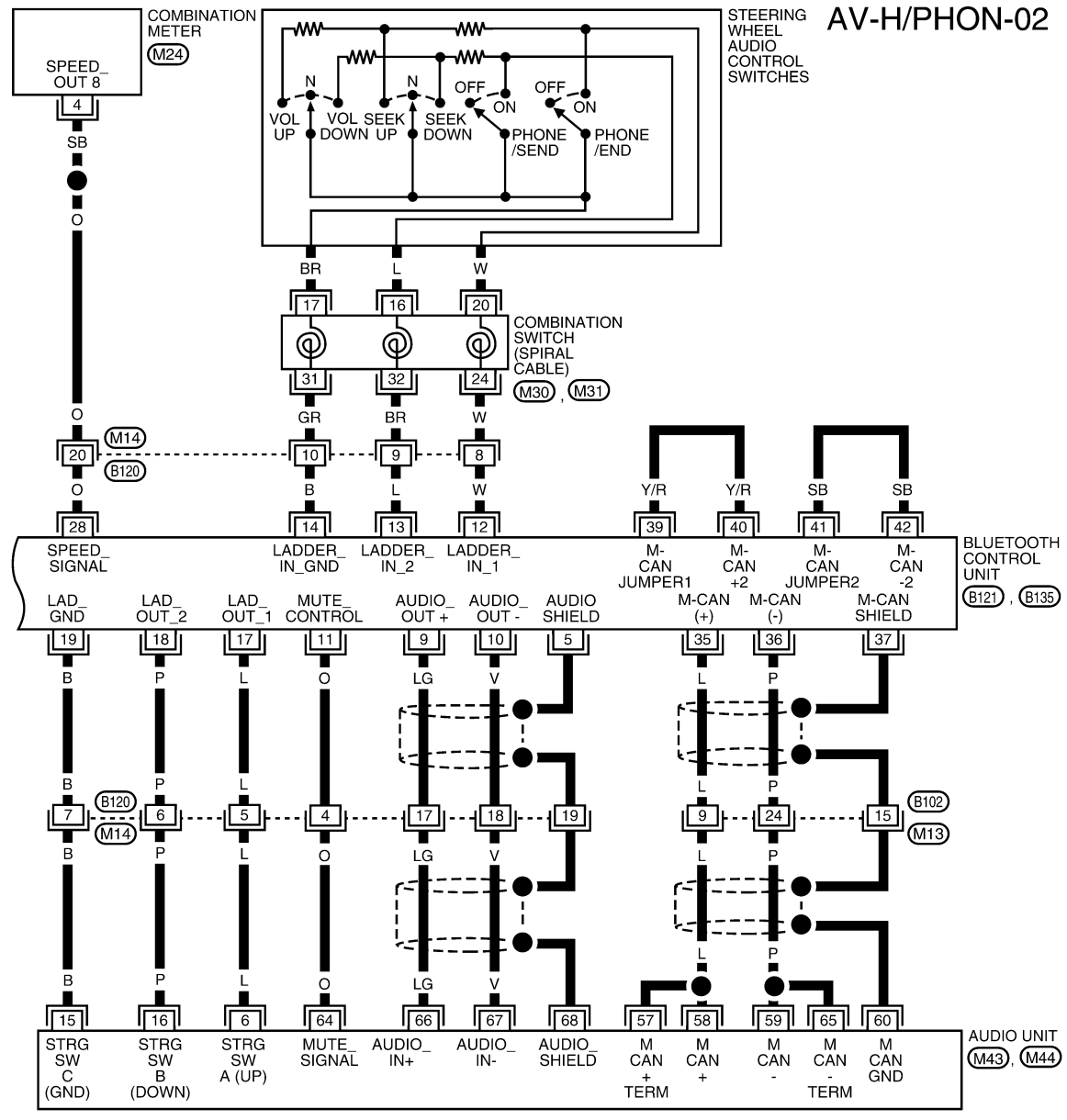


AANWA0452GB

TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]



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

AANWA0478GB

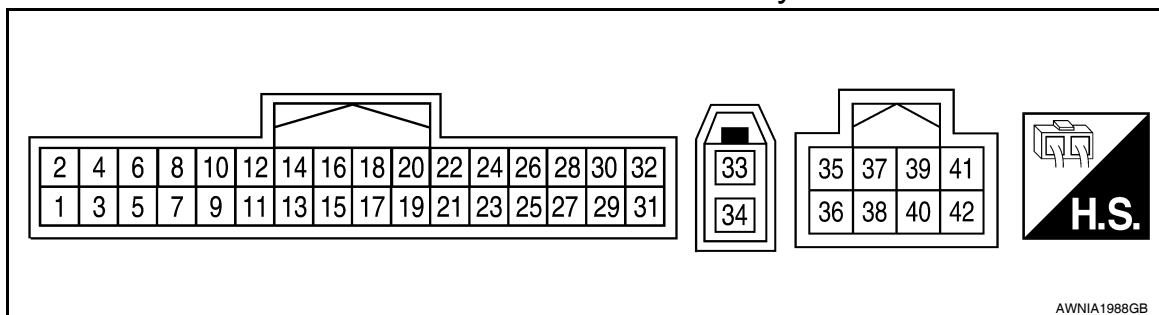
TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Bluetooth Control Unit Harness Connector Terminal Layout

INFOID:000000007329212



Terminal and Reference Value for Bluetooth Control Unit

INFOID:000000007329213

Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symptom
+	-			Ignition switch	Operation		
1 (R)	Ground	Battery power	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	-	-	-	-	-
6	-	Shield	-	-	-	-	-
7 (R/W)	8 (R/L)	Mic-in signal	Input	-	-	-	Bluetooth Microphone inoperative.
9 (LG)	10 (V)	Audio out	Output	ACC/ ON	Bluetooth control unit sends audio signal	 SKIB3609E	Audio can not be heard.
11(O)	-	Mute	Output	-	-	5V	Mute inoperative.
12 (W)	Ground	Remote control switch 1	Input	ACC/ ON	Press PHONE/ END switch	0V	Steering wheel audio control switches do not function.
					Press SEEK UP switch	0.75V	
					Press VOL UP switch	2V	
					Except for above	5V	
13 (L)	Ground	Remote control switch 2	Input	ACC/ ON	Press PHONE/ SEND switch	0V	Steering wheel audio control switches do not function.
					Press SEEK DOWN switch	0.75V	
					Press VOL DOWN switch	2V	
					Except for above	5V	

TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symptom
+	-			Ignition switch	Operation		
14 (B)	-	Remote control ground	Input	-	-	-	Steering wheel audio control switches do not function.
17 (L)	Ground	Audio unit switch 1	Output	ACC/ ON	Press PHONE/ END switch	0V	Steering wheel audio controls do not function.
					Press SEEK UP switch	0.75V	
					Press VOL UP switch	2V	
					Except for above	5V	
18 (P)	Ground	Audio unit switch 2	Output	ACC/ ON	Press PHONE/ SEND switch	0V	Steering wheel audio controls do not function.
					Press SEEK DOWN switch	0.75V	
					Press VOL DOWN switch	2V	
					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)	<p style="text-align: right; font-size: small;">PKIC0643E</p>	Speed sensitive volume is inoperative.
29 (B)	Ground	Bluetooth Microphone power	Output	-	-	5V	Bluetooth Microphone inoperative.
33	-	Bluetooth antenna signal	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	-	-	-	-	-

Bluetooth Control Unit Self-Diagnosis Function

INFOID:000000007329214

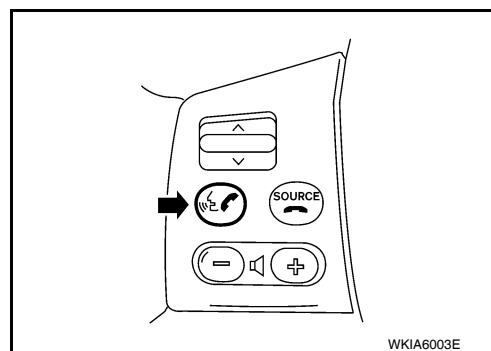
The Bluetooth control unit has two diagnostic checks. The first diagnostic check is performed automatically every ignition cycle during control unit initialization. The second diagnostic check is performed by the technician using the steering wheel audio control switches prior to trouble diagnosis.

BLUETOOTH CONTROL UNIT INITIALIZATION CHECKS

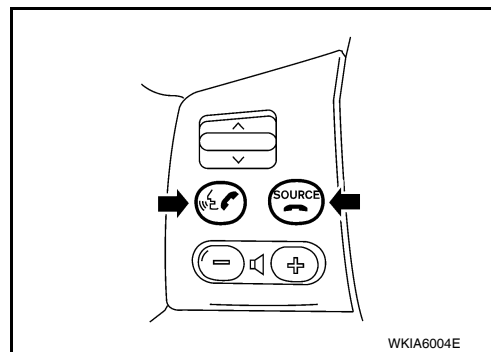
- Internal control unit failure
- Bluetooth antenna connection open or shorted
- Steering wheel audio control switches (PHONE/SEND, PHONE/END) stuck closed
- Vehicle speed pulse count
- Bluetooth Microphone connection test (with playback to operator)
- Bluetooth inquiry check

SELF-DIAGNOSIS MODE

1. Turn ignition switch to ACC or ON.
2. Wait for the Bluetooth system to complete initialization and the Bluetooth ON indicator to stop flashing. This may take up to 10 seconds.
3. 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.



4. While the prompt is playing, momentarily press both the steering wheel audio control switches PHONE/SEND and PHONE/END buttons simultaneously. The Bluetooth system will sound a 5 second beep.
5. While the beep is sounding, momentarily press both the steering wheel audio control switches PHONE/SEND and PHONE/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-42. "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-42. "Workflow"](#).
9. Self-diagnosis mode is complete when the voice prompt says "All diagnostic functions completed". A short beep is heard.



Workflow

INFOID:000000007329215

Flashing Pattern (Bluetooth ON indicator)	Failure Message	Action
1	"Internal failure"	Replace Bluetooth control unit. Refer to AV-47. "Removal and Installation" .
2	"Bluetooth antenna open"	1. Inspect harness connection. 2. Replace Bluetooth antenna. Refer to AV-47. "Removal and Installation" .
3	"Bluetooth antenna shorted"	

TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

Flashing Pattern (Bluetooth ON indicator)	Failure Message	Action
4	"Phone/Send for the Hands Free Phone System is stuck"	Check steering wheel audio control switches. Refer to AV-22, "Steering Switch Check (With Bluetooth)" .
5	"Phone/End for the Hands Free Phone System is stuck"	
-	"Bluetooth Microphone test" (failed interactive test)	<ol style="list-style-type: none"> Inspect harness between Bluetooth control unit and Bluetooth microphone. Replace Bluetooth microphone. Refer to AV-47, "Removal and Installation".

Power Supply and Ground Circuit Inspection for Bluetooth Control Unit

INFOID:000000007329216

1.CHECK FUSES

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

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

OK or NG

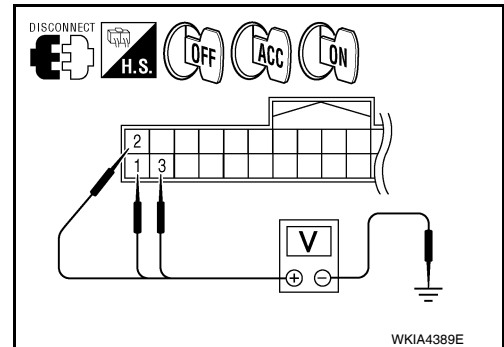
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to [PG-4, "Schematic"](#).

2.CHECK POWER SUPPLY CIRCUIT

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

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

- Turn ignition switch OFF.

TELEPHONE

< SERVICE INFORMATION >

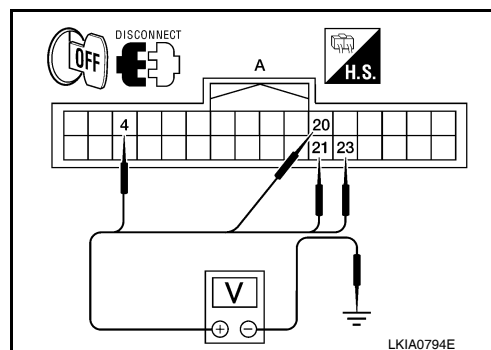
- Check continuity between the following Bluetooth control unit terminals and ground.

Terminals			Continuity
Connector	Terminal	—	
B121	4	Ground	Yes
	20		
	21		
	23		

OK or NG

- OK >> Inspection End.
- NG >> Repair or replace harness.

[AUDIO WITHOUT NAVIGATION]



Steering Wheel Audio Control Switch Does Not Operate

INFOID:000000007329217

1. CHECK STEERING WHEEL AUDIO CONTROL SWITCH RESISTANCE

- Turn ignition switch OFF.
- Disconnect steering wheel audio control switch connector.
- 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-30, "Removal and Installation"](#).

2. CHECK AUDIO UNIT

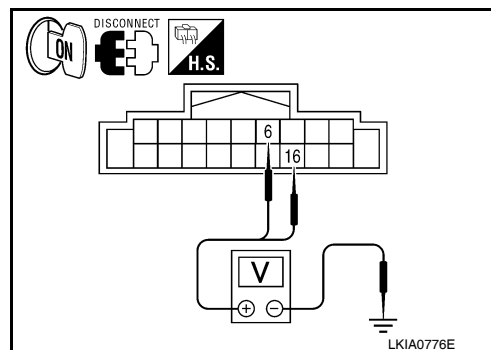
- Connect Bluetooth control unit connector.
- Turn ignition switch ON.
- Check voltage between audio unit harness connector M43 terminals 6, 16 and ground.

6 - Ground : Approx. 5 V

16 - Ground : Approx. 5 V

OK or NG

- OK >> Replace audio unit. Refer to [AV-30, "Removal and Installation"](#).
- NG >> GO TO 3.



3. CHECK BLUETOOTH CONTROL UNIT

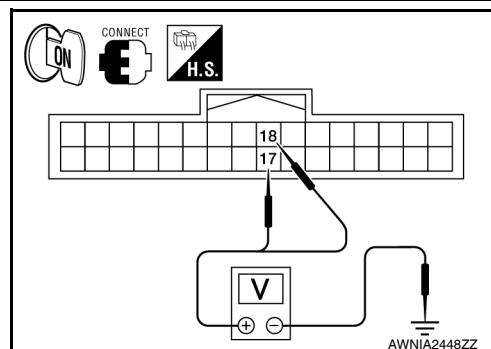
- Check voltage between Bluetooth control unit harness connector B121 terminals 17, 18 and ground.

17 - Ground : Approx. 5 V

18 - Ground : Approx. 5 V

OK or NG

- OK >> Repair or replace harness.
- NG >> Replace Bluetooth control unit. [AV-47, "Removal and Installation"](#).



Voice Activated Control Function Does Not Operate

INFOID:000000007329218

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-

TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITHOUT NAVIGATION]

TROL SWITCH

1. CHECK HARNESS BETWEEN BLUETOOTH CONTROL UNIT AND BLUETOOTH MICROPHONE

1. Turn ignition switch OFF.
2. 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).

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

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

Terminals			Continuity
Connector	Terminal	—	
A: B121	7	Ground	No
	8		
	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.

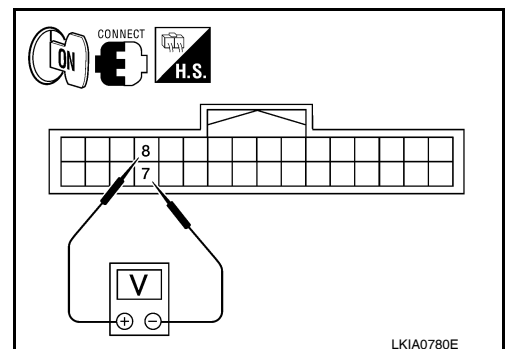
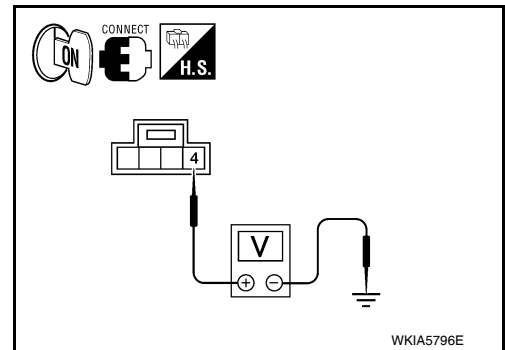
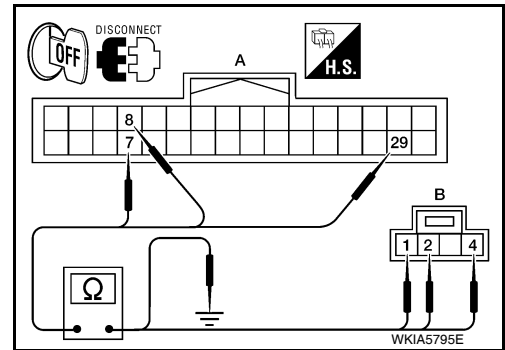
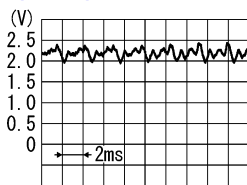
NO >> Replace Bluetooth control unit. Refer to [AV-47. "Removal and Installation"](#).

