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AUDIO, VISUAL, NAVIGATION & TELEPHONE SYS-

CONTENTS

PRECAUTIONS2	Front Tweeter (Base System)
Precautions for Supplemental Restraint System	Sound Is Not Heard From Rear
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	System)
SIONER" 2	Sound Is Not Heard From Fro
Wiring Diagrams and Trouble Diagnosis 2	Front Tweeter (Premium Syst
PREPARATION 3	Sound Is Not Heard From Re
Commercial Service Tool 3	Rear Door Tweeter (Premium
AUDIO 4	Sound Is Not Heard From Sul
Component Parts and Harness Connector Location 4	System)
System Description5	Removal and Installation for A
BASE SYSTEM 5	REMOVAL
PREMIUM SYSTEM5	INSTALLATION
Schematic 7	Removal and Installation of S
PREMIUM SYSTEM7	REMOVAL - FRONT DOOF
Wiring Diagram — AUDIO — 8	INSTALLATION - FRONT D
BASE SYSTEM8	REMOVAL - REAR DOOR
PREMIUM SYSTEM10	INSTALLATION - REAR DO
Terminals and Reference Value for Audio Unit (Base	REMOVAL - FRONT TWEE
System) 17	INSTALLATION - FRONT T
Terminals and Reference Value for Audio Unit (Pre-	REMOVAL - REAR DOOR
mium System)18	MIUM SYSTEM)
Terminals and Reference Value for Audio Amplifier	INSTALLATION - REAR DO
(Premium System)20	(PREMIUM SYSTEM)
Audio Unit Self-Diagnosis Function (Premium Sys-	REMOVAL - SUBWOOFER
tem)23	TEM)
STARTING THE SELF-DIAGNOSIS MODE 23	INSTALLATION - SUBWOO
EXITING THE SELF-DIAGNOSIS MODE 23	SYSTEM)
DIAGNOSIS FUNCTION23	Removal and Installation of A
Trouble Diagnosis24	REMOVAL
MALFUNCTION WITH RADIO AND CD (BASE	I NSTALLATION
SYSTEM)24	Removal and Installation of St
MALFUNCTION WITH RADIO AND CD (PRE-	Control Switches
MIUM SYSTEM)24	REMOVAL
FOR RADIO ONLY25	INSTALLATION
FOR CD ONLY25	AUDIO ANTENNA
Noise Inspection25	Location of Antenna
TYPE OF NOISE AND POSSIBLE CAUSE 25	Fixed Antenna Rod Replacen
Power Supply Circuit Inspection	REMOVAL
Steering Switch Check (Premium System) 27	INSTALLATION
Sound Is Not Heard From Front Door Speaker or	

PRECAUTIONS

PRECAUTIONS PFP:00001

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

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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 Man-

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.

Wiring Diagrams and Trouble Diagnosis

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When you read wiring diagrams, refer to the following:

- GI-15, "How to Read Wiring Diagrams".
- PG-4, "POWER SUPPLY ROUTING CIRCUIT".

When you perform trouble diagnosis, refer to the following:

- GI-11, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES".
- GI-27, "How to Perform Efficient Diagnosis for an Electrical Incident".

PREPARATION

PREPARATION			PFP:00002	
Commercial Servi	ice Tool		EKS00DKF	Α
Tool name		Description		
Power tool		Loosening bolts and nuts		В
				С
	PBIC0191E			D

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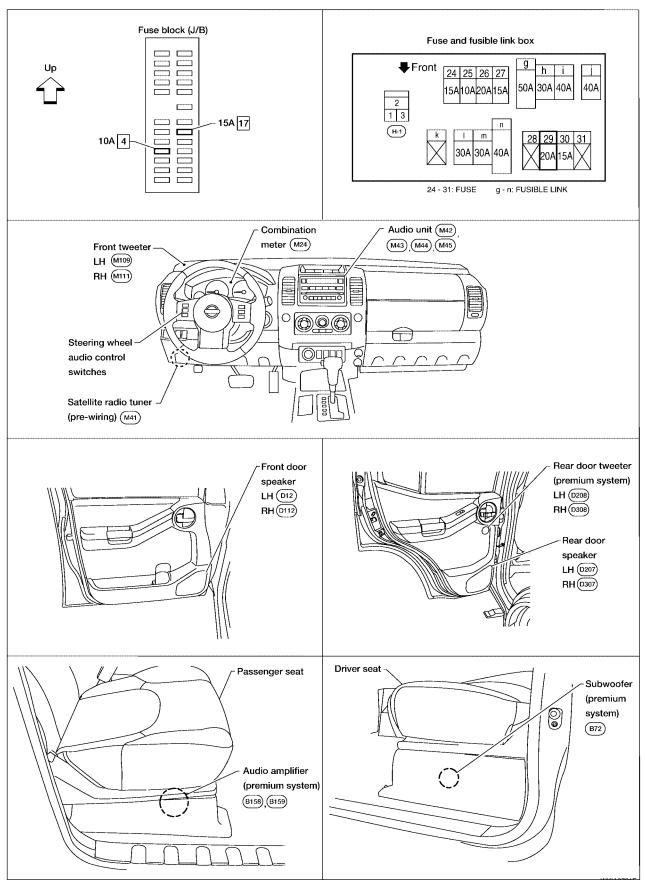
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AUDIO PFP:28111

Component Parts and Harness Connector Location

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System Description EKS00DKH **BASE SYSTEM** Α Refer to Owner's Manual for audio system operating instructions. Power is supplied at all times through 20A fuse (No. 29, located in the fuse and fusible link box) to audio unit terminal 6. With the ignition switch in the ACC or ON position, power is supplied through 10A fuse [No. 4, located in the fuse block (J/B)] to audio unit terminal 10. Ground is supplied through the case of the audio unit. D Then audio signals are supplied through audio unit terminals 1, 2, 3, 4, 13, 14, 15 and 16 to terminals + and - of front door speaker LH and RH Е to terminals + and - of front tweeter LH and RH 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 15A fuse [No. 17, located in the fuse block (J/B)] to audio amplifier terminals 1 and 17 through 20A fuse (No. 29, located in the fuse and fusible link box) Н to audio unit terminal 6. With the ignition switch in the ACC or ON position, power is supplied through 10A fuse [No. 4, located in the fuse block (J/B)] to audio unit terminal 10. Ground is supplied through the case of the audio unit. Ground is also supplied to audio amplifier terminals 4 and 20 through body grounds B117 and B132. Then audio signals are supplied through audio unit terminals 1, 2, 3, 4, 13, 14, 15 and 16 to audio amplifier terminals 5, 6, 7, 8, 21, 22, 23 and 24. Audio signals are amplified by the audio amplifier. The amplified audio signals are supplied

through audio amplifier terminals 2, 3, 11, 12, 13, 14, 15, 16, 18, 19, 27, 28, 29, 30, 31 and 32

- to terminals + and of front door speaker LH and RH
- to terminals + and of front tweeter LH and RH
- to terminals + and of rear door speaker LH and RH
- to terminals + and of rear door tweeter LH and RH
- to terminals 1, 2, 3 and 4 of subwoofer.

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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Satellite Radio Tuner (Pre-wiring)

The satellite radio tuner pre-wiring allows connection of a satellite radio tuner. Power is supplied at all times

- through 15A fuse [No. 17, located in the fuse block (J/B)]
- to satellite radio tuner pre-wiring terminal 32.

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

- through 10A fuse [No. 4, located in the fuse block (J/B)]
- to satellite radio tuner pre-wiring terminal 36.

AV-5 2005 Xterra Revision: February 2005

Ground is supplied through the case of the satellite radio tuner. Then audio signals are supplied

- through satellite radio tuner pre-wiring terminals 21, 22, 23 and 24
- to audio unit terminals 41, 42, 43 and 44.

