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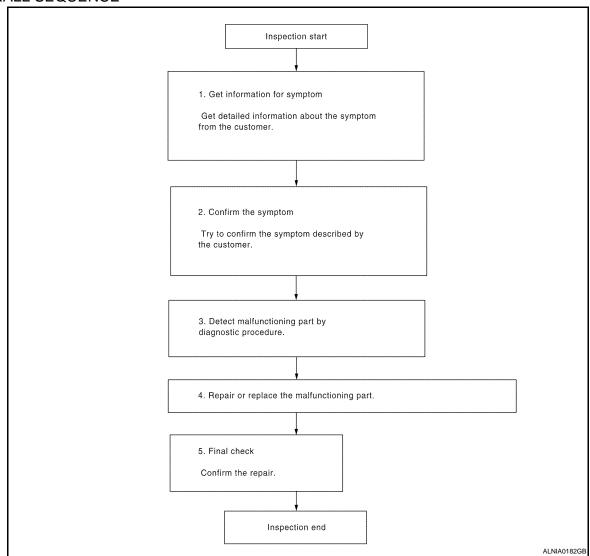
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# **BASIC INSPECTION**

## DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

### **OVERALL SEQUENCE**



#### **DETAILED FLOW**

### 1.GET INFORMATION FOR SYMPTOM

Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

#### >> GO TO 2

### 2.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer. Verify the relation between the symptom and the condition when the symptom is detected.

#### >> GO TO 3

# 3. Detect malfunctioning part by diagnostic procedure

Inspect according to Diagnostic Procedure of the system.

**DIAGNOSIS AND REPAIR WORKFLOW** [BASE AUDIO] < BASIC INSPECTION > Is a malfunctioning part detected? Α YES >> GO TO 4 NO >> GO TO 2 4. REPAIR OR REPLACE THE MALFUNCTIONING PART Repair or replace the malfunctioning part. Reconnect parts or connectors disconnected during Diagnostic Procedure. C >> GO TO 5 5. FINAL CHECK D Refer to confirmed symptom in step 2, and check that the symptom is not detected. Has the symptom been repaired? YES >> INSPECTION END. Е >> GO TO 2 NO F Н K L M ΑV

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# **FUNCTION DIAGNOSIS**

### **AUDIO SYSTEM**

System Diagram

INFOID:0000000003415156 ROD ANTENNA (AM/FM main) AUDIO ANTENNA BASE DISPLAY Antenna amp. ON signal UNIT ANTENNA AMP Antenna signal **EACH SPEAKER** AUDIO GLASS UNIT ANTENNA (CD) Sound signal (FM sub) (AM/FM RADIO) Illumination control switch signal COMBINATION METER Steering switch signal **STEERING** SWITCH : AV communication JSNIA1060GE

NOTE:

An antenna base integrated with radio antenna amp. is adopted.

### System Description

INFOID:0000000003465355

#### **AUDIO SYSTEM**

The audio system consists of the following components.

- Audio unit
- · Rod antenna (AM/FM main)
- Glass antenna (FM sub)
- · Steering switch
- Front door speakers
- Rear door speakers
- Front squawker
- Audio display unit

#### AM/FM Radio Mode

- AM/FM radio tuner is integrated into audio unit.
- When AM/FM radio waves are received by rod antenna, the radio waves are amplified by an antenna amp.
  to input them to audio unit. Sound signals are output to each speaker for the audio unit. The FM sub antenna
  is installed on the back door window glass and the audio unit is received.

#### CD Mode

- The audio unit has CD function.
- The audio unit outputs sound signals to each speaker when CD is inserted into the audio unit.

### [BASE AUDIO]

# **Component Parts Location**

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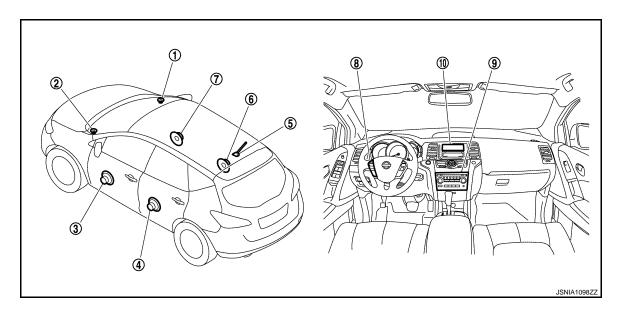
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- 1. Front squawker RH
- 4. Rear door speaker LH
- 7. Front door speaker RH
- 10. Audio display unit

- 2. Front squawker LH
- 5. Antenna base (antenna amp.)
- 8. Steering switch

- 3. Front door speaker LH
- 6. Rear door speaker RH
- 9. Audio unit

# Component Description

INFOID:0000000003415159

Part name	Description
AUDIO UNIT	<ul> <li>Has radio function and CD playing function.</li> <li>Sound signals are output to each speaker.</li> </ul>
AUDIO DISPLAY UNIT	Display images are controlled by AV communication from audio unit.
FRONT DOOR SPEAKER	<ul><li>Outputs sound signals from audio unit.</li><li>Outputs sound (mid and low range).</li></ul>
REAR DOOR SPEAKER	<ul><li>Outputs sound signals from audio unit.</li><li>Outputs sound (mid and low range).</li></ul>
FRONT SQUAWKER	<ul><li>Outputs sound signals from audio unit.</li><li>Outputs sound (high and mid range).</li></ul>
STEERING SWITCH	Steering switch signals (operation signals) are output to audio unit.
ANTENNA BASE	An antenna base integrated with radio antenna amp. is adopted. ANTENNA AMP.  Radio waves received by rod antenna are amplified and transmitted to audio unit.  Power (antenna amp. ON signal) is supplied from audio unit.

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[BASE AUDIO]

# **DIAGNOSIS SYSTEM (AUDIO UNIT)**

### **Diagnosis Description**

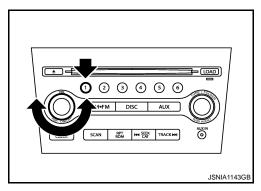
INFOID:0000000003465356

Self-diagnosis mode can perform the following items.

- Versions display
- Channel check diagnosis
- Key check diagnosis
- · AV communication diagnosis

#### VERSIONS DISPLAY FUNCTION

- Turn ignition switch ON.
- 2. Turn the audio unit off.
- 3. While pressing "1" button, turn volume control dial clockwise or counterclockwise for 30 clicks or more.



4. Diagnosis default screen of audio display unit is displayed.

#### NOTE:

Diagnosis default screen = All icons and segments of the audio display unit are turned on.

 Pressing the AUDIO switch briefly displays the version display mode. Pressing the AUDIO switch briefly switches to each version display. Pressing and holding the AUDIO switch when displaying each software version returns to the diagnosis default screen.

Version	display	item
V C I SIOI I	uispiay	ILCIII

	Mode	Description
	Software V######	Audio unit software version is displayed.
	Hardware V#####	Audio unit hardware version is displayed.
	CD Mech V######	Audio unit CD mechanism version is displayed.
	EEPROM V#####	Audio unit EEPROM version is displayed.
Versions display	Disp SW V######	Display unit software version is displayed.
	Disp HW V#####	Display unit hardware version is displayed.
	SDARS V#####	Audio unit SDARS version is displayed.  NOTE:  "VFFFFFF" is displayed when SRARS is not available.

6. Self-diagnosis mode is canceled when the ignition switch is turned OFF.

#### CHANNEL CHECK DIAGNOSIS FUNCTION

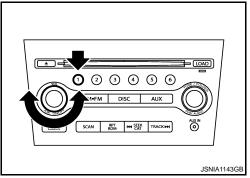
- 1. Turn ignition switch ON.
- 2. Turn the audio unit off.

### **DIAGNOSIS SYSTEM (AUDIO UNIT)**

#### < FUNCTION DIAGNOSIS >

[BASE AUDIO]

While pressing the "1" button, turn the volume control dial clockwise or counterclockwise for 30 clicks or more.



The diagnosis default screen of audio display unit is displayed.

#### NOTE:

Diagnosis default screen = All icons and segments of the audio display unit are turned on.

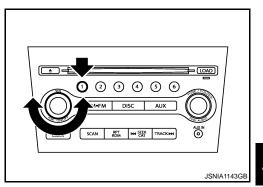
5. Turning the TUNE/FOLDER dial clockwise displays the channel check mode. Pressing and holding the AUDIO switch during each channel check or waiting approximately 1 second after finishing all channel checks returns to the diagnosis default screen.

	Mode	Description		
	Channel Check Front Left			
Channel check	Channel Check Front Right			
	Channel Check Rear Right	Connection of a speaker can be confirmed by test tone.		
	Channel Check Rear Left			

6. Self-diagnosis mode is canceled when the ignition switch is turned OFF.

### KEY CHECK DIAGNOSIS FUNCTION

- 1. Turn ignition switch ON.
- 2. Turn the audio unit off.
- 3. While pressing the "1" button, turn the volume control dial clockwise or counterclockwise for 30 clicks or more.



4. The diagnosis default screen of audio display unit is displayed. NOTE:

Diagnosis default screen = All icons and segments of the audio display unit are turned on.

Turning the TUNE/FOLDER dial counterclockwise displays the key check mode, and the pressed switch name is shown. Pressing and holding the AUDIO switch during the key check returns to the diagnosis default screen.

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### **DIAGNOSIS SYSTEM (AUDIO UNIT)**

#### < FUNCTION DIAGNOSIS >

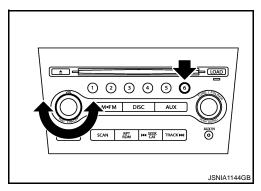
[BASE AUDIO]

Mode	Display item	Switch name		
	1	Preset button "1" switch		
	2	Preset button "2" switch		
	3	Preset button "3" switch		
	4	Preset button "4" switch		
	5	Preset button "5" switch		
	6	Preset button "6" switch		
	POWER	"ON-OFF" switch		
	VOLUME up	"VOL up" switch		
	VOLUME down	"VOL down" switch		
	AM-FM	"AM-FM" switch		
Marrials and	DISC	"DISC" switch		
Key check	AUX	"AUX" switch		
	AUDIO	"AUDIO" switch		
	TUNE/FOLDER up	"TUNE/FOLDER up" switch		
	TUNE/FOLDER down	"TUNE/FOLDER up" switch		
	DISP CLOCK	"DISP CLOCK" switch		
	SCAN	"SCAN" switch		
	RPT/RDM	"RPT RDM" switch		
	SEEK/TRACK up	"SEEK CAT" switch		
	SEEK/TRACK down	"TRACK" switch		
	LOAD	"LOAD" switch		
	EJECT	"EJECT" switch		
Ley check item (steering s	witch)			
Mode	Display item	Switch name		
	STR SOURCE	"SOURCE" switch		
	STR VOL UP	"VOL up" switch		
Key check	STR VOL DOWN	"VOL down" switch		
	STR UP	"MENU up" switch		
	STR DOWN	"MENU down" switch		

6. Self-diagnosis mode is canceled when the ignition switch is turned OFF.

#### AV COMMUNICATION DIAGNOSIS FUNCTION

- 1. Turn ignition switch ON.
- 2. Turn the audio unit off.
- 3. While pressing the "6" button, turn the volume control dial clockwise or counterclockwise for 30 clicks or more.



4. Returns to diagnosis default screen and displays "AV DIAGNOSIS".

### **DIAGNOSIS SYSTEM (AUDIO UNIT)**

#### < FUNCTION DIAGNOSIS >

[BASE AUDIO]

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Pressing the AUDIO switch briefly displays the AV communication diagnosis mode. Pressing the AUDIO switch briefly again switches to each AV communication display.

AV communication diagnosis item

Display item			Description
AV communication item	Current	Past	Description
TRANSMIT	OK / UN	OK / 0 –39	The communication condition and error counter from the audio unit to the audio display unit are displayed.
DISP	OK / UN	OK / 0 -39	The communication condition and error counter from the audio display
DISP MPDT	OK / UN	OK / 0 -39	unit to the audio unit.
NO HISTORY BTHF	_	_	Not used.
AV TROUBLE DEL	_	_	The error record can be deleted.

6. Pressing the SEEK TRACK up switch displays the confirmation screen of "delete error record". Press the SEEK TRACK down switch if returning from RECORD DEL YES? to RECORD DEL NO? The item is automatically determined approximately 6 seconds after it is displayed. Then the display returns to AV TROUBLE DEL display item.

Display item	Description
RECORD DEL NO?	Does not delete error record.
RECORD DEL YES?	Deletes error record.

7. Self-diagnosis mode is canceled when the ignition switch is turned OFF.

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### POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

# **COMPONENT DIAGNOSIS**

# POWER SUPPLY AND GROUND CIRCUIT

**AUDIO UNIT** 

**AUDIO UNIT: Diagnosis Procedure** 

INFOID:0000000003468501

### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between audio unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	ry power supply M46		OFF	Battery voltage
ACC power supply	IVITO	7	ACC	Dattery voltage

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Check harness between audio unit and fuse.

### STEERING SWITCH SIGNAL A CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

INFOID:0000000003468489

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### STEERING SWITCH SIGNAL A CIRCUIT

Description INFOID:000000003468488

Transmits the steering switch signal to audio unit.

## Diagnosis Procedure

# 1. CHECK STEERING SWITCH SIGNAL A CIRCUIT

- 1. Disconnect audio unit connector and spiral cable connector.
- 2. Check continuity between audio unit harness connector and spiral cable harness connector.

Audio unit		Spiral cable		Continuity
Connector	Terminal	Connector Terminal		Continuity
M46	6	M33	24	Existed

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

Audio unit			Continuity	
Connector	Terminal	<del></del>	Continuity	
M46	6	Ground	Not existed	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK SPIRAL CABLE

Check spiral cable.

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# 3.CHECK AUDIO UNIT VOLTAGE

- 1. Connect audio unit connector and spiral cable connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between audio unit harness connector terminals.

(1	+)	(	-)	
	Audi	Voltage		
Connector	Terminal	Connector	Terminal	
M46	6	M46	15	Approx 5.0 V

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace audio unit.

# 4. CHECK STEERING SWITCH

- Turn ignition switch OFF.
- Check steering switch. Refer to <u>AV-20, "Component Inspection"</u>.

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

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### STEERING SWITCH SIGNAL A CIRCUIT

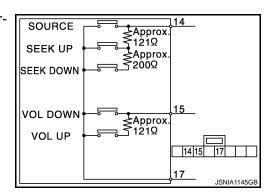
< COMPONENT DIAGNOSIS >

[BASE AUDIO]

# Component Inspection

INFOID:0000000003468490

Measure the resistance between the steering switch connector terminals.



#### Standard

	Steerin	g switch			Resistance	
Con- nector	Termi- nals	Con- nector	Termi- nal	Condition	Ω	
	14	M303 17		SEEK DOWN switch ON	315 – 327	
				SEEK UP switch ON	119 – 123	
M303			17	SOURCE switch ON	0	
	15			VOL UP switch ON	119 – 123	
				VOL DOWN switch ON	0	

#### STEERING SWITCH SIGNAL B CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

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### STEERING SWITCH SIGNAL B CIRCUIT

**Description** 

Transmits the steering switch signal to audio unit.

## Diagnosis Procedure

# INFOID:000000003468492

# 1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

- 1. Disconnect audio unit connector and spiral cable connector.
- 2. Check continuity between audio unit harness connector and spiral cable harness connector.

Audio unit		Spiral cable		Continuity
Connector	Terminal	Connector Terminal		Continuity
M46	16	M33	31	Existed

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

Audio unit			Continuity	
Connector	Terminal	<del></del>	Continuity	
M46	16	Ground	Not existed	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK SPIRAL CABLE

Check spiral cable.

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# 3.CHECK AUDIO UNIT VOLTAGE

- 1. Connect audio unit connector and spiral cable connector.
- 2. Turn ignition switch ON.
- Check voltage between audio unit harness connector terminals.

(1	+)			
Audio		o unit		Voltage
Connector	Terminal	Connector	Terminal	
M46	16	M46	15	Approx 5.0 V

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace audio unit.

# 4. CHECK STEERING SWITCH

- Turn ignition switch OFF.
- Check steering switch. Refer to <u>AV-22, "Component Inspection"</u>.

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

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### STEERING SWITCH SIGNAL B CIRCUIT

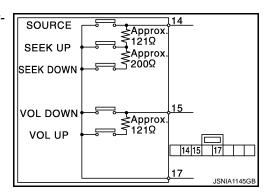
< COMPONENT DIAGNOSIS >

[BASE AUDIO]

# Component Inspection

INFOID:0000000003470180

Measure the resistance between the steering switch connector terminals.



#### Standard

	Steering switch				Resistance	
Con- nector	Termi- nals	Con- nector	Termi- nal	Condition	$\Omega$	
				SEEK DOWN switch ON	315 – 327	
	14		17	SEEK UP switch ON	119 – 123	
M303		M303		17	SOURCE switch ON	0
	15			VOL UP switch ON	119 – 123	
			15		VOL DOWN switch ON	0

### STEERING SWITCH SIGNAL GND CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

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### STEERING SWITCH SIGNAL GND CIRCUIT

Description INFOID:0000000003468494

Transmits the steering switch signal to audio unit.

## Diagnosis Procedure

# INFOID:0000000003468495

# 1. CHECK STEERING SWITCH SIGNAL GND CIRCUIT

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

Audi	Audio unit		l cable	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M46	15	M33	33	Existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK SPIRAL CABLE

Check spiral cable.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# 3.CHECK GROUND CIRCUIT

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

Audi	io unit		Continuity	
Connector	Terminal	<del></del>	Continuity	
M46	15	Ground	Existed	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace audio unit.

### 4. CHECK STEERING SWITCH

- Turn ignition switch OFF.
- 2. Check steering switch. Refer to AV-24, "Component Inspection".

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

### STEERING SWITCH SIGNAL GND CIRCUIT

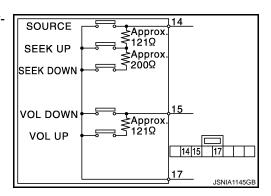
< COMPONENT DIAGNOSIS >

[BASE AUDIO]

# Component Inspection

INFOID:0000000003470181

Measure the resistance between the steering switch connector terminals.