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-47. "Removal and Installation"](#).

NG >> Replace Bluetooth microphone. Refer to [AV-47. "Removal and Installation"](#).

TELEPHONE

[AUDIO WITHOUT NAVIGATION]

< SERVICE INFORMATION >

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 \(With Bluetooth\)"](#).

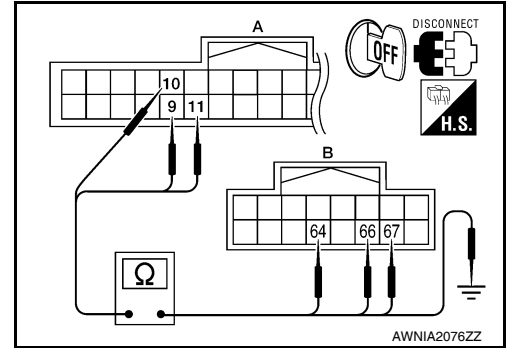
OK or NG

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

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



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

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

OK or NG

- OK >> GO TO 3.
- NG >> Repair harness or connector.

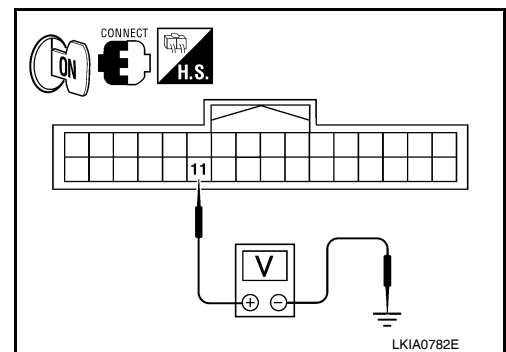
3. CHECK MUTE SIGNAL

1. Connect Bluetooth control unit connector and audio unit connector.
2. Turn ignition switch ON.
3. 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-30. "Removal and Installation"](#).



4. CHECK BLUETOOTH VOICE SIGNAL

TELEPHONE

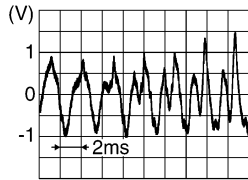
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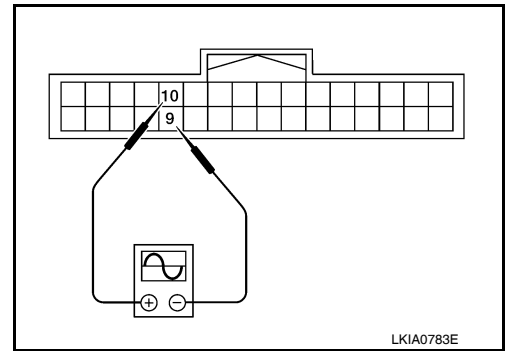
1. Check signal between Bluetooth control unit harness connector B121 terminals 9 and 10.

When giving a voice

9 – 10:



SKIB3609E



LKIA0783E

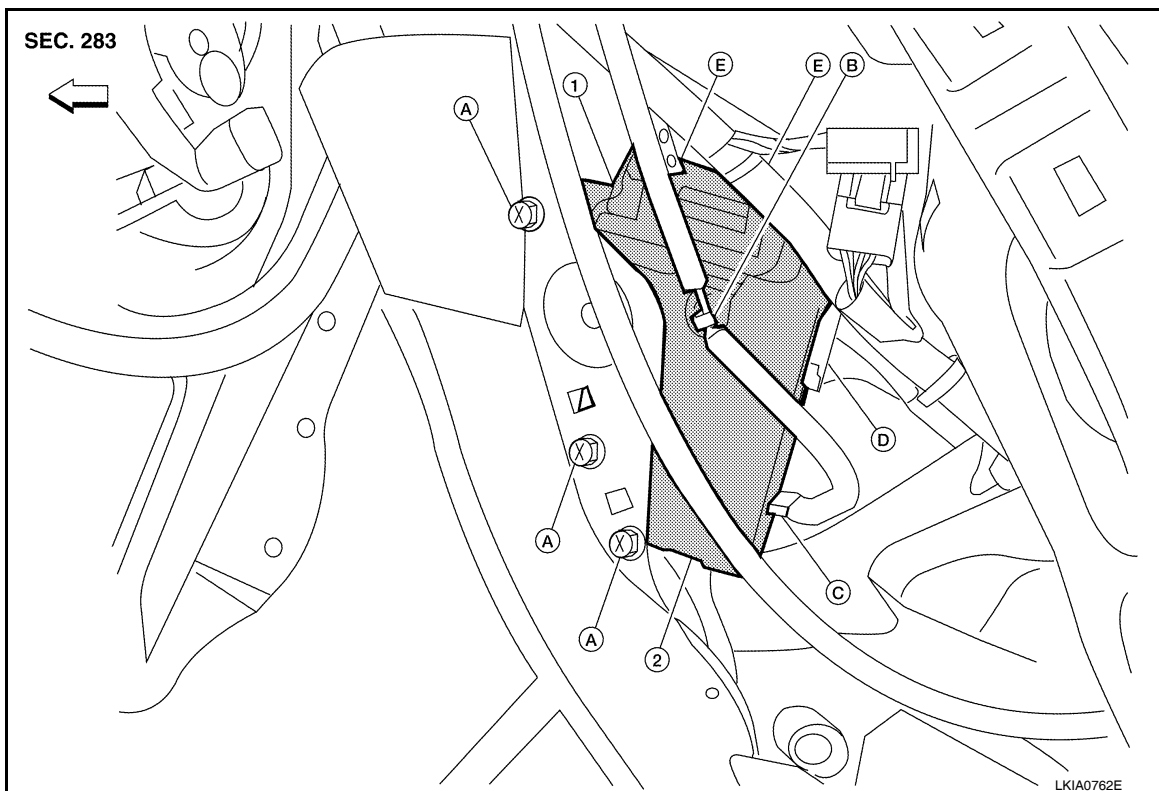
OK or NG

- OK >> Replace audio unit. Refer to [AV-30, "Removal and Installation"](#).
- NG >> Replace Bluetooth control unit. Refer to [AV-47, "Removal and Installation"](#).

Removal and Installation

INFOID:000000007329219

BLUETOOTH CONTROL UNIT



SEC. 283

LKIA0762E

- | | | |
|--|---|-------------------------------------|
| 1. Bluetooth control unit bracket | 2. Bluetooth control unit | A. Blue tooth control unit bolts |
| B. BLuetooth antenna feeder harness clip | C. Bluetooth antenna feeder harness connector | D. Bluetooth control unit connector |
| E. Bluetooth control unit bracket screws | ← Front | |

Removal

1. Remove luggage side lower finish (RH). Refer to [EI-44, "Removal and Installation"](#).
 - Disconnect Bluetooth antenna harness clip.
2. Disconnect the Bluetooth control unit harness connector.
3. Remove the Bluetooth control unit upper and lower bracket bolts.
4. Unhook the Bluetooth control unit upper and lower brackets and remove Bluetooth control unit.
5. Remove Bluetooth control unit bracket screws and remove the upper and lower brackets from unit.

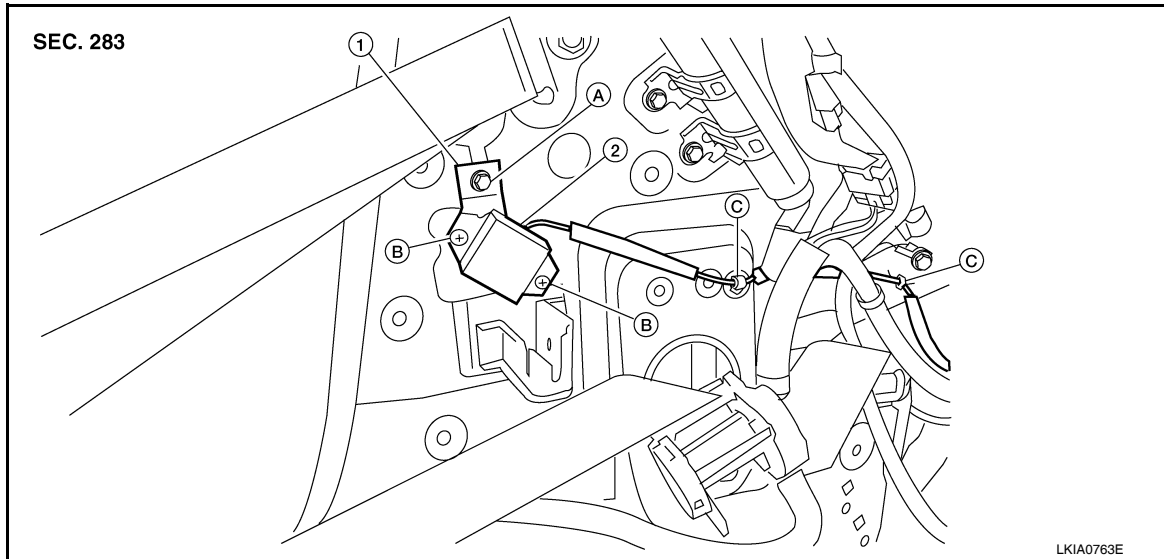
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Installation

Installation is in the reverse order of removal.

BLUETOOTH ANTENNA



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

Removal

1. Remove luggage side lower finisher (RH). Refer to [EI-44. "Removal and Installation"](#).
2. Disconnect the Bluetooth antenna feeder harness clips.
3. Disconnect the Bluetooth antenna feeder harness connector.
4. Remove the Bluetooth antenna bracket bolt(s) and remove antenna.
5. 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-41. "Component"](#).
2. 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 PRE-TENSIONER"

INFOID:000000007329220

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:000000007329221

NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYSTEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT 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

1. 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.
4. Perform the necessary repair operation.

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PRECAUTIONS

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[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.

Precaution for Work

INFOID:000000007666202

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components.
 - Water soluble dirt: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the dirty area.
Then rub with a soft and dry cloth.
 - Oily dirt: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the dirty area.
Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol, or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

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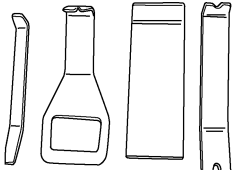
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PREPARATION

Special Service Tool

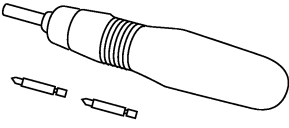
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
— (J-46534) Trim tool set  AWJIA0483ZZ	Removing trim components

Commercial Service Tool

INFOID:000000007329222

Tool name	Description
Power tool  PBIC0191E	Loosening bolts and nuts

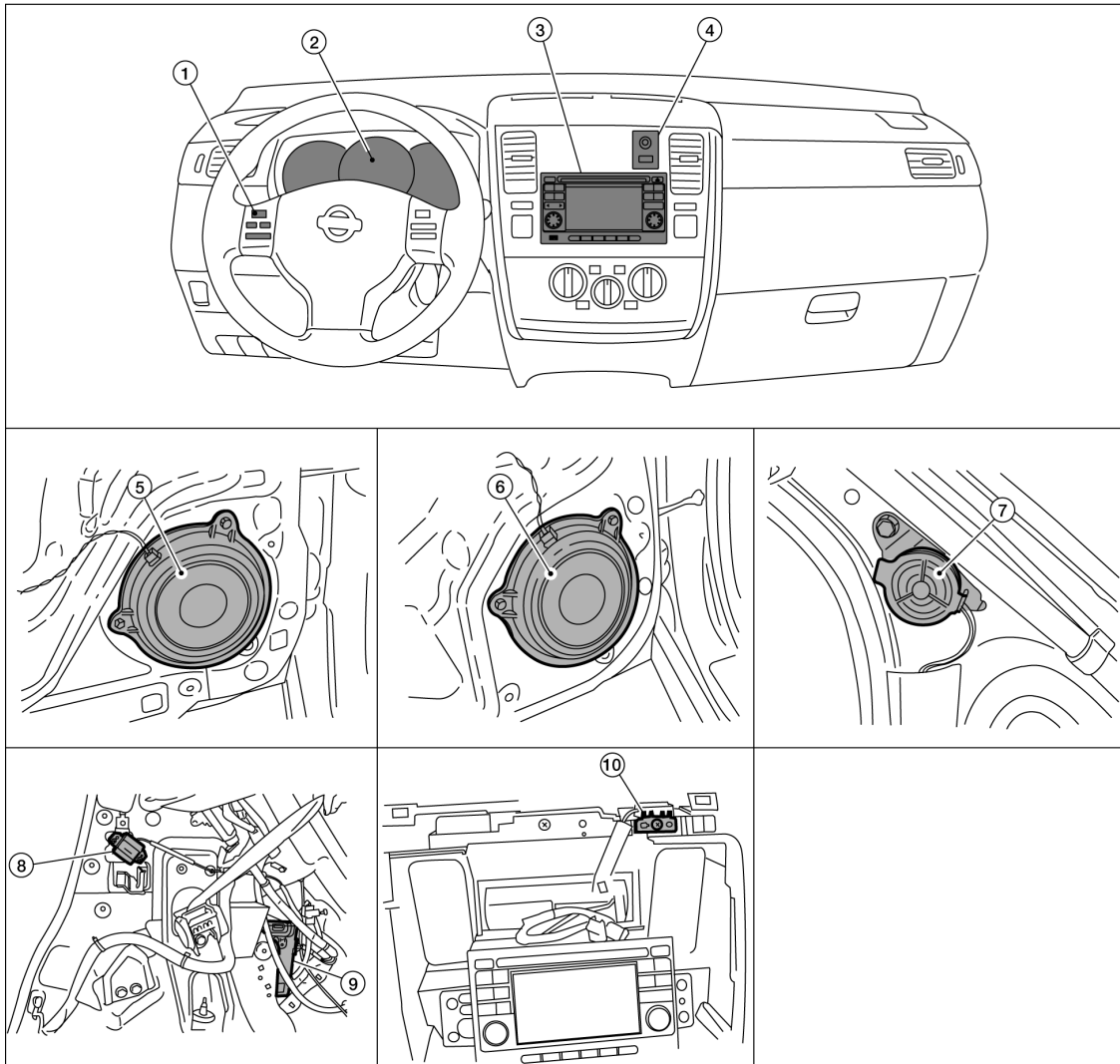
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Component Parts Location