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 PREMIUM SYSTEM

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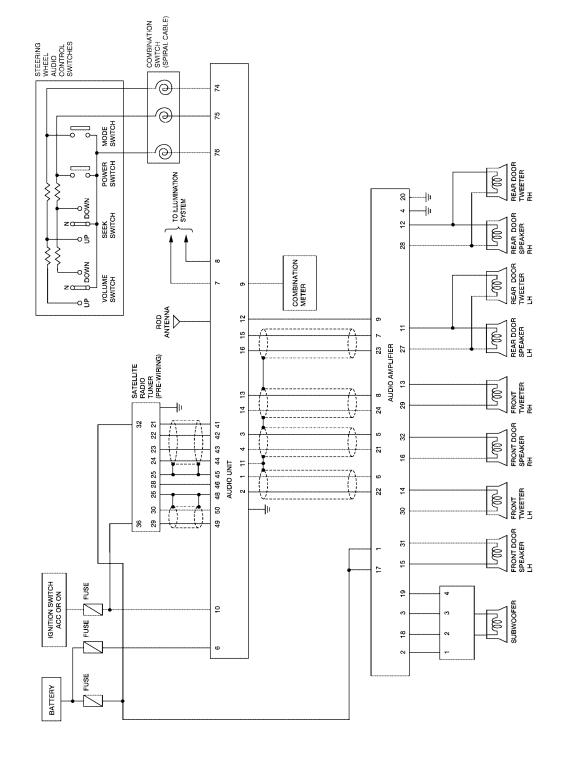
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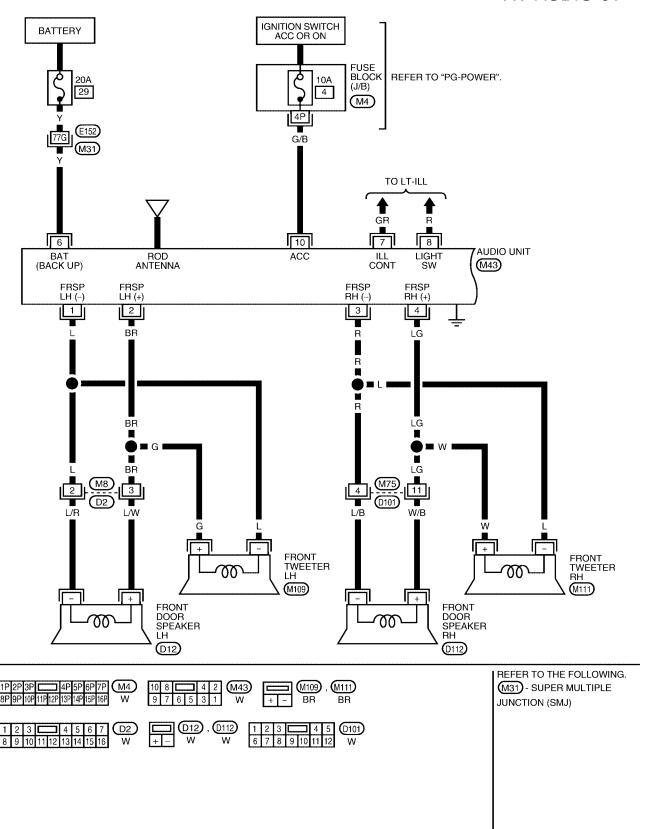


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Wiring Diagram — AUDIO — BASE SYSTEM

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AV-AUDIO-01



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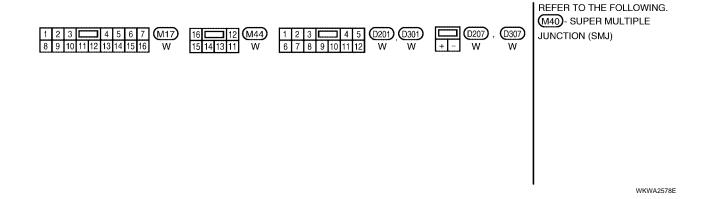
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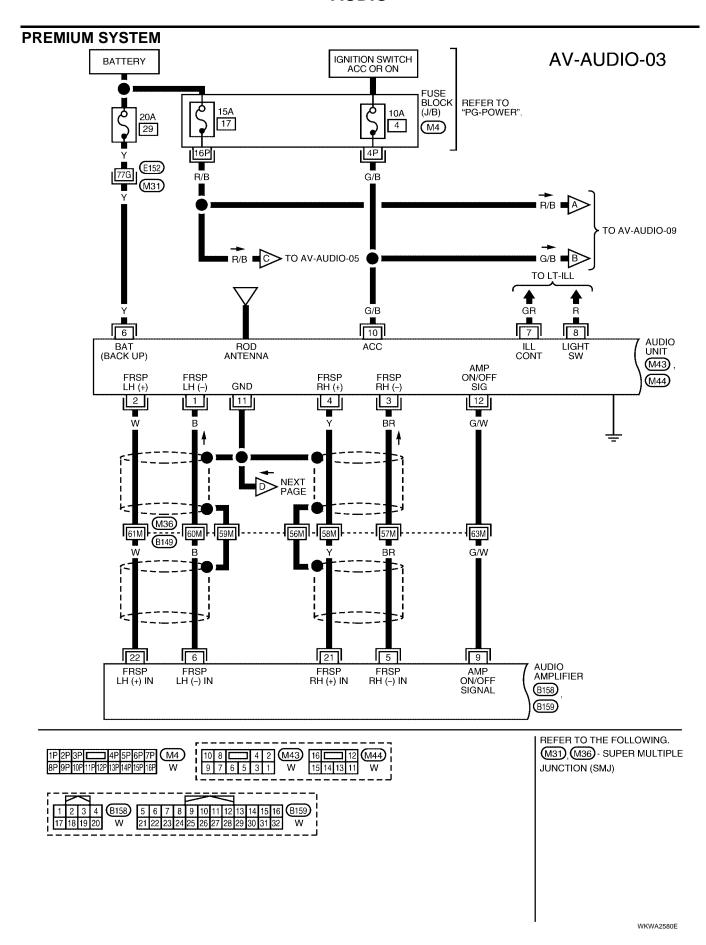
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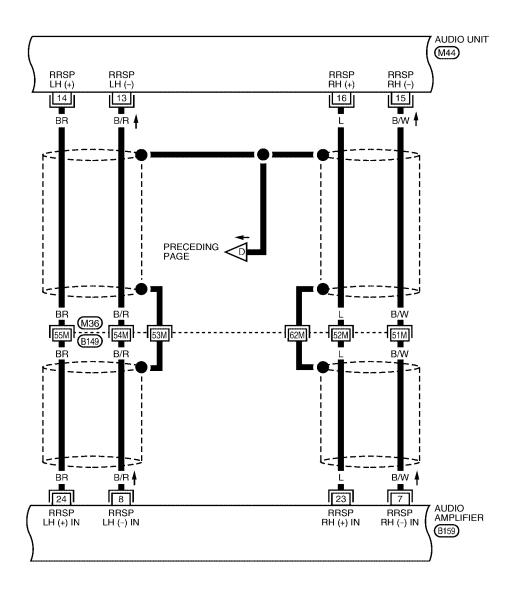
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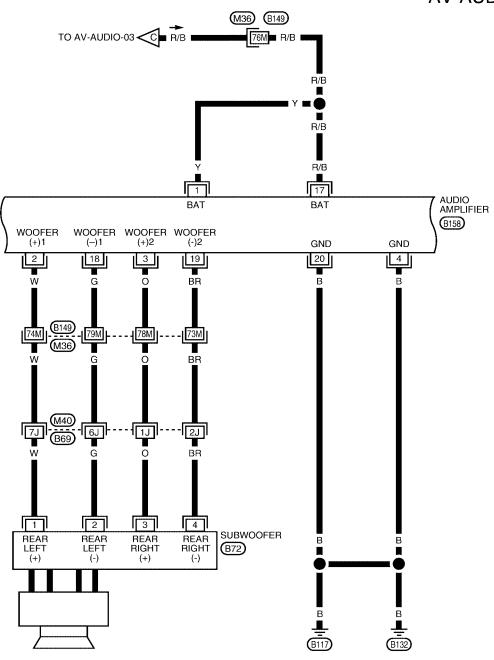
16 12 M44 5 6 7 8 9 10 11 12 13 14 15 16 B159 21 22 23 24 25 26 27 28 29 30 31 32 W

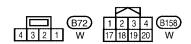
REFER TO THE FOLLOWING.