#### Standard

	Steering switch				Resistance				
Con- nector	Termi- nals	Con- nector	Termi- nal	Condition	Ω				
								SEEK DOWN switch ON	315 – 327
	14		17	SEEK UP switch ON	119 – 123				
M303		M303		SOURCE switch ON	0				
	15			VOL UP switch ON	119 – 123				
	13			VOL DOWN switch ON	0				

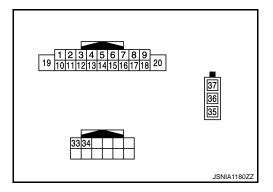
< ECU DIAGNOSIS > [BASE AUDIO]

# **ECU DIAGNOSIS**

# **AUDIO UNIT**

Reference Values

TERMINAL LAYOUT PHYSICAL VALUES



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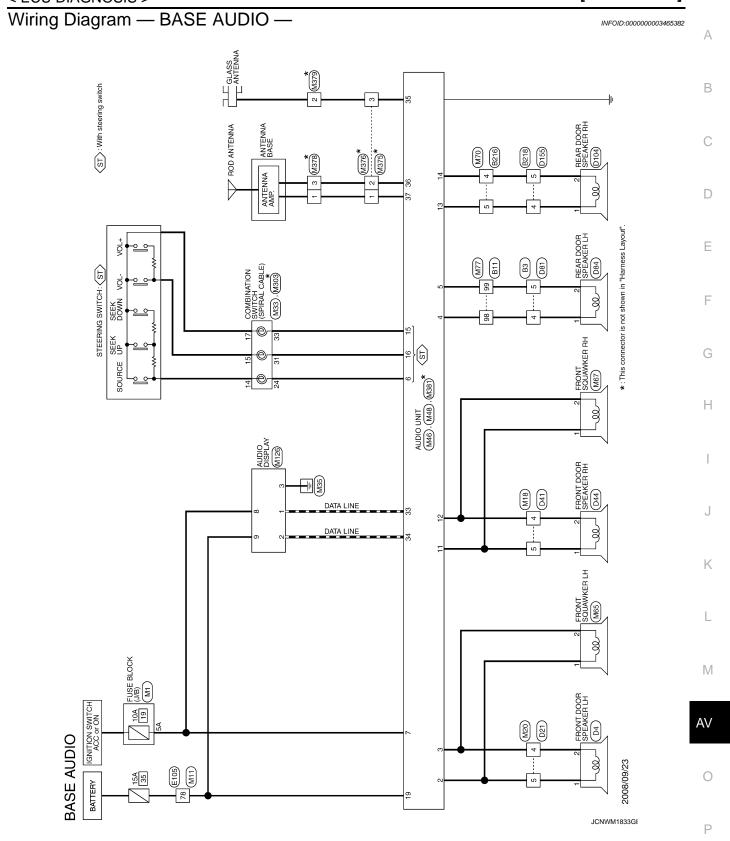
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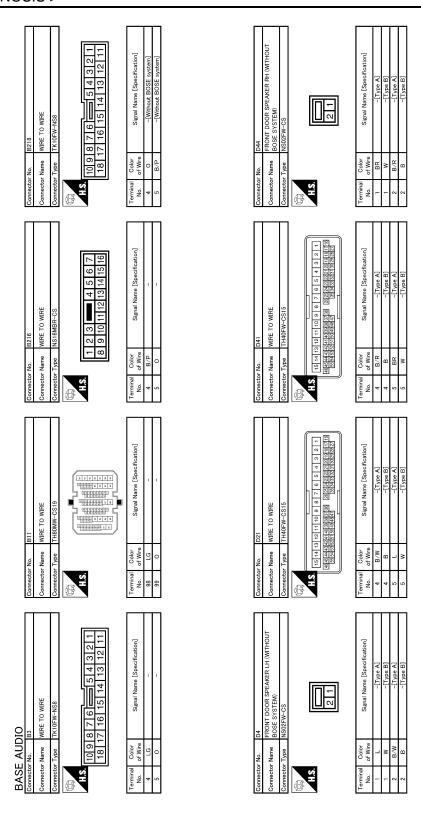
	minal e color)	Description			Condition	Reference value				
+	_	Signal name	Input/ Output	/		(Approx.)				
2 (L)	3 (B)	Sound signal front LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E				
4 (LG)	5 (Y)	Sound signal rear LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E				
				1:4:	Keep pressing SOURCE switch.	0 V				
6 (W)	15 (SB)	Steering switch signal A	Input	Input	Input	Input	Input	Ignition switch	Keep pressing $\Delta$ switch.	1.0 V
(**)	(05)									•
					Except for above.	5.0 V				
7 (R)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage				
11 (BR)	12 (W)	Sound signal front RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms				

### **AUDIO UNIT**

< ECU DIAGNOSIS > [BASE AUDIO]

	minal e color)	Description			Condition	Reference value		
+	_	Signal name	Input/ Output	Input/		(Approx.)		
13 (O)	14 (P)	Sound signal rear RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E		
15 (SB)	Ground	Steering switch signal ground	_	Ignition switch ON	_	0 V		
		Ignition switch.	ring switch signal B Input	Keep pressing VOL DOWN switch.	0 V			
16 (Y)	15 (SB)	Steering switch signal B		Input	Input	Input	switch ON	Keep pressing VOL UP switch.
					Except for above.	5.0 V		
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage		
33 (G)	Ground	AV communication signal (L)	Input/ Output	_	_	_		
34 (R)	Ground	AV communication signal (H)	Input/ Output	_	_	_		
35	_	FM sub	Input	_	_	_		
36	_	AM-FM main	Input	_	_	_		
37	Ground	Antenna amp. ON signal	Output	Ignition switch ACC	_	12.0 V		

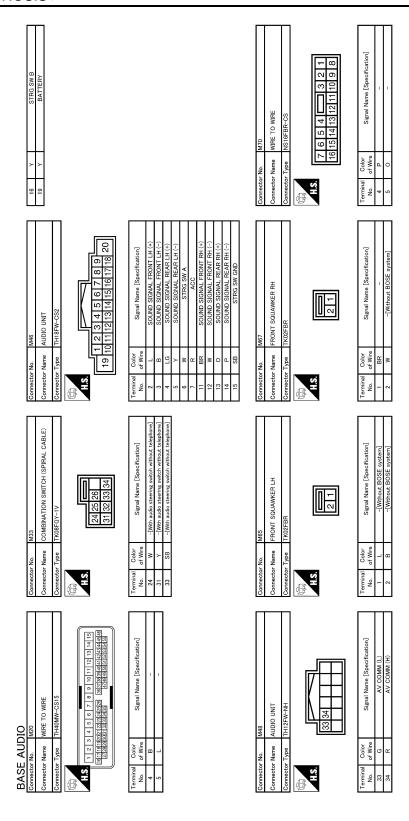




JCNWM1834GE

Connector No. 0155  Connector Name WIRE TO WIRE  Connector Type TK10MW-NSS  L1 2 3 4 5 6 7 8 9 10  1 1 2 13 4 5 6 7 8 9 10	No.   Signal Name [Specification]   No.   Of Wire   Signal Name [Specification]   No.   Of Wire   No.   Of W	Connector No.   M18   Connector No.   M18   Connector Name   WIRE TO WIRE   Connector Type   TH40MM-CS15   TH40M	A B C
DIGH THEAD GOOR SPEAKER RH (WITHOUT BOOSE SYSTEM) NS02FW-CS	Signal Name   Specification	WINE TO WIRE TH/TOPW-CS/10-M3  Signal Name [Specification]	E F G
No.         D84         Connector No.           r Name         REAR BOOR SPEAKER LH (WITHOUT BOSE SYSTEM)         Connector Name           r Type         NS02FW-CS         Connector Type           Image: Type         Connector Type	Color Signal Name (Specification) Terminal O No. of Wee	Name   FUSE BLOCK (J/B)   Connector Name   Connector Name   Connector Type   Connector Ty	H I J
Connector No.   DSI   Connector No.   Connector No.   Connector Name   WIRE TO WIRE   Connector Type   TKIOMW-NSS   TRIOMW-NSS   Connector Type   TKIOMW-NSS   TRIOMW-NSS   TR	Terminal   Color   Signal Name [Specification]   Terminal No.   1	Connector No. E105  Connector Name WIRE TO WIRE  Connector Type TH/TOMW-CS10-M3  Terminal Color  No. of Wire  Terminal Color  No. of Wire  Terminal Color  No. of Wire  Terminal Color  Termin	L M
B B B B B B B B B B B B B B B B B B B	F 2 4 10	Connes Connes Termin No.	JCNWM1835GI

Revision: 2008 October AV-29 2009 Murano



JCNWM1836GE

BASE AUDIO Connector Name WIRE TO WIRE Connector Type TH80FW-CS19  Terminal Color Signal Name (Specification)  98 LG  199 Y	Connector No. M376  Gondector Name WIFE TO WIFE  Connector Type GT13SCN-2/IPP-HU  Line Gonder Signal Name [Specification]  1	M
Connector No.   M126	Connector No. M378 Connector Type GT13SSN-1/TPP-HU Connector Type GT13SSN-1/TPP-HU Terminal Color No. of Wire T 1	J K L
Signal Name [Specification]	Signal Name [Specification]	H I
Connector No.   M303	Connector No. M379 Connector Name GLASS Connector Type GT13SS H.S. H.S.  1 Color Terminal Color No. of Wire 2.	G
M303   TY08FGY   TY08FGY   TY08FGY   Signal Name [Specification]   Signal Name [Specification]	M379 GLASS ANTENNA GT13SCN-1/1PP-HU  Signal Name [Specification]  FM SUB	E
Connector No.   M375	Cornector No.   M381	C
WIRE 2/15-HU  Signal Name [Specification]	NNT  -2-/15-HU  -2-/15	В
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Revision: 2008 October AV-31 2009 Murano

[BASE AUDIO]

# SYMPTOM DIAGNOSIS

# **AUDIO SYSTEM SYMPTOMS**

Symptom Table

### **RELATED TO AUDIO**

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take	
Audio sound is not heard.	No sound from all speakers.	Audio unit malfunction. Refer to AV-37, "Exploded View".	
Addio sound is not neard.	There is no sound from one of speakers.	Sound signal malfunction between audio unit and speake on the side where there is no sound.	
AM/FM radio is not received. Other audio sounds are normal.		<ul><li>Antenna amp. ON signal circuit.</li><li>Antenna feeder.</li><li>Rod antenna.</li><li>Antenna base.</li></ul>	
Audio display does not work.	_	<ul> <li>Audio display power supply and ground circuits.</li> <li>AV communication circuits between audio unit and audio display.</li> </ul>	

#### **RELATED TO STEERING SWITCH**

Trouble diagnosis chart by symptom

Symptoms	Inspection location / Probable malfunction location
None of the steering switch operations work.	Steering switch signal GND circuit.  Refer to AV-23, "Diagnosis Procedure".
Only specified switch cannot be operated.	Steering switch. Refer to AV-42, "Exploded View".
"SOURCE", "MENU UP", "MENU DOWN" switches of steering switch are not operational.	Steering switch signal A circuit.  Refer to AV-19, "Diagnosis Procedure".
"VOL UP", "VOL DOWN" switches of steering switch are not operational.	Steering switch signal B circuit.  Refer to AV-21, "Diagnosis Procedure".

#### NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BASE AUDIO]

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### NORMAL OPERATING CONDITION

Description INFOID:000000003465389

#### NOTE:

- Audio operation information, refer to Owner's Manual.
- The majority of the audio concerns are the result of outside causes (bad CD, electromagnetic interference, etc.).

#### NOISE

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 that reflect off mountains or buildings.

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

Types of Noise and Possible Causes

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
The occurrence of the noise is linked with the operation of the fuel pump.		Fuel pump condenser
Noise only occurs when various electrical components are operating.	A cracking or snapping sound occurs with the operation of various switches.	Relay malfunction, audio unit malfunction
	The noise occurs when various motors are operating.	Motor case ground     Motor
The noise occurs constantly, not just under certain conditions.		Rear defogger coil malfunction     Open circuit in printed heater     Poor ground of antenna feeder line
A cracking or snapping sound occurs while the vehicle is being driven, especially when it is vibrating excessively.		<ul> <li>Ground wire of body parts</li> <li>Ground due to improper part installation</li> <li>Wiring connections or a short circuit</li> </ul>

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< PRECAUTION > [BASE AUDIO]

# **PRECAUTION**

### **PRECAUTIONS**

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

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 AIRBAG" and "SEAT BELT" 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 AIRBAG".
- Never 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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

## Precaution for Trouble Diagnosis

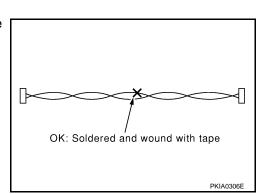
#### AV COMMUNICATION SYSTEM

- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage at 7.0 V or less.
- Turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

### Precaution for Harness Repair

#### AV COMMUNICATION SYSTEM

 Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



INFOID:0000000003509002

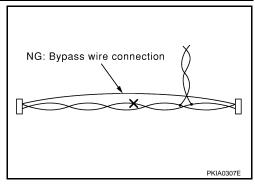
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### **PRECAUTIONS**

< PRECAUTION > [BASE AUDIO]

 Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)



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### **PREPARATION**

< PREPARATION > [BASE AUDIO]

# **PREPARATION**

# **PREPARATION**

# **Commercial Service Tools**

INFOID:0000000003509004		

Tool name		Description
Power tool	PBIC0191E	Loosening screws

[BASE AUDIO]

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# **ON-VEHICLE REPAIR**

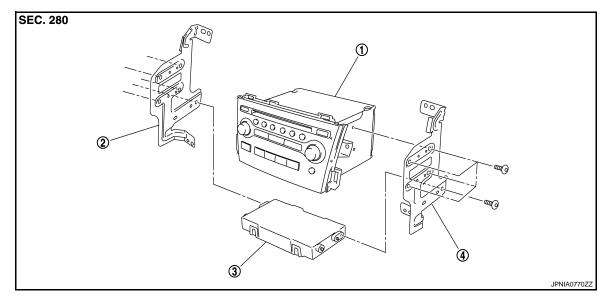
# **AUDIO UNIT**

Exploded View

**REMOVAL** 

Refer to IP-11, "Exploded View".

**DISASSEMBLY** 



1. Audio unit

2. Bracket LH

3. A/C auto amp.

4. Bracket RH

## Removal and Installation

REMOVAL

- 1. Remove cluster lid C lower. Refer to IP-11, "Exploded View".
- 2. Remove instrument stay cover LH and instrument stay cover RH Refer to IP-11, "Exploded View".
- 3. Remove audio unit with an A/C auto amp. as a single unit from the body.
- 4. Remove bracket screws, and then remove audio unit.

## **INSTALLATION**

Install in the reverse order of removal.

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# **AUDIO DISPLAY**

# **Exploded View**

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JPNIA07712Z

- 1. Audio display unit
- 4. Front cover

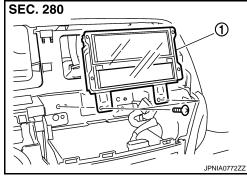
2. Bracket

3. A/C display

## Removal and Installation

## **REMOVAL**

- 1. Remove center ventilator assembly. Refer to IP-11, "Exploded View".
- Remove audio display unit and A/C display with bracket as a single unit (1).
- 3. Remove bracket screws, and then remove audio display unit.



## **INSTALLATION**

Install in the reverse order of removal.

## FRONT DOOR SPEAKER

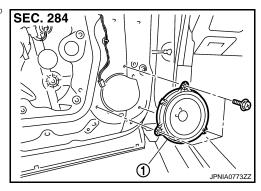
< ON-VEHICLE REPAIR >

[BASE AUDIO]

# FRONT DOOR SPEAKER

**Exploded View** 

INFOID:0000000003509010



Front door speaker

## Removal and Installation

## **REMOVAL**

- Remove front door finisher. Refer to <u>INT-11, "FRONT DOOR FINISHER: Exploded View"</u>.
- Remove front door speaker screws, then disconnect front door speaker connector and remove front door speaker.

## **INSTALLATION**

Install in the reverse order of removal.

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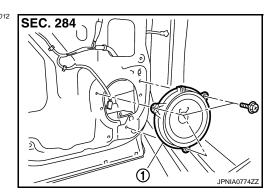
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[BASE AUDIO]

# **REAR DOOR SPEAKER**

# **Exploded View**

INFOID:0000000003509012



Rear door speaker

## Removal and Installation

INFOID:0000000003509013

## **REMOVAL**

- 1. Remove rear door finisher. Refer to INT-15, "REAR DOOR FINISHER: Exploded View".
- 2. Remove rear door speaker screws, then disconnect rear door speaker connector and remove rear door speaker.

## **INSTALLATION**

Install in the reverse order of removal.

## **FRONT SQUAWKER**

< ON-VEHICLE REPAIR >

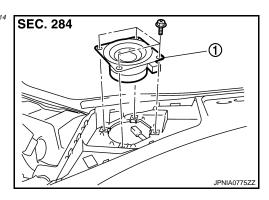
[BASE AUDIO]

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# **FRONT SQUAWKER**

**Exploded View** 

INFOID:0000000003509014



Front squawker

## Removal and Installation

## **REMOVAL**

1. Remove speaker grille. Refer to IP-11, "Exploded View".

Remove front squawker screws, lift up the front squawker and disconnect front squawker connector. Then remove the front squawker.

## **INSTALLATION**

Install in the reverse order of removal.

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## **STEERING SWITCH**

< ON-VEHICLE REPAIR > [BASE AUDIO]

STEERING SWITCH

Exploded View

Refer to ST-15, "Exploded View".

Removal and Installation

**REMOVAL** 

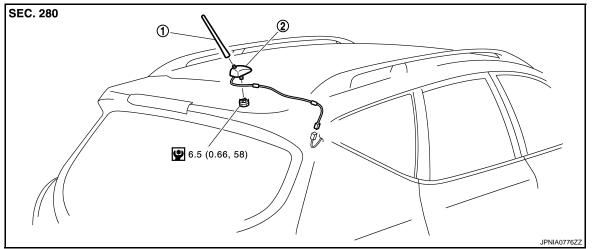
Refer to ST-15, "Removal and Installation".

**INSTALLATION** 

Install in the reverse order of removal.

# **ROOF ANTENNA**

**Exploded View** 



1. Rod antenna

2. Antenna base

Refer to GI-4. "Components" for symbols in the figure.

## Removal and Installation

REMOVAL

Remove headlining assembly (rear) to secure work space between vehicle and headlining. Refer to <u>INT-25</u>, "NORMAL ROOF: Exploded View" [without sunroof] or <u>INT-29</u>, "SUNROOF: Exploded View" [with sunroof].

- Disconnect AM/FM main connector.
- 3. Remove antenna base nut, and then remove antenna base from roof panel.

## **INSTALLATION**

Install in the reverse order of removal.

Antenna base mounting nut 
9: 6.5 N·m (0.66 kg-m, 58 in-lb)

## **CAUTION:**

Be careful about tightening torque. When the antenna base mounting nut tightening torque is loose, the antenna sensitivity becomes poor, and when it is excessive, the roof panel may be deformed.

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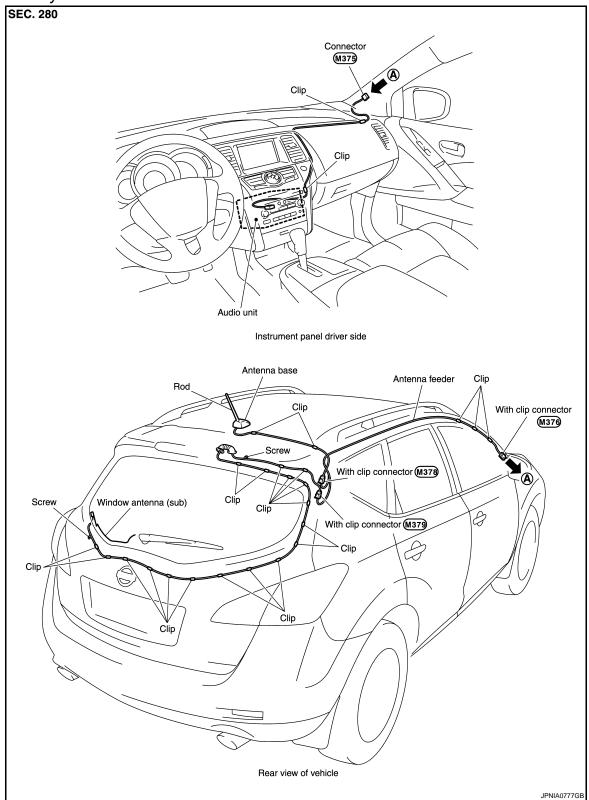
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[BASE AUDIO]

# ANTENNA FEEDER (RADIO)

Harness Layout

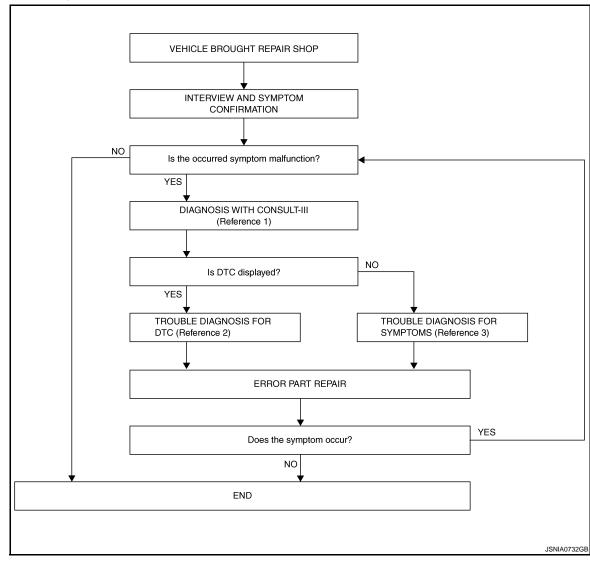


# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

## **OVERALL SEQUENCE**



- Reference 1... Refer to <u>AV-83, "CONSULT-III Function (MULTI AV)"</u>.
- Reference 2··· Refer to <u>AV-192</u>, "<u>DTC Index</u>".
- Reference 3··· Refer to AV-509, "Symptom Table".

## **DETAILED FLOW**

# 1.INTERVIEW AND SYMPTOM CONFIRMATION

Check the malfunction symptoms by performing the following items.

- Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred).
- Check the symptom.

## Is the occurring symptom a malfunction?

YES >> GO TO 2.

NO >> INSPECTION END

2.DIAGNOSIS WITH CONSULT-III

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## DIAGNOSIS AND REPAIR WORK FLOW

## < BASIC INSPECTION >

## [BOSE AUDIO WITHOUT NAVIGATION]

Connect CONSULT-III and perform a self-diagnosis for "MULTI AV". Refer to <u>AV-83, "CONSULT-III Function (MULTI AV)"</u>.

### NOTE:

Skip to step 4 of the diagnosis procedure if "MULTI AV" is not displayed.

2. Check if any DTC is displayed in the self-diagnosis results.

## Is DTC displayed?

YES >> GO TO 3. NO >> GO TO 4.

# 3. TROUBLE DIAGNOSIS FOR DTC

- 1. Check the DTC indicated in the self-diagnosis results.
- Perform the relevant diagnosis referring to the DTC Index. Refer to AV-192, "DTC Index".

>> GO TO 5.

# 4. TROUBLE DIAGNOSIS FOR SYMPTOMS

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to <u>AV-509</u>, "Symptom <u>Table"</u>.

>> GO TO 5.

# 5. ERROR PART REPAIR

- 1. Repair or replace the identified malfunctioning parts.
- 2. Perform a self-diagnosis for "MULTI AV" with CONSULT-III.

#### NOTE:

Erase the stored self-diagnosis results after repairing or replacing the relevant components if any DTC has been indicated in the self-diagnosis results.

3. Check that the symptom does not occur.

## Does the symptom occur?

YES >> GO TO 1.