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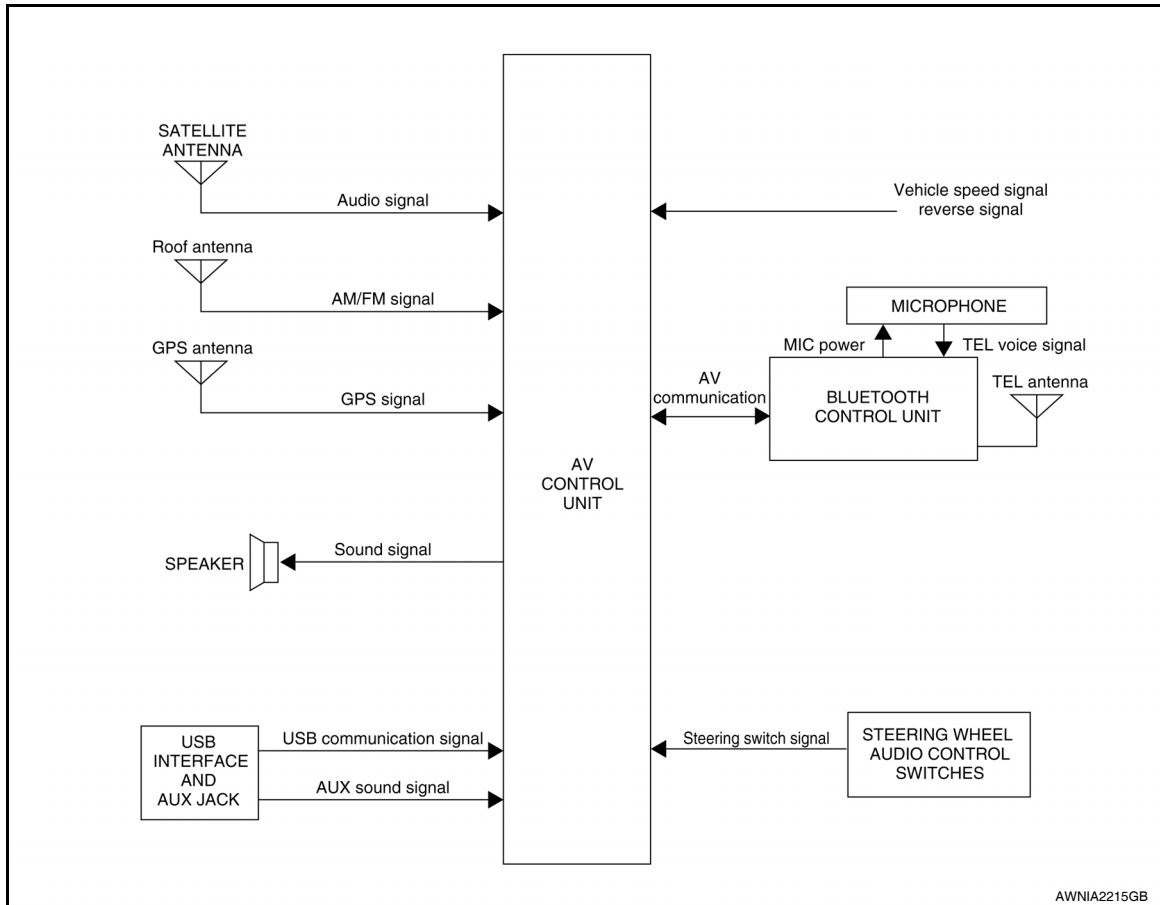


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|--|---|---|
| 1. Steering wheel audio control switches | 2. Combination meter M24 | 3. AV control unit M43, M70, M71, M87, M88, M89 |
| 4. USB interface and AUX jack M72, M76 | 5. Front door speaker LH D12, RH D112 | 6. Rear door speaker LH D207, RH D307 |
| 7. Front tweeter LH M46, RH M47 (view with front pillar garnish removed) | 8. Bluetooth antenna [view with luggage side lower finisher (RH) removed] | 9. Bluetooth control unit B121, B122, B135 |
| 10. GPS antenna (view with cluster lid C removed) | | |

System Description

INFOID:000000007329224



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® 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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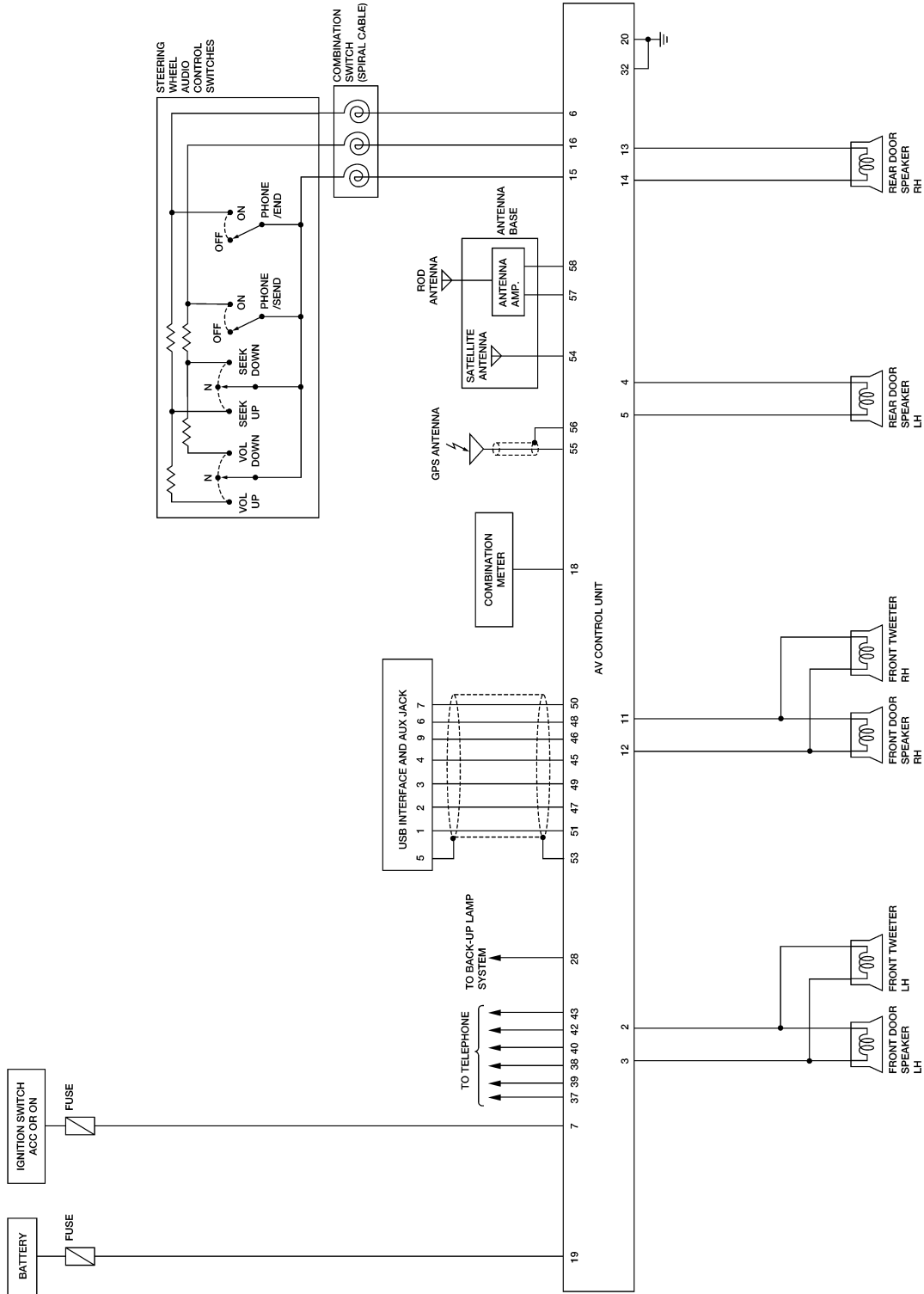
[AUDIO WITH NAVIGATION]

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

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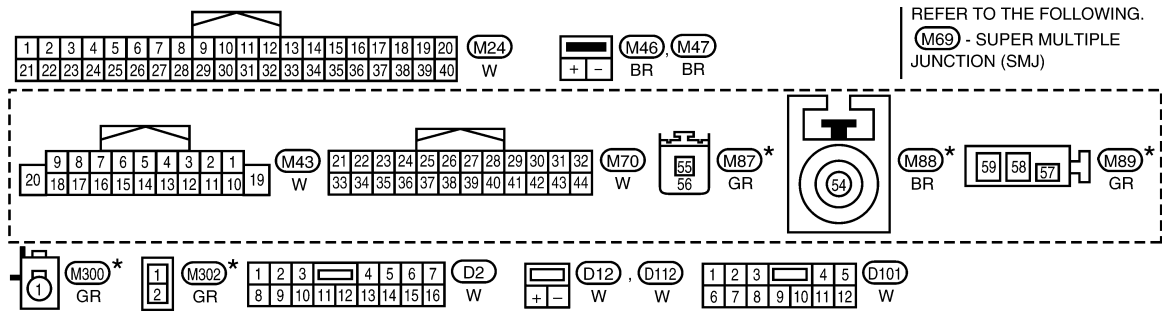
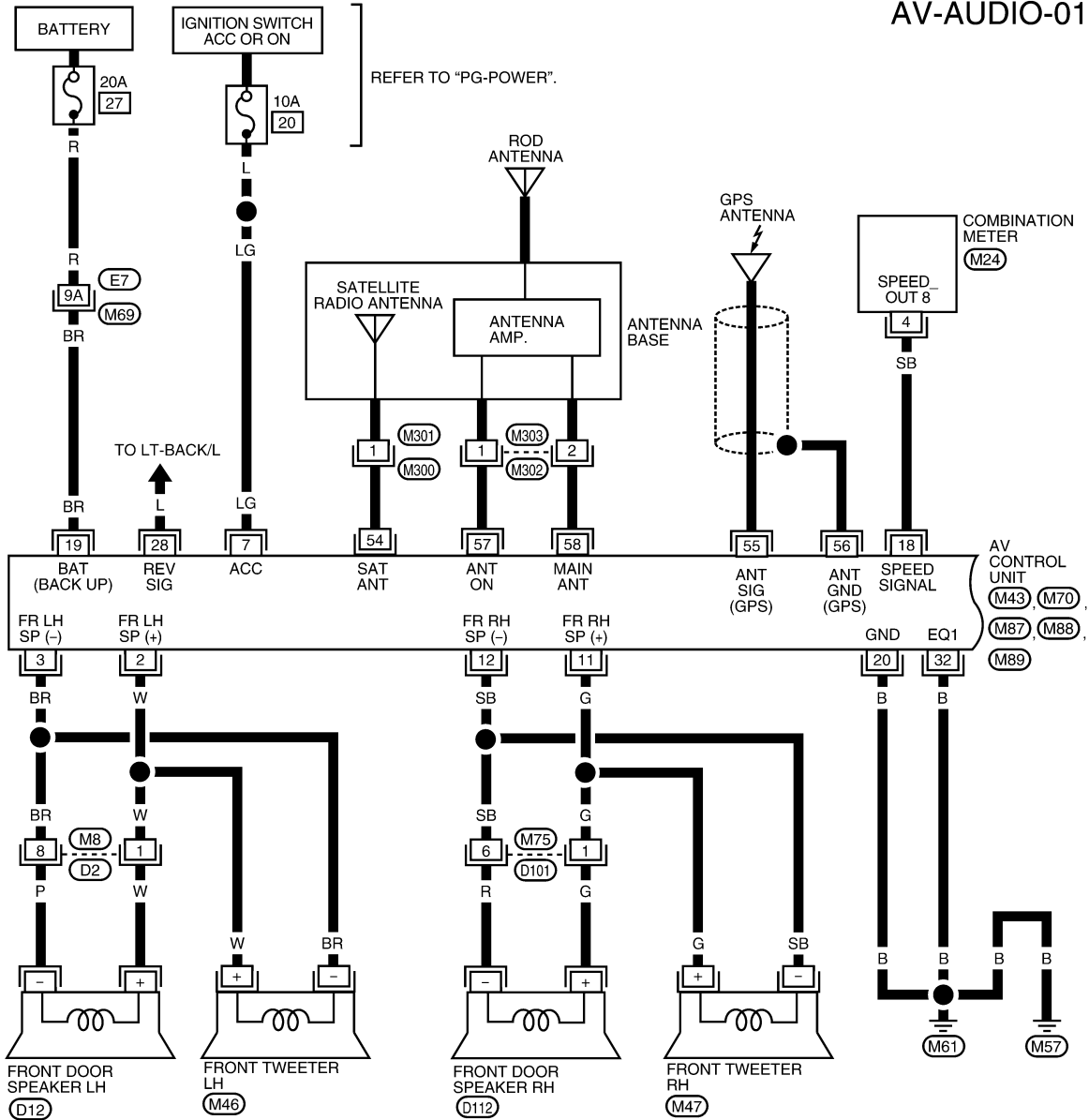
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[AUDIO WITH NAVIGATION]

Wiring Diagram - AUDIO -

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

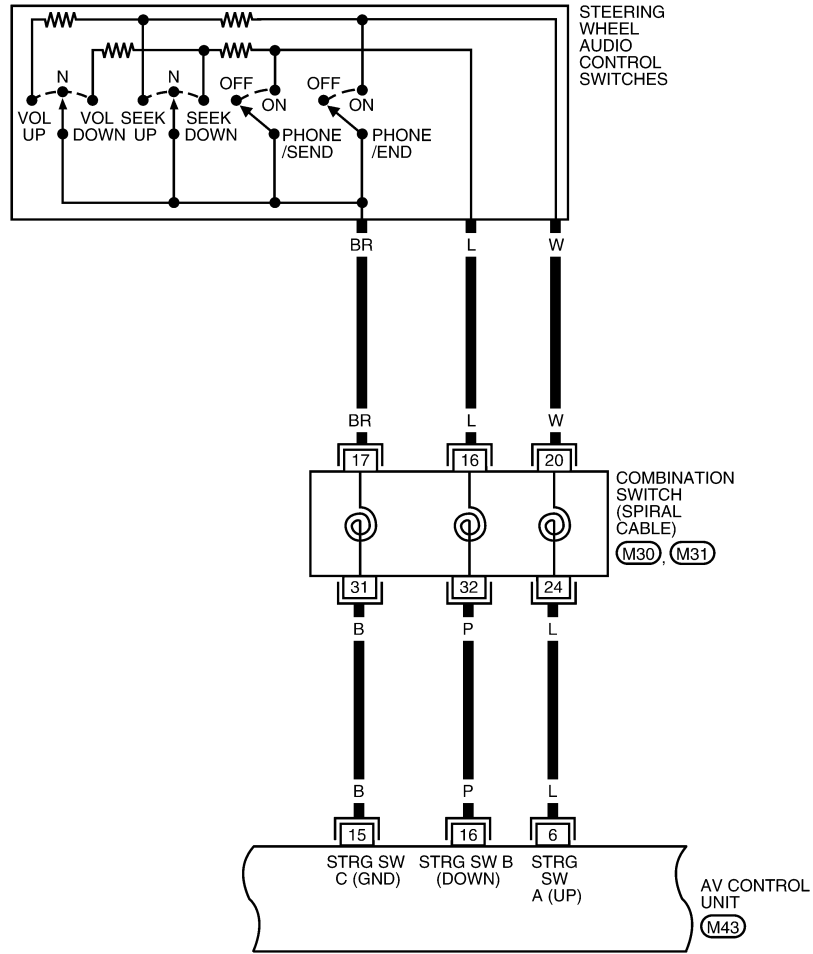
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AV-AUDIO-02



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

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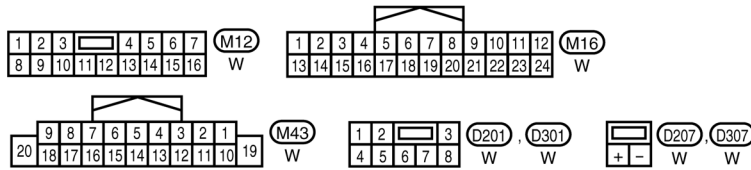
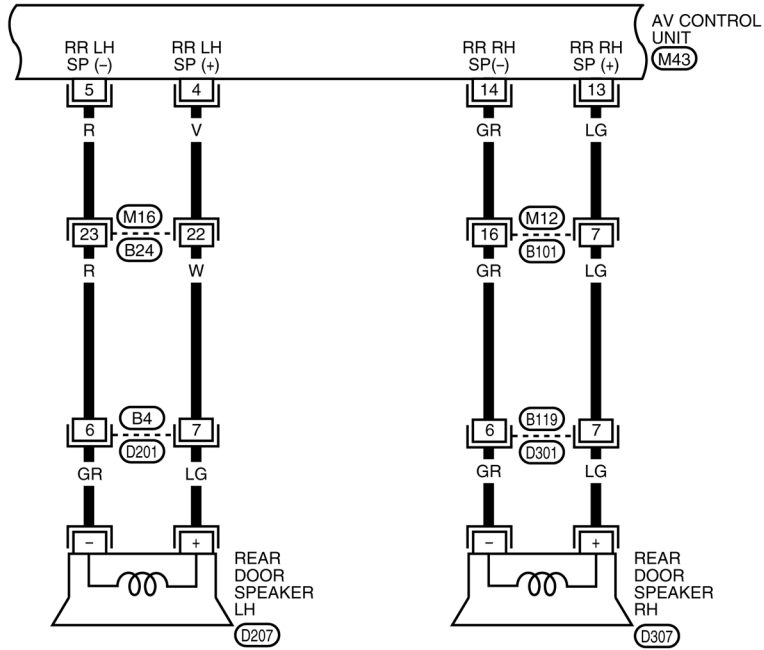
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[AUDIO WITH NAVIGATION]