(M36) - SUPER MULTIPLE

JUNCTION (SMJ)

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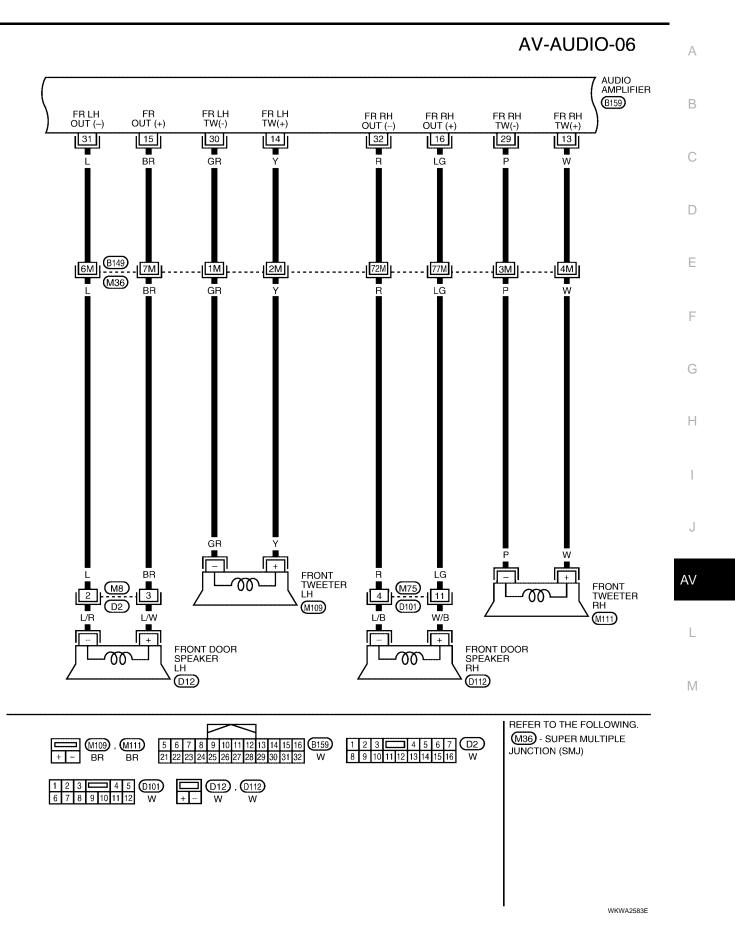


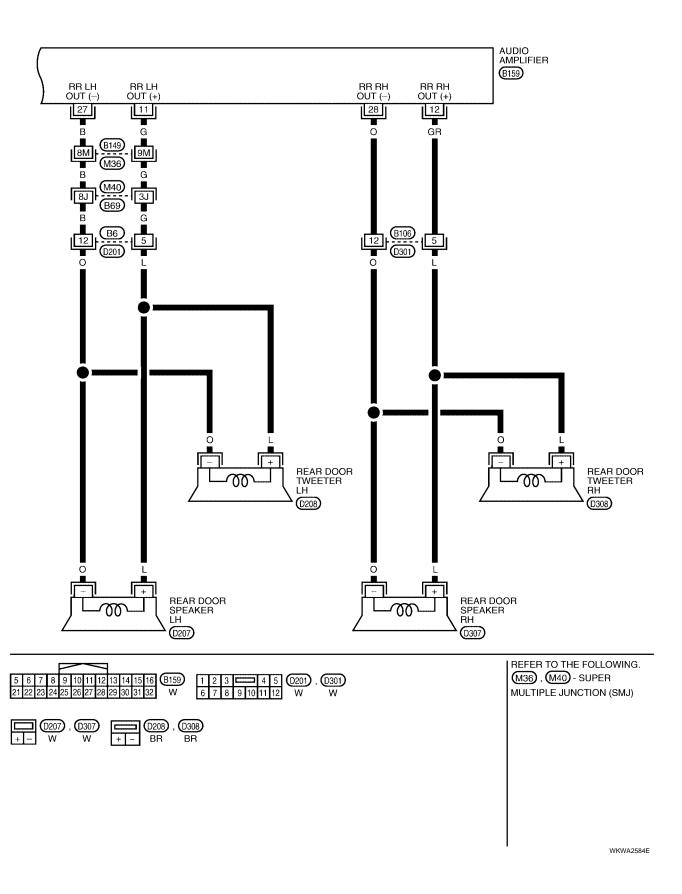
REFER TO THE FOLLOWING.

(M36) (M40) - SUPER MULTIPLE

JUNCTION (SMJ)

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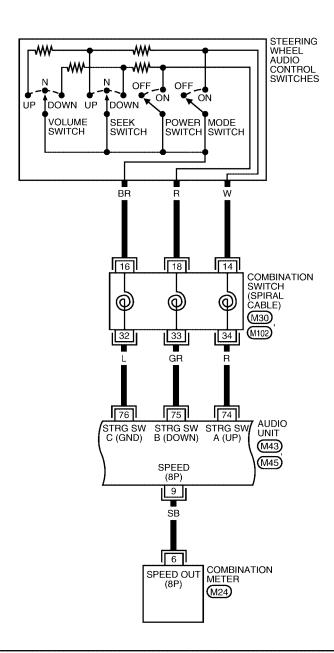
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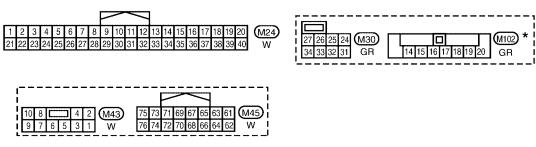
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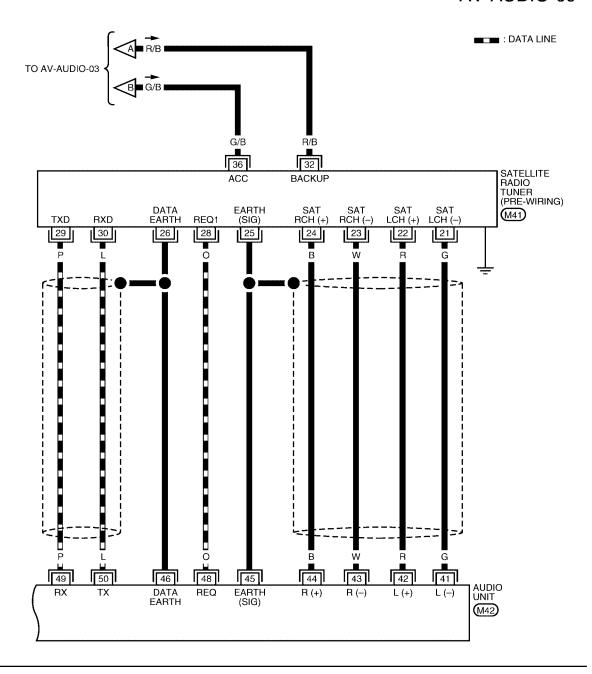
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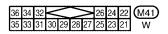