NO >> INSPECTION END

# **INSPECTION AND ADJUSTMENT**

< BASIC INSPECTION >

>> END

[BOSE AUDIO WITHOUT NAVIGATION]

INSPECTION AND ADJUSTMENT	Λ
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	Α
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description	В
Always correct the center position of the rear view monitor's possible route line after disconnecting the battery negative terminal.	С
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement	D
1.correction of center position of rear view monitor's possible route line	
Refer to the following for details.	Ε
>> Refer to AV-47, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT: Special Repair Requirement".  ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	F
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description  NFOID:000000003579561	G
When camera control unit is replaced, the center position of rear view monitor possible route line is corrected.  ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement	Н
1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE	-
Refer to the following for details.	
>> Refer to AV-47, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT: Special Repair Requirement".  REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUST-MENT	K
REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUST- MENT: Description	L
Adjust the center position of the possible route line of the rear view monitor if it is shifted.	M
REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUST- MENT : Special Repair Requirement	AV
1.STEERING OPERATION	
Steer the steering wheel to the leftmost and rightmost positions.	0
>> GO TO 2 2.DRIVING	Р
Drive the vehicle straight ahead 100 m (328.1 ft) or more at a speed of 30 km/h (18.6 MPH) or more.	

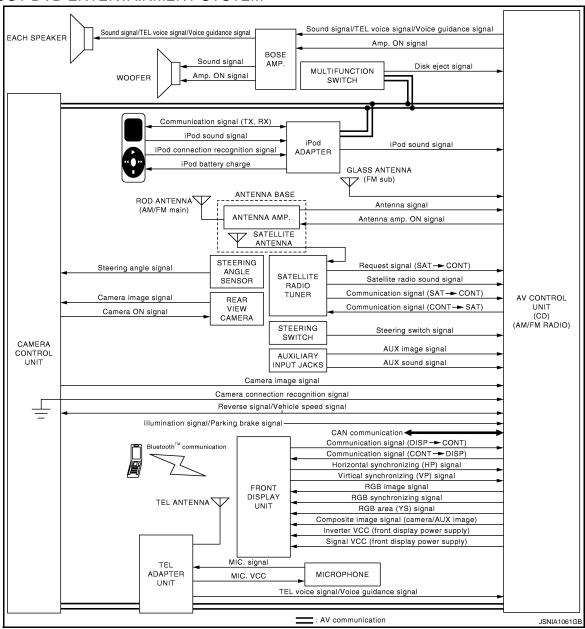
Revision: 2008 October AV-47 2009 Murano

# **FUNCTION DIAGNOSIS**

## **MULTI AV SYSTEM**

System Diagram

## WITHOUT DVD ENTERTAINMENT SYSTEM



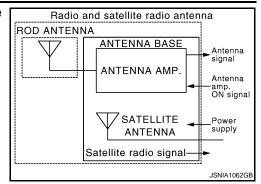
#### NOTE:

- Woofer, illustrated in the above figure, integrates two woofers and a woofer amp.
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.

# < FUNCTION DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

 An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.



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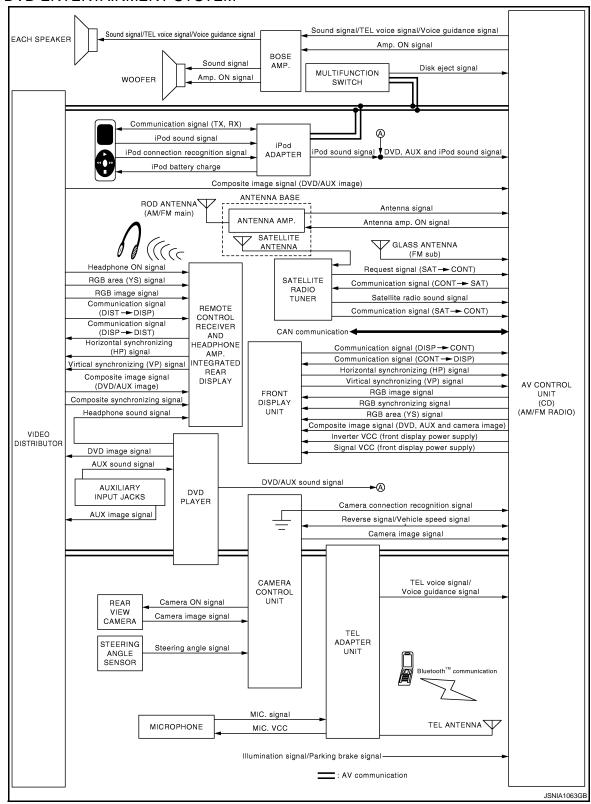
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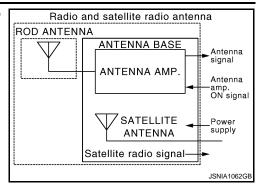
## WITH DVD ENTERTAINMENT SYSTEM



#### NOTE

- Woofer, illustrated in the above figure, integrates two woofers and a woofer amp.
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.

 An antenna base integrated with radio antenna and satellite radio antenna is adopted.



# System Description

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MULTI AV system means that the following systems are integrated.

System name	System explanation
AUDIO SYSTEM	AV-60, "System Description"
REAR VIEW MONITOR SYSTEM	AV-57, "System Description"
DVD ENTERTAINMENT SYSTEM	AV-64, "System Description"
HANDS-FREE PHONE SYSTEM	AV-67, "System Description"
VEHICLE INFORMATION SYSTEM	<ul> <li>Indicates the status of audio, climate control system, fuel economy and maintenance.</li> <li>AV control unit displays the fuel consumption status while receiving data signals through CAN communication from ECM, combination meter and BCM.</li> </ul>
AUXILIARY INPUT SYSTEM	Refer to "AUXILIARY INPUT SYSTEM" shown below.

- AV control unit functions by transmitting/receiving data one by one with each unit (slave unit) that configures
  them completely as a master unit by connecting between units that configure MULTI AV system with two AV
  communication lines (H, L).
- Two AV communication lines (H, L) adopt a twisted pair line that is resistant to noise.
- AV control unit is connected by CAN communication, and it receives data signals from ECM and combination meter. It computes and displays fuel economy information value with the obtained information. Transmitting/receiving of data signals are performed by BCM. Also, it transmits the required signal of vehicle setting and receives the response signal.
- AV control unit is connected with front display unit and serial communication, and it transmits the required signal of display and display control and receives the response signal from front display unit. It is also connected with satellite radio by serial communication, transmits the operating signal and receives the display signal.

### NOTE:

AV control unit can perform CONSULT-III self-operating function and on board self-diagnosis.

- CONSULT-III self-diagnosis: refer to <u>AV-83, "CONSULT-III Function (MULTI AV)"</u>.
- On board self-diagnosis: refer to <u>AV-70, "Diagnosis Description"</u>.

On board self-diagnosis of TEL adapter unit can be performed.

Refer to <u>AV-87</u>, "<u>Diagnosis Description</u>" for on board self-diagnosis.

## **AUXILIARY INPUT SYSTEM**

- Image and sound can be output from an external device by connecting a device with auxiliary input jacks.
- Operation can be performed with multifunction switch and steering switch. Multifunction switch transmits operation signal to AV control unit by AV communication.

### Without DVD Entertainment System

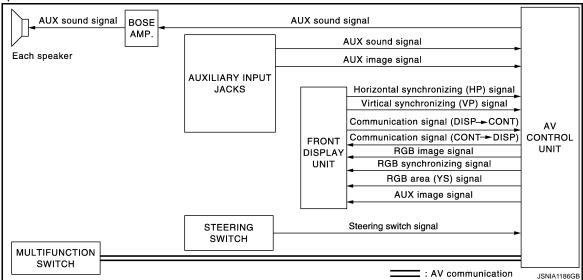
The AUX image signal is input from the auxiliary input jacks to the AV control unit. The AV control unit outputs AUX image signal to the front display unit.

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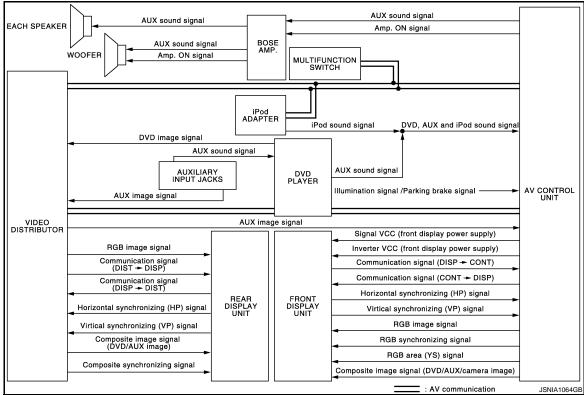
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The AUX sound signal is input from the auxiliary input jacks to the AV control unit. The AV control unit outputs the AUX sound signal to BOSE amp. The BOSE amp. outputs the AUX sound signal to woofer and each speaker.



## With DVD Entertainment System

- The AUX sound signal input from the external input device is transmitted from auxiliary input jacks to DVD player. DVD player transmits it to AV control unit. AV control unit transmits the AUX sound signal to BOSE amp. The BOSE amp. outputs the AUX sound signal to woofer and each speaker.
- The AUX image signal input from the external input device is transmitted to the video distributor. The video distributor transmits the AUX image signal to the AV control unit and rear display unit.



# **Component Parts Location**

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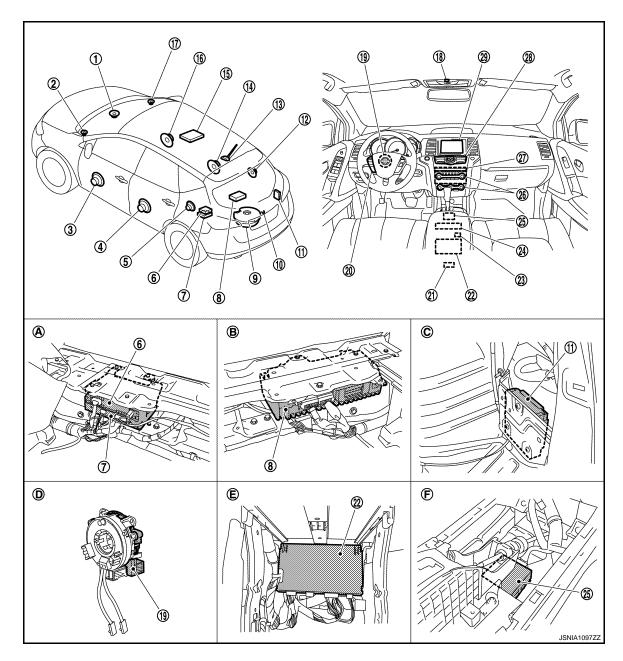
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- Center speaker
- Rear door speaker LH
- TEL adapter unit 7.
- 10. Rear view camera
- Antenna base (antenna amp. and sat-13. ellite antenna)
- 16. Front door speaker RH
- 19. Steering angle sensor
- 22. Video distributor
- 25. iPod adapter
- Multifunction switch 28.
- Luggage floor finisher is removed condition
- Spiral cable part

- Front squawker LH
- 5. Rear speaker LH
- BOSE amp.
- Camera control unit
- 14. Rear door speaker RH
- Front squawker RH
- Steering switch 20.
- iPod connector 23.
- Preset switch
- Front display unit
- Luggage floor finisher is removed con-
- Console rear finisher is removed condition

- Front door speaker LH
- 6. Satellite radio tuner
- 9. Woofer
- 12. Rear speaker RH
- Rear display unit 15.
- 18. Microphone
- Auxiliary input jacks 21.
- DVD player 24.
- 27. AV control unit
- Luggage side finisher lower RH is removed condition
- Console finisher is removed condition

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# [BOSE AUDIO WITHOUT NAVIGATION]

# **Component Description**

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Part name	Description
AV CONTROL UNIT	<ul> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>AV control unit includes audio function and vehicle information function.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>The camera image signal is input from the camera control unit. The AV control unit outputs camera image signal to the front display unit.</li> <li>BOSE amp. ON signal and sound signal are transmitted to BOSE amp.</li> <li>Power (signal VCC and inverter VCC) is transmitted to front display unit. Without DVD entertainment system</li> <li>Auxiliary image and auxiliary sound signals are input from the auxiliary input jacks. With DVD entertainment system</li> <li>Composite image signal (auxiliary and DVD images) is input from the video distributor.</li> <li>Sound signal (DVD and auxiliary sounds) is input from the DVD player.</li> </ul>
VIDEO DISTRIBUTOR	<ul> <li>It receives the image signal from the DVD player, and auxiliary input jack, and then transmits it to the AV control unit and rear display unit.</li> <li>Composite synchronize signal is output to rear display unit.</li> <li>It transmits the headphone ON signal to the rear display unit, and then receives the remote controller operation signal from the rear display unit.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Front display image is controlled by the serial communication from AV control unit.</li> <li>It receives the power (signal VCC and inverter VCC) from the AV control unit and operates.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing).</li> <li>Synchronizing signal (HP, VP) is output to AV control unit.</li> <li>Camera image signal is input from AV control unit. Without DVD entertainment system</li> <li>Auxiliary image signal is input from AV control unit. With DVD entertainment system</li> <li>Composite image signal (auxiliary and DVD images) is input from the AV control unit.</li> </ul>
REAR DISPLAY UNIT	<ul> <li>The rear display unit has functions of remote control receiver and headphone amp.</li> <li>Transmits the headphone sound signal when receiving headphone ON signal from the video distributor.</li> <li>Headphone sound signal is input from DVD player via wiring harnesses and outputs the signal to headphones via infrared wireless communication.</li> <li>Receives the operation signal from the remote controller and transmits the signal to the video distributor via serial communication.</li> <li>Rear display image is controlled by the serial communication from video distributor.</li> <li>RGB image signal is input from video distributor (RGB image and RGB area). Composite image signal (DVD and auxiliary images) is input from the video distributor.</li> <li>Synchronize signal (HP, VP) is output to video distributor.</li> </ul>
DVD PLAYER	<ul> <li>It transmits the playback DVD image signal to the video distributor.</li> <li>It transmits the playback DVD sound signal to the AV control unit.</li> <li>It also transmits the input AUX sound signal to the AV control unit.</li> </ul>

# < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

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Part name	Description
BOSE AMP.	<ul> <li>Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to woofer and each speaker.</li> <li>Woofer amp. ON signal is transmitted to woofer.</li> </ul>
WOOFER	<ul> <li>Composed of two woofers and a woofer amp.</li> <li>Inputs power (amp. ON) and sound signal from BOSE amp.</li> <li>Outputs low frequency sound.</li> </ul>
FRONT DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
REAR DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
FRONT SQUAWKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
REAR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
CENTER SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
MULTIFUNCTION SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and aux iliary input operations are integrated.</li> <li>The multifunction switch is connected to the preset switch by wiring harness, and it transmits the operation signal to the preset switch.</li> </ul>
PRESET SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>The preset switch is connected via AV communication, and it transmits the operation signals of the preset switch and multifunction switch.</li> <li>The disk ejection operating signal is performed by wiring harness.</li> </ul>
STEERING SWITCH	<ul> <li>Operations such as audio and hands-free phone are possible.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
MICROPHONE	<ul> <li>Used only when hands-free phone is operated.</li> <li>Outputs Mic. signal (TEL voice signal) to the TEL adapter unit.</li> <li>The power (Mic. power supply) is supplied from the TEL adapter unit.</li> </ul>
AUXILIARY INPUT JACKS	<ul> <li>Without DVD entertainment system</li> <li>The image signal of the auxiliary input is output via the AV control unit to the front display, and it outputs the sound signal to the AV control unit. With DVD entertainment system</li> <li>The AUX image signal of the auxiliary input is output via the video distributor to the AV control unit and rear display unit, and it outputs the AUX sound signat to the DVD player.</li> </ul>
ANTENNA BASE	<ul> <li>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted. ANTENNA AMP.</li> <li>Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li> <li>Power (antenna amp. ON signal) is supplied from AV control unit. SATELLITE RADIO ANTENNA</li> <li>Receives the satellite radio wave and outputs it to the satellite radio tuner.</li> </ul>
CAMERA CONTROL UNIT	<ul> <li>Camera image signal is input from rear view camera. Camera image signal output to AV control unit.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> <li>Camera control unit is connected via AV communication.</li> </ul>
REAR VIEW CAMERA	<ul> <li>The image of vehicle rear view is transmitted to camera control unit.</li> <li>It receives the power (camera ON signal) from the camera control unit and op erates.</li> </ul>
STEERING ANGLE SENSOR	Steering signal necessary for possible route line control is transmitted to camera control unit.

# < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Part name	Description
TEL ADAPTER UNIT	<ul> <li>Inputs the TEL voice signal from TEL antenna and outputs it to the AV control unit.</li> <li>It is connected with the AV control unit via AV communication and controlled with the AV control unit.</li> </ul>
TEL ANTENNA	Receives the TEL voice signal and outputs it to the TEL adapter unit.
SATELLITE RADIO TUNER	<ul> <li>Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to the AV control unit.</li> <li>It is controlled with the AV control unit and serial communication (communication signal and request signal).</li> </ul>
iPod ADAPTER	<ul> <li>Inputs iPod sound signal from iPod[®], and outputs iPod sound signal to AV control unit.</li> <li>Receiving/transmitting of iPod[®] operation signals are performed as follows:</li> <li>between AV control unit and iPod adapter: AV communication.</li> <li>between iPod[®] and iPod adapter: serial communication.</li> </ul>

# **REAR VIEW MONITOR SYSTEM**

# System Diagram

INFOID:0000000003416489 Communication signal (DISP+CONT) Communication signal (CONT+DISP) STEERING Steering angle signal ANGLE Horizontal synchronizing (HP) signal SENSOR Virtical synchronizing (VP) signal **FRONT** RGB image signal Camera image signal DISPLAY RGB synchronizing signal UNIT RGB area (YS) signal REAR CAMERA VIEW Composite image signal (camera image) CONTROL CONTRL CAMERA UNIT Camera ON signal Inverter VCC (front display power supply) UNIT Signal VCC (front display power supply) Camera connection recognition signal Reverse signal/Vehicle speed signal Parking brake signal Camera image signal AV communication JSNIA1068GI

# System Description

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## CAMERA IMAGE OPERATION PRINCIPLE

- Power is supplied to rear view camera from camera control unit and outputs camera image signal to camera control unit when selector lever is set to R position and the reverse signal on camera control unit is input.
- Camera control unit synthesizes guide lines and possible route lines with camera image signal from rear view camera, and transmits camera image signal to the AV control unit. In this case, since the reverse signal is also input to AV control unit, the AV control unit recognizes that the selector lever is in the R position, and it switches communication signal between AV control unit and front display unit, and image that is displayed on the front display unit by RGB image signal with rear view monitor image. In addition, possible route lines are controlled by original sensor signal from steering angle sensor.
- The AV control unit determines whether rear view camera is equipped or not, based on the presence of camera connection recognition signal. It switches to rear view monitor image at the time of reverse signal input when it is equipped.
- Warning message under the rear view monitor display is described by AV control unit.
- AV control unit is connected in communication with camera control unit and front display unit, and it controls
  operation of rear view monitor system.

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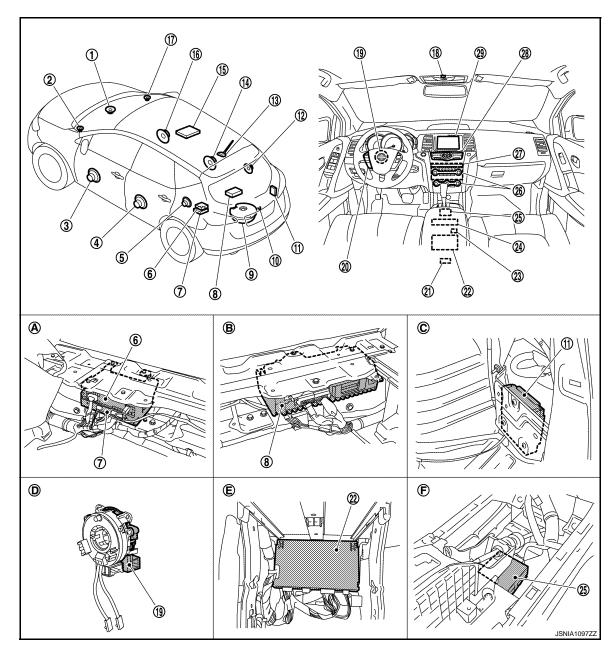
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# **Component Parts Location**

INFOID:0000000003464493



- Center speaker
- 4. Rear door speaker LH
- 7. TEL adapter unit
- 10. Rear view camera
- 13. Antenna base (antenna amp. and satellite antenna)
- 16. Front door speaker RH
- 19. Steering angle sensor
- 22. Video distributor
- 25. iPod adapter
- 28. Multifunction switch
- A. Luggage floor finisher is removed condition
- D. Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. BOSE amp.
- 11. Camera control unit
- 14. Rear door speaker RH
- 17. Front squawker RH
- 20. Steering switch
- 23. iPod connector
- 26. Preset switch
- 29. Front display unit
- B. Luggage floor finisher is removed condition
- Console rear finisher is removed condition

- Front door speaker LH
- 6. Satellite radio tuner
- 9. Woofer
- 12. Rear speaker RH
- 15. Rear display unit
- 18. Microphone
- 21. Auxiliary input jacks
- 24. DVD player
- 27. AV control unit
- Luggage side finisher lower RH is removed condition
- F. Console finisher is removed condition

# REAR VIEW MONITOR SYSTEM

< FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

# Component Description

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Part name	Description
AV CONTROL UNIT	<ul> <li>Camera image signal is input from camera control unit, and it is output to front display unit when input reverse signal.</li> <li>Image on display is changed to rear view monitor with the communication for AV control unit and front display unit.</li> <li>Warning displayed in rear view monitor image is illustrated.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Camera image signal is input from AV control unit.</li> <li>RGB image signal for warning display is input from AV control unit.</li> <li>Rear view monitor image is changed with the serial communication for AV control unit.</li> </ul>
CAMERA CONTROL UNIT	<ul> <li>Camera image signal is input from rear view camera. Camera image signal output to AV control unit.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> <li>Camera control unit is connected via AV communication.</li> </ul>
REAR VIEW CAMERA	<ul> <li>The image of vehicle rear view is transmitted to camera control unit.</li> <li>It receives the power (camera ON signal) from the camera control unit and operates.</li> </ul>
STEERING ANGLE SENSOR	Steering signal necessary for possible route line control is transmitted to camera control unit.