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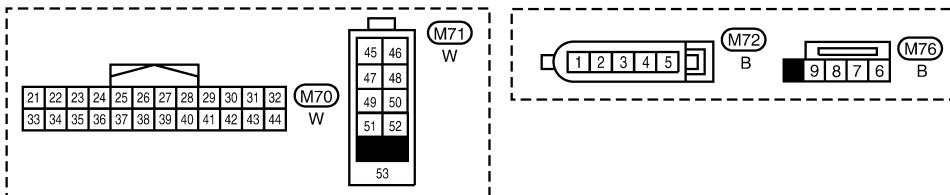
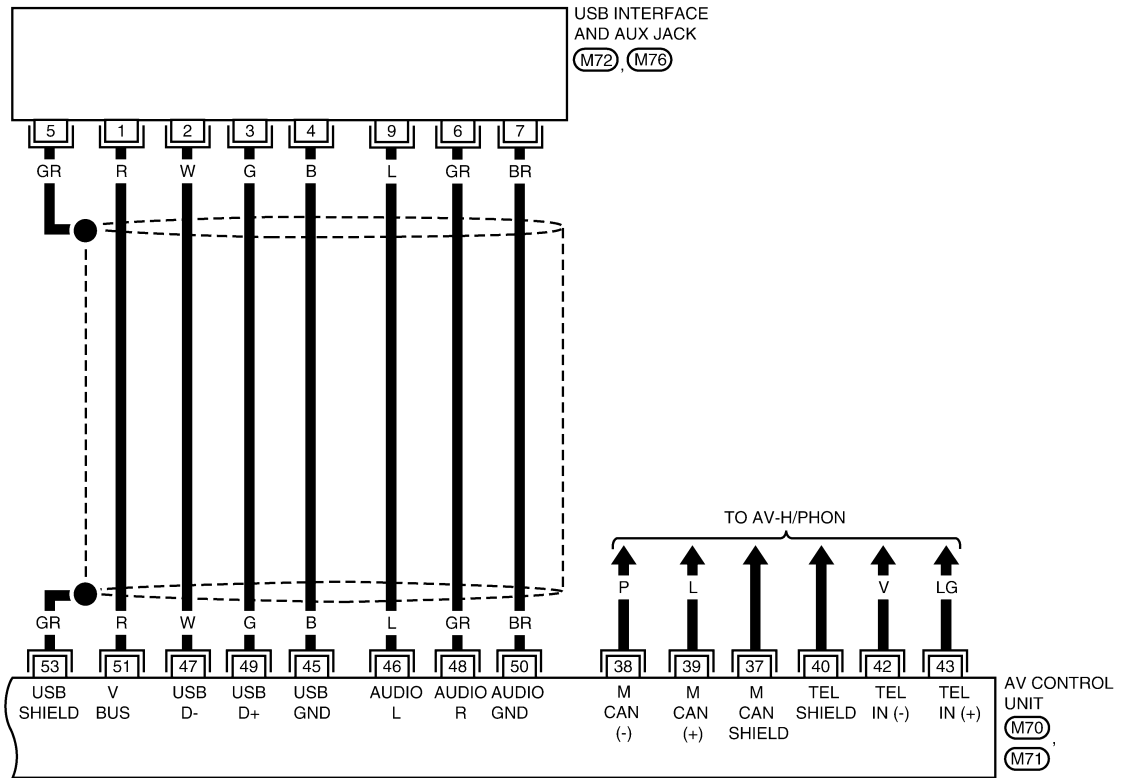
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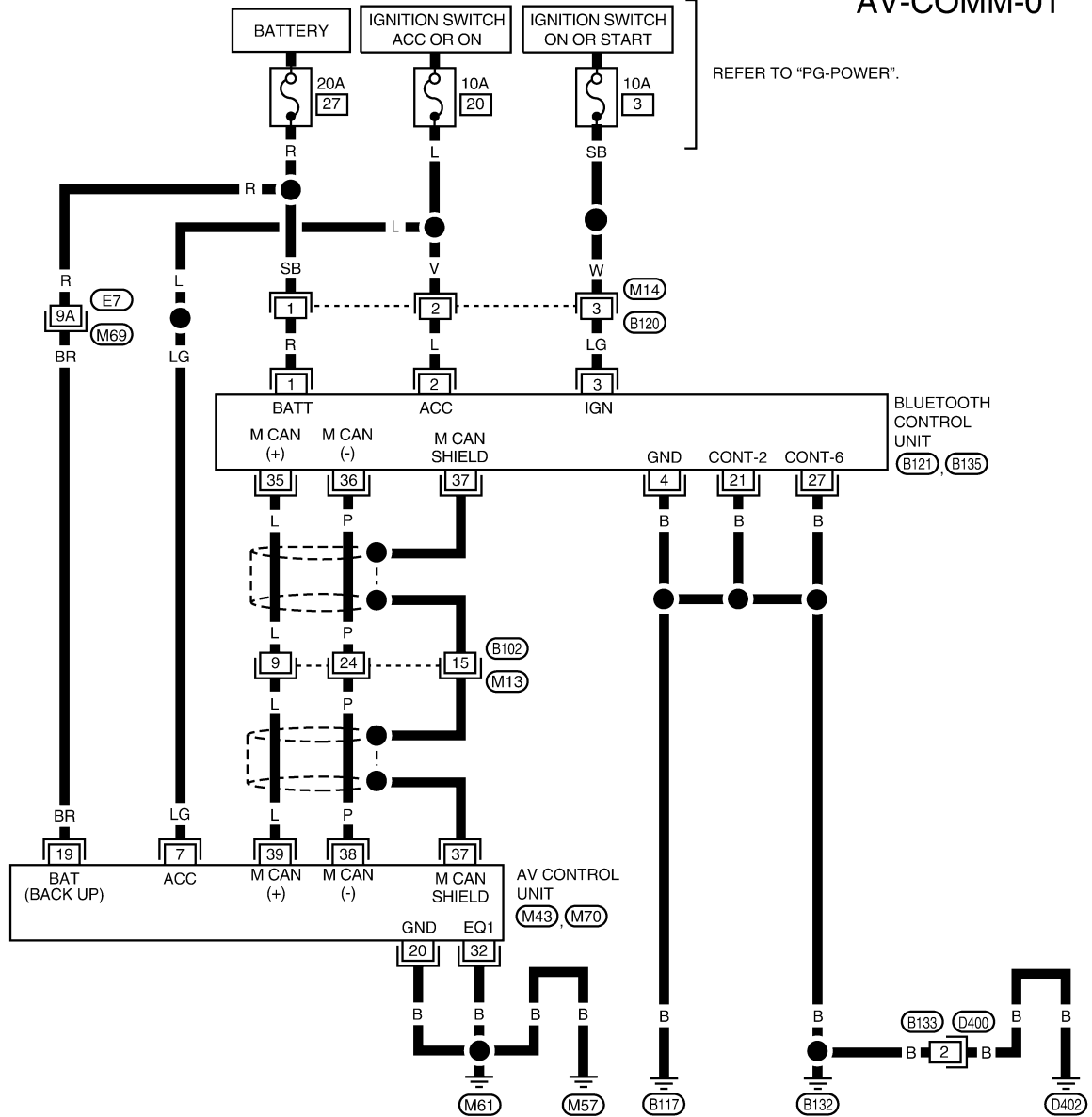
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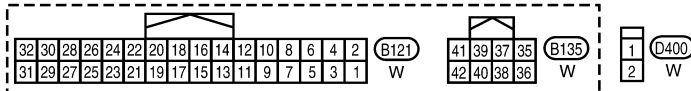
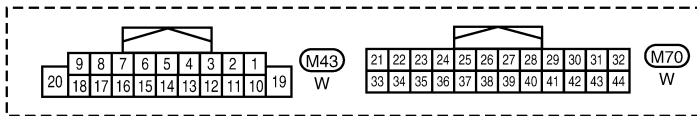
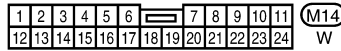
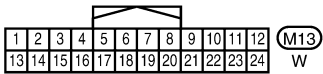
AV-COMM-01



REFER TO "PG-POWER".

REFER TO THE FOLLOWING.

(M69) - SUPER MULTIPLE JUNCTION (SMJ)



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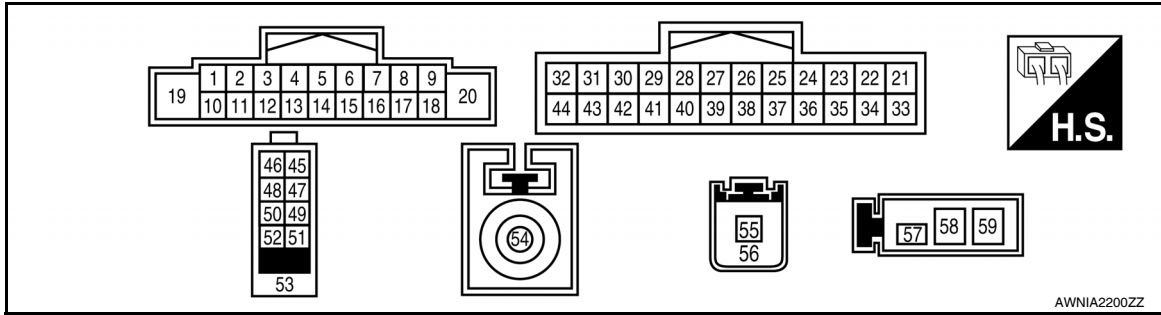
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[AUDIO WITH NAVIGATION]

AV Control Unit Harness Connector Terminal Layout

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Terminal and Reference Value for AV Control Unit

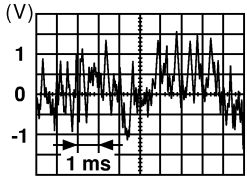
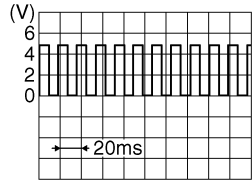
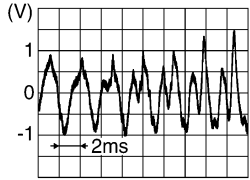
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Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symp- tom
+	-			Ignition switch	Operation		
2 (W)	3 (BR)	Audio sound signal front LH	Output	ON	Receive audio signal	 SKIA0177E	No sound from front door speaker LH or tweeter LH.
4 (V)	5 (R)	Audio sound signal rear LH	Output	ON	Receive audio signal	 SKIA0177E	No sound from rear speaker LH.
6 (L)	Ground	Remote control A	Input	ON	Press Phone/ End switch	0V	Steering wheel au- dio controls do not function
					Press SEEK UP switch	1.7V	
					Press VOL UP switch	3.3V	
					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	 SKIA0177E	No sound from front door speaker RH or tweeter RH.

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[AUDIO WITH NAVIGATION]

Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symp- tom
+	-			Ignition switch	Operation		
13 (LG)	14 (GR)	Audio sound signal rear RH	Output	ON	Receive audio signal	 <small>SKIA0177E</small>	No sound from rear speaker RH.
15 (B)	—	Remote control ground	Input	—	—	—	Steering wheel au- dio controls do not function
16 (P)	Ground	Remote control B	Input	ON	Press Phone/ Send switch	0V	Steering wheel au- dio controls do not function
					Press SEEK DOWN switch	1.7V	
					Press VOL DOWN switch	3.3V	
					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)	 <small>SKIA6649J</small>	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	Ground
						Other than R position	0V
32 (B)	Ground	Ground	—	ON	—	—	—
37	—	Shield	—	—	—	—	—
38 (P)	—	AV commu- nication sig- nal 1 (-)	Input/ Output	—	—	—	—
39 (L)	—	AV commu- nication sig- nal 1 (+)	Input/ Output	—	—	—	—
40	—	Shield	—	—	—	—	—
43 (LG)	42 (V)	TEL voice audio signal	Input	ON	Start confirma- tion/adjustment mode, and then Voice Micro- phone Test by selecting "Voice Microphone Test" on Hands- free Microphone screen.	 <small>SKIB3609E</small>	TEL voice audio signal
45 (B)	—	USB ground	—	—	—	—	—

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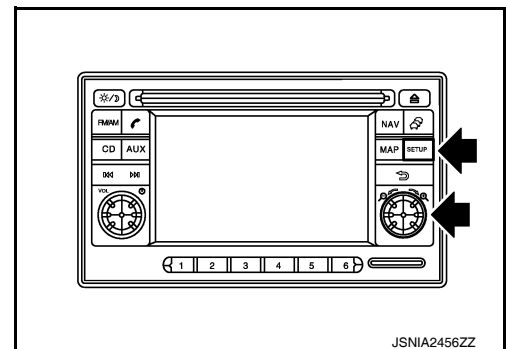
Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symp- tom
+	-			Ignition switch	Operation		
46 (L)	—	AUX sound signal LH	—	—	—	—	—
47 (W)	—	USB D-	—	—	—	—	—
48 (GR)	—	AUX sound signal RH	—	—	—	—	—
49 (G)	—	USB D+	—	—	—	—	—
50 (BR)	—	AUX sound signal ground	—	—	—	—	—
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:000000007329229

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.)



JSNIA2456ZZ

- 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
Radio	FM monitor	—	The Change Mediator monitors the dynamic values of the current tuner. If the band is switched within the radio monitor context, the active monitor is switched as well.
	AM monitor	—	
	XM monitor	—	The version data is displayed.
	XM functions	<ul style="list-style-type: none"> • 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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[AUDIO WITH NAVIGATION]

	Mode	Item	Content
System state	Running system status	<ul style="list-style-type: none"> • 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 history	<ul style="list-style-type: none"> • 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 • 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	—	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).
	Speaker test 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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< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

Mode	Item	Content
System configuration	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.

Noise Inspection

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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

Occurrence condition	Possible cause
Occurs only when engine is ON.	A continuous growling noise occurs. The speed of the noise varies with changes in the engine speed. Ignition components
	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
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. <ul style="list-style-type: none"> • Motor case ground • Motor
The noise occurs constantly, not just under certain conditions.	<ul style="list-style-type: none"> • Rear defogger coil malfunction • Open circuit in printed heater
A cracking or snapping sound occurs while the vehicle is being driven, especially when it is vibrating excessively.	<ul style="list-style-type: none"> • Ground wire of body parts. • Ground due to improper part installation • Wiring connections or a short circuit

Symptom Chart

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MALFUNCTION WITH NAVIGATION

Symptoms	Check items	Probable malfunction location / Action to take
Display does not turn ON.	All switches cannot be operated.	AV control unit power supply and ground circuit. Refer to AV-68 .
	All switches can be operated.	AV control unit. Refer to AV-73 .

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< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

Symptoms	Check items		Probable malfunction location / Action to take
All switches cannot be operated.	Display does not turn ON.		AV control unit power supply and ground circuit. Refer to AV-68 .
	Display turn ON.		AV control unit. Refer to AV-73 .
Only specified switch cannot be operated.	-		AV control unit. Refer to AV-68 .
Voice guidance is not heard.	Audio sound is normal.		AV control unit. Refer to AV-60 .
Display does not dim.	Check "Illumination Signal" in "SERVICE SYSTEM STATUS", "SERVICE MENU".	"Illumination Signal" reaches 100% when the lighting switch is ON.	AV control unit. Refer to AV-73 .
		"Illumination Signal" does not reach 100% when the lighting switch is ON.	Illumination signal circuit. Refer to LT-103 .
Vehicle icon does not move.	Check "Speed Signal" in "SERVICE SYSTEM STATUS", "SERVICE MENU".	A value of "Speed Signal" changes according to vehicle speeds.	AV control unit. Refer to AV-73 .
		A value of "Speed Signal" does not change according to vehicle speeds.	Vehicle speed signal circuit. Refer to DI-16 .
Map matching is not complete GPS icon is not displayed	Check "GPS Antenna" in "SERVICE SYSTEM SELF TEST", "SERVICE MENU".	"Connected" is displayed for "GPS Antenna".	AV control unit. Refer to AV-73 .
		"Connected" is not displayed for "GPS Antenna".	GPS antenna. Refer to AV-90 .
Traffic information (XM Traffic) is not received.	Radio broadcasts are received.		AV control unit. Refer to AV-73 .
	Radio broadcasts are not received.		<ul style="list-style-type: none"> • Radio antenna. Refer to AV-88. • Antenna feeder. Refer to AV-88.