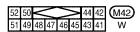


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WKWA2585E







WKWA2586E

ermin	als and	Reference	ce Val	ue for	Audio Uni	t (Base System)	EKS00DKK
	ninal color)	- Item	Signal	(Condition	Reference value	Everante of everators
+	_	nem	input/ output	Ignition switch	Operation	(Approx.)	Example of symptom
2 (BR)	1 (L)	Audio sound signal front LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from front door speaker LH or front tweeter LH.
4 (LG)	3 (R)	Audio sound signal front RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from front door speaker RH or front tweeter RH.
6 (Y)	Ground	Battery power	Input	_	_	Battery voltage	System does not work properly.
7 (GR)	Ground	Illumination control signal	Input	ON	Illumination control switch is operated by lighting switch in 1st position.	Changes between 0 and 12V	Audio unit illumina- tion cannot be con- trolled.
8 (R)	Ground	Illumination	Input	OFF	Lighting switch is in 1st position.	Battery voltage	Audio unit illumina- tion does not come on when lighting
		signal			Lighting switch is OFF.	3V or less	switch is in 1st position.
10 (G/B)	Ground	ACC power	Input	ACC	Ignition switch ACC or ON	Battery voltage	System does not work properly.
14 (G)	13 (B)	Audio sound signal rear LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from rear door speaker LH.
16 (GR)	15 (O)	Audio sound signal rear RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from rear door speaker RH.

Termin	als and	d Referer	ce Va	lue fo	r Audio Unit	(Premium System)	EKS00DKL
	ninal color)	Item	Signal input/		Condition	Reference value	Example of symptom
+	_	item	output	Ignition switch	Operation	(Approx.)	Example of Symptom
2 (W)	1 (B)	Audio sound signal front LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from front door speaker LH or front tweeter LH.
4 (Y)	3 (BR)	Audio sound signal front RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker RH or front tweeter RH.
6 (Y)	Ground	Battery power	Input	-	-	Battery voltage	System does not work properly.
7 (GR)	Ground	Illumination control sig- nal	Input	ON	Illumination control switch is operated by lighting switch in 1st position.	Changes between 0 and 12V	Audio unit illumination cannot be controlled.
		Illumination			Lighting switch is in 1st position.	Battery voltage	Audio unit illumina- tion does not come
8 (R)	Ground	signal	Input	OFF	Lighting switch is OFF.	3V or less	on when lighting switch is in 1st posi- tion.
9 (SB)	Ground	Vehicle speed sig- nal	Input	ON	When vehicle speed is approx. 40 km/h (25 MPH)	Vehicle speed : approx.40km/h b a 10ms a \$3.5V b \$1.5V SKIA0168E	Speed sensitive volume inoperative.
10 (G/B)	Ground	ACC power	Input	ACC	_	Battery voltage	System does not work properly.
11	_	Shield ground	-	_	-	-	-
12 (G/W)	Ground	Amp. ON/ OFF signal	Output	ON	_	More than 6.5V	Audio amplifier does not work properly.
14 (BR)	13 (B/R)	Audio sound signal rear LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from rear door speaker LH or rear door tweeter LH.

	ninal color)	Item	Signal input/		Condition	Reference value	Example of symptom	
+	_	цет	output	Ignition switch	Operation	(Approx.)	Example of symptom	
16 (L)	15 (B/W)	Audio sound signal rear RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from rear door speaker RH or rear door tweeter RH.	
42 (R)	41 (G)	Audio left channel sound sig- nal from sat- ellite radio tuner	Input	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from satellite radio tuner left channel.	
44 (B)	43 (W)	Audio right channel sound sig- nal from sat- ellite radio tuner	Input	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from satellite radio tuner right channel.	
45	-	Shield ground (audio sig- nal)	_	_	-	_	-	
46	-	Shield ground (data)	_	-	-	_	-	
48 (O)	Ground	Satellite radio tuner request to audio unit	Input	ON	Turn audio unit ON	5V	Satellite radio tuner does not operate properly.	
49 (P)	Ground	Audio RX	Input	ON	Operate audio volume	(V) 6 4 2 0 ** 5ms SKIA4403E	Satellite radio tuner audio information does not display properly.	
50 (L)	Ground	Audio TX	Output	ON	Operate audio volume	(V) 6 4 2 0 + 2ms SKIA4402E	Satellite radio tuner audio information does not display properly.	

	minal e color)		Signal input/		Condition	Reference value	Example of symptom											
+	_	пеш	output	Ignition switch	Operation	(Approx.)	Example of Symptom											
					Press MODE switch	0V												
74 (R)	Ground	Remote control A	Input	Input	Input	ON	Press SEEK UP switch	0.75V	Steering wheel audio controls do not func-									
		CONTIONA													Press VOL UP switch	2V	tion.	
												Except for above	5V					
			Input	Input	Input		Press POWER switch	OV										
75 (GR)	Ground	Remote control B				Input	Input	Input	Input	Input	Input	Input	Input	Input	ON	Press SEEK DOWN switch	0.75V	Steering wheel audio controls do not func-
		CONTIOLE											Press VOL DOWN switch	2V	tion.			
					Except for above	5V												
76 (L)	-	Remote control ground	-	_	_	_	Steering wheel audio controls do not function.											

Terminals and Reference Value for Audio Amplifier (Premium System)

Termin	ais aiic	i Kelelelic	e vait	ie ioi	Audio Ailip	olifier (Premium Syste	em) eksooe17
	minal color)	Item	Signal input/	(Condition	Reference value	Example of
+	_	item	output	Ignition switch	Operation	(Approx.)	symptom
1 (Y)	Ground	Battery	Input	_	-	Battery voltage	System does not work properly.
2 (W)	18 (G)	Subwoofer	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from subwoofer.
3 (O)	19 (BR)	Subwoofer	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from subwoofer.
4 (B)	Ground	Ground	_	ON	_	-	_
9 (G/W)	Ground	Amp. ON sig- nal	Input	ON	-	More than 6.5V	System does not work properly.
11 (G)	27 (B)	Rear door speaker LH and rear door tweeter LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from rear door speaker LH or rear door tweeter LH.

	ninal color)	14	Signal	(Condition	Reference value	Example of
+	_	Item	input/ output	Ignition switch	Operation	(Approx.)	symptom
12 (GR)	28 (O)	Rear door speaker RH and rear door tweeter RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from rear door speaker RH or rear door tweeter RH.
13 (W)	29 (P)	Front tweeter RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from front tweeter RH.
14 (Y)	30 (GR)	Front tweeter LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms	No sound from front tweeter LH.
15 (BR)	31 (L)	Front door speaker LH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker LH.
16 (LG)	32 (R)	Front door speaker RH	Output	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker RH.
17 (R/B)	Ground	Battery	Input	_	_	Battery voltage	System does not work properly.
20 (B)	Ground	Ground	-	ON	_	-	-
21 (Y)	5 (BR)	Audio sound signal front RH	Input	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker RH or front tweeter RH.

	minal color)	Item	Signal input/	(Condition	Reference value	Example of
+	_	item	output	Ignition switch	Operation	(Approx.)	symptom
22 (W)	6 (B)	Audio sound signal front LH	Input	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from front door speaker LH or front tweeter LH.
23 (L)	7 (B/W)	Audio sound signal rear RH	Input	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from rear door speaker RH or rear door tweeter RH.
24 (BR)	8 (B/R)	Audio sound signal rear LH	Input	ON	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	No sound from rear door speaker LH or rear door tweeter LH.

Audio Unit Self-Diagnosis Function (Premium System)

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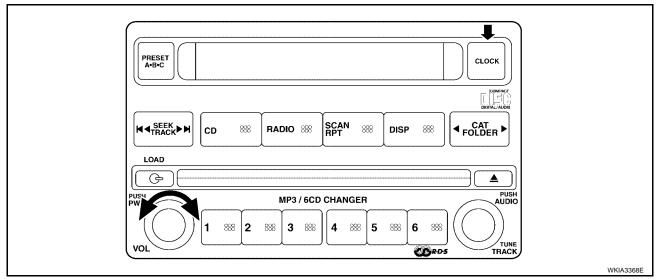
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It can check ON/OFF operation of each switch in the audio unit and diagnose the input signals from the steering switch.