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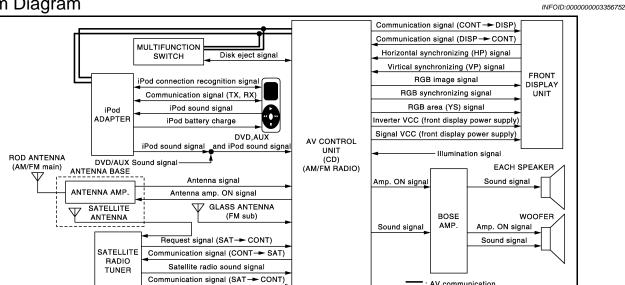
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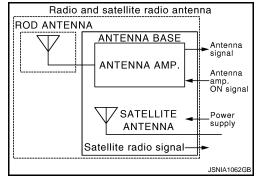
# **AUDIO SYSTEM**

System Diagram



## NOTE:

- Woofer, illustrated in the above figure, integrates two woofers and a woofer amp.
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.
- An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.



# System Description

INFOID:0000000003356753

JSNIA1065GB

The audio system is equipped with the following functions. Each function can be operated with the multifunction switch, preset switch or steering switch. It indicates the operation status of AUDIO to the front display unit.

Function
AM/FM radio
Satellite radio
CD mode
iPod connection
AUX mode
DVD mode

## **FUNCTION DESCRIPTION**

## **Operating Signal**

- Audio system operation can be performed with multifunction switch, preset switch, and steering switch.
- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The disk ejection operating signal is performed by wiring harness.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.

## **AUDIO SYSTEM**

## < FUNCTION DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

### Screen Front Display

- The display switching of the screen is performed with the serial communication signal between the front display unit and the AV control unit.
- The image signal to display operating condition is performed with RGB image signal, RGB area signal and RGB image synchronizing signal.

### AM/FM Radio Mode

- AM/FM radio tuner is built into AV control unit.
- AM/FM radio wave is received by rod antenna, next it is amplified by antenna amp., and finally it is input to
  AV control unit. The FM sub antenna is installed on the back door window glass and the AV control unit is
  received.
- Audio signal is input to BOSE amp. and BOSE amp. outputs to woofer and each speaker for AV control unit.

### Satellite Radio Mode

- Satellite radio tuner is controlled by serial communication and request signal with AV control unit.
- Satellite radio wave is received by satellite radio antenna, and it is input to satellite radio tuner. Satellite radio tuner outputs satellite radio sound signal to AV control unit. AV control unit outputs satellite radio sound signal to BOSE amp. and BOSE amp. outputs the sound signal to each speaker and woofer.

#### CD Mode

- CD function is built into AV control unit.
- AV control unit outputs audio signal to BOSE amp. and BOSE amp. outputs to woofer and each speaker when CD is inserted to AV control unit.

#### iPod Connection

- Connect iPod[®] and iPod adapter with wire harness and iPod adapter input iPod sound signal from iPod[®].
   When iPod mode is selected, iPod adapter output iPod sound signal to AV control unit. AV control unit output sound signal to BOSE amp., and BOSE amp. output sound signal to woofer and each speaker.
- Receiving/transmitting of iPod[®] operation signals are performed as follows:
- between AV control unit and iPod adapter: AV communication.
- between iPod® and iPod adapter: serial communication.
- The iPod® connection status can be recognized if iPod adapter receives iPod connection recognition signal.
- The iPod adapter can charge iPod[®].

#### **AUX Mode**

Refer to AV-51, "System Description".

### **DVD Mode**

Refer to AV-64, "System Description".

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Revision: 2008 October AV-61 2009 Murano

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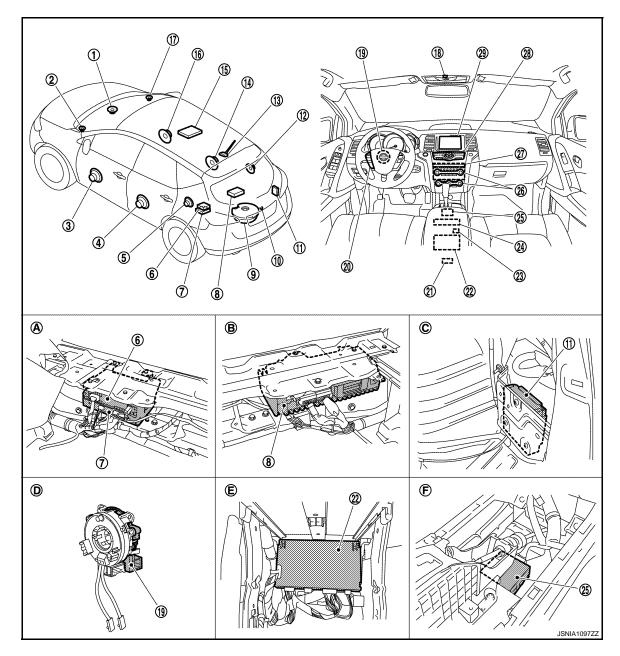
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# **Component Parts Location**

INFOID:0000000003464494



- Center speaker
- 4. Rear door speaker LH
- 7. TEL adapter unit
- 10. Rear view camera
- 13. Antenna base (antenna amp. and satellite antenna)
- 16. Front door speaker RH
- 19. Steering angle sensor
- 22. Video distributor
- 25. iPod adapter
- 28. Multifunction switch
- A. Luggage floor finisher is removed condition
- D. Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. BOSE amp.
- 11. Camera control unit
- 14. Rear door speaker RH
- 17. Front squawker RH
- 20. Steering switch
- 23. iPod connector
- 26. Preset switch
- 29. Front display unit
- B. Luggage floor finisher is removed condition
- E. Console rear finisher is removed condition

- Front door speaker LH
- 6. Satellite radio tuner
- 9. Woofer
- 12. Rear speaker RH
- 15. Rear display unit
- 18. Microphone
- 21. Auxiliary input jacks
- 24. DVD player
- 27. AV control unit
- C. Luggage side finisher lower RH is removed condition
- F. Console finisher is removed condition

# **AUDIO SYSTEM**

# [BOSE AUDIO WITHOUT NAVIGATION]

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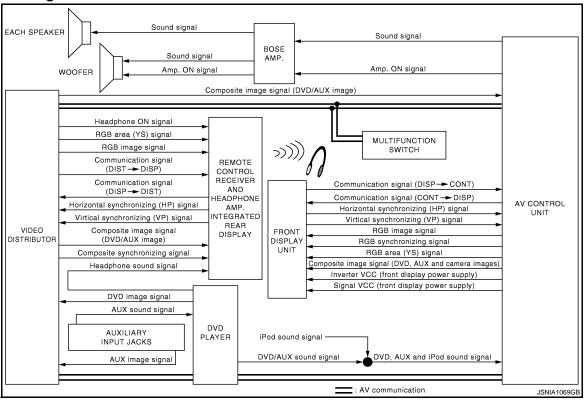
AUDIO SYSTEM	
< FUNCTION DIAGNOSIS >	[BOSE AUDIO WITHOUT NAVIGATION]
Component Description	INFOID:000000003356755

Part name	Description
AV CONTROL UNIT	<ul> <li>The AM/FM receiving function and the CD playing function are equipped.</li> <li>BOSE amp. ON signal and sound signal are transmitted to BOSE amp.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Front display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal (audio operation condition) is input from AV control unit.</li> </ul>
BOSE AMP.	<ul> <li>Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to woofer and each speaker.</li> <li>Woofer amp. ON signal is transmitted to woofer.</li> </ul>
WOOFER	<ul> <li>Composed of two woofers and a woofer amp.</li> <li>Inputs power (amp. ON) and sound signal from BOSE amp.</li> <li>Outputs low frequency sound.</li> </ul>
FRONT DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
REAR DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
FRONT SQUAWKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
REAR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
CENTER SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
MULTIFUNCTION SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and auxiliary input operations are integrated.</li> <li>The multifunction switch is connected to the preset switch by wiring harness, and it transmits the operation signal to the preset switch.</li> </ul>
PRESET SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>The preset switch is connected via AV communication, and it transmits the operation signals of the preset switch and multifunction switch.</li> <li>The disk ejection operating signal is performed by wiring harness.</li> </ul>
STEERING SWITCH	<ul> <li>Operations such as audio and hands-free phone are possible.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
ANTENNA BASE	<ul> <li>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.     ANTENNA AMP.</li> <li>Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li> <li>Power (antenna amp. ON signal) is supplied from AV control unit.     SATELLITE RADIO ANTENNA</li> <li>Receives the satellite radio wave and outputs it to the satellite radio tuner.</li> </ul>
SATELLITE RADIO TUNER	<ul> <li>Receives the satellite radio wave and outputs it to the satellite radio tuner.</li> <li>Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to the AV control unit.</li> <li>It is controlled with the AV control unit and serial communication (communication signal and request signal).</li> </ul>
iPod ADAPTER	<ul> <li>Inputs iPod sound signal from iPod[®], and outputs iPod sound signal to AV control unit.</li> <li>Receiving/transmitting of iPod[®] operation signals are performed as follows:</li> <li>between AV control unit and iPod adapter: AV communication.</li> <li>between iPod[®] and iPod adapter: serial communication.</li> </ul>

# **DVD ENTERTAINMENT SYSTEM**

System Diagram

INFOID:0000000003416493



# System Description

INFOID:0000000003416494

The passengers can enjoy watching DVDs in the rear seat with the rear display unit. They can also listen to a DVD and AUX in the rear seat independently by cordless headphones.

### **FUNCTION DESCRIPTION**

### Operating Signal

The mobile entertainment system can be controlled by the rear seat remote controller.

It receives the operation signal of the rear seat remote controller by the rear display unit, and then transmits it to the video distributor.

#### Screen Rear Display

- Switching of display is performed with serial communication between rear display unit and video distributor.
- The rear display unit receives the DVD/AUX image signal and RGB image signal from the video distributor.

## Screen Front Display

- Switching of display is performed with serial communication between front display unit and AV control unit.
- The front display unit receives the DVD/AUX image signal from the AV control unit.
- The front display unit receives the RGB image signal from the AV control unit.

#### **DVD Mode**

- The DVD player is connected to the AV control unit via AV communication and controlled by the AV control
  unit.
- The DVD player sound signal is output to the AV control unit. The AV control unit outputs DVD player sound signal to BOSE amp. The BOSE amp. outputs it to woofer and each speaker.
- The DVD image signal is output to the video distributor. The video distributor outputs it to AV control unit and rear display unit. The AV control unit output DVD image signal to front display unit.

### **AUX Mode**

Refer to AV-51, "System Description".

# **Component Parts Location**

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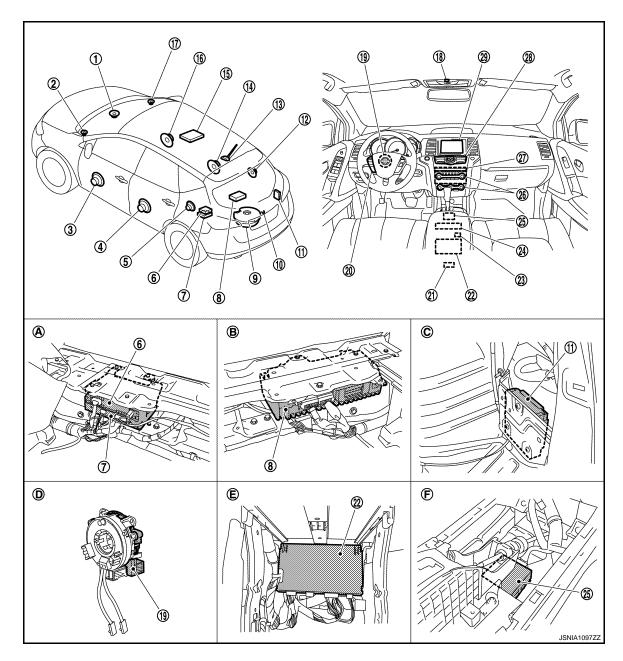
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- Center speaker
- Rear door speaker LH
- TEL adapter unit 7.
- 10. Rear view camera
- Antenna base (antenna amp. and sat-13. ellite antenna)
- 16. Front door speaker RH
- 19. Steering angle sensor
- Video distributor 22.
- 25. iPod adapter
- Multifunction switch 28.
- Luggage floor finisher is removed condition
- Spiral cable part

- Front squawker LH
- 5. Rear speaker LH
- BOSE amp.
- Camera control unit
- 14. Rear door speaker RH
- Front squawker RH
- Steering switch
- iPod connector 23.
- Preset switch
- Front display unit
- Luggage floor finisher is removed con-
- Console rear finisher is removed condition

- Front door speaker LH
- 6. Satellite radio tuner
- 9. Woofer
- 12. Rear speaker RH
- Rear display unit 15.
- 18. Microphone
- 21. Auxiliary input jacks
- DVD player 24.
- 27. AV control unit
- Luggage side finisher lower RH is removed condition

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# **DVD ENTERTAINMENT SYSTEM**

< FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

# Component Description

INFOID:0000000003416496

Part name	Description
AV CONTROL UNIT	<ul> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>AV control unit includes audio function and vehicle information function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>BOSE amp. ON signal and sound signal are transmitted to BOSE amp.</li> <li>Composite image signal (auxiliary and DVD images) is input from the video distributor.</li> <li>Sound signal (DVD and auxiliary sounds) is input from the DVD player.</li> </ul>
VIDEO DISTRIBUTOR	<ul> <li>It receives the image signal from the DVD player, and auxiliary input jack, and then transmits it to the AV control unit and rear display unit.</li> <li>Composite synchronize signal is output to rear display unit.</li> <li>It transmits the headphone ON signal to the rear display unit, and then receives the remote controller operation signal from the rear display unit.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Front display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing).</li> <li>Synchronizing signal (HP, VP) is output to AV control unit.</li> <li>Composite image signal (auxiliary and DVD images) is input from the AV control unit.</li> </ul>
REAR DISPLAY UNIT	<ul> <li>The rear display unit has functions of remote control receiver and headphone amp.</li> <li>Transmits the headphone sound signal when receiving headphone ON signal from the video distributor.</li> <li>Headphone sound signal is input from DVD player via wiring harnesses and outputs the signal to headphones via infrared wireless communication.</li> <li>Receives the operation signal from the remote controller and transmits the signal to the video distributor via serial communication.</li> <li>Rear display image is controlled by the serial communication from video distributor.</li> <li>RGB image signal is input from video distributor (RGB image and RGB area). Composite image signal (DVD and auxiliary images) is input from the video distributor.</li> <li>Synchronize signal (HP, VP) is output to the video distributor.</li> </ul>
DVD PLAYER	<ul> <li>It transmits the playback DVD image signal to the video distributor.</li> <li>It transmits the playback DVD sound signal to the AV control unit.</li> <li>It also transmits the input AUX sound signal to the AV control unit.</li> </ul>
BOSE AMP.	<ul> <li>Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to woofer and each speaker.</li> <li>Woofer amp. ON signal is transmitted to woofer.</li> </ul>
WOOFER	<ul> <li>Composed of two woofers and a woofer amp.</li> <li>Inputs power (amp. ON) and sound signal from BOSE amp.</li> <li>Outputs low frequency sound.</li> </ul>
FRONT DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
REAR DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
FRONT SQUAWKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
REAR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
CENTER SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>

## HANDS-FREE PHONE SYSTEM

# System Diagram

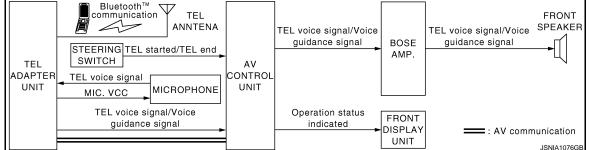
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# System Description

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- TEL adapter unit is controlled with AV communication from AV control unit.
- The connection between portable telephone and TEL adapter unit is performed with Bluetooth[™] communication.
- The voice guidance signal is input from the TEL adapter unit to the AV control unit and output via BOSE amp. to the front door speaker when operating the cellular phone.
- TEL adapter unit has the on board self-diagnosis function. Refer to AV-87, "Diagnosis Description".

### WHEN RECEIVING A CALL

TEL voice signal received with the portable telephone is input from TEL antenna via TEL adapter unit to AV control unit with Bluetooth[™] communication and output via BOSE amp. to the front door speaker. The operation is performed with the steering switch or voice recognition function (TEL operation only).

## WHEN A CALL IS TRANSMITTED

Speech sounds (TEL voice signal) are input from the microphone to the TEL adapter unit. It is input from the TEL antenna via  $\mathsf{Bluetooth}^\mathsf{TM}$  communication to the portable telephone. It is transmitted to the phone on the other side. The operation is performed with the steering switch or voice recognition function (TEL operation only).

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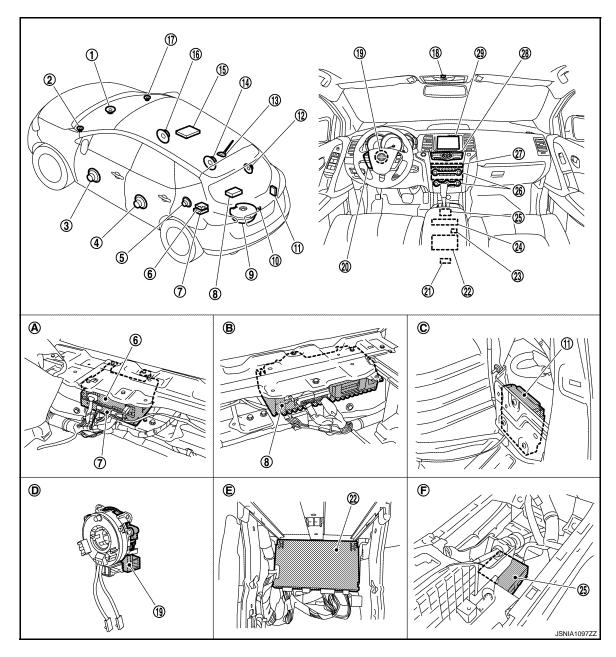
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# **Component Parts Location**

INFOID:0000000003464496



- Center speaker
- 4. Rear door speaker LH
- 7. TEL adapter unit
- 10. Rear view camera
- 13. Antenna base (antenna amp. and satellite antenna)
- 16. Front door speaker RH
- 19. Steering angle sensor
- 22. Video distributor
- 25. iPod adapter
- 28. Multifunction switch
- A. Luggage floor finisher is removed condition
- D. Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. BOSE amp.
- 11. Camera control unit
- 14. Rear door speaker RH
- 17. Front squawker RH
- 20. Steering switch
- 23. iPod connector
- 26. Preset switch
- 29. Front display unit
- Luggage floor finisher is removed condition
- E. Console rear finisher is removed condition

- Front door speaker LH
- 6. Satellite radio tuner
- 9. Woofer
- 12. Rear speaker RH
- 15. Rear display unit
- 18. Microphone
- 21. Auxiliary input jacks
- 24. DVD player
- 27. AV control unit
- C. Luggage side finisher lower RH is removed condition
- F. Console finisher is removed condition

# HANDS-FREE PHONE SYSTEM

< FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

# **Component Description**

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Part name	Description
AV CONTROL UNIT	<ul> <li>Inputs TEL voice signal or voice guidance signal from TEL adapter unit and outputs it to BOSE amp. during reception.</li> <li>Connects with TEL adapter unit and AV communication and controls hands free phone system.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Display image is controlled by the serial communication from AV control unit.</li> <li>Inputs RGB image signal (RGB, RGB area and RGB synchronizing) from AV control unit and displays the status of hands free phone system.</li> </ul>
BOSE AMP.	Inputs TEL voice signal or voice guidance signal from AV control unit and outputs it to front speaker.
FRONT DOOR SPEAKER	Outputs the TEL value signal as value guidence signal from DOCE
FRONT SQUAWKER	Outputs the TEL voice signal or voice guidance signal from BOSE amp.
PRESET SWITCH	<ul> <li>Adjust the sound when using hands-free phone system.</li> <li>The operation signal is transmitted to the AV control unit via AV communication.</li> </ul>
STEERING SWITCH	<ul> <li>The hands-free phone system can be operated.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
MICROPHONE	<ul> <li>Uses when operating the hands-free phone.</li> <li>Outputs Mic. signal (TEL voice signal) to the TEL adapter unit.</li> <li>The power (Mic. power supply) is supplied from the TEL adapter unit.</li> </ul>
TEL ADAPTER UNIT	<ul> <li>Receives the steering switch signal (operation signal) from the steering switch.</li> <li>Inputs the TEL voice signal from TEL antenna during reception and outputs it to the AV control unit.</li> <li>Inputs the TEL voice signal from microphone during speech recognition and outputs it to the TEL antenna.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> </ul>
TEL ANTENNA	Connects with the portable telephone via Bluetooth [™] and communicates the TEL voice signal.