MALFUNCTION WITH AUDIO

- 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 style="list-style-type: none"> • AV control unit power supply and ground circuit. Refer to AV-68. • AV control unit. Refer to AV-73.
Audio steering wheel switch does not operate properly.	<ul style="list-style-type: none"> • Remote control signal circuit between steering switch and AV control unit. Refer to AV-68. • Steering wheel audio control switch. Refer to AV-73. • AV control unit. Refer to AV-73.
No sound can be heard from any speakers.	<ul style="list-style-type: none"> • Speaker circuit shorted to ground. Refer to AV-55. • AV control unit. Refer to AV-73.
No sound can be heard from front speakers.	<ul style="list-style-type: none"> • Audio signal circuit between AV control unit and front speakers. Refer to AV-70. • Front speaker. Refer to AV-73. • Front tweeter. Refer to AV-73. • AV control unit. Refer to AV-73.

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[AUDIO WITH NAVIGATION]

Symptom	Probable malfunction location
No sound can be heard from rear speakers.	<ul style="list-style-type: none"> Audio signal circuit between AV control unit and rear speakers. Refer to AV-71. Rear speaker. Refer to AV-73. AV control unit. Refer to AV-73.
No sound can be heard from radio or noise is heard.	<ul style="list-style-type: none"> Antenna feeder. Refer to AV-88. Roof antenna. Refer to AV-88. AV control unit. Refer to AV-73.
Speed dependent volume system does not function.	<ul style="list-style-type: none"> Vehicle speed signal circuit between combination meter and AV control unit. Refer to DI-16. AV control unit. Refer to AV-73. Combination meter. Refer to DI-19.
There is no sound from the iPod® or Aux jack.	<ul style="list-style-type: none"> iPod® sound signal circuit between AV control unit and Auxiliary jack assembly. Refer to AV-68. AV control unit. Refer to AV-73.
Buzz/rattle sound from speaker.	The majority of buzz/rattle sounds are not indicative of an issue with the speaker, usually something nearby the speaker is causing the buzz/rattle. Refer to "SQUEAK AND RATTLE TROUBLE DIAGNOSIS" in appropriate interior trim section.

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® or USB memory can not be recognized.	With iPod® or USB memory Connected, check "USB Device" in "SERVICE STATUS", "SERVICE MENU".	<ul style="list-style-type: none"> USB interface and AUX jack harness USB interface and AUX jack. Refer to AV-87. AV control unit. Refer to AV-73.
	—	<ul style="list-style-type: none"> USB interface and AUX jack harness USB interface and AUX jack. Refer to AV-87.
	—	Generation of iPod® 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 style="list-style-type: none"> USB interface and AUX jack harness USB interface and AUX jack. Refer to AV-87.

MALFUNCTION WITH STEERING SWITCH

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

AV Control Unit Power and Ground Supply Circuit Inspection

INFOID:000000007329232

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
	7	Ignition switch ACC or ON	20

OK or NG

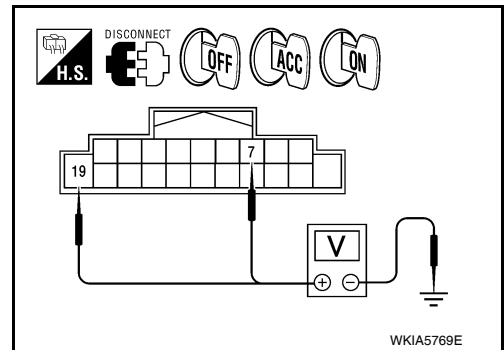
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to [PG-4](#). "Schematic".

2. AV CONTROL UNIT POWER SUPPLY CIRCUIT CHECK

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

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



OK or NG

OK >> GO TO 3.

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

3. GROUND CIRCUIT CHECK

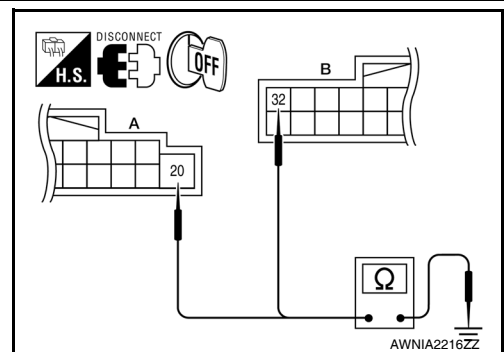
Check continuity between AV control unit harness connectors M43 (A), M70 (B) terminals 20, 32 and ground.

Continuity should exist.

OK or NG

OK >> Inspection End.

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



Steering Switch Check

INFOID:000000007329233

1. CHECK HARNESS

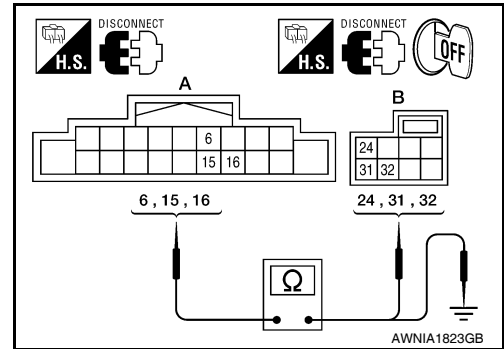
AUDIO

[AUDIO WITH NAVIGATION]

< SERVICE INFORMATION >

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

Terminals				Continuity
A		B		
Connector	Terminal	Connector	Terminal	
M43	6	M30	24	Yes
	15		31	
	16		32	



4. Check continuity between AV control unit and ground.

Terminals			Continuity
(+)		(-)	
Connector	Terminal		
M43	6	Ground	No
	15		
	16		

OK or NG

- OK >> GO TO 3.
 NG >> Repair harness.

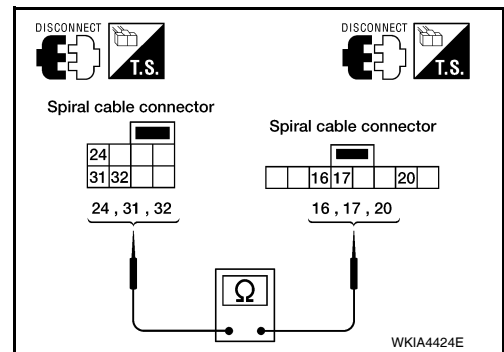
2. SPIRAL CABLE CHECK

1. Disconnect combination switch (spiral cable) connector M31.
2. 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

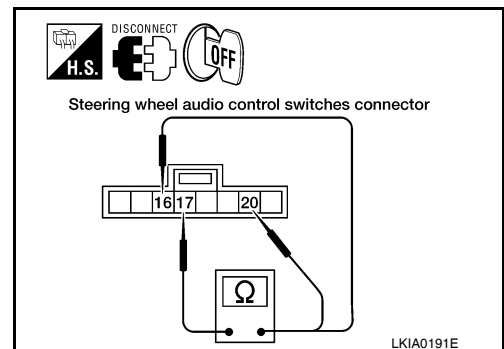
- OK >> GO TO 4.
 NG >> Replace combination switch (spiral cable). Refer to [SRS-37. "Removal and Installation"](#).



3. CHECK STEERING SWITCH RESISTANCE

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

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



OK or NG

- OK >> Inspection End.
 NG >> Replace steering wheel audio control switch. Refer to [AV-73. "Removal and Installation"](#).

Sound Is Not Heard from Front Door Speaker or Front Tweeter

INFOID:000000007329234

1. CONNECTOR CHECK

Check the AV control unit and speaker connectors for the following:

- Proper connection
- Damage
- Disconnected or loose terminals

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair the terminal and connector.

2. HARNESS CHECK

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

Terminals				Continuity
AV control unit		Speaker or tweeter		
Connector	Terminal	Connector	Terminal	
A: M43	2	B: M46	+	Yes
	3		-	
	11	B: M47	+	
	12		-	
	2	B: D12	+	
	3		-	
	11	B: D112	+	
	12		-	

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

Terminals			Continuity
AV control unit		—	
Connector	Terminal	—	
A: M43	2	Ground	No
	3		
	11		
	12		

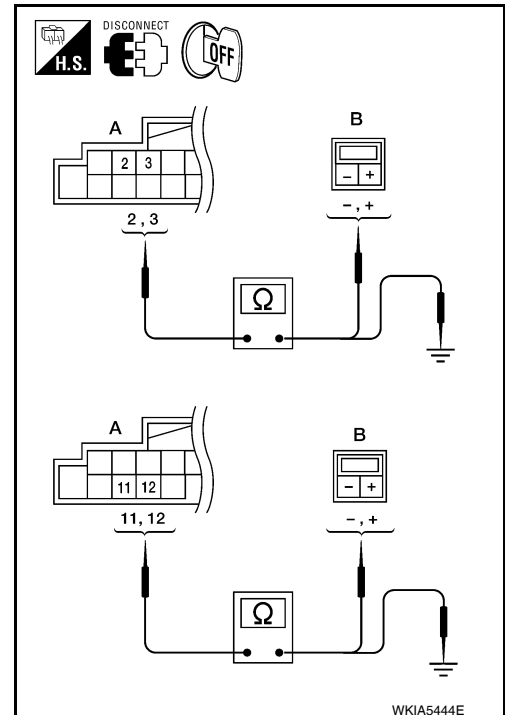
OK or NG

OK >> GO TO 3.

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

3. 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.

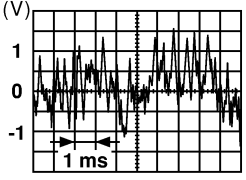


AUDIO

< SERVICE INFORMATION >

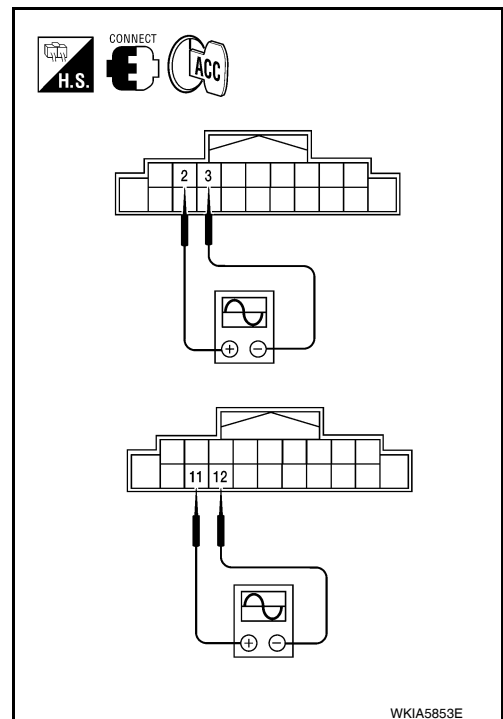
[AUDIO WITH NAVIGATION]

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

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

OK or NG

- OK >> Replace front speaker. Refer to [AV-73, "Removal and Installation"](#).
- NG >> Replace AV control unit. Refer to [AV-73, "Removal and Installation"](#).



Sound Is Not Heard from Rear Speaker

INFOID:000000007329235

1.CONNECTOR CHECK

Check the AV control unit and speaker connectors for the following:

- Proper connection
- Damage
- Disconnected or loose terminals

Is the inspection result normal?

- YES >> GO TO 2
- NO >> Repair the terminal and connector.

2.HARNESS CHECK

1. Disconnect AV control unit connector and rear speaker connector.

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AV

AUDIO

< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

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

Terminals				Continuity
AV control unit		Speaker		
Connector	Terminal	Connector	Terminal	
A: M43	4	B: D207	+	Yes
	5		-	
	13	B: D307	+	
	14		-	

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

Terminals				Continuity
AV control unit		—		
Connector	Terminal			
A: M43	4	Ground		No
	5			
	13			
	14			

OK or NG

- OK >> GO TO 3.
 NG >> • Check connector housings for disconnected or loose terminals.
 • Repair harness or connector.

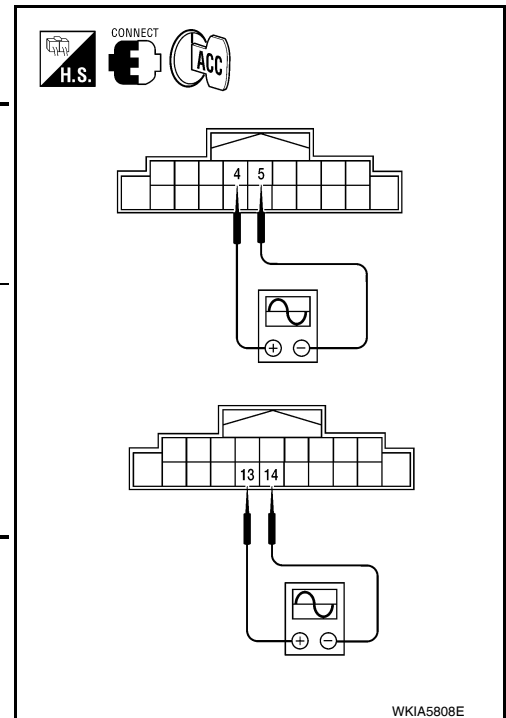
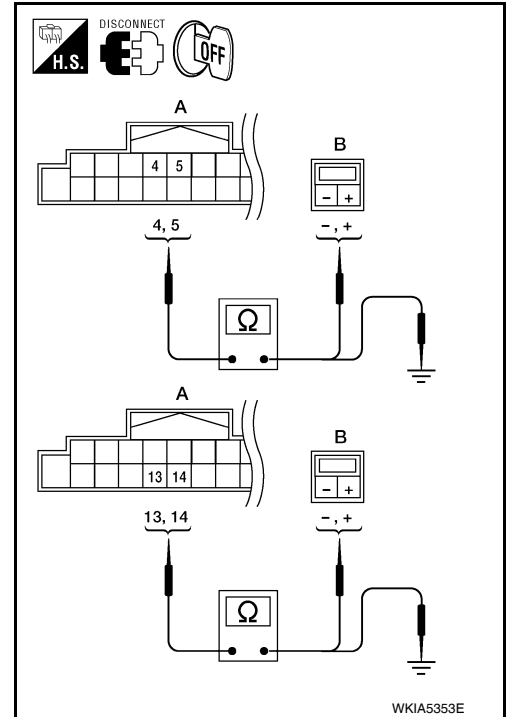
3. REAR SPEAKER SIGNAL CHECK

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

Terminals				Condition	Reference signal
(+) (+)		(-) (-)			
Con- nec- tor	Termi- nal	Con- nec- tor	Termi- nal		
M43	4	M43	5	Re- ceive audio signal	
	13		14		

OK or NG

- OK >> Replace speaker. Refer to [AV-73. "Removal and Installation"](#).
 NG >> Replace AV control unit. Refer to [AV-73. "Removal and Installation"](#).

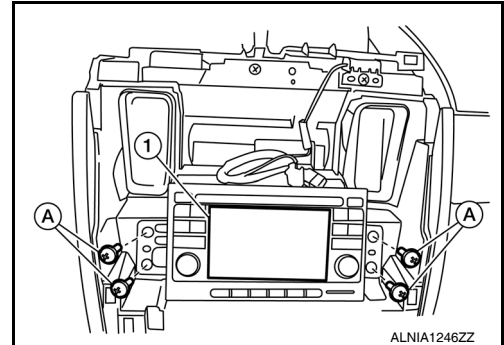


Removal and Installation

AUDIO UNIT

Removal

1. Remove cluster lid C. Refer to [IP-12. "Removal and Installation"](#).
2. Remove the audio unit screws (A), disconnect the connectors and remove the audio unit (1).
3. Remove the audio unit bracket.



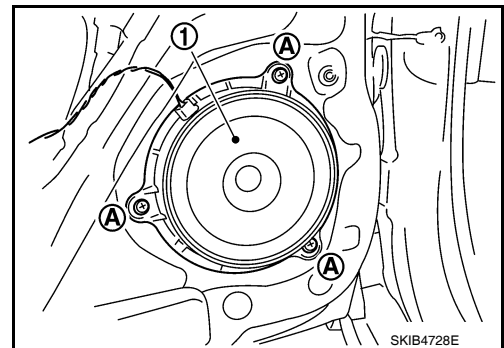
Installation

Installation is in the reverse order of removal.