STARTING THE SELF-DIAGNOSIS MODE

- 1. Turn ignition switch from OFF to ACC.
- 2. Press and hold the "CLOCK" switch and turn the volume control dial clockwise or counterclockwise for 30 clicks or more.



Then the self-diagnosis operates. A single beep indicates self-diagnosis mode is active.

- 3. Initially, all display segments will be illuminated.
- 4. Press each switch. When each switch is pressed, its name and communication code will be displayed.

NOTE:

CD player LOAD and EJECT buttons are not included in this test and will not change the display when pressed.

EXITING THE SELF-DIAGNOSIS MODE

Turn ignition switch OFF. Then the self-diagnosis ends.

DIAGNOSIS FUNCTION

- It can check for continuity of the switches by sounding a beep when each audio unit switch and steering switch is pressed.
- It can check for continuity of harness between audio unit and steering switch.

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Revision: February 2005 AV-23 2005 Xterra

Trouble Diagnosis

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The majority of the audio troubles are the result of outside causes (bad CD, electromagnetic interference, etc.). Check the inspection items below to diagnose the malfunction.

MALFUNCTION WITH RADIO AND CD (BASE SYSTEM)

Symptom	Possible cause
Inoperative	 Audio unit power circuit check. Refer to <u>AV-26</u>, "<u>Power Supply Circuit Inspection</u>".
·	If above check is OK, replace audio unit.
All speakers do not sound	Audio unit
One or several speakers do not sound	 Front door speaker check. Refer to AV-29, "Sound Is Not Heard From Front Door Speaker or Front Tweeter (Base System)". Rear door speaker check. Refer to AV-31, "Sound Is Not Heard From Rear Door Speaker (Base System)".
Poor sound	Audio unit Speaker
Noisy	 Audio unit Electrical equipment (generator, bonding wire, etc.)

MALFUNCTION WITH RADIO AND CD (PREMIUM SYSTEM)

Symptom	Possible cause
Inoperative	 Audio unit power circuit check. Refer to <u>AV-26</u>, "<u>Power Supply Circuit</u> <u>Inspection</u>".
	If above check is OK, replace audio unit.
Steering switch does not operate	 Steering switch check. Refer to <u>AV-27</u>, "<u>Steering Switch Check (Premium System)</u>".
	If above check is OK, replace audio unit.
	Audio unit
All speakers do not sound	 Audio amplifier power supply and ground circuit check. Refer to <u>AV-26</u>, <u>"Power Supply Circuit Inspection"</u>.
·	Audio amplifier ON signal
	Audio amplifier
	• Front door speaker check. Refer to AV-33, "Sound Is Not Heard From Front Door Speaker or Front Tweeter (Premium System)".
One or several speakers do not sound	• Rear door speaker check. Refer to AV-36, "Sound Is Not Heard From Rear Door Speaker or Rear Door Tweeter (Premium System)".
	 Subwoofer check. Refer to <u>AV-40, "Sound Is Not Heard From Subwoofer (Premium System)"</u>.
	Audio unit
Poor sound	Audio amplifier
	Speaker
	Audio unit
Noisy	Audio amplifier
	• Electrical equipment (generator, bonding wire, etc.)

Symptom	Possible cause
No sound	Audio unit
No sound	 Antenna feeder, wiring or connections
	Audio unit
	Audio unit case ground
Noisy	 Antenna feeder, wiring or connections
Noisy	Noise prevention parts
	Electrical equipment
	 Wire harness of each piece of electrical equipment
	Audio unit power circuit. Refer to AV-26, "Power Supply Circuit
All radio stations stored in memory are deleted	Inspection".
	Audio unit

NOTE:

The following noise results 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 which reflect off mountains or buildings.

FOR CD ONLY

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Symptom	Possible cause	
CD cannot be inserted.		
CD cannot be ejected.	• CD	1
The CD cannot be played.	Audio unit	
The sound skips, stops suddenly, or is distorted.		

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

C	Occurrence condition		
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	
The occurrence of the noise is lin	ked with the operation of the fuel pump.	Fuel pump condenser	
Noise only occurs when various	A cracking or snapping sound occurs with the operation of various switches.	Relay malfunction, audio unit malfunction	
electrical components are operating.	The noise occurs when various motors are operating.	Motor case groundMotor	

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Occurrence condition	Possible cause	
	Rear defogger coil malfunction	
The noise occurs constantly, not just under certain conditions.	Open circuit in printed heater	
	Poor ground of antenna feeder line	
	Ground wire of body parts	
A cracking or snapping sound occurs while the vehicle is being driven, especially when it is vibrating excessively.	Ground due to improper part installation	
when it is vibrating excessively.	Wiring connections or a short circuit	

Power Supply Circuit Inspection

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1. CHECK FUSES

Check that the following fuses are not blown.

Unit	Terminals	Signal name	Fuse No.
Audio unit	6	Battery power	29
Audio utili	10	Ignition switch ACC or ON	4
Audio amplifier (premium system)	1	Rattony nower	17
Addio ampliner (premium system)	17	Battery power	17

OK or NG

OK

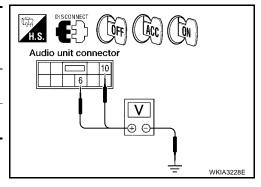
>> GO TO 2. NG

>> If fuse is blown, be sure to eliminate cause of problem before installing new fuse. Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT" .

2. POWER SUPPLY CIRCUIT CHECK

- Disconnect audio unit connector M43 and audio amplifier connector B158 (premium system).
- Check voltage between the audio unit and ground.

	Terminal No.					
Unit	(+)		()	OFF	ACC	ON
	Connector	Terminal	(-)			ĺ
Audio unit M43	M43	6	Ground	Battery voltage	Battery voltage	Battery voltage
	10	Ground	0V	Battery voltage	Battery voltage	



Check voltage between audio amplifier (premium system) and ground.

	Terminal No.					
Unit	(+)		(-)	OFF	ACC	ON
	Connector	Terminal	(-)			
Audio	B158	1	Ground	Battery	Battery	Battery
amplifier	amplifier		Ground	voltage	voltage	voltage

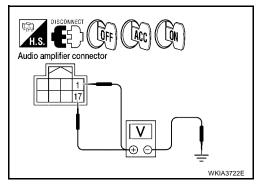
OK or NG

OK >> GO TO 3.

NG

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

Repair harness or connector.



3. GROUND CIRCUIT CHECK

- 1. Turn ignition switch OFF.
- 2. Check continuity between audio amplifier (premium system) harness connector B158 terminal 4 and terminal 20 and ground.

Continuity should exist.

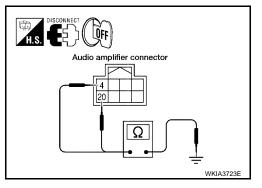
OK or NG

OK

NG

>> Inspection End.

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



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Steering Switch Check (Premium System)

1. SELF-DIAGNOSIS FUNCTION CHECK

- 1. Start audio unit self-diagnosis function. Refer to AV-23, "Audio Unit Self-Diagnosis Function (Premium System)".
- 2. Operate steering switch.

Does steering switch operate normally?

YES >> Inspection End.

NO >> GO TO 2.

2. CHECK HARNESS

- 1. Turn ignition switch OFF.
- 2. Disconnect audio unit connector M45 and spiral cable connector M30.
- Check continuity between spiral cable harness connector terminal and audio unit harness connector terminal.