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## **DIAGNOSIS SYSTEM (AV CONTROL UNIT)**

< FUNCTION DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

# **Diagnosis Description**

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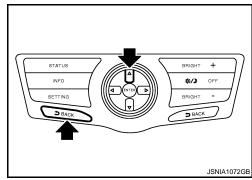
## MULTIFUNCTION SWITCH AND PRESET SWITCH SELF-DIAGNOSIS FUNCTION

The ON/OFF operation (continuity) of each switch in the multifunction switch and preset switch can be checked.

## Self-Diagnosis Mode

- Press the "BACK" switch and the "
   " switch of the 8-direction switches within 10 seconds after turning the ignition switch from OFF to ACC and hold them for 3 seconds or more. Then the buzzer sounds, all indicators of the preset switch illuminate, and the self-diagnosis mode starts.
- The continuity of each switch at the ON position can be checked by pressing the switch. The buzzer sounds if the switch is normal.
   NOTE:

The disk eject switch cannot be checked.



### Finishing Self-diagnosis Mode

Self-diagnosis mode is canceled when the ignition switch is turned OFF.

## MULTI AV SYSTEM ON BOARD DIAGNOSIS FUNCTION

- The AV control unit diagnosis function starts up with multifunction switch operation and the AV control unit performs a diagnosis for each unit in the system during the on board diagnosis.
- Perform a CONSULT-III diagnosis if the on board diagnosis does not start, e.g., if the screen does not display anything, the multifunction switch does not function, etc.

### ON BOARD DIAGNOSIS

### Description

- The trouble diagnosis function has a self-diagnosis mode for conducting trouble diagnosis automatically and a confirmation/adjustment mode for operating manually.
- Self-diagnosis mode performs the AV control unit diagnosis and the connection diagnosis between each of the units that make up the system, and it indicates the results to the display.
- The confirmation/adjustment mode allows the technician to check, modify or adjust the vehicle signals and set values, as well as to monitor the system error records and system communication status. The checking, modifying or adjusting generally requires human intervention and judgment (the system cannot make judgment automatically).

## On Board Diagnosis Item

Mode	Description
Self-Diagnosis	AV control unit diagnosis     Perform the connection diagnosis between each of the units.

# **DIAGNOSIS SYSTEM (AV CONTROL UNIT)**

## < FUNCTION DIAGNOSIS >

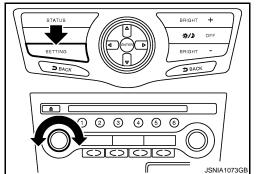
## [BOSE AUDIO WITHOUT NAVIGATION]

Mode		Description
Confirmation/ Adjustment	Display Diagnosis	The confirmation of the tint with the color spectrum bar display and shading of color with the gradation bar display can be performed.
	Vehicle Signals	Diagnosis of signals can be performed for vehicle speed, parking brake, lights, ignition switch, and reverse.
	Speaker Test	The connection of a speaker can be confirmed by test tone.
	Climate Control*	Not used.
	Error History	System malfunctions and the frequency when occurring in the past are displayed. When the malfunctioning item is selected, the time and place that the selected malfunction last occurred are displayed.
	Camera Cont.	The signal connected to camera control unit can be checked and the guiding line position that overlaps rear view camera image can be adjusted.
	Vehicle CAN Diagnosis	The transmitting/receiving of CAN communication can be monitored.
	AV COMM Diagnosis	The communication condition of each unit of MULTI AV system can be monitored.
	Delete Unit Connection Log	Erase the connection history of unit and error history
	Initialize Settings	Initializes the AV control unit memory.

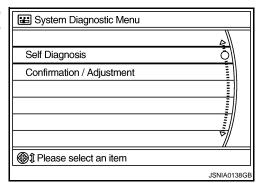
#### NOTE:

## STARTING PROCEDURE

- 1. Start the engine.
- 2. Turn the audio system OFF.
- 3. While pressing the "SETTING" button, turn the volume control dial clockwise or counterclockwise for 40 clicks or more. (When the self-diagnosis mode is started, a short beep will be heard.)
  - Shifting from current screen to previous screen is performed by pressing the "BACK" button.



 The trouble diagnosis initial screen is displayed, and then the items of "Self Diagnosis" and "Confirmation/Adjustment" can be selected.



**SELF-DIAGNOSIS MODE** 

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Revision: 2008 October AV-71 2009 Murano

^{*:} On-board self-diagnosis is not supported. Only CONSULT-III is supported.

# **DIAGNOSIS SYSTEM (AV CONTROL UNIT)**

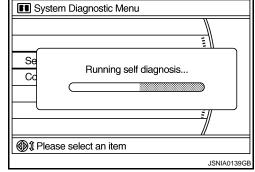
## < FUNCTION DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

Start the self-diagnosis function and select "Self-diagnosis".
 NOTE:

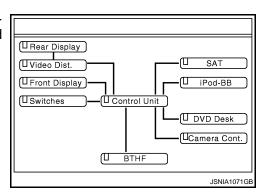
Because the start condition of diagnosis function is a switch operation, the on board diagnosis function cannot start up if any malfunction is detected in the AV communication circuit between AV control unit and multifunction switch.

- Self-diagnosis subdivision screen is displayed, and the selfdiagnosis mode starts.
- The bar graph visible on the center of the self-diagnosis subdivision screen indicates progress of the trouble diagnosis.



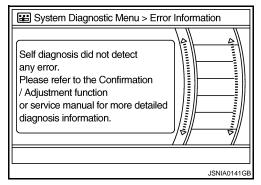
 Diagnosis results are displayed after the self-diagnosis is completed. The unit names and the connection lines are color-coded according to the diagnostic results.

Diagnosis results	Unit	Con- nection line
Normal	Green	Green
Connection malfunction	Gray	Yellow
Unit malfunction Note	Red	Green



#### NOTE:

- · Only the control unit (AV control unit) is displayed in red.
- Replace AV control unit if "Self-Diagnosis did not run because of a control unit malfunction" is indicated. The symptom is AV control unit internal error. Refer to AV-522, "Exploded View".
- If multiple errors occur at the same time for a single unit, the screen switch colors are determined according to the following order of priority: red > gray.
- The comments of the self-diagnosis results can be viewed with a component in the diagnosis result screen.



## SELF-DIAGNOSIS RESULTS

Check the applicable display at the following table, and then repair the malfunctioning parts.

#### NOTE:

Because the start condition of diagnosis function is a switch operation, the on board diagnosis function cannot be started up if any malfunction is detected in the AV communication circuit between AV control unit and multifunction switch.

Self-diagnosis Result Chart

# [BOSE AUDIO WITHOUT NAVIGATION]

Diagnosis results	Detection logic	Possible malfunction location / Action to take
Rear Display	Malfunction is detected in AV control unit power supply and ground circuits.	Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.
URear Display UVideo Dist. Front Display USwitches UControl Unit UDVD Deck UCamera Cont.  IF Gray USNIA1078GB	When either one of the following items are detected:  • serial communication circuits between AV control unit and front display unit are malfunctioning.  • serial communication signal between AV control unit and front display unit is malfunctioning.	Serial communication circuits between AV control unit and front display unit.
U Rear Display U Video Dist. U Front Display U Switches U DVD Deck	When either one of the following items are detected:  satellite radio tuner power supply and ground circuits are malfunctioning.  serial communication circuits between AV control unit and satellite radio tuner are malfunctioning.  serial communication or request signal between AV control unit and satellite radio tuner is malfunctioning.  request signal circuit between AV control unit and satellite radio tuner is malfunctioning.	<ul> <li>Satellite radio tuner power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>

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# [BOSE AUDIO WITHOUT NAVIGATION]

Diagnosis results	Detection logic	Possible malfunction location / Action to take
Rear Display	<ul> <li>When either one of the following items are detected:</li> <li>TEL adapter unit power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between camera control unit and TEL adapter unit are malfunctioning.</li> <li>AV communication circuits between multifunction switch and camera control unit are malfunctioning. (without DVD player models)</li> <li>AV communication circuits between DVD player and camera control unit are malfunctioning. (with DVD player models)</li> <li>AV communication circuits between camera control unit and TEL adapter unit is malfunctioning.</li> <li>AV communication signal between AV control unit and TEL adapter unit is malfunctioning.</li> </ul>	<ul> <li>TEL adapter unit power supply and ground circuits.</li> <li>AV communication circuits between camera control unit and TEL adapter unit.</li> <li>AV communication circuits between multifunction switch and camera control unit. (without DVD player models)</li> <li>AV communication circuits between DVD player and camera control unit. (with DVD player models)</li> <li>AV communication circuits between camera control unit and TEL adapter unit.</li> <li>AV communication circuits between multifunction switch and TEL adapter unit. (without rear view camera)</li> </ul>
☐ Rear Display ☐ Video Dist. ☐ Front Display ☐ ☐ DVD Deck ☐ BTHF ☐ Gray — — — : Yellow ☐ SAT ☐ ☐ DVD Deck ☐ DVD Deck ☐ STHF ☐ UDVD Deck ☐ STHF	Malfunction is detected in camera-connection recognition signal circuit.	Camera connection recognition signal circuit.
☐ Rear Display ☐ Video Dist. ☐ Front Display ☐ IPod-BB ☐ DVD Deck ☐ DVD Deck ☐ UCamera Cont. ☐ BTHF ☐ SAT ☐ PVD Deck ☐ UCamera Cont. ☐ STHF ☐ USNIA1082GB	<ul> <li>When either one of the following items are detected:</li> <li>iPod adapter power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between multifunction switch and iPod adapter are malfunctioning.</li> <li>AV communication signal between AV control unit and iPod adapter is malfunctioning.</li> </ul>	<ul> <li>iPod adapter power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch and iPod adapter.</li> </ul>
U Sat U Sat U Sat U Sat U Southes U Souther Display U Shitches U Souther Display U Shitches U Shitches U Sat U Sat U iPod-BB U Switches U DVD Deck UCamera Cont. UCamera Cont.	When either one of the following items are detected:  • DVD player power supply and ground circuits are malfunctioning.  • AV communication signal between AV control unit and DVD player is malfunctioning.	DVD player power supply and ground circuits.

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Diagnosis results	Detection logic	Possible malfunction location / Action to take
Rear Display  Uvideo Dist. UFront Display USwitches UControl Unit UDVD Deck UCamera Cont.  I Gray  JSNIA1084GB	When either one of the following items are detected:  • rear display unit power supply and ground circuits are malfunctioning.  • serial communication circuits between video distributor and rear display unit are malfunctioning.  • serial communication signal between video distributor and rear display unit is malfunctioning.	<ul> <li>Rear display unit power supply and ground circuits.</li> <li>Serial communication circuits between video distributor and rear display unit.</li> </ul>
Rear Display  Video Dist.  U Front Display  U SAT  U iPod-BB  U Switches  U Control Unit  U DVD Deck  UCamera Cont.  I Gray  JSNIA1085GB	When either one of the following items are detected:  Malfunction is detected in video distributor power supply and ground circuits.  AV communication signal between AV control unit and video distributor is malfunctioning.	Video distributor power supply and ground circuits.
U Rear Display  U Video Dist. U Front Display U SAT  U Front Display U Switches U Control Unit UCamera Cont.  BTHF  SAT  U FPOd-BB  UCamera Cont.	Malfunction is detected in AV communication circuits between video distributor and DVD player.	AV communication circuits between video distributor and DVD player malfunction.

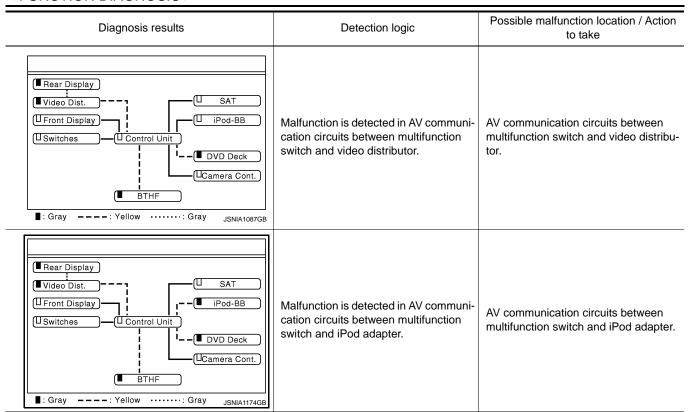
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### [BOSE AUDIO WITHOUT NAVIGATION]

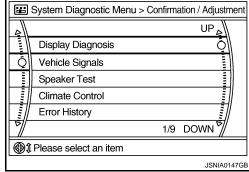


#### NOTE:

The number of units that is displayed on the on board self-diagnosis display according to equipment.

#### CONFIRMATION/ADJUSTMENT MODE

- 1. Start the diagnosis function and select "Confirmation/Adjustment". The confirmation/adjustment mode indicates where each item can be checked or adjusted.
- 2. Select each switch on the "Confirmation/Adjustment Mode" screen to display the relevant trouble diagnosis screen. Press the "RETURN" switch to return to the initial Confirmation/Adjustment Mode screen.



#### < FUNCTION DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

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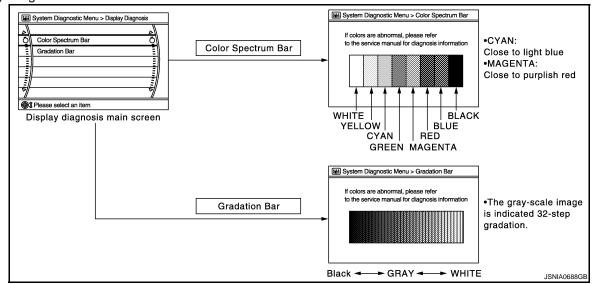
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### Display Diagnosis



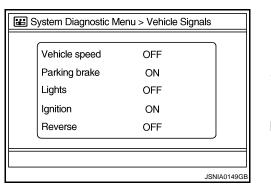
The tint of the color bar indication is as per the following list if RGB image signal error is detected.

R (red) signal error : Light blue (Cyan) tint G (green) signal error : Purple (Magenta) tint

B (blue) signal error : Yellow tint

#### Vehicle Signals

A comparison check can be made of each actual vehicle signal and the signals recognized by the system.



Diagnosis item	Display	Vehicle status	Remarks
Vehicle speed	ON	Vehicle speed > 0 km/h (0 MPH)	
verlicie speed	OFF	Vehicle speed = 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
Darking broke	ON	Parking brake is applied.	Changes in indication may be delayed. This is normal.
Parking brake	OFF	Parking brake is released.	
Lighto	ON	Light switch ON	
Lights		Light switch OFF	<del>_</del>
Ignition	ON	Ignition switch ON	
Ignition	OFF	Ignition switch in the ACC position	<del>_</del>
Reverse	ON	Shift the selector lever to the "R" position	Changes in indication may be delayed. This is normal.
OFF Shift the selector leve		Shift the selector lever to a position other than the "R" position	Changes in indication may be delayed. This is normal.

Speaker Test

#### < FUNCTION DIAGNOSIS >

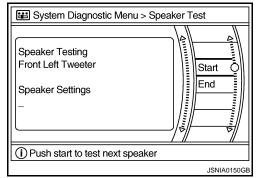
#### [BOSE AUDIO WITHOUT NAVIGATION]

Select "SPEAKER DIAGNOSIS" to display the Speaker Diagnosis screen. Press "START and NEXT" to generate a test tone in a speaker. Press "Start" to generate a test tone in the next speaker. Press "End" to stop the test tones.

#### NOTE:

The frequency of test tone emitted from each speaker is as follows.

Tweeter : 3 kHz
Front speaker : 300 Hz
Rear speaker : 1 kHz



#### Climate Control

On-board self-diagnosis is not supported. Only CONSULT-III is supported.

Refer to <u>HAC-38</u>, "CONSULT-III Function" [without 7 inch display].

Refer to <u>HAC-157</u>, "CONSULT-III Function" [with 7 inch display].

#### **Error History**

The self-diagnosis results are judged depending on whether any error occurs from when "Self-diagnosis" is selected until the self-diagnosis results are displayed.

However, the diagnosis results are judged normal if an error has occurred before the ignition switch is turned ON and then no error has occurred until the self-diagnosis start. Check the "Error Record" to detect any error that may have occurred before the self-diagnosis start because of this situation.

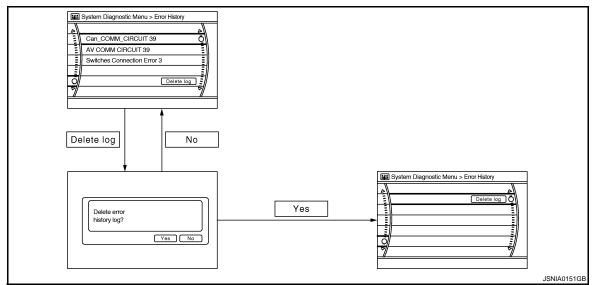
#### Count up method A

- The counter resets to 0 if an error occurs when IGN switch is turned ON. The counter increases by 1 if the condition is normal at the next IGN ON cycle.
- The counter upper limit is 39. Any counts exceeding 39 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

#### Count up method B

- The counter increases by 1 if an error occurs when IGN switch is ON. The counter will not decrease even if the condition is normal at the next IGN ON cycle.
- The counter upper limit is 50. Any counts exceeding 50 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

Display type of occur- rence frequency	Error history display item	
Count up method A	CAN communication line, control unit (CAN), AV communication line, control unit (AV communication)	
Count up method B	Other than the above	



#### Error Item

Some error items may be displayed simultaneously according to the cause. If some error items are displayed simultaneously, the detection of the cause can be performed by the combination of display items

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results.  Refer to AV-83, "CONSULT-III Function (MULTI AV)".
CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	
CONTROL UNIT (AV)	AV communication circuit initial diagnosis malfunction is detected.	Replace the AV control unit.
FLASH-ROM Error Of Control Unit CAN Controller Memory Error	AV control unit malfunction is detected.	
Front Display Connection Error	When either one of the following items are detected:  front display unit power supply and ground circuits are malfunctioning.  serial communication circuits between AV control unit and front display unit are malfunctioning.  serial communication signal between AV control unit and front display unit is malfunctioning.	<ul> <li>Front display unit power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and front display unit.</li> </ul>
Rear Display Connection Error	When either one of the following items are detected:  rear display unit power supply and ground circuits are malfunctioning.  serial communication circuits between video distributor and rear display unit are malfunctioning.  serial communication signal between video distributor and rear display unit is malfunctioning.	<ul> <li>Rear display unit power supply and ground circuits.</li> <li>Serial communication circuits between video distributor and rear display unit.</li> </ul>
Camera Control Unit Connection Error	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.
SAT Connection Error	When either one of the following items are detected:  satellite radio tuner power supply and ground circuits are malfunctioning.  serial communication circuits between AV control unit and satellite radio tuner are malfunctioning.  serial communication or request signal between AV control unit and satellite radio tuner is malfunctioning.  request signal circuit between AV control unit and satellite radio tuner is malfunctioning.	<ul> <li>Satellite radio tuner power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>
AV COMM CIRCUIT     Switches Connection Error	When either one of the following items are detected:  multifunction switch power supply and ground circuits are malfunctioning.  AV communication circuits between AV control unit and multifunction switch are malfunctioning.  AV communication signal between AV control unit and multifunction switch is malfunctioning.	<ul> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuits between AV control unit and multifunction switch.</li> </ul>

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
AV COMM CIRCUIT     Video Distributor Connection Error	When either one of the following items are detected:  video distributor power supply and ground circuits are malfunctioning.  AV communication signal between AV control unit and video distributor is malfunctioning.	Video distributor power supply and ground circuits.
AV COMM CIRCUIT     DVD Deck Connection Error	When either one of the following items are detected:  DVD player power supply and ground circuits are malfunctioning.  AV communication signal between AV control unit and DVD player is malfunctioning.	DVD player power supply and ground circuits.
AV COMM CIRCUIT     Rearview Camera Connection Error	<ul> <li>When either one of the following items are detected:</li> <li>camera control unit power supply and ground circuits are malfunctioning.</li> <li>AV communication signal between AV control unit and camera control unit is malfunctioning.</li> <li>AV communication circuits between multifunction switch and camera control unit are malfunctioning. (Without DVD entertainment system models)</li> </ul>	Camera control unit power supply and ground circuits.     AV communication circuits between multifunction switch and camera control unit. (Without DVD entertainment system models)
AV COMM CIRCUIT     iPod Connection Error	<ul> <li>When either one of the following items are detected:</li> <li>iPod adapter power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between multifunction switch and iPod adapter are malfunctioning.</li> <li>AV communication signal between AV control unit and iPod adapter is malfunctioning.</li> </ul>	<ul> <li>iPod adapter power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch and iPod adapter.</li> </ul>
AV COMM CIRCUIT     H/F Unit Connection Error	When either one of the following items are detected:  TEL adapter unit power supply and ground circuits are malfunctioning.  AV communication circuits between camera control unit and TEL adapter unit are malfunctioning.  AV communication signal between AV control unit and TEL adapter unit is malfunctioning.	<ul> <li>TEL adapter unit power supply and ground circuits.</li> <li>AV communication circuits between camera control unit and TEL adapter unit.</li> </ul>
<ul> <li>AV COMM CIRCUIT</li> <li>Rearview Camera Connection Error</li> <li>H/F Unit Connection Error*</li> </ul>	When either one of the following items are detected:  AV communication circuits between multifunction switch and camera control unit are malfunctioning. (without DVD player models)  AV communication circuits between DVD player and camera control unit are malfunctioning. (with DVD player models)	AV communication circuits between multifunction switch and camera control unit. (without DVD player models)     AV communication circuits between DVD player and camera control unit. (with DVD player models)
<ul> <li>AV COMM CIRCUIT</li> <li>DVD Deck Connection Error</li> <li>Rearview Camera Connection Error</li> <li>H/F Unit Connection Error</li> </ul>	Malfunction is detected in AV communication circuits between video distributor and DVD player.	AV communication circuits between video distributor and DVD player.