FRONT DOOR SPEAKER

Removal

1. Remove the front door finisher. Refer to [EI-30. "Removal and Installation"](#).
2. Remove the front door speaker screws (A), disconnect the connector and remove the front door speaker (1).



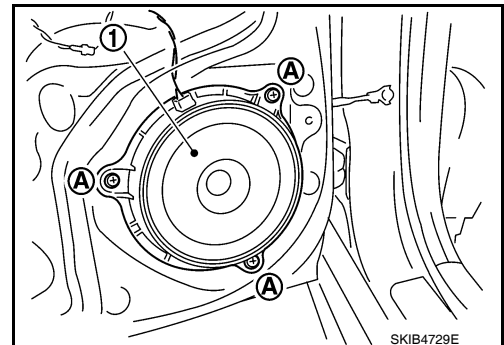
Installation

Installation is in the reverse order of removal.

REAR DOOR SPEAKER

Removal

1. Remove the rear door finisher. Refer to [EI-30. "Removal and Installation"](#).
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

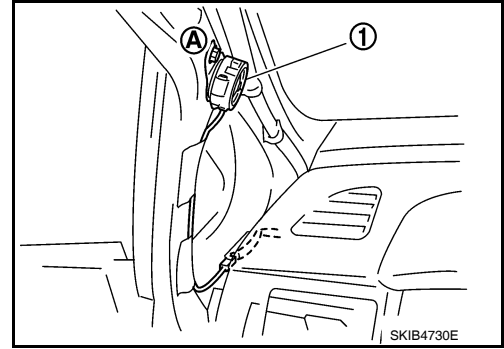
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AUDIO

< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

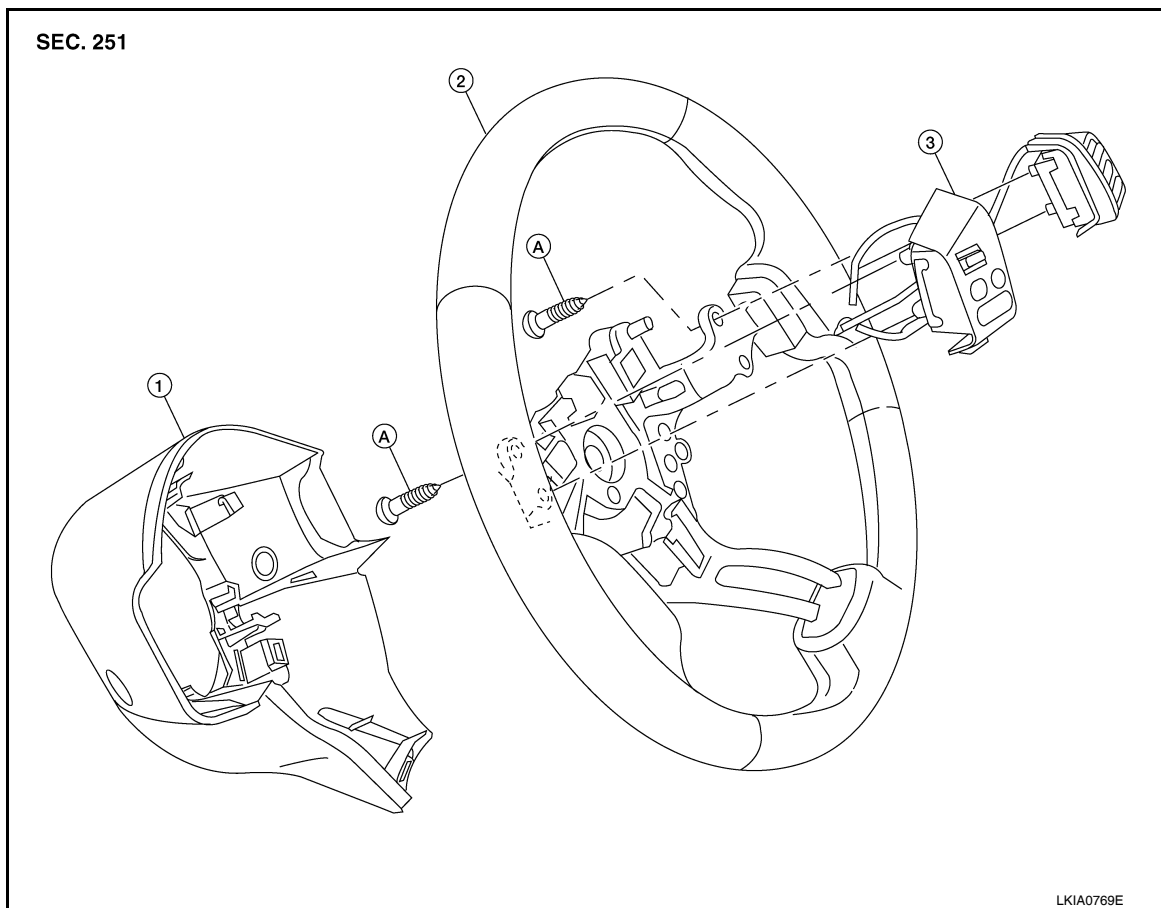
1. Remove the front pillar garnish. Refer to [EI-35. "Component"](#).
2. Remove the tweeter screw (A), disconnect the connector and remove the tweeter (1).



Installation

Installation is in the reverse order of removal.

STEERING WHEEL AUDIO CONTROL SWITCHES



1. Steering wheel finisher cover

2. Steering wheel

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

How to Proceed with Trouble Diagnosis

INFOID:000000007329237

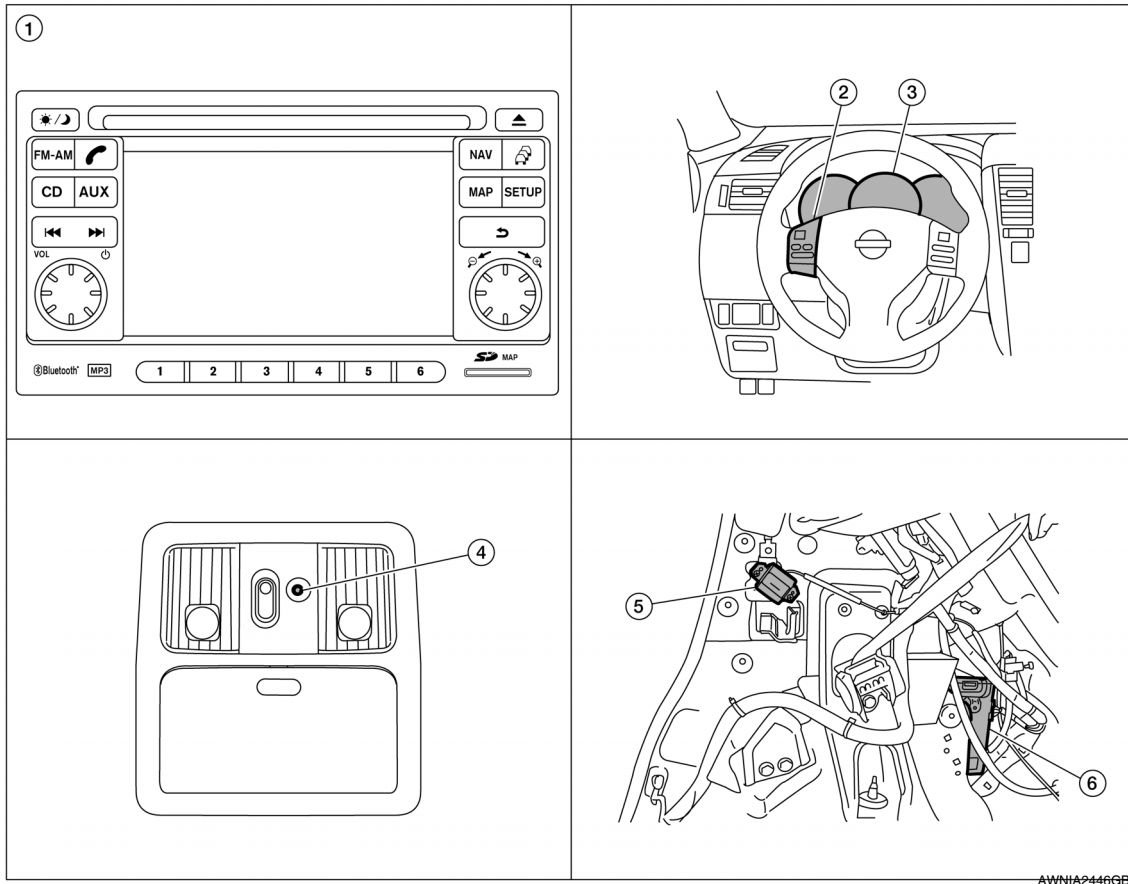
Refer to [AV-65. "Symptom Chart"](#).

- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- AV**
- L
- M
- N
- O
- P

TELEPHONE

Component Parts and Harness Connector Location

INFOID:000000007329238



- | | | |
|-----------------------------|--|--|
| 1. AV control unit M70 | 2. Steering wheel audio control switches | 3. Combination meter M24 |
| 4. Bluetooth microphone R15 | 5. Bluetooth antenna | 6. Bluetooth control unit B121, B122, B135
[view with luggage side lower finisher (RH) removed] |

System Description

INFOID:000000007329239

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.

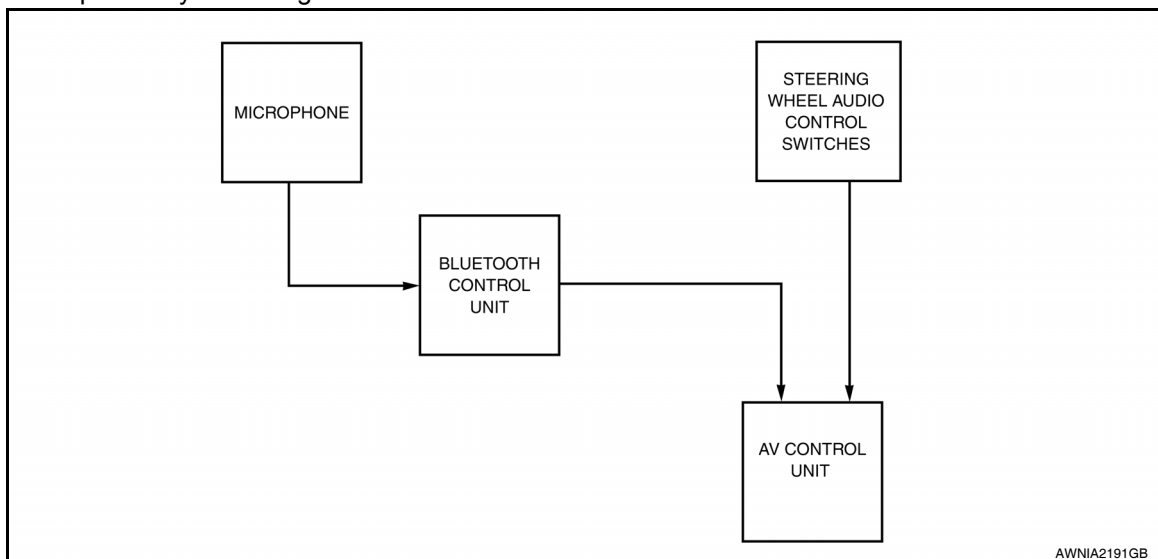
Bluetooth telephone system allows users who have a Bluetooth cellular telephone to make a wireless connection between their cellular telephone and the Bluetooth control unit. Hands-free cellular telephone calls can be sent and received. Some Bluetooth cellular telephones may not be recognized by the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

TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

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.

TELEPHONE

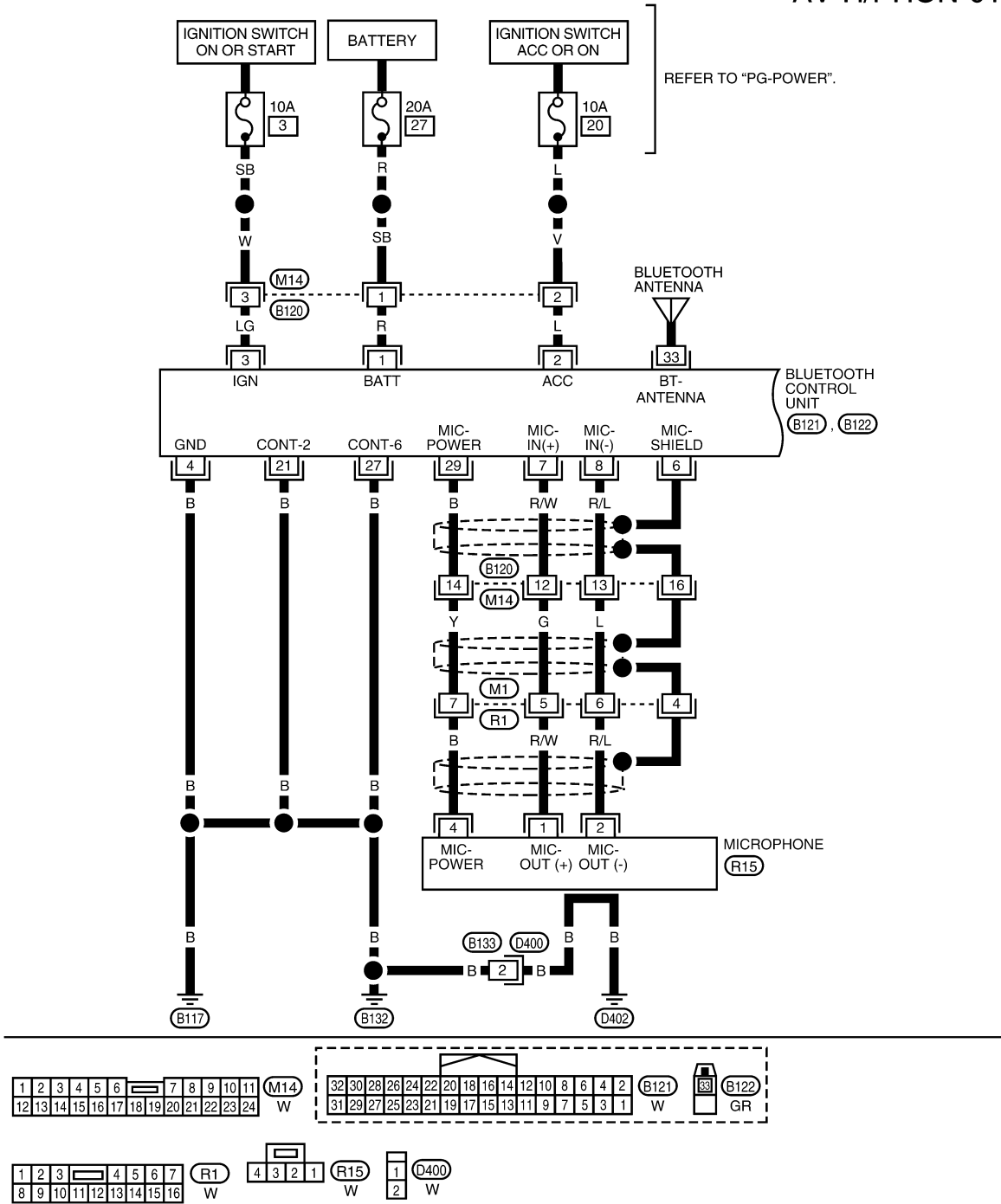
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[AUDIO WITH NAVIGATION]