Terminals						
Spiral	cable	Audio unit		Audio unit Cor		Continuity
Connector	Terminal	Connector Terminal				
	32		76			
M30	33	M45	75	Yes		
	34		74			

4. Check continuity between audio unit and ground.

Audio unit			Continuity	
Connector	Terminal	_		
	74			
M45	75	Ground	No	
	76			

Audio unit connector Spiral cable connector 32 33 34 32 , 33 , 34

M

OK or NG

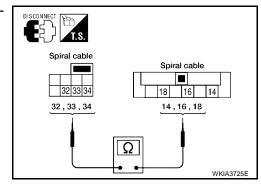
OK >> GO TO 3.

NG >> Repair harness.

3. SPIRAL CABLE CHECK

- 1. Disconnect spiral cable connectors M30 and M102.
- 2. Check continuity between spiral cable harness connector terminals.

Terminals				
Spiral cable			Continuity	
Connector	Terminal	Connector	Terminal	
	32		16	
M30	33	M102	18	Yes
	34		14	



OK or NG

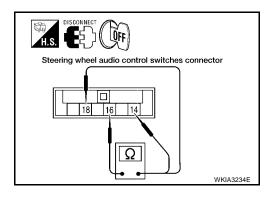
OK >> GO TO 4.

NG >> Replace spiral cable. Refer to <u>SRS-44, "SPIRAL CABLE"</u>.

4. CHECK STEERING SWITCH RESISTANCE

Check resistance between steering switch terminals.

Terr	Terminal Signal name Condition		Condition	Resistance (Ω) (Approx.)
		Seek (down)	Depress (station) down switch.	165
18	16	Power	Depress power switch.	0
Volume (down)		Volume (down)	Depress volume down switch.	652
		Seek (up)	Depress (station) up switch.	165
14	16	Mode	Depress mode switch.	0
		Volume (up)	Depress volume up switch.	652



OK or NG

NG

OK >> Inspection End.

>> Replace steering switch. Refer to <u>AV-43</u>, "<u>Removal and Installation of Steering Wheel Audio Control Switches</u>".

Sound Is Not Heard From Front Door Speaker or Front Tweeter (Base System) EKS00E1R

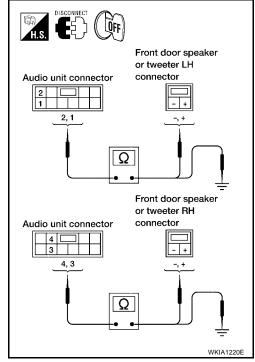
1. HARNESS CHECK

- 1. Turn ignition switch OFF.
- 2. Disconnect audio unit connector M43 and suspect speaker or tweeter connector.
- Check continuity between audio unit harness connector M43 terminal and suspect speaker or tweeter harness connector terminal.

Terminals				
Audi	o unit	Speaker or tweeter		Continuity
Connector	Terminal	Connector	Terminal	
	2	D12	+	
	1	DIZ	-	
	4	M109 -	+	
M43	3		-	Yes
IVI+3	2		+	163
	1		-	
	4		+	
	3	IVIIII	-	

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

	Terminals			
Audio unit			Continuity	
Connector	Terminal			
M43	2		No	
	1	Ground		
	4	Ground		
	3			



OK or NG

NG

OK >> GO TO 2.

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

Repair harness or connector.

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2. FRONT SPEAKER SIGNAL CHECK

- 1. Connect audio unit connector and front speaker or tweeter connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio unit harness connector terminal and ground with CONSULT-II or oscilloscope.

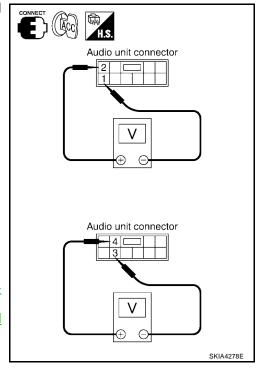
	Terminals					
	(+) (-)		Condi-	Reference		
Con- nec- tor	Termi- nal	Con- nec- tor	Termi- nal	tion	signal	
	2		1			
M43	4	M43	3	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	

OK or NG

NG

OK >> Replace speaker. Refer to AV-41, "Removal and Installation of Speaker".

>> Replace audio unit. Refer to <u>AV-41</u>, "<u>Removal and</u> <u>Installation for Audio Unit</u>".



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

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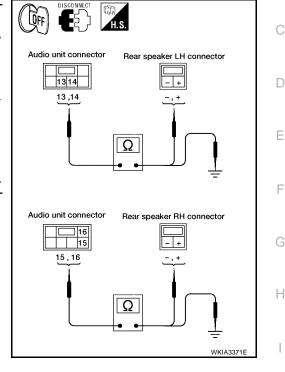
1. HARNESS CHECK

- 1. Turn ignition switch OFF.
- 2. Disconnect audio unit connector M44 and suspect speaker connector.
- Check continuity between audio unit harness connector M44 terminal and suspect speaker harness connector terminal.

	Tern			
Audi	o unit	Continuity		
Connector	Terminal	Connector	Terminal	
	13	D207	-	
M44	14	D201	+	Yes
	15	D307	-	165
	16	D307	+	

4. Check continuity between audio unit harness connector M44 terminal and ground.

	Continuity		
Connector	Terminal	_	
	13	Ground	No
M44	14		
IVI TT	15	Giouna	
	16		



OK or NG

NG

OK >> GO TO 2.

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

• Repair harness or connector.

AV

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

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

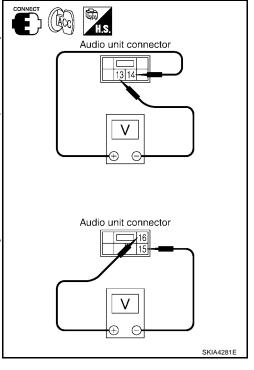
	Terminals					
(-	+)	(-)		Condi-	Reference	
Con- nector	Termi- nal	Con- nector	Terminal	tion	signal	
	14		13			
M44	16	M44	15	Receive audio signal	1 0 -1 1 ms SKIA0177E	

OK or NG

NG

OK >> Replace rear door speaker. Refer to <u>AV-41, "Removal and Installation of Speaker"</u>.

>> Replace audio unit. Refer to <u>AV-41, "Removal and</u> Installation for Audio Unit".



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

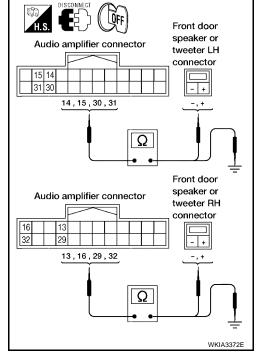
1. HARNESS CHECK

- 1. Turn ignition switch OFF.
- 2. Disconnect audio amplifier connector B159 and suspect speaker connector.
- 3. Check continuity between audio amplifier harness connector terminal B159 and suspect speaker harness connector terminal.

Audio a	amplifier	Speaker	or tweeter	Continuity
Connector	Terminal	Connector	Terminal	
	15	D12	+	
	31	012	-	
	16	D112	+	Yes
B159	32	DIIZ	-	
D109	14	M109	+	
	30	IVITUS	-	
	13	M111	+	
	29	IVITI	-	

4. Check continuity between audio amplifier harness connector terminal B159 and ground.

Au	Continuity		
Connector	Terminal	_	
	13		No
	14		
	15	Ground	
B159	16		
D 159	29		
	30		
	31		
	32		



OK or NG

OK >> GO TO 2.

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

• Repair harness or connector.

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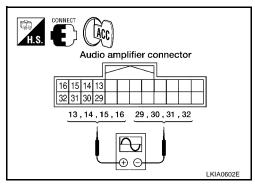
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2. FRONT SPEAKER SIGNAL CHECK

- 1. Connect audio amplifier connector B159 and suspect speaker connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio amplifier harness connector B159 terminals with CONSULT-II or oscilloscope.