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

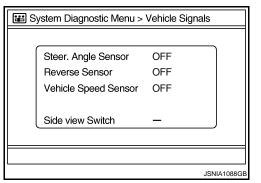
Error item	Description	Possible malfunction factor/Action to take
<ul> <li>AV COMM CIRCUIT</li> <li>Video Distributor Connection Error</li> <li>DVD Deck Connection Error</li> <li>Rearview Camera Connection Error</li> <li>H/F Unit Connection Error</li> </ul>	Malfunction is detected in AV communication circuits between multifunction switch and video distributor.	AV communication circuits between multi- function switch and video distributor.
AV COMM CIRCUIT     Video Distributor Connection Error     DVD Deck Connection Error     Rearview Camera Connection Error     iPod Connection Error     H/F Unit Connection Error	Malfunction is detected in AV communication circuits between multifunction switch and iPod adapter.	AV communication circuits between multi- function switch and iPod adapter.
<ul> <li>AV COMM CIRCUIT</li> <li>Switches Connection Error</li> <li>Rearview Camera Connection Error</li> <li>iPod Connection Error*</li> <li>H/F Unit Connection Error*</li> </ul>	When either one of the following items are detected:  • AV communication circuits between AV	AV communication circuits between AV control unit and the branch point multi-
<ul> <li>AV COMM CIRCUIT</li> <li>Switches Connection Error</li> <li>Video Distributor Connection Error</li> <li>DVD Deck Connection Error</li> <li>Rearview Camera Connection Error</li> <li>iPod Connection Error</li> <li>H/F Unit Connection Error</li> </ul>	control unit and the branch point multi- function switch and AV control unit are malfunctioning.  • AV communication circuits are malfunc- tioning.	function switch and AV control unit.  Check and repair the short circuit in AV communication circuits.

^{*:} Non-equipped item is not displayed.

#### Camera Cont.

The two functions of "Connection Confirmation" and "Adjust Offset of Rear View Camera" are available. CONNECTION CONFIRMATION

The steering angle sensor, reverse signal and vehicle speed sensor can be inspected.



Diagnosis item	Display	Vehicle status
	ON	When steering the vehicle with ignition switch ON (remains ON until connection mode is stopped when it is turned ON).
Steer. Angle Sensor	OFF	<ul><li>Ignition switch at ACC.</li><li>No steering with ignition switch ON.</li></ul>
	_	Malfunction detected in camera connection recognition signal.
	ON	Selector lever is in "R" with ignition switch ON.
Reverse Sensor	OFF	<ul><li>Ignition switch at ACC.</li><li>Selector lever is in position other than "R" with ignition switch ON.</li></ul>
	_	Malfunction detected in camera-connection recognition signal.
	ON	Vehicle speed is more than 0 km/h (0 MPH) with ignition switch ON.
Vehicle Speed Sensor	OFF	<ul><li>Ignition switch at ACC.</li><li>Vehicle speed is 0 km/h (0 MPH) with ignition switch ON.</li></ul>
	_	Malfunction detected in camera connection recognition signal.
Side view Switch	_	Not used.

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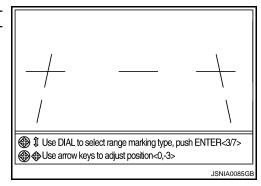
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#### < FUNCTION DIAGNOSIS >

#### [BOSE AUDIO WITHOUT NAVIGATION]

#### ADJUST OFFSET OF REAR VIEW CAMERA

Use this mode to adjust the guide line display position of the rearview monitor if necessary after removing the rear view monitor camera



#### Vehicle CAN Diagnosis

- CAN communication status and error counter is displayed.
- The error counter displays "OK" if any malfunction was not detected in the past and displays "0" if a malfunction is detected. It increases by 1 if the status is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- The error counter is erased if reset.

Items	Display (Current)	Malfunction counter (Past)
Tx (HVAC)	OK / UNKWN	OK / 0 - 39
Rx (ECM)	OK / UNKWN	OK / 0 - 39
Rx (Cluster)	OK / UNKWN	OK / 0 - 39
Rx (BCM)	OK / UNKWN	OK / 0 - 39
Rx (HVAC)	OK / UNKWN	OK / 0 - 39
Rx (USM)	OK / UNKWN	OK / 0 - 39

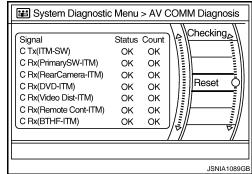
#### System Diagnostic Menu > Vehicle CAN... (\$)BACK Checking Signal Status Count Tx(HVAC) OK OK Rx(ECM) OK OK Rx(Cluster) OK OK Reset Rx(BCM) OK OK Rx(HVAC) OK OK Rx(USM) OK OK JSNIA0080GE

#### **AV COMM Diagnosis**

- Displays the communication status between AV control unit (master unit) and each unit.
- The error counter displays "OK" if any malfunction was not detected in the past and displays "0" if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- If it resets, the error counter is erased.

Items	Status (Current)	Counter (Past)
C Tx(ITM-SW)	OK / UNKWN	OK / 0 - 39
C Rx(PrimarySW-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(RearCamera-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(DVD-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(Video Dist-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(Remote Cont-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(BTHF–ITM)	OK / UNKWN	OK / 0 - 39
C Rx(iPod AdptITM)	OK / UNKWN	OK / 0 - 39
C Rx(DVDAudio-ITM)	OK / UNKWN	OK / 0 - 39

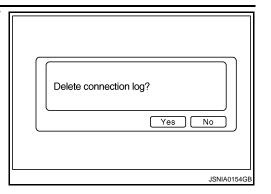
**Delete Unit Connection Log** 



#### < FUNCTION DIAGNOSIS >

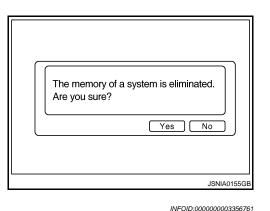
#### [BOSE AUDIO WITHOUT NAVIGATION]

Deletes any unit connection records and error records from the AV control unit memory. (Clear the records of the unit that has been removed)



Initialize Settings

Initializes the AV control unit memory.



## CONSULT-III Function (MULTI AV)

#### **CONSULT-III** functions

CONSULT-III performs the following functions via communication with the AV control unit.

Diagnosis mode	Description
Ecu Identification	The part number of AV control unit can be checked.
Self Diagnostic Result	Performs a diagnosis on the AV control unit. A connection diagnosis for the communication circuit of the MULTI AV system and displays the current and past malfunctions collectively.
Data Monitor	The diagnosis of vehicle signal that is input to the AV control unit can be performed.

#### AV COMMUNICATION

When "AV communication" of "CAN Diag Support Monitor" is selected, the following function will be performed.

AV communication	AV&NAVI C/U	Displays the communication status from AV control unit to each unit as well as the error counter.
	AUDIO	Displays the AV control unit communication status and the error counter.

#### **ECU IDENTIFICATION**

The part number of AV control unit is displayed.

#### SELF DIAGNOSIS RESULT

- In CONSULT-III self-diagnosis, self-diagnosis results and error history are displayed collectively.
- The current malfunction indicates "CRNT". The past malfunction indicates "PAST".
- The timing is displayed as "0" if any of the error codes [U1000], [U1010], [U1300] and [U1310] is detected. The counter increases by 1 if the condition is normal at the next ignition switch ON cycle.

## Self-diagnosis Results Display Item

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT [U1000]	CAN communication malfunction is detected.	Refer to AV-89, "Description".

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## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
CONTROL UNIT (CAN) [U1010]	CAN initial diagnosis malfunction is detected.	
CONTROL UNIT (AV) [U1310]	AV communication circuit initial diagnosis malfunction is detected.	Replace the AV control unit
Cont Unit FLASH-ROM [U1200]	AV control unit malfunction is detected.	
CAN CONT [U1216]	AV control unit manunction is detected.	
FRONT DISP CONN [U1243]	When either one of the following items are detected:  • front display unit power supply and ground circuits are malfunctioning.  • serial communication circuits between AV control unit and front display unit are malfunctioning.  • serial communication signal between AV control unit and front display unit is malfunctioning.	<ul> <li>Front display unit power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and front display unit.</li> </ul>
REAR DISP CONN [U1247]	<ul> <li>When either one of the following items are detected:</li> <li>rear display unit power supply and ground circuits are malfunctioning.</li> <li>serial communication circuits between video distributor and rear display unit are malfunctioning.</li> <li>serial communication signal between video distributor and rear display unit is malfunctioning.</li> </ul>	<ul> <li>Rear display unit power supply and ground circuits.</li> <li>Serial communication circuits between video distributor and rear display unit.</li> </ul>
CAMERA CONT CONN [U1250]	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.
SAT CONN [U1255]	<ul> <li>When either one of the following items are detected:</li> <li>satellite radio tuner power supply and ground circuits are malfunctioning.</li> <li>serial communication circuits between AV control unit and satellite radio tuner are malfunctioning.</li> <li>serial communication or request signal between AV control unit and satellite radio tuner is malfunctioning.</li> <li>request signal circuit between AV control unit and satellite radio tuner is malfunctioning.</li> </ul>	<ul> <li>Satellite radio tuner power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>
AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]	<ul> <li>When either one of the following items are detected:</li> <li>multifunction switch power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between AV control unit and multifunction switch are malfunctioning.</li> <li>AV communication signal between AV control unit and multifunction switch is malfunctioning.</li> </ul>	<ul> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuits between AV control unit and multifunction switch.</li> </ul>
AV COMM CIRCUIT [U1300]     VIDEO DIST CONN [U1246]	When either one of the following items are detected:  video distributor power supply and ground circuits are malfunctioning.  AV communication signal between AV control unit and video distributor is malfunctioning.	Video distributor power supply and ground circuits.

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
AV COMM CIRCUIT [U1300]     DVD DECK CONN [U1248]	When either one of the following items are detected:  DVD player power supply and ground circuits are malfunctioning.  AV communication signal between AV control unit and DVD player is malfunctioning.	DVD player power supply and ground circuits.
AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]	<ul> <li>When either one of the following items are detected:</li> <li>camera control unit power supply and ground circuits are malfunctioning.</li> <li>AV communication signal between AV control unit and camera control unit is malfunctioning.</li> <li>AV communication circuits between multifunction switch and camera control unit is malfunctioning. (Without DVD entertainment system models)</li> </ul>	Camera control unit power supply and ground circuits.     AV communication circuits between multifunction switch and camera control unit. (Without DVD entertainment system models)
AV COMM CIRCUIT [U1300]     IPod CONN [U1254]	<ul> <li>When either one of the following items are detected:</li> <li>iPod adapter power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between multifunction switch and iPod adapter are malfunctioning.</li> <li>AV communication signal between AV control unit and iPod adapter is malfunctioning.</li> </ul>	<ul> <li>iPod adapter power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch unit and iPod adapter.</li> </ul>
AV COMM CIRCUIT [U1300]     HAND FREE CONN [U1256]	When either one of the following items are detected:  TEL adapter unit power supply and ground circuits are malfunctioning.  AV communication circuits between camera control unit and TEL adapter unit are malfunctioning.  AV communication signal between AV control unit and TEL adapter unit is malfunctioning.	<ul> <li>TEL adapter unit power supply and ground circuits.</li> <li>AV communication circuits between camera control unit and TEL adapter unit.</li> <li>AV communication circuits between multifunction switch and TEL adapter unit. (without rear view camera models)</li> </ul>
<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>HAND FREE CONN [U1256][*]</li> </ul>	When either one of the following items are detected:  AV communication circuits between multifunction switch and camera control unit are malfunctioning. (without DVD player models)  AV communication circuits between DVD player and camera control unit are malfunctioning. (with DVD player models)	AV communication circuits between multifunction switch and camera control unit. (without DVD player models)     AV communication circuits between DVD player and camera control unit. (with DVD player models)  A
<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>DVD DECK CONN [U1248]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>HAND FREE CONN [U1256]</li> </ul>	Malfunction is detected in AV communication circuits between video distributor and DVD player.	AV communication circuits between video distributor and DVD player.
<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>VIDEO DIST CONN [U1246]</li> <li>DVD DECK CONN [U1248]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>IPod CONN [U1254]</li> <li>HAND FREE CONN [U1256]</li> </ul>	Malfunction is detected in AV communication circuits between multifunction switch and iPod adapter.	AV communication circuits between multi- function switch and iPod adapter.
<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>VIDEO DIST CONN [U1246]</li> <li>DVD DECK CONN [U1248]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>HAND FREE CONN [U1256]</li> </ul>	Malfunction is detected in AV communication circuits between multifunction switch and video distributor.	AV communication circuits between multi- function switch and video distributor.

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
AV COMM CIRCUIT [U1300] SWITCH CONN [U1240] IPod CONN [U1254]* HAND FREE CONN [U1256]*  AV COMM CIRCUIT [U1300] SWITCH CONN [U1240] VIDEO DIST CONN [U1246] DVD DECK CONN [U1248] REAR CAMERA LAN CONN [U1252] IPod CONN [U1254] HAND FREE CONN [U1256]	<ul> <li>When either one of the following items are detected:</li> <li>AV communication circuits between AV control unit and the branch point multifunction switch.</li> <li>AV communication circuits are malfunctioning.</li> </ul>	<ul> <li>AV communication circuits between AV control unit and the branch point multifunction switch.</li> <li>Check and repair the short circuit in AV communication circuits.</li> </ul>

#### NOTE:

#### **DATA MONITOR**

#### **ALL SIGNALS**

- Displays the status of the following vehicle signals inputted into the AV control unit.
- For each signal, the actual signal can be compared the condition recognized on the system.

Display Item	Dis- play	Vehicle status	Remarks
VHCL SPD SIG	On	Vehicle speed >0 km/h (0 MPH)	
VHOL SED SIG	Off	Vehicle speed =0 km/h (0 MPH)	Changes in indication may be delayed. This is nor
PKB SIG	On	Parking brake is applied.	mal.
PND SIG	Off	Parking brake is released.	
ILLUM SIG	On	Light switch ON	
ILLUM SIG	Off	Light switch OFF	
IGN SIG	On	Ignition switch ON	_
IGN SIG	Off	Ignition switch in ACC position	
REV SIG	On	Shift the selector lever to the "R" position	Changes in indication may be delayed. This is nor-
NEV OIG	Off	Shift the selector lever other than the "R" position	mal.

#### **SELECTION FROM MENU**

Allows the technician to select which vehicle signals should be displayed and displays the status of the selected vehicle signals.

Item to be selected	Description
VHCL SPD SIG	
PKB SIG	
ILLUM SIG	The same as when "ALL SIGNALS" is selected.
IGN SIG	
REV SIG	

^{*:} Non-equipped item is not displayed.

# **DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)**

< FUNCTION DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)

## **Diagnosis Description**

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#### HANDS-FREE PHONE SYSTEM ON BOARD DIAGNOSIS

During on board diagnosis the diagnosis function of TEL adapter unit starts with the operation of the steering switch and performs the diagnosis when ignition switch ACC.

#### On board diagnosis item

The on board diagnosis has 3 modes: the self-diagnosis mode that performs the trouble diagnosis, the speaker adaptation data deleting mode and the hands-free phone system initialization mode.

CAUTION:

- Perform the diagnosis with the vehicle stopped.
- Perform STEP2 if necessary.

STEP	MODE	Description
STEP1	Self-diagnosis	<ul> <li>The self-diagnosis mode performs the microphone test.</li> <li>The self-diagnosis mode also diagnoses TEL adapter unit, TEL antenna and steering switch.</li> <li>Those results are indicated with voice guidance and displayed on the screen.</li> </ul>
STFP2	Speaker adaptation data deleting	The speaker adaptation data deleting mode can delete the speaker adaptation data.
SIEFZ	Hands-free phone system initialization	Hands-free phone system initialization mode can perform the initialization of hands-free phone system.

#### Self-diagnosis results

Self-diagnosis mode reads out the self-diagnosis results and indicates DTC on the display.

#### NOTE:

- Error count is read out simultaneously when reading out the DTC name.
- The errors are read out continuously when some errors occur at the same time. The DTC displays are combined and displayed. For example, DTC 01100 is displayed when DTC 01000 and DTC 00100 are indicated at the same time.

Self-diagnosis results

DTC	DTC name	Possible causes	
DTC 10000	INTERNAL FAILURE	TEL adapter unit	
DTC 01000	ANT. SHORT TO BATT OR OPEN	TEL antenna	
DTC 00100	ANT. SHORT TO GROUND	TEL antenna	
DTC 00010	STEERING REMOTE BUTTON STUCK A	Stooring quitch	
DTC 00001	STEERING REMOTE BUTTON STUCK B	Steering switch	
DTC 00000	THERE ARE NO FAILURE RECORDS TO REPORT	_	

The details of error count

The error count guides "0" when the error occurs. The next time it counts up "1" if it is normal with the ignition switch ON. It continues the count up unless the initialization of hands-free phone system is performed.

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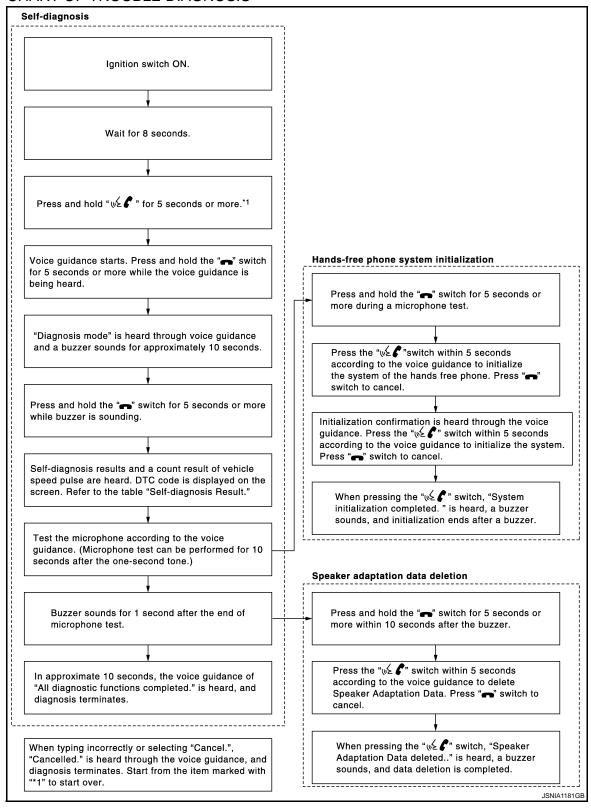
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### FLOW CHART OF TROUBLE DIAGNOSIS



### **U1000 CAN COMM CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# **COMPONENT DIAGNOSIS**

# U1000 CAN COMM CIRCUIT

Description

CAN (Controller Area Network) is a serial communication line for real-time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independently). In CAN communication, control units are connected with 2 communication lines (CAN-H, CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to LAN-25, "CAN Communication Signal Chart".

DTC Logic

#### DTC DETECTION LOGIC

DTC	Display contents of CON- SULT-III	Diagnostic item is detected when	Probable malfunction location
U1000	CAN COMM CIRCUIT	AV control unit is not transmitting or receiving CAN communication signal for 2 seconds or more.	CAN communication system.

# Diagnosis Procedure

INFOID:0000000003356765

# 1.PERFORM SELF-DIAGNOSTIC

- 1. Turn ignition switch ON and wait for 2 seconds or more.
- 2. Check "Self Diagnostic Result" of "MULTI AV".

#### Is "CAN COMM CIRCUIT" displayed?

YES >> Refer to "LAN system". Refer to LAN-16, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI section. Refer to GI-40. "Intermittent Incident".

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# **U1010 CONTROL UNIT (CAN)**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# U1010 CONTROL UNIT (CAN)

Description INFOID:000000003356766

Initial diagnosis of AV control unit.

DTC Logic

### DTC DETECTION LOGIC

DTC	Display contents of CON- SULT-III	Diagnostic item is detected when	Probable malfunction location
U1010	CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	AV control unit.

# Diagnosis Procedure

INFOID:0000000003356768

# 1. REPLACE AV CONTROL UNIT

When DTC U1010 is detected, replace AV control unit.

>> INSPECTION END

# **U1310 AV CONTROL UNIT**

< COMPONENT DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

# U1310 AV CONTROL UNIT

Description INFOID:0000000003356769

Replace the AV control unit if this DTC is displayed. Refer to AV-522, "Exploded View".