Wiring Diagram - H/PHON -

INFOID:000000007329240

AV-H/PHON-01



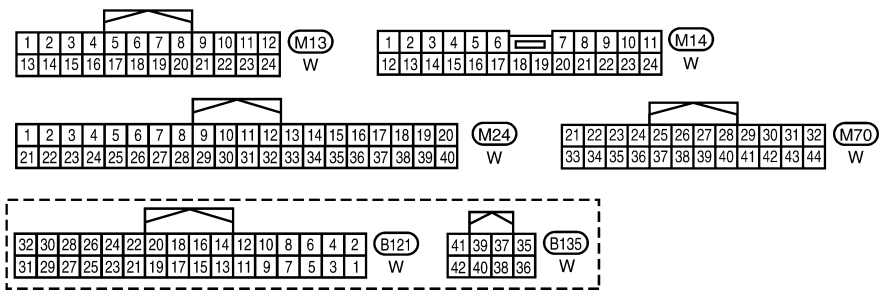
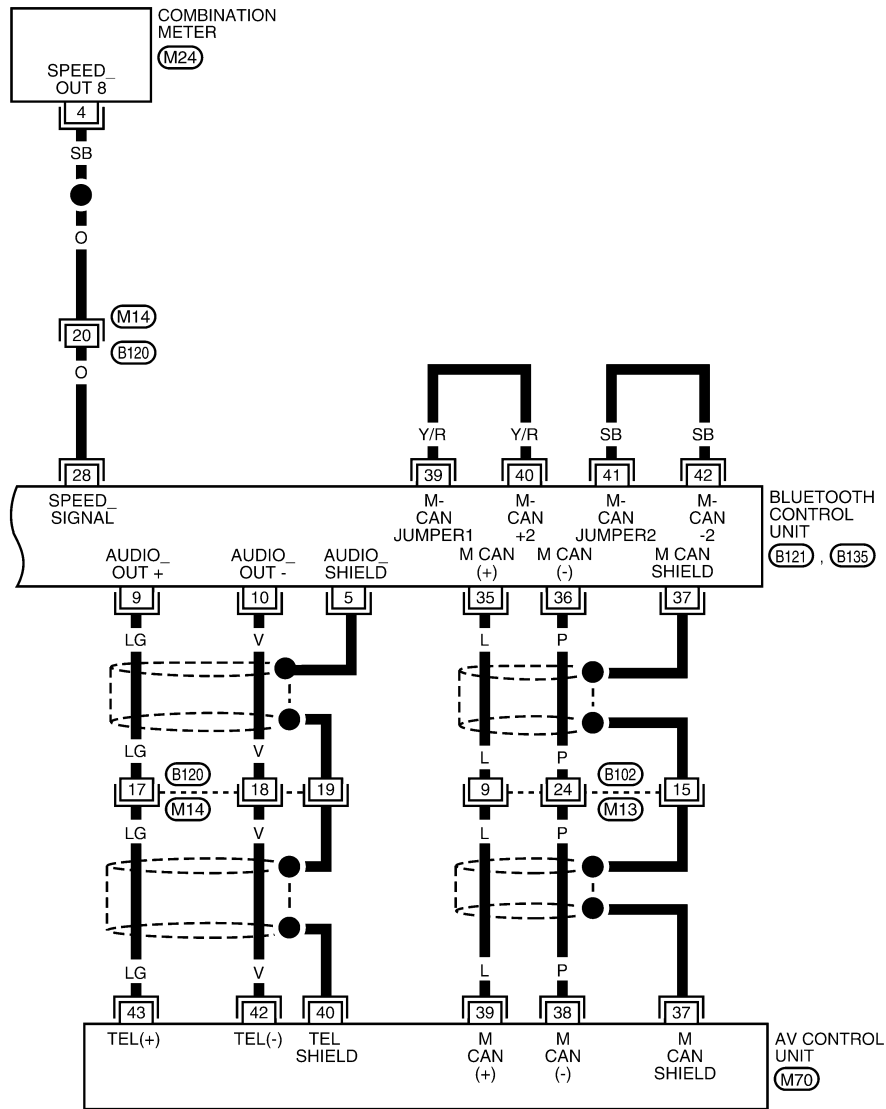
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TELEPHONE

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[AUDIO WITH NAVIGATION]

AV-H/PHON-02



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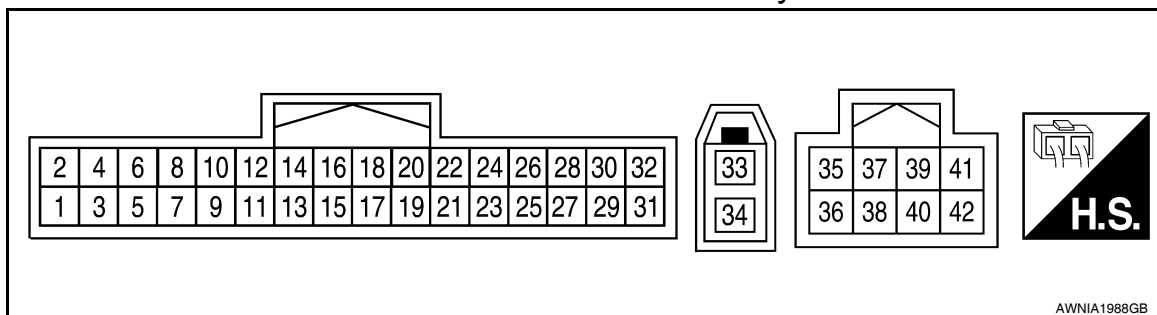
TELEPHONE

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[AUDIO WITH NAVIGATION]

Bluetooth Control Unit Harness Connector Terminal Layout

INFOID:000000007329241



AWNIA1988GB

Terminal and Reference Value for Bluetooth Control Unit

INFOID:000000007329242

Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symptom
+	-			Ignition switch	Operation		
1 (R)	Ground	Battery power	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	-	-	-	-	-
6	-	Shield	-	-	-	-	-
7 (R/W)	8 (R/L)	Mic-in signal	Input	-	-	-	Bluetooth Microphone inoperative.
9 (LG)	10 (V)	Audio out	Output	ACC/ ON	Bluetooth control unit sends audio signal	 SKIB3609E	Audio can not be heard.
21 (B)	-	Cont-2	-	-	-	-	-
27 (B)	-	Cont-6	-	-	-	-	-
28 (O)	Ground	Vehicle speed signal (8-pulse)	Input	ON	When vehicle speed is approx. 40 km/h (25 MPH)	 PKIC0643E	Speed sensitive volume is inoperative.
29 (B)	Ground	Bluetooth Microphone power	Output	-	-	5V	Bluetooth Microphone inoperative.
33	-	Bluetooth antenna signal	Input	-	-	-	-
35 (L)	-	M CAN +	-	-	-	-	-

Terminal (Wire color)		Item	Signal input/ output	Condition		Reference value (Approx.)	Example of symptom
+	-			Ignition switch	Operation		
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

INFOID:000000007329243

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

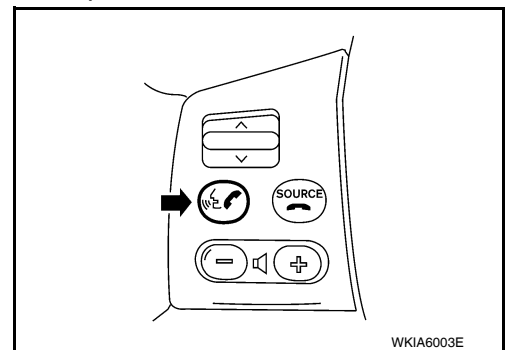
- Internal control unit failure
- Bluetooth antenna connection open or shorted
- Steering wheel audio control switches (PHONE/SEND, PHONE/END) stuck closed
- Vehicle speed pulse count
- Bluetooth Microphone connection test (with playback to operator)
- Bluetooth inquiry check

SELF-DIAGNOSIS MODE

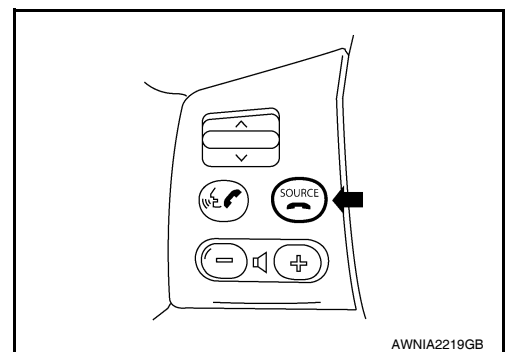
1. Turn ignition switch to ACC or ON.
2. Wait for the Bluetooth system to complete initialization. This may take up to 20 seconds.
3. Press and hold the steering wheel audio control switch PHONE/SEND button for at least 5 seconds. The Bluetooth system will begin to play a verbal prompt.

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.
5. While the beep is sounding, press and hold the steering wheel audio control switch PHONE/END button for at least 5 seconds 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-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"](#).
9. Self-diagnosis mode is complete when the voice prompt says "All diagnostic functions completed". A short beep is heard.



Workflow

INFOID:000000007329244

Failure Message	Action
"Internal failure"	Replace Bluetooth control unit. Refer to AV-85, "Removal and Installation" .
"Bluetooth antenna open"	1. Inspect harness connection. 2. Replace Bluetooth antenna. Refer to AV-85, "Removal and Installation" .
"Bluetooth antenna shorted"	
"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)	1. Inspect harness between Bluetooth control unit and microphone. 2. Replace microphone. Refer to AV-85, "Removal and Installation" .

Power Supply and Ground Circuit Inspection for Bluetooth Control Unit

INFOID:000000007329245

1. CHECK FUSES

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

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

OK or NG

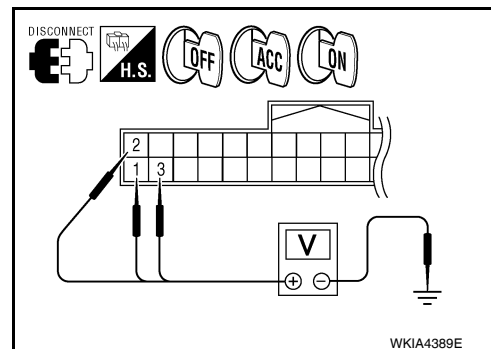
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to [PG-6, "Wiring Diagram - POWER -"](#).

2. CHECK POWER SUPPLY CIRCUIT

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

Terminals		(-)	Ignition switch position		
(+)	Terminal		OFF	ACC	ON
Connector B121	1	Ground	Battery voltage	Battery voltage	Battery voltage
	2		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 >

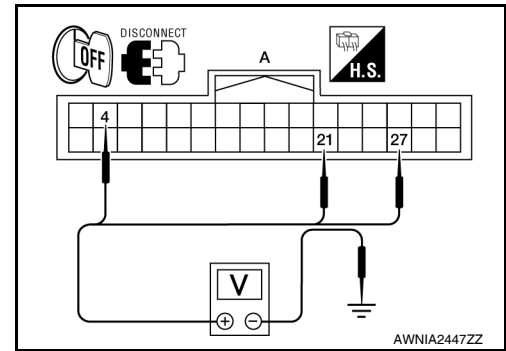
[AUDIO WITH NAVIGATION]

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

Terminals			Continuity
Connector	Terminal	—	
B121	4	Ground	Yes
	21		
	27		

OK or NG

- OK >> Inspection End.
 NG >> Repair or replace harness.



Steering Wheel Audio Control Switch Does Not Operate

INFOID:000000007329246

Refer to [AV-68, "Steering Switch Check"](#).

Voice Activated Control Function Does Not Operate

INFOID:000000007329247

NOTE:

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

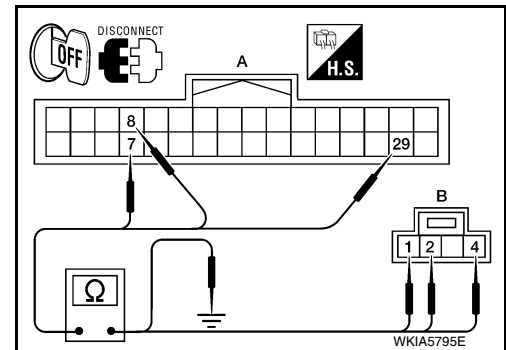
BLUETOOTH VOICE GUIDANCE IS HEARD WHEN PRESSING STEERING WHEEL AUDIO CONTROL SWITCH

1. CHECK HARNESS BETWEEN BLUETOOTH CONTROL UNIT AND BLUETOOTH MICROPHONE

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

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

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



Terminals			Continuity
Connector	Terminal	—	
A: B121	7	Ground	No
	8		
	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.

TELEPHONE

< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

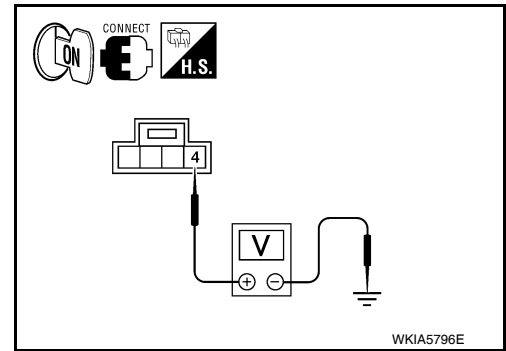
- Check voltage between Bluetooth microphone connector R15 terminal 4 and ground.

4 - Ground : Approx. 5 V

YES or NO

YES >> GO TO 3.

NO >> Replace Bluetooth control unit. Refer to [AV-85. "Removal and Installation"](#).

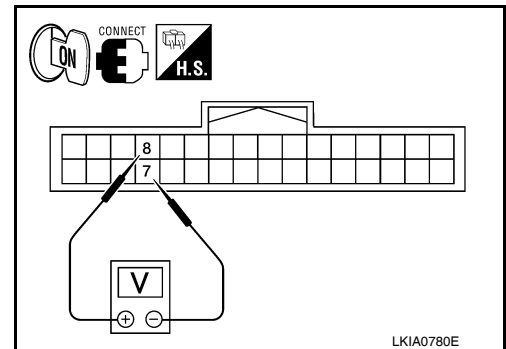
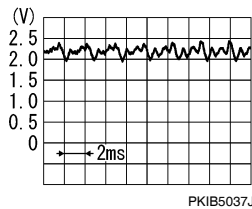


3. CHECK MIC. SIGNAL

- 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.

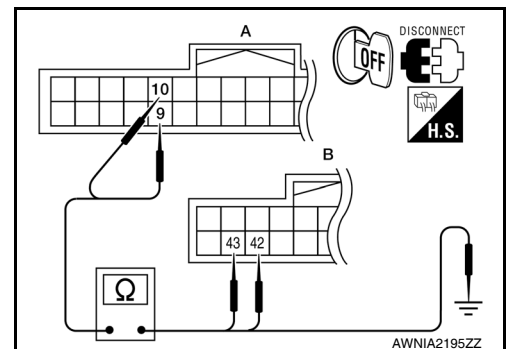
NG >> Replace applicable parts.

2. CHECK BLUETOOTH VOICE SIGNAL CIRCUIT

- 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).

Terminals				Continuity
Connector	Terminal	Connector	Terminal	
A: B121	9	B: M70	43	Yes
	10		42	

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



Terminals			Continuity
Connector	Terminal	—	
A: B121	9	Ground	No
	10		

OK or NG

< SERVICE INFORMATION >

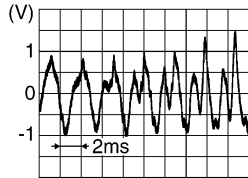
- OK >> GO TO 3.
- NG >> Repair harness or connector.

3. CHECK BLUETOOTH VOICE SIGNAL

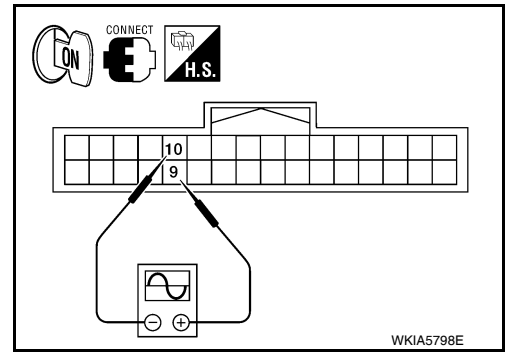
Check signal between Bluetooth control unit harness connector B121 terminals 9 and 10.