	Terminals					
(+) (-)		Condi-	Reference			
Con- nector	Termi- nal	Con- nector	Termi- nal	tion	signal	
	13		29		(V)	
	14		30		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
B159	15	B159	31	Receive audio	0	
	16		32	signal	-1 1 ms SKIA0177E	



OK or NG

OK >> Replace suspect speaker. Refer to AV-41, "Removal and Installation of Speaker" .

NG >> GO TO 3.

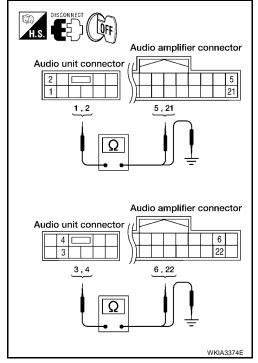
3. HARNESS CHECK

- 1. Turn ignition switch OFF.
- 2. Disconnect audio unit connector M43 and audio amplifier connector B159.
- Check continuity between audio unit harness connector terminals and audio amplifier harness connector terminals.

Audi	Audio unit Audio amplifier				
Connector	Terminal	Connector			
	1		6		
M43	2	B159	22	Yes	
IVI43	3	D 109	5	165	
	4		21	l	

Check continuity between audio unit harness connector terminals and ground.

	Continuity		
Connector	Terminal	_	
	1	Ground	No
M43	2		
10143	3		
	4		



OK or NG

OK >> GO TO 4.

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

Repair harness or connector.

4. FRONT SPEAKER SIGNAL CHECK

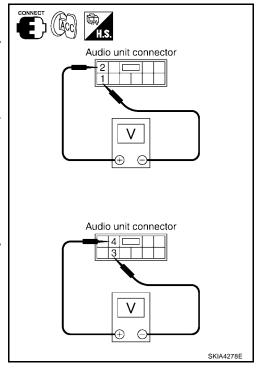
- 1. Connect audio unit connector and audio amplifier connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio unit harness connector terminals with CONSULT-II or oscilloscope.

Terminals						
(-	(+) (-)		Condi-	Reference		
Con- nector	Termi- nal	Con- nector	Termi- nal	tion	signal	
	2		1			
M43	4	M43	3	Receive audio signal	1 0 -1 1 ms SKIA0177E	

OK or NG

OK >> Replace audio amplifier. Refer to <u>AV-43, "Removal and Installation of Audio Amplifier"</u>.

NG >> Replace audio unit. Refer to <u>AV-41, "Removal and Installation for Audio Unit"</u>.



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Sound Is Not Heard From Rear Door Speaker or Rear Door Tweeter (Premium System)

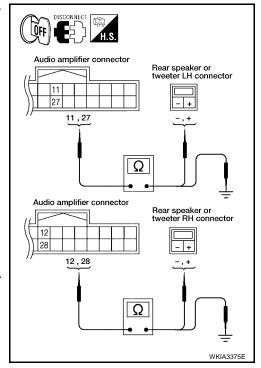
1. HARNESS CHECK

- 1. Turn ignition switch OFF.
- 2. Disconnect audio amplifier connector B159 and suspect speaker connector.
- 3. Check continuity between audio amplifier harness connector terminal B159 and suspect speaker harness connector terminal.

Audio a	amplifier	Speaker	Continuity	
Connector	Terminal	Connector	Terminal	
	11	D207	+	
	27	D201	-	Yes
	12	D307	+	
B159	28	D307	-	
D139	11	D208	+	165
	27	D200	-	
	12	D308	+	
	28	D300	-	

4. Check continuity between audio amplifier harness connector B159 terminal and ground.

Au	Continuity		
Connector	Terminal	_	
	11		No
B159	27	Ground	
D139	12		
	28		



OK or NG

NG

OK >> GO TO 2.

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

• Repair harness or connector.

$\overline{2}$. REAR SPEAKER SIGNAL CHECK

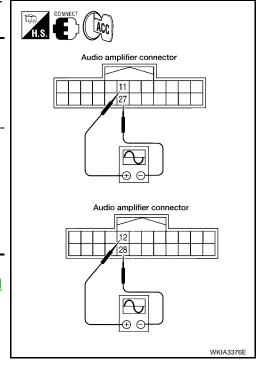
- 1. Connect audio amplifier connector B159 and suspect speaker connector.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio amplifier harness connector B159 terminals with CONSULT-II or oscilloscope.

Terminals						
(+)		(-)		Condi-	Reference	
Con- nec- tor	Terminal	Con- nec- tor	Terminal	tion	signal	
	11		27			
B159	12	B159	28	Receive audio signal	(V) 1 0 -1 1 ms	

OK or NG

OK >> Replace suspect speaker. Refer to <u>AV-41, "Removal and Installation of Speaker"</u>.

NG >> GO TO 3.



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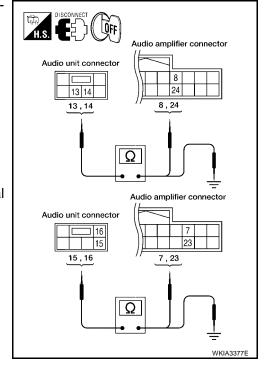
3. HARNESS CHECK

- 1. Turn ignition switch OFF.
- 2. Disconnect audio unit connector M44 and audio amplifier connector B159.
- Check continuity between audio unit harness connector M44 terminals and audio amplifier harness connector B159 terminals.

Audi	o unit	Audio a	Continuity		
Connector	Terminal	Connector	Terminal	l	
M44	13		8	Yes	
	14	B159	24		
	15	D 109	7		
	16		23		

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

	Audio unit		Continuity	
Connector	Terminal	_		
M44	13	- Ground	No	
	14			
	15			
	16			



OK or NG

OK >> GO TO 4.

NG

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

4. REAR SPEAKER SIGNAL CHECK

- 1. Connect audio unit connector M44 and audio amplifier connector B159.
- 2. Turn ignition switch to ACC.
- 3. Push "POWER" switch.
- 4. Check the signal between audio unit harness connector M44 terminals with CONSULT-II or oscilloscope.

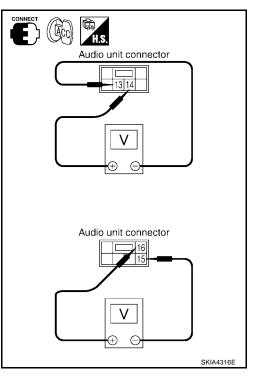
Terminals						
(+)		(-)		Condi-	Reference	
Con- nector	Terminal	Con- nector	Terminal	tion	signal	
	14		13			
M44	16	M44	15	Receive audio signal	(V) 1 0 -1 1 ms SKIA0177E	

OK or NG

NG

OK >> Replace audio amplifier. Refer to AV-43, "Removal and Installation of Audio Amplifier".

>> Replace audio unit. Refer to <u>AV-41</u>, "Removal and <u>Installation for Audio Unit"</u>.



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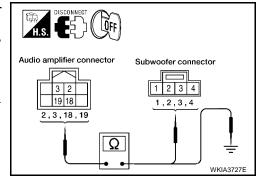
Sound Is Not Heard From Subwoofer (Premium System)

EKS00E1V

1. HARNESS CHECK

- 1. Turn ignition switch OFF.
- 2. Disconnect audio amplifier connector B158 and subwoofer connector B72.
- Check continuity between audio amplifier harness connector terminal and subwoofer harness connector terminal.

Audio a	amplifier	Subv	Continuity	
Connector	Terminal	Connector	Terminal	
B158	2		1	Yes
	3	B72	3	
	18	572	2	
	19		4	



4. Check continuity between audio amplifier harness connector terminal and ground.

	Audio amplifier					
Connector	Terminal	_				
	2		No			
B158	3	Ground				
D130	18					
	19					

OK or NG

OK

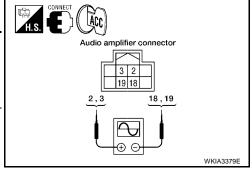
NG

- >> GO TO 2.
- >> Check connector housings for disconnected or loose terminals.
 - Repair harness or connector.