Part name	Description
	It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.
	<ul> <li>AV control unit includes audio function and vehicle information function.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> </ul>
	<ul> <li>It inputs the illumination signals that are required for the display dimming control.</li> </ul>
AV CONTROL UNIT	<ul> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> </ul>
	<ul> <li>The camera image signal is input from the camera control unit. The AV control unit outputs camera image signal to the front display unit.</li> </ul>
	<ul> <li>BOSE amp. ON signal and sound signal are transmitted to BOSE amp.</li> <li>Power (signal VCC and inverter VCC) is transmitted to front display.</li> </ul>
	Without DVD entertainment system
	<ul> <li>Auxiliary image and auxiliary sound signals are input from the auxiliary input jacks.</li> </ul>
	With DVD entertainment system
	<ul> <li>Composite image signal (auxiliary and DVD images) is input from the video distributor.</li> </ul>
	<ul> <li>Sound signal (DVD and auxiliary sounds) is input from the DVD player.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1310	CONTROL UNIT (AV) [U1310]	An initial diagnosis error is detected in AV communication circuit.	Replace AV control unit.

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# **U1200 AV CONTROL UNIT**

# **U1200 AV CONTROL UNIT**

Description INFOID:000000003470017

Replace the AV control unit if this DTC is displayed. Refer to AV-522, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>AV control unit includes audio function and vehicle information function.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>The camera image signal is input from the camera control unit. The AV control unit outputs camera image signal to the front display unit.</li> <li>BOSE amp. ON signal and sound signal are transmitted to BOSE amp.</li> <li>Power (signal VCC and inverter VCC) is transmitted to front display. Without DVD entertainment system</li> <li>Auxiliary image and auxiliary sound signals are input from the auxiliary input jacks. With DVD entertainment system</li> <li>Composite image signal (auxiliary and DVD images) is input from the video distributor.</li> <li>Sound signal (DVD and auxiliary sounds) is input from the DVD player.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1200	Cont Unit FLASH- ROM [U1200]	An internal malfunction is detected in AV control unit (FLASH-ROM).	Replace AV control unit.

# **U1216 AV CONTROL UNIT**

< COMPONENT DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

# **U1216 AV CONTROL UNIT**

Description INFOID:0000000003470018

Replace the AV control unit if this DTC is displayed. Refer to AV-522, "Exploded View".

Part name	Description
	<ul> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> </ul>
	<ul> <li>AV control unit includes audio function and vehicle information function.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> </ul>
	<ul> <li>It inputs the illumination signals that are required for the display dimming control.</li> </ul>
AV CONTROL UNIT	<ul> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> </ul>
	<ul> <li>The camera image signal is input from the camera control unit. The AV control unit outputs camera image signal to the front display unit.</li> </ul>
	BOSE amp. ON signal and sound signal are transmitted to BOSE amp.
	<ul> <li>Power (signal VCC and inverter VCC) is transmitted to front display.</li> <li>Without DVD entertainment system</li> </ul>
	<ul> <li>Auxiliary image and auxiliary sound signals are input from the auxiliary input jacks.</li> </ul>
	With DVD entertainment system
	<ul> <li>Composite image signal (auxiliary and DVD images) is input from the video distributor.</li> </ul>
	<ul> <li>Sound signal (DVD and auxiliary sounds) is input from the DVD player.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1216	CAN CONT [U1216]	Internal malfunction of AV control unit (CAN controller) is detected.	Replace AV control unit.

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# U1243 DISPLAY UNIT

Description INFOID:0000000003356775

Part name	Description		
FRONT DISPLAY UNIT	<ul> <li>Front display image is controlled by the serial communication from AV control unit.</li> <li>It receives the power (signal VCC and inverter VCC) from the AV control unit and operates.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing).</li> <li>Synchronizing signal (HP, VP) is output to AV control unit.</li> <li>Camera image signal is input from AV control unit.</li> <li>Without DVD entertainment system</li> <li>Auxiliary image signal is input from AV control unit.</li> <li>With DVD entertainment system</li> <li>Composite image signal (auxiliary and DVD images) is input from the AV control unit.</li> </ul>		

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1243	FRONT DISP CONN [U1243]	<ul> <li>When either one of the following items are detected:</li> <li>front display unit power supply and ground circuits are malfunctioning.</li> <li>serial communication circuits between AV control unit and front display unit are malfunctioning.</li> <li>serial communication signal between AV control unit and front display unit is malfunctioning.</li> </ul>	<ul> <li>Front display unit power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and front display unit.</li> </ul>

# Diagnosis Procedure

INFOID:0000000003356777

# 1.CHECK DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check front display unit power supply and ground circuit. Refer to <u>AV-103, "FRONT DISPLAY UNIT : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

# 2.check continuity communication circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector Terminals		Connector	Terminals	Continuity
M49	11	M129	56	Existed
10149	22	101129	44	LXISIEU

4. Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminals	Ground	Continuity
M49	11	Ground	Not existed
10149	22		Not existed

## **U1243 DISPLAY UNIT**

## [BOSE AUDIO WITHOUT NAVIGATION]

### < COMPONENT DIAGNOSIS >

Is the inspection result normal?
YES >> GO TO 3.

NO >> Repair harness or connector.

# 3. CHECK COMMUNICATION SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
M49	11	Ground	When adjusting display bright ness.	(V) 6 4 2 0  +-1ms  PKIB5039J

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

# 4. CHECK COMMUNICATION SIGNAL

Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
M49	22	Ground	When adjusting display bright ness.	(V) 6 4 2 0  + 1ms  PKIB5039J

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front display unit.

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# U1247 REAR DISP CONN

Description INFOID:000000003470084

Part name	Description		
REAR DISPLAY UNIT	<ul> <li>The rear display unit has functions of remote control receiver and headphone amp.</li> <li>Transmits the headphone sound signal when receiving headphone ON signal from the video distributor.</li> <li>Headphone sound signal is input from DVD player via hard wires and outputs the signal to headphones via infrared wireless communication.</li> <li>Receives the operation signal from the remote controller and transmits the signal to the video distributor via serial communication.</li> <li>Rear display image is controlled by the serial communication from video distributor.</li> <li>RGB image signal is input from video distributor (RGB image and RGB area). Composite image signal (DVD and auxiliary images) is input from the video distributor.</li> <li>Synchronize signal (HP, VP) is output to video distributor.</li> </ul>		

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1247	REAR DISP CONN [U1247]	<ul> <li>When either one of the following items are detected:</li> <li>rear display unit power supply and ground circuits are malfunctioning.</li> <li>serial communication circuits between video distributor and rear display unit are malfunctioning.</li> <li>serial communication signal between video distributor and rear display unit is malfunctioning.</li> </ul>	<ul> <li>Rear display unit power supply and ground circuits.</li> <li>Serial communication circuits between video distributor and rear display unit.</li> </ul>

# Diagnosis Procedure

INFOID:0000000003470086

# 1.CHECK REAR DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check rear display unit power supply and ground circuits. Refer to <u>AV-104, "REAR DISPLAY UNIT : Diagnosis Procedure"</u>.

#### <u>Is the inspection result normal?</u>

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

# 2. CHECK CONTINUITY SERIAL COMMUNICATION CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect rear display unit connector and video distributor connector.
- 3. Check continuity between rear display unit harness connector and video distributor harness connector.

Rear dis	splay unit	Video distributor		Continuity
Connector Terminals		Connector	Terminals	
R152	9	M257	39	Existed
K152	10	IVIZOT	40	

4. Check continuity between rear display unit harness connector and ground.

## **U1247 REAR DISP CONN**

## [BOSE AUDIO WITHOUT NAVIGATION]

#### < COMPONENT DIAGNOSIS >

Rear dis	splay unit	Ground	Continuity
Connector	Terminals		
R152	9		Not existed
KIDZ	10		Not existed

## Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3.check serial communication signal

- 1. Connect rear display unit connector and video distributor connector.
- 2. Turn ignition switch ON.
- 3. Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
R152	9	Ground	Rear seat remote controller operation.	(V) 6 4 2 0 ++1ms PKIB5039J

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace rear display unit.

## 4. CHECK SERIAL COMMUNICATION SIGNAL

Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
R152	10	Ground	Rear seat remote controller operation.	(V) 6 4 2 0 ++1ms PKIB5039J

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace video distributor.

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## **U1250 CAMERA CONTROL UNIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# U1250 CAMERA CONTROL UNIT

Description INFOID:000000003470087

Part name	Description
CAMERA CONTROL UNIT	<ul> <li>Camera image signal is input from rear view camera. Camera image signal output to AV control unit.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> <li>Camera control unit is connected via AV communication.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1250	CAMERA CONT. CONN [U1250]	Malfunction is detected in camera-connection recognition signal circuit.	Camera-connection recognition signal circuit.

# Diagnosis Procedure

INFOID:0000000003470089

# 1. CHECK CAMERA-CONNECTION RECOGNITION SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect AV control unit connector and camera control unit connector.
- 3. Check continuity between AV control unit harness connector and camera control unit harness connector.

AV cor	ntrol unit	Camera o	control unit	Continuity
Connector Terminal		Connector	Terminal	Continuity
M130	68	B60	14	Existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector and ground.

(	+)		\
AV control unit		(–)	Voltage (Approx.)
Connector Terminal			(11 - 7
M130	68	Ground	5.0 V

### Is the inspection result normal?

YES >> Replace camera control unit.

NO >> Replace AV control unit.

## **U1255 SATELLITE RADIO TUNER**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# **U1255 SATELLITE RADIO TUNER**

**Description** 

Part name	Description
SATELLITE RADIO TUNER	<ul> <li>Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to the AV control unit.</li> <li>It is controlled with the AV control unit and serial communication (communication signal and request signal).</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1255	SAT CONN [U1255]	<ul> <li>When either one of the following items are detected:</li> <li>satellite radio tuner power supply and ground circuits are malfunctioning.</li> <li>serial communication circuits between AV control unit and satellite radio tuner are malfunctioning.</li> <li>serial communication or request signal between AV control unit and satellite radio tuner is malfunctioning.</li> <li>request signal circuit between AV control unit and satellite radio tuner is malfunctioning.</li> </ul>	<ul> <li>Satellite radio tuner power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>

# Diagnosis Procedure

INFOID:0000000003356780

# 1. CHECK SATELLITE RADIO TUNER POWER SUPPLY AND GROUND CIRCUIT

Check satellite radio tuner power supply and ground circuit. Refer to <u>AV-109, "SATELLITE RADIO TUNER:</u> <u>Diagnosis Procedure"</u>.

## Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

# 2.CHECK CONTINUITY COMMUNICATION CIRCUIT AND REQUEST SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect AV control unit connector and satellite radio tuner connector.
- 3. Check continuity between AV control unit harness connector terminals and satellite radio tuner harness connector terminals.

AV control unit		Satellite radio tuner		Continuity
Connector Terminals		Connector	Terminals	Continuity
	28	B48	8	Existed
M128	29		9	
	30		10	

4. Check continuity between AV control unit harness connector terminals and ground.

AV control unit			Continuity
Connector	Terminals		Continuity
-	28	Ground	
M128	29		Not existed
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Is the inspection result normal?

YES >> GO TO 3.

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## **U1255 SATELLITE RADIO TUNER**

#### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

NO >> Repair harness or connector.

# $3. \mathsf{CHECK}$ av control unit voltage

- 1. Connect AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector terminal and ground.

(+) AV control unit		(-)	Voltage (Approx.)
Connector	Terminals		, , ,
M128	M128 Ground		7.0 V
IVIIZO	29	Giodila	7.0 V

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

# 4. CHECK SATELLITE RADIO TUNER

- 1. Turn ignition switch OFF.
- 2. Disconnect AV control unit connector.
- 3. Connect satellite radio tuner.
- 4. Turn ignition switch ON.
- 5. Check voltage between satellite radio tuner harness connector terminal ground.

(+)			V 16
Satellite radio tuner		(–)	Voltage (Approx.)
Connector	Terminal	,	, , ,
B48	10	Ground	7.0 V

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace satellite radio tuner.

## [BOSE AUDIO WITHOUT NAVIGATION]

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# U1300 AV COMM CIRCUIT

Description INFOID:0000000003356781

U1300 is indicated when malfunction occurs in communication signal of multi AV system. Indicated simultaneously, without fail, with the malfunction of control units connected to AV control unit with communication line. Determine the possible malfunction cause from the table below.

### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1300 U1240	AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]	<ul> <li>When either one of the following items are detected:</li> <li>multifunction switch power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between AV control unit and multifunction switch are malfunctioning.</li> <li>AV communication signal between AV control unit and multifunction switch is malfunctioning.</li> </ul>	Multifunction switch power supply and ground circuits.     AV communication circuits between AV control unit and multifunction switch.
U1300 U1246	AV COMM CIRCUIT [U1300]     VIDEO DIST CONN [U1246]	When either one of the following items are detected:  video distributor power supply and ground circuits are malfunctioning.  AV communication signal between AV control unit and video distributor is malfunctioning.	Video distributor power supply and ground circuits.
U1300 U1248	AV COMM CIRCUIT [U1300]     DVD DECK CONN [U1248]	<ul> <li>When either one of the following items are detected:</li> <li>DVD player power supply and ground circuits are malfunctioning.</li> <li>AV communication signal between AV control unit and DVD player is malfunctioning.</li> </ul>	DVD player power supply and ground circuits.
U1300 U1252	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]	<ul> <li>When either one of the following items are detected:</li> <li>camera control unit power supply and ground circuits are malfunctioning.</li> <li>AV communication signal between AV control unit and camera control unit is malfunctioning.</li> <li>AV communication circuits between multifunction and camera control unit is malfunctioning. (Without DVD entertainment system models)</li> </ul>	Camera control unit power supply and ground circuits.     AV communication circuits between multifunction and camera control unit. (Without DVD entertainment system models)
U1300 U1254	AV COMM CIRCUIT [U1300]     IPod CONN [U1254]	<ul> <li>When either one of the following items are detected:</li> <li>iPod adapter power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between multifunction switch and iPod adapter are malfunctioning.</li> <li>AV communication signal between AV control unit and iPod adapter is malfunctioning.</li> </ul>	<ul> <li>iPod adapter power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch unit and iPod adapter.</li> </ul>
U1300 U1256	AV COMM CIRCUIT [U1300]     HAND FREE CONN [U1256]	When either one of the following items are detected:  TEL adapter unit power supply and ground circuits are malfunctioning.  AV communication circuits between camera control unit and TEL adapter unit are malfunctioning.  AV communication signal between AV control unit and TEL adapter unit is malfunctioning.	<ul> <li>TEL adapter unit power supply and ground circuits.</li> <li>AV communication circuits between camera control unit and TEL adapter unit.</li> <li>AV communication circuits between multifunction switch and TEL adapter unit. (without rear view camera models)</li> </ul>
U1300 U1252 U1256 [*]	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN     CONN [U1252]     HAND FREE CONN [U1256]*	When either one of the following items are detected:  AV communication circuits between multifunction switch and camera control unit are malfunctioning. (without DVD player models)  AV communication circuits between DVD player and camera control unit are malfunctioning. (with DVD player models)	AV communication circuits between multifunction switch and camera control unit. (without DVD player models)     AV communication circuits between DVD player and camera control unit. (with DVD player models)

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# **U1300 AV COMM CIRCUIT**

## < COMPONENT DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1300 U1248 U1252 U1256	AV COMM CIRCUIT [U1300]     DVD DECK CONN [U1248]     REAR CAMERA LAN CONN [U1252]     HAND FREE CONN [U1256]	Malfunction is detected in AV communication circuits between video distributor and DVD player.	AV communication circuits between video distributor and DVD player.
U1300 U1246 U1248 U1252 U1256	AV COMM CIRCUIT [U1300] VIDEO DIST CONN [U1246] DVD DECK CONN [U1248] REAR CAMERA LAN CONN [U1252] HAND FREE CONN [U1256]	Malfunction is detected in AV communication circuits between multifunction switch and video distributor.	AV communication circuits between multifunction switch and video distributor.
U1300 U1246 U1248 U1252 U1254 U1256	AV COMM CIRCUIT [U1300]     VIDEO DIST CONN [U1246]     DVD DECK CONN [U1248]     REAR CAMERA LAN CONN [U1252]     IPOD CONN [U1254]     HAND FREE CONN [U1256]	Malfunction is detected in AV communication circuits between multifunction switch and iPod adapter.	AV communication circuits between multifunction switch and iPod adapter.
U1300 U1240 U1254 [*] U1256 [*]	<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> <li>IPod CONN [U1254]*</li> <li>HAND FREE CONN [U1256]*</li> </ul>		
U1300 U1240 U1246 U1248 U1252 U1254 U1256	AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]     VIDEO DIST CONN [U1246]     DVD DECK CONN [U1248]     REAR CAMERA LAN CONN [U1252]     IPOd CONN [U1254]     HAND FREE CONN [U1256]	When either one of the following items are detected:  AV communication circuits between AV control unit and the branch point multifunction switch.  AV communication circuits are malfunctioning.	<ul> <li>AV communication circuits between AV control unit and the branch point multifunction switch.</li> <li>Check and repair the short circuit in AV communication circuits.</li> </ul>

#### NOTE

^{*:} Non-equipped item is not displayed.

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# POWER SUPPLY AND GROUND CIRCUIT AV CONTROL UNIT

AV CONTROL UNIT : Diagnosis Procedure

INFOID:0000000003356782

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## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19
Ignition switch ON or START	3

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M127	19	OFF	
ACC power supply	IVI I Z I	7	ACC	Battery voltage
Ignition signal	M131	104	ON	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between AV control unit and fuse.

# 3.CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect AV control unit connectors.
- 3. Check continuity between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M127	20	OFF	Existed
Ground	M131	85	OFF	LAISIEU

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

### FRONT DISPLAY UNIT

# FRONT DISPLAY UNIT: Diagnosis Procedure

# 1. CHECK POWER SUPPLY CIRCUIT (FRONT DISPLAY SIDE)

Check voltage between front display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Inverter VCC	M49	2	ACC	9.0 V
Signal VCC	IVI <del>-1</del> 3	3	700	9.0 V

#### Is the inspection result normal?

YES >> GO TO 4. NO >> GO TO 2.

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#### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# 2.check power supply circuit (continuity)

- 1. Turn ignition switch OFF.
- 2. Disconnect the harness connector between front display unit and AV control unit.
- Check continuity between front display unit harness connector M49 and AV control unit harness connector M129.

Signal name	Display unit (M49)	AV control unit (M129)	Continuity
Inverter VCC	2	59	Existed
Signal VCC	3	47	Existed

4. Check continuity between front display unit harness connector M49 and ground.

Signal name	Display unit (M49)	_	Continuity
Inverter VCC	2	Ground	Not existed
Signal VCC	3	Ground	Not existed

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3. CHECK POWER SUPPLY CIRCUIT (AV CONTROL UNIT SIDE)

- 1. Connect the AV control unit harness connector.
- 2. Turn ignition switch ACC.
- 3. Check voltage between AV control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Inverter VCC	M129	59	<b>^</b> CC	9.0 V
Signal VCC	WITZ9	47	ACC	9.0 V

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace AV control unit.

## 4. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect front display unit connector.
- 3. Check continuity between front display unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M49	1	OFF	Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

REAR DISPLAY UNIT

# REAR DISPLAY UNIT: Diagnosis Procedure

INFOID:0000000003509245

## 1. CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

#### Is the inspection result normal?

YES >> GO TO 2.

#### < COMPONENT DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between rear display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	R152	3	OFF	
Battery power supply	K 132	4		Battery voltage
ACC power supply	R152	6	ACC	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between rear display unit and fuse.

# 3. CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect rear display unit connector.
- Check continuity between rear display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	R152	1	OFF	Existed
Oround	1(102	2	Oll	Existed

#### Is the inspection result normal?

>> INSPECTION END

>> Repair harness or connector. NO

### VIDEO DISTRIBUTOR

# VIDEO DISTRIBUTOR: Diagnosis Procedure

# 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19
Ignition switch ON or START	3

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between video distributor harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply		54	OFF	
ACC power supply	M255	55	ACC	Battery voltage
Ignition signal		56	ON	

#### Is the inspection result normal?

YES

NO >> Check harness between video distributor and fuse.

# 3.CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect video distributor connector.

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#### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITHOUT NAVIGATION]

3. Check continuity between video distributor harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
	M258	15	OFF	Existed
Ground		16		
Ground	M256	51	OH	LXISTEG
	M255	53		

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

**DVD PLAYER** 

# DVD PLAYER: Diagnosis Procedure

INFOID:0000000003509247

# 1. CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between DVD player harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M254	2	OFF	Battery voltage
ACC power supply	IVIZ54	4	ACC	Dattery Voltage

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between DVD player and fuse.

# 3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect DVD player connector.
- 3. Check continuity between DVD player harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M254	1	OFF	Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

#### MULTIFUNCTION SWITCH

# MULTIFUNCTION SWITCH: Diagnosis Procedure

INFOID:0000000003356784

# 1. CHECK FUSE

Check for blown fuses.