9 – 10:

When giving a voice



SKIB3609E



WKIA5798E

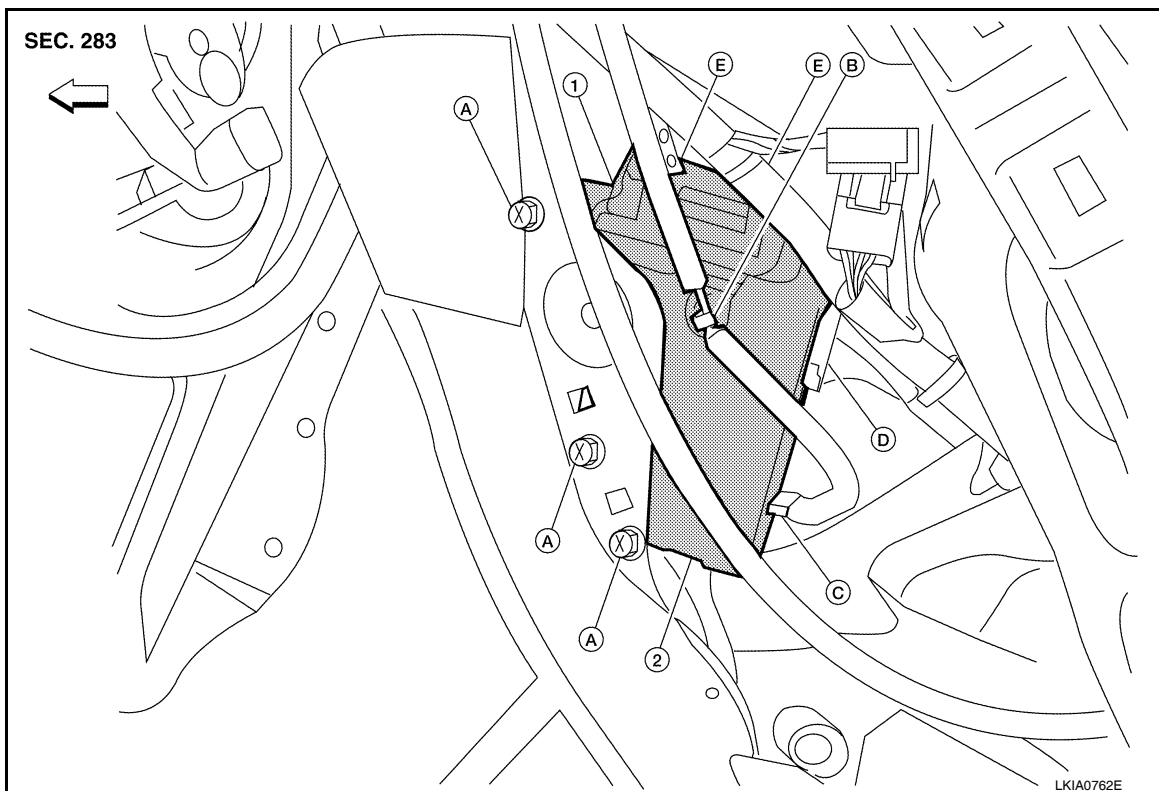
OK or NG

- OK >> Replace AV control unit. Refer to [AV-73. "Removal and Installation"](#).
- NG >> Replace Bluetooth control unit. Refer to [AV-85. "Removal and Installation"](#).

Removal and Installation

INFOID:000000007329248

BLUETOOTH CONTROL UNIT



LKIA0762E

- | | | |
|--|---|-------------------------------------|
| 1. Bluetooth control unit bracket | 2. Bluetooth control unit | A. Blue tooth control unit bolts |
| B. BLuetooth antenna feeder harness clip | C. Bluetooth antenna feeder harness connector | D. Bluetooth control unit connector |
| E. Bluetooth control unit bracket screws | ← Front | |

Removal

1. Remove luggage side lower finisher (RH). Refer to [EI-44. "Removal and Installation"](#).
 - Disconnect Bluetooth antenna harness clip.
2. Disconnect the Bluetooth control unit harness connector.

A
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AV

TELEPHONE

< SERVICE INFORMATION >

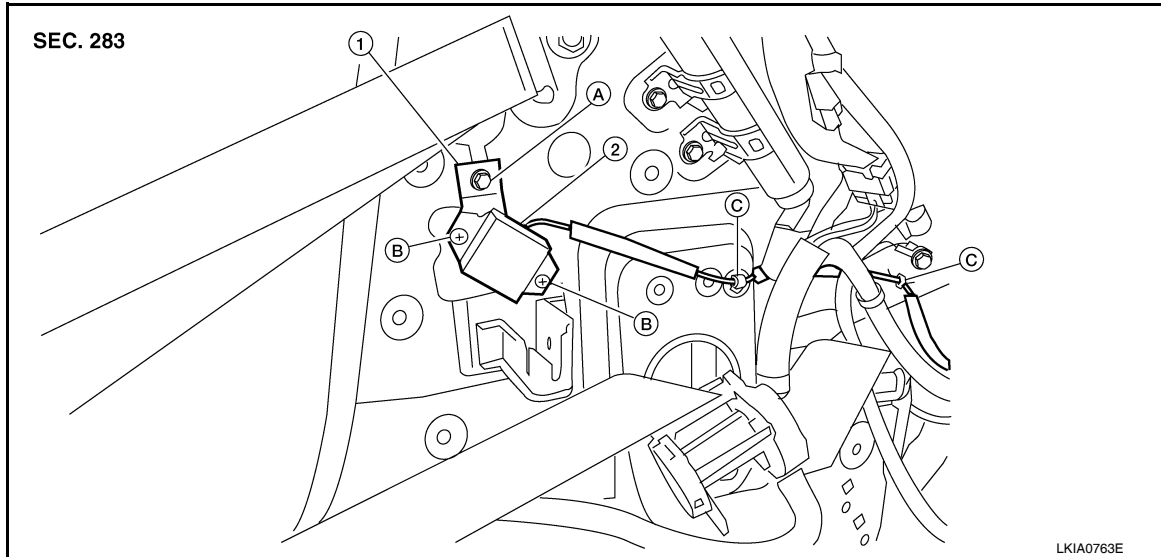
[AUDIO WITH NAVIGATION]

3. Remove the Bluetooth control unit upper and lower bracket bolts.
4. Unhook the Bluetooth control unit upper and lower brackets and remove Bluetooth control unit.
5. 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



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

Removal

1. Remove luggage side lower finisher (RH). Refer to [EI-44. "Removal and Installation"](#).
2. Disconnect the Bluetooth antenna feeder harness clips.
3. Disconnect the Bluetooth antenna feeder harness connector.
4. Remove the Bluetooth antenna bracket bolt(s) and remove antenna.
5. 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-41. "Component"](#).
2. Remove the Bluetooth microphone.

Installation

Installation is in the reverse order of removal.

USB CONNECTOR AND AUX JACK

< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

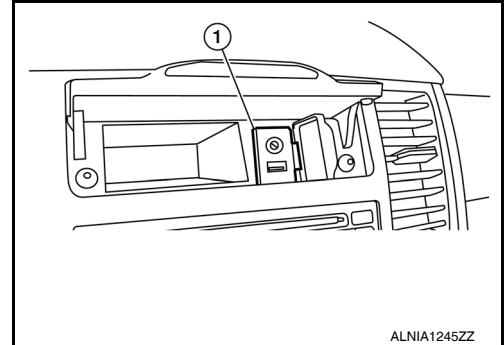
USB CONNECTOR AND AUX JACK

Removal and Installation

INFOID:000000007329249

REMOVAL

1. Remove the cluster lid C. Refer to [IP-12. "Removal and Installation"](#).
2. Push the pawl from the back of the cluster lid C to remove the USB connector and aux jack (1).



INSTALLATION

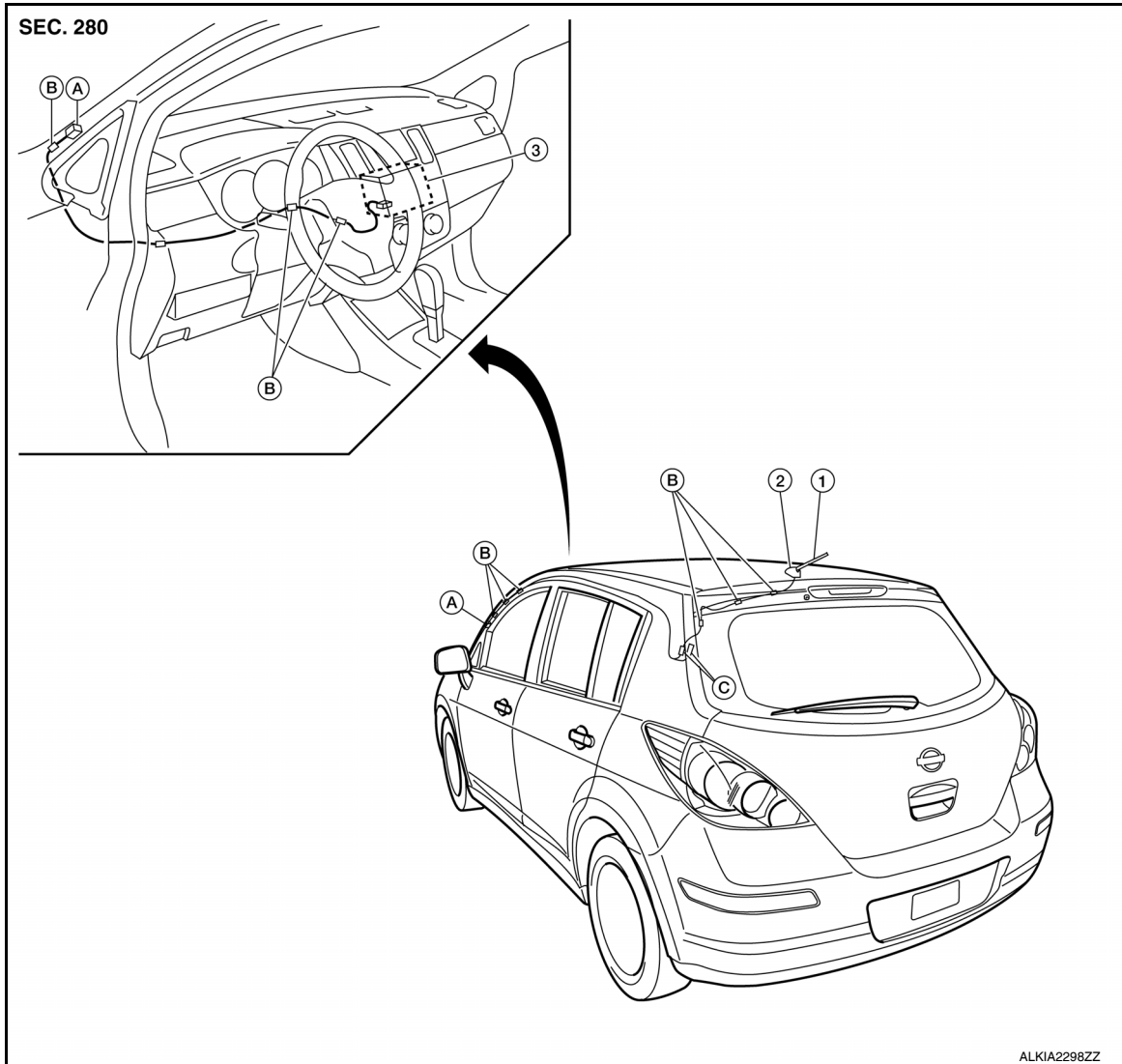
Installation is in the reverse order of removal.

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AUDIO ANTENNA

Location of Antenna

INFOID:000000007329250



- | | | |
|------------------------------------|----------------------|------------------------------------|
| 1. Roof antenna | 2. Roof antenna base | 3. AV control unit |
| A. Audio antenna harness connector | B. Harness clips | C. Roof antenna harness connectors |

Removal and Installation of Roof Antenna

INFOID:000000007329251

REMOVAL

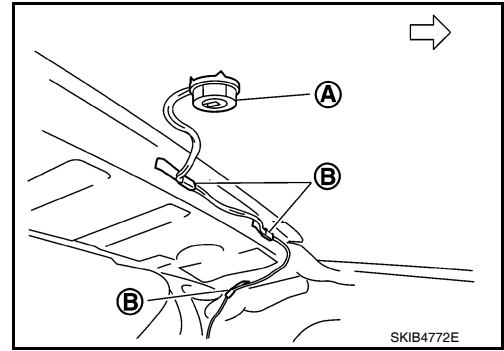
1. Remove the luggage side upper finisher (LH). Refer to [EI-44](#).
2. Remove rear assist grip (LH). Refer to [EI-41, "Component"](#).
3. Remove three clips of headlining (rear side). Pull down headlining (rear side) and obtain space for work between vehicle and headlining.
4. Disconnect the roof antenna harness connectors.
5. Remove nut (A) and clips (B).

AUDIO ANTENNA

< SERVICE INFORMATION >

[AUDIO WITH NAVIGATION]

- ←: Vehicle front



6. Remove the roof antenna.

INSTALLATION

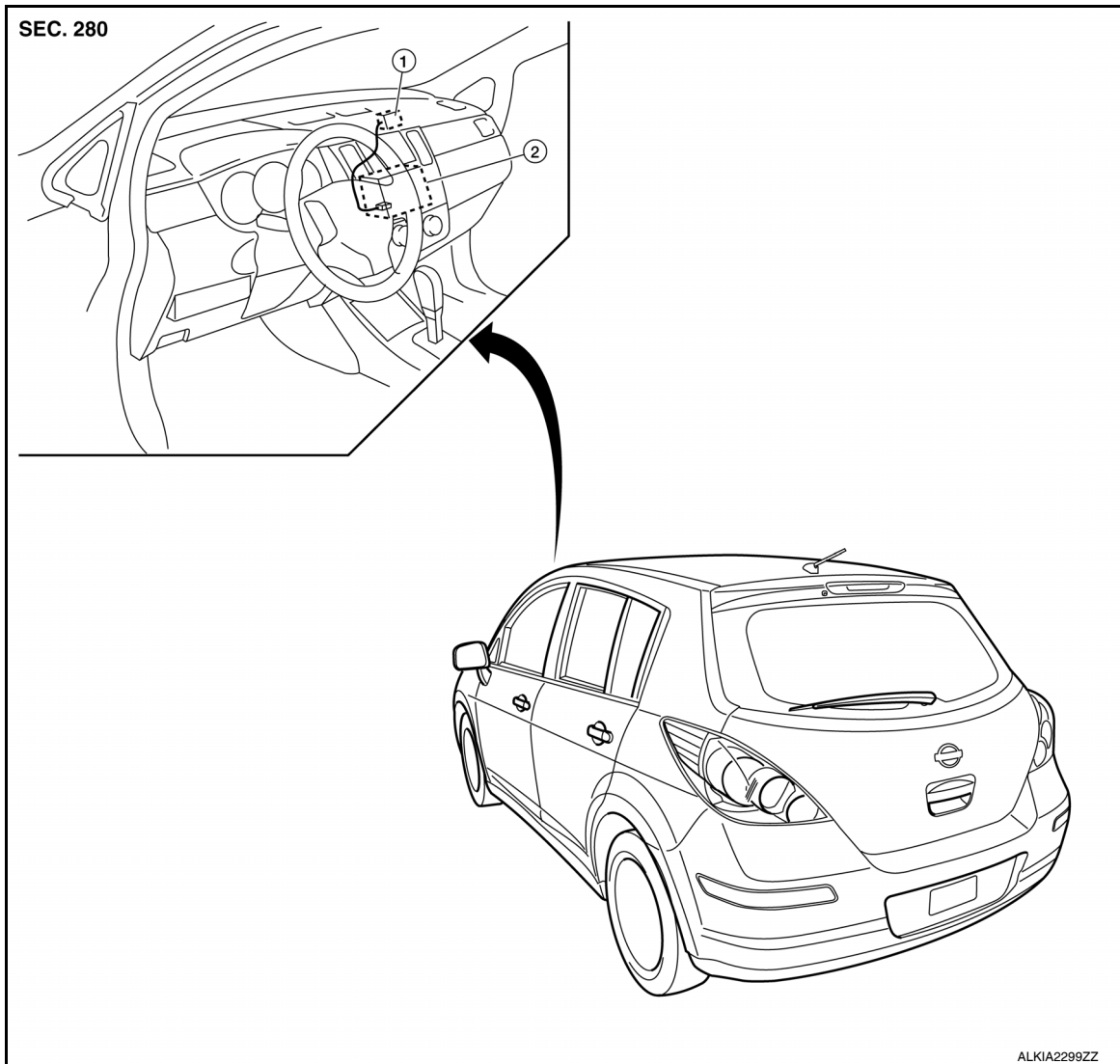
Installation is in the reverse order of removal.

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GPS ANTENNA

Location of Antenna

INFOID:000000007329252



1. GPS antenna

2. AV control unit

Removal and Installation of GPS Antenna

INFOID:000000007329253

1. Remove cluster lid C. Refer to [IP-12, "Removal and Installation"](#)
2. Remove audio unit and disconnect GPS antenna connector.
3. Remove screw (A) and remove GPS antenna (1).