2. SUBWOOFER SIGNAL CHECK

- 1. Connect audio amplifier connector and subwoofer connector.
- 2. Turn ignition switch to ACC.
- 3. Check the signal between audio amplifier harness connector terminals with CONSULT-II or oscilloscope.

Terminals						
(+) (-)		(-)	Condi-	Reference		
Con- nector	Termi- nal	Con- nector	Termi- nal	tion	signal	
	2		18		(V)	
B158	3	B158	19	Receive audio signal	1 0 -1 1 ms SKIA0177E	



OK or NG

OK >> Replace subwoofer. Refer to AV-41, "Removal and Installation of Speaker".

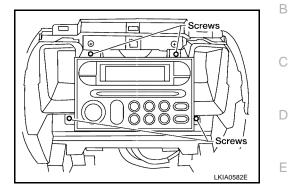
NG >> Replace audio amplifier. Refer to AV-43, "Removal and Installation of Audio Amplifier".

Removal and Installation for Audio Unit **REMOVAL**

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- 1. Disconnect the negative battery cable.
- 2. Remove cluster lid C. Refer to IP-11, "CLUSTER LID C".
- 3. Using power tool, remove the audio unit screws.
- 4. Pull out audio unit, then disconnect connectors.

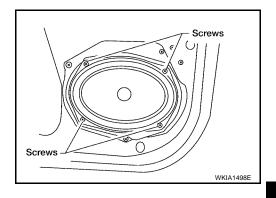


INSTALLATION

Installation is in the reverse order of removal.

Removal and Installation of Speaker **REMOVAL - FRONT DOOR SPEAKER**

- 1. Remove door finisher. Refer to EI-24, "DOOR FINISHER".
- 2. Remove the front door speaker screws.
- Disconnect the connector and remove speaker from front door.



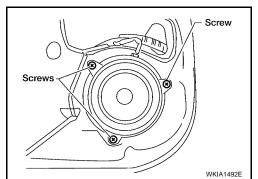
INSTALLATION - FRONT DOOR SPEAKER

Installation is in the reverse order of removal.

Front door speaker screws : 3.5 N·m (0.36 kg-m, 31 in-lb)

REMOVAL - REAR DOOR SPEAKER

- 1. Remove the rear door finisher. Refer to El-25, "REAR DOOR".
- 2. Remove the rear door speaker screws.
- Disconnect the connector and remove speaker from rear door.



INSTALLATION - REAR DOOR SPEAKER

Installation is in the reverse order of removal.

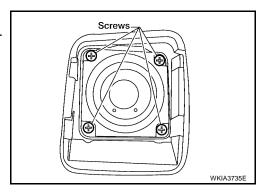
Rear door speaker screws : 3.5 N·m (0.36 kg-m, 31 in-lb)

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AV-41 2005 Xterra Revision: February 2005

REMOVAL - FRONT TWEETER

- 1. Remove the front tweeter grille.
- 2. Remove the front tweeter screws.
- 3. Disconnect the connector, and remove front tweeter from instrument panel.

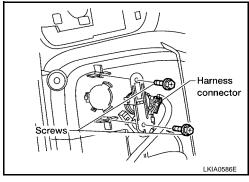


INSTALLATION - FRONT TWEETER

Installation is in the reverse order of removal.

REMOVAL - REAR DOOR TWEETER (PREMIUM SYSTEM)

- 1. Remove rear door finisher. Refer to EI-25, "REAR DOOR".
- 2. Remove the rear door tweeter screws.
- 3. Remove rear door tweeter from rear door finisher.

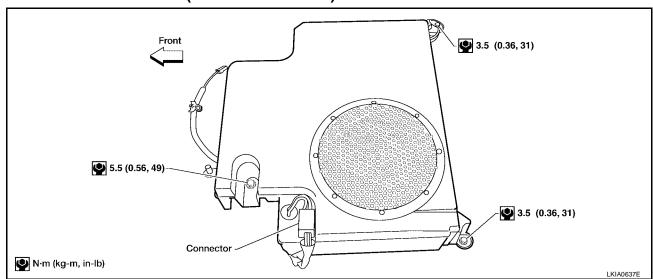


INSTALLATION - REAR DOOR TWEETER (PREMIUM SYSTEM)

Installation is in the reverse order of removal.

Rear door tweeter screws : 3.5 N-m (0.36 kg-m, 31 in-lb)

REMOVAL - SUBWOOFER (PREMIUM SYSTEM)



- 1. Remove the driver side front seat. Refer to SE-10, "FRONT SEAT".
- 2. Remove the subwoofer bolts.
- 3. Disconnect the connector and remove the subwoofer.

INSTALLATION - SUBWOOFER (PREMIUM SYSTEM)

Installation is in the reverse order of removal.

Removal and Installation of Audio Amplifier REMOVAL

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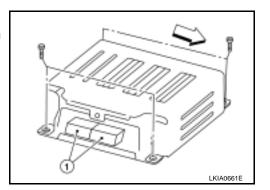
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- 1. Remove passenger side front seat. Refer to <a>SE-10, "FRONT SEAT".
 - ⇒: Vehicle front
- 2. Remove audio amplifier and kick shield screws.
- 3. Disconnect the connectors (1) and remove audio amplifier from the bracket.



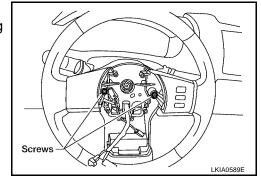
INSTALLATION

Installation is in the reverse order of removal.

Removal and Installation of Steering Wheel Audio Control Switches REMOVAL

EKS00E20

- 1. Remove driver air bag module. Refer to SRS-42, "Removal and Installation".
- 2. Remove steering wheel audio control switch assembly screws.
- 3. Disconnect the switch connector, and remove from steering wheel.



INSTALLATION

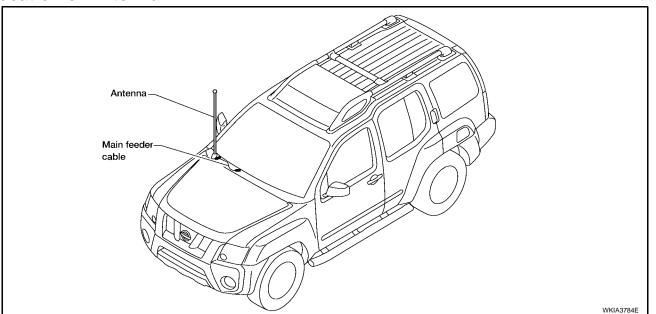
Installation is in the reverse order of removal.

ΑV

AUDIO ANTENNA PFP:28200

Location of Antenna

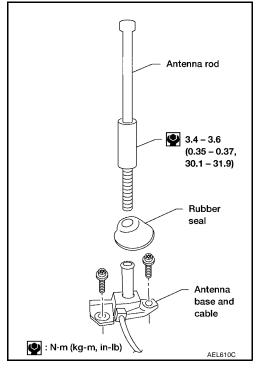
EKS00E21



Fixed Antenna Rod Replacement REMOVAL

EKS00E22

- 1. Remove antenna rod.
- 2. Remove rubber seal.
- 3. Remove cowl top. Refer to EI-17, "COWL TOP".
- 4. Remove antenna base bolts.
- 5. Remove audio unit. Refer to AV-41, "Removal and Installation for Audio Unit".
- 6. Disconnect antenna cable from audio unit.
- Remove antenna base and cable.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Always properly tighten the antenna rod during installation or the antenna rod may bend or break during vehicle operation.