## **IBOSE AUDIO WITHOUT NAVIGATION**

	Power source		Fuse No.	
Igniti	Ignition switch ACC or ON 19			
the inspection resu				
YES     >> GO TO 2 NO      >> Be sure t		of malfunction bot	fore installing new fuse.	
CHECK POWER		or manufiction be	iore installing hew ruse.	
	en multifunction switch	harnoss connoct	or and ground	
Sheck vollage between	en maillanction switch	namess connect	or and ground.	
Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
ACC power supply	M125	3	ACC	Battery voltage
s the inspection resu YES >> GO TO 3 NO >> Check ha CHECK GROUND	Irness between multifu	nction switch and	I fuse.	
	ch OFF. unction switch connec between multifunction		onnector and ground.	
			3	
Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M125	Terminal No.		Continuity Existed
Ground  Is the inspection result  YES >> INSPECT  NO >> Repair has  BOSE AMP.  BOSE AMP. : Dia  1.CHECK FUSE	M125 It normal? TON END arness or connector. agnosis Procedure	1	Ignition switch position	
Ground  s the inspection results YES >> INSPECTION NO >> Repair has BOSE AMP.  BOSE AMP. : Dia  1.CHECK FUSE	M125 It normal? TION END arness or connector. agnosis Procedure	1	Ignition switch position  OFF	Existed
Ground  s the inspection result YES >> INSPECT NO >> Repair has BOSE AMP.  BOSE AMP. : Dia  1.CHECK FUSE	M125  It normal? TON END arness or connector.  agnosis Procedure  S.  Power source	1	Ignition switch position  OFF  Fuse No.	Existed
Ground  s the inspection resure YES >> INSPECTION NO >> Repair has BOSE AMP.  BOSE AMP. : Dia  CHECK FUSE  Check for blown fuses	M125  It normal? FION END Arness or connector.  Agnosis Procedure  Battery	1	Ignition switch position  OFF	Existed
Ground  Is the inspection resulus YES >> INSPECTION	M125  It normal? FION END Arness or connector.  Agnosis Procedure  Battery  It normal?  O eliminate the cause of	e	Ignition switch position  OFF  Fuse No.	Existed
Ground    Sthe inspection resure     YES   >> INSPECTION     NO   >> Repair has     BOSE AMP.     BOSE AMP.     Dia     CHECK FUSE     Check for blown fuses     Sthe inspection resure     YES   >> GO TO 2     NO   >> Be sure to     CHECK POWER STATES     Sthe inspection resure     CHECK POWER STATES     CHECK POWER STATES	M125  It normal? FION END Arness or connector.  Agnosis Procedure  Battery  It normal?  O eliminate the cause of	e of malfunction be	Fuse No. 23, 24	Existed
s the inspection resure YES >> INSPECTION O >> Repair has BOSE AMP.  BOSE AMP. : Dia black Dia black for blown fuses on the inspection resure YES >> GO TO 2 NO >> Be sure to blow the second of the control of the cont	M125  It normal? FION END Arness or connector.  Agnosis Procedure  Battery  It normal?  O eliminate the cause of SUPPLY CIRCUIT	e of malfunction be	Fuse No. 23, 24	Existed

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between BOSE amp. and fuse.

# 3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2.
- Disconnect BOSE amp. connector. Check continuity between BOSE amp. harness connector and ground.

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#### < COMPONENT DIAGNOSIS >

#### [BOSE AUDIO WITHOUT NAVIGATION]

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B224	7	OFF	Existed
Ground	DZZŦ	12	OIT	LXISIEU

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

WOOFER

## WOOFER: Diagnosis Procedure

INFOID:0000000003509249

# 1. CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	25

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between woofer amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B28	6	OFF	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between woofer amp. and fuse.

# 3.CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect woofer amp. connector.
- 3. Check continuity between woofer amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B28	5	OFF	Existed

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

iPod ADAPTER

# iPod ADAPTER: Diagnosis Procedure

INFOID:0000000003509250

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

### POWER SUPPLY AND GROUND CIRCUIT

### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITHOUT NAVIGATION]

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between iPod adapter harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M148	5	OFF	Battery voltage
ACC power supply	W1140	3	ACC	Dattery Voltage

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Check harness between iPod adapter and fuse.

#### SATELLITE RADIO TUNER

## SATELLITE RADIO TUNER: Diagnosis Procedure

INFOID:0000000003356788

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### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

## 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between satellite radio tuner harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B48	12	OFF	Battery voltage
ACC power supply	D40	16	ACC	Dattery Voltage

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between satellite radio tuner and fuse.

## 3.CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect satellite radio tuner.
- 3. Check continuity between satellite radio tuner harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B48	15	OFF	Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

### TEL ADAPTER UNIT

# TEL ADAPTER UNIT: Diagnosis Procedure

### 1.CHECK FUSE

Check for blown fuses.

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### POWER SUPPLY AND GROUND CIRCUIT

#### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITHOUT NAVIGATION]

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19
Ignition switch ON or START	3

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between TEL adapter unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply		1	OFF	
ACC power supply	B39	2	ACC	Battery voltage
Ignition signal		3	ON	

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between TEL adapter unit and fuse.

# 3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect TEL adapter unit connector.
- 3. Check continuity between TEL adapter unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B39	4, 14, 20, 24	OFF	Existed

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## RGB (R: RED) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB (R: RED) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

Description INFOID:0000000003509176

Transmit the image displayed with AV control unit with RGB image signal to the front display unit.

## Diagnosis Procedure

# 1. CHECK CONTINUITY RGB (R: RED) SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect front display unit connector and AV control unit connector.
- Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	17	M129	40	Existed

Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	17		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB (R: RED) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- Check signal between front display unit harness connector and ground using an oscilloscope.

-	+) splay unit	(–)	Condition	Signal
Connector	Terminal		C S. I.G. III	O.g. ta.
M49	17	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4 0 -0. 4 → 40μs SKIB2238J

### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

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# RGB (G: GREEN) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB (G: GREEN) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DIS-PLAY UNIT)

**Description** 

Transmit the image displayed with AV control unit with RGB image signal to the front display unit.

### Diagnosis Procedure

INFOID:0000000003509181

# 1. CHECK CONTINUITY RGB (G: GREEN) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	6	M129	39	Existed

4. Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	6		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB (G: GREEN) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
M49	6	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4 0 -0. 4 -0. 4 -0. 4 SKIB2236J

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

### RGB (B: BLUE) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB (B: BLUE) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DIS-PLAY UNIT)

Description INFOID:0000000003509184

Transmit the image displayed with AV control unit with RGB image signal to the front display unit.

# Diagnosis Procedure

# 1. CHECK CONTINUITY RGB (B: BLUE) SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect front display unit connector and AV control unit connector.
- Check continuity between front display unit harness connector and AV control unit harness connector.

Front dis	Front display unit		trol unit	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	18	M129	38	Existed

Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	18		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

## 2.CHECK RGB (B: BLUE) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(–)	Condition	Signal	
Connector Terminal		( )	Condition	Olgital	
M49	18	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4  0	

### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

**AV-113** Revision: 2008 October 2009 Murano

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### **RGB SYNCHRONIZING SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## **RGB SYNCHRONIZING SIGNAL CIRCUIT**

Description INFOID.000000003356796

Transmit the RGB synchronizing signal to the front display unit so as to synchronize the RGB image displayed with AV control unit.

### Diagnosis Procedure

INFOID:0000000003356797

# 1. CHECK CONTINUITY RGB SYNCHRONIZING SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	19	M129	41	Existed

4. Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	19		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB SYNCHRONIZING SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

	+) splay unit	(-)	Condition	Signal	
Connector	Terminal				
M49	19	Ground	_	(V) 4 0 → 20 µs SKIB3603E	

### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

# RGB AREA (YS) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB AREA (YS) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

Description INFOID:0000000003509188

Transmits the display area of RGB image displayed by AV control unit with RGB area (YS) signal to front display unit.

# Diagnosis Procedure

# 1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front dis	splay unit	AV cor	trol unit	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	9	M129	43	Existed

4. Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	9		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB AREA (YS) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
			When RGB image is displayed.	Approx. 5.0 V
M49	9	Ground	When AUX image is displayed.	(V) 6 4 2 0 → • 200 μ s PKIB4948J

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

Revision: 2008 October AV-115 2009 Murano

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INFOID:0000000003509189

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### HP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT) [BOSE AUDIO WITHOUT NAVIGATION]

< COMPONENT DIAGNOSIS >

# HP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT)

Description INFOID:0000000003509192

In composite image (DVD image, AUX image, camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from front display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:0000000003509193

# ${f 1.}$ CHECK CONTINUITY HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect front display unit connector and AV control unit connector. 2.
- Check continuity between front display unit harness connector and AV control unit harness connector.

Front dis	splay unit	AV control unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	8	M129	45	Existed

Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	8		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

- Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal	
Connector	Terminal				
M49	8	Ground	_	(V) 4 0 → 20 µs SKIB3603E	

#### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace front display unit.

### **VP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT)** [BOSE AUDIO WITHOUT NAVIGATION]

< COMPONENT DIAGNOSIS >

# VP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT)

Description INFOID:0000000003509196

In composite image (DVD, AUX and camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from front display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

# Diagnosis Procedure

# 1.check continuity vertical synchronizing (VP) signal circuit

- Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- Check continuity between front display unit harness connector and AV control unit harness connector.

Front dis	Front display unit		trol unit	Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M49	20	M129	57	Existed	

Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	20		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

- Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
M49	20	Ground	_	(V) 4 0 + 4ms SKIB3598E

#### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace front display unit.

**AV-117** Revision: 2008 October 2009 Murano

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### COMPOSITE IMAGE SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DIS-PLAY UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# COMPOSITE IMAGE SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

**Description** 

#### WITHOUT DVD ENTERTAINMENT SYSTEM

AV control unit that inputs the camera image signal and AUX image signal transmits the composite image signal to the front display unit.

#### WITH DVD ENTERTAINMENT SYSTEM

AV control unit receives the image signal from the video distributor and camera control unit and then transmits the composite image signal (AUX, DVD and camera image) to the front display unit.

## Diagnosis Procedure

INFOID:0000000003510960

# 1. CHECK CONTINUITY COMPOSITE IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect AV control unit connector and front display unit connector.
- 3. Check continuity between AV control unit harness connector and front display unit harness connector.

AV cor	ntrol unit	Front display unit		Continuity
Connector	Terminals	Connector	Terminals	Continuity
M129	36	M49	15	Existed
IVI 129	37	10149	4	Existed

4. Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	15		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK COMPOSITE IMAGE SIGNAL

- 1. Connect AV control unit connector and front display unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display harness connector using an oscilloscope.

(	+)	(-)			
Front di	ront display unit Front display unit		Condition	Signal	
Connector	Terminal	Connector	Terminal		
M49	15	M49	4	When AUX, DVD or camera image is displayed on front display.	(V) 0. 4 0 -0. 4 → 40µs SKIB2251J

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

# COMPOSITE IMAGE SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO AV CONTROL UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

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INFOID:0000000003509205

# COMPOSITE IMAGE SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO AV CONTROL UNIT)

Description INFOID:0000000003509204

Video distributor receives the image signal from the DVD player and auxiliary input jack and then transmits it to the AV control unit and rear display unit.

# Diagnosis Procedure

# 1. CHECK CONTINUITY COMPOSITE IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect video distributor connector and AV control unit connector.
- 3. Check continuity between video distributor harness connector and AV control unit harness connector.

Video distributor		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	Continuity
M258	8	M130	66	Existed
	6	IVITOU	74	Existed

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

AV cor	ntrol unit		Continuity
Connector	Terminal	Ground	Continuity
M130	66		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

## 2.CHECK COMPOSITE IMAGE SIGNAL

- 1. Connect video distributor connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between AV control unit harness connector using an oscilloscope.

•	+) ntrol unit	(–) AV control unit		Condition	Signal
Connector	Terminal	Connector	Terminal		G
M130	66	M130	74	When AUX, DVD or camera image is displayed on front display.	0. 4 0 -0. 4 -40\u03 SKIB2251J

#### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace video distributor.

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# COMPOSITE IMAGE SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# COMPOSITE IMAGE SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

**Description** 

Video distributor receives the image signal from the DVD player and auxiliary input jack and then transmits it to the AV control unit and rear display unit.

### Diagnosis Procedure

INFOID:0000000003580076

# 1. CHECK CONTINUITY COMPOSITE IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect video distributor connector and rear display unit connector.
- 3. Check continuity between video distributor harness connector and rear display unit harness connector.

Video d	Video distributor		play unit	Continuity
Connector	Terminal	Connector Terminal		Continuity
M257	34	R152	14	Existed

4. Check continuity between rear display unit harness connector and ground.

Rear display unit			Continuity
Connector	Terminal	Ground	Continuity
R152	14		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK COMPOSITE IMAGE SIGNAL

- 1. Connect video distributor connector and rear display unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between rear display unit harness connector using an oscilloscope.

	(+) Rear display unit		Condition	Signal
Connector Terminal		(-) Condition		Signal
R152	14	Ground	When AUX, DVD or camera image is displayed on front display.	(V) 0. 4 0 -0. 4 → 40μs SKIB2251J

### Is the inspection result normal?

YES >> Replace rear display unit.

NO >> Replace video distributor.

# RGB (R: RED) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB (R: RED) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

Description

Transmit the image displayed with video distributor with RGB signal to the rear display unit.

# **Diagnosis Procedure**

# 1. CHECK CONTINUITY RGB (R: RED) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect rear display unit connector and video distributor connector.
- 3. Check continuity between rear display unit harness connector and video distributor harness connector.

Rear dis	Rear display unit		istributor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
R152	22	M257	25	Existed

4. Check continuity between rear display unit harness connector and ground.

Rear display unit			Continuity
Connector	Terminal	Ground	Continuity
R152	22		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

## 2.CHECK RGB (R: RED) SIGNAL

- 1. Connect rear display unit connector and video distributor connector.
- 2. Turn ignition switch ON.
- 3. Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Rear display unit		(-)	Condition	Signal
Connector	Terminal			
R152	22	Ground	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 1 0 ++5ms JSNIA0984ZZ

#### Is the inspection result normal?

Revision: 2008 October

YES >> Replace rear display unit.

NO >> Replace video distributor.

**AV-121** 2009 Murano

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# RGB (G: GREEN) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB (G: GREEN) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

Description

Transmit the image displayed with video distributor with RGB signal to the rear display unit.

### Diagnosis Procedure

INFOID:0000000003509230

# 1. CHECK CONTINUITY RGB (G: GREEN) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect rear display unit connector and video distributor connector.
- 3. Check continuity between rear display unit harness connector and video distributor harness connector.

Rear dis	Rear display unit		istributor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
R152	21	M257	26	Existed

4. Check continuity between rear display unit harness connector and ground.

Rear display unit			Continuity
Connector	Terminal	Ground	Continuity
R152	21		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB (G: GREEN) SIGNAL

- 1. Connect rear display unit connector and video distributor connector.
- 2. Turn ignition switch ON.
- 3. Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Rear display unit		(-)	Condition	Signal
Connector	Terminal			
R152	21	Ground	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 1 0 **5ms JSNIA0984ZZ

#### Is the inspection result normal?

YES >> Replace rear display unit.

NO >> Replace video distributor.

# RGB (B: BLUE) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB (B: BLUE) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

**Description** 

Transmit the image displayed with video distributor with RGB signal to the rear display unit.

# Diagnosis Procedure

# 1. CHECK CONTINUITY RGB (B: BLUE) SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect rear display unit connector and video distributor connector.
- 3. Check continuity between rear display unit harness connector and video distributor harness connector.

Rear dis	Rear display unit		istributor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
R152	20	M257	28	Existed

4. Check continuity between rear display unit harness connector and ground.

Rear display unit			Continuity
Connector	Terminal	Ground	Continuity
R152	20		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

## 2.CHECK RGB (B: BLUE) SIGNAL

- 1. Connect rear display unit connector and video distributor connector.
- Turn ignition switch ON.
- 3. Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Rear display unit		( )	Condition	Signal
Real dis	spiay unit	(-)	Condition	Signal
Connector	Terminal			
R152	20	Ground	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 2 0 ++25 \(\mu\)s. JSNIA1090ZZ

#### Is the inspection result normal?

YES >> Replace rear display unit.

NO >> Replace video distributor.

INFOID:0000000003509232

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# COMPOSITE SYNCHRONIZING SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

## < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# COMPOSITE SYNCHRONIZING SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

**Description** 

Transmit the composite synchronizing signal to the rear display unit so as to synchronize the composite image displayed with video distributor.

### Diagnosis Procedure

INFOID:0000000003509234

# 1. CHECK CONTINUITY COMPOSITE SYNCHRONIZING SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect rear display unit connector and video distributor connector.
- 3. Check continuity between rear display unit harness connector and video distributor harness connector.

Rear dis	Rear display unit		istributor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
R152	13	M257	33	Existed

4. Check continuity between rear display unit harness connector and ground.

Rear dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
R152	13		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK COMPOSITE SYNCHRONIZING SIGNAL

- 1. Connect rear display unit connector and video distributor connector.
- 2. Turn ignition switch ON.
- 3. Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Rear display unit		(-)	Condition	Signal
Connector	Terminal			
R152	13	Ground	When AUX or DVD image is displayed on rear display unit.	(V) 4 0 → 20µs SKIB0825E

#### Is the inspection result normal?

YES >> Replace rear display unit.

NO >> Replace video distributor.

## RGB AREA (YS) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DISPLAY UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# RGB AREA (YS) SIGNAL CIRCUIT (VIDEO DISTRIBUTOR TO REAR DIS-PLAY UNIT)

Description INFOID:0000000003580023

Transmits the display area of RGB image displayed by video distributor with RGB area (YS) signal to rear display unit.

# Diagnosis Procedure

# 1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect rear display unit connector and video distributor connector. 2.
- Check continuity between rear display unit harness connector and video distributor harness connector.

Rear dis	Rear display unit Video distributor		Continuity	
Connector	Terminal	Connector	Terminal	Continuity
R152	15	M257	32	Existed

Check continuity between rear display unit harness connector and ground.

Rear display unit			Continuity
Connector	Terminal	Ground	Continuity
R152	15		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB AREA (YS) SIGNAL

- Connect rear display unit connector and video distributor connector.
- 2. Turn ignition switch ON.
- Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Rear display unit				
		(–)	Condition	Signal
Connector	Terminal			
			When AUX or DVD image is displayed on rear display unit.	0 V
R152	15	Ground	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 6 4 2 0 +

### Is the inspection result normal?

YES >> Replace rear display unit.

NO >> Replace video distributor.

**AV-125** Revision: 2008 October 2009 Murano

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### **VP SIGNAL CIRCUIT (REAR DISPLAY UNIT TO VIDEO DISTRIBUTOR)** [BOSE AUDIO WITHOUT NAVIGATION]

< COMPONENT DIAGNOSIS >

# VP SIGNAL CIRCUIT (REAR DISPLAY UNIT TO VIDEO DISTRIBUTOR)

Description INFOID:0000000003509235

In composite image (DVD and AUX images), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from rear display unit to video distributor so as to synchronize the RGB images displayed with video distributor such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:0000000003509236

# 1.check continuity vertical synchronizing (VP) signal circuit

- Turn ignition switch OFF.
- Disconnect rear display unit connector and video distributor connector.
- Check continuity between rear display unit harness connector and video distributor harness connector.

Rear dis	splay unit	Video d	istributor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
R152	17	M257	29	Existed

Check continuity between rear display unit harness connector and ground.

Rear dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
R152	17		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

- Connect rear display unit connector and video distributor connector.
- Turn ignition switch ON.
- Check signal between rear display unit harness connector and ground using an oscilloscope.

(+)					
Rear dis	splay unit	(–)	Condition	Signal	
Connector	Terminal				
R152	17	Ground	_	(V) 4 0 + 4ms SKIB3598E	

### Is the inspection result normal?

YES >> Replace video distributor.

NO >> Replace rear display unit.

### HP SIGNAL CIRCUIT (REAR DISPLAY UNIT TO VIDEO DISTRIBUTOR) [BOSE AUDIO WITHOUT NAVIGATION]

< COMPONENT DIAGNOSIS >

# HP SIGNAL CIRCUIT (REAR DISPLAY UNIT TO VIDEO DISTRIBUTOR)

Description INFOID:0000000003509237

In composite image (DVD and AUX images), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from rear display unit to video distributor so as to synchronize the RGB images displayed with video distributor such as the image quality adjusting menu, etc.

# Diagnosis Procedure

# 1.check continuity horizontal synchronizing (hp) signal circuit

- Turn ignition switch OFF.
- 2. Disconnect rear display unit connector and video distributor connector.
- Check continuity between rear display unit harness connector and video distributor harness connector.

Rear display unit		Video distributor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
R152	18	M257	30	Existed

Check continuity between rear display unit harness connector and ground.

Rear display unit			Continuity
Connector	Terminal	Ground	Continuity
R152	18		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

- Connect rear display unit connector and video distributor connector.
- Turn ignition switch ON.
- Check signal between rear display unit harness connector and ground using an oscilloscope.

(+) Rear display unit		( )	Condition	Signal	
		(–)	Condition	Signal	
Connector	Terminal				
R152	18	Ground	_	(V) 4 0 → + 20µs SKIB3601E	

#### Is the inspection result normal?

>> Replace video distributor. YES

NO >> Replace rear display unit.

**AV-127** Revision: 2008 October 2009 Murano Α

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### **AUX IMAGE SIGNAL CIRCUIT**

[BOSE AUDIO WITHOUT NAVIGATION]

### < COMPONENT DIAGNOSIS >

# AUX IMAGE SIGNAL CIRCUIT WITHOUT DVD ENTERTAINMENT SYSTEM

### WITHOUT DVD ENTERTAINMENT SYSTEM: Description

INFOID:0000000003509223

- Transmits the image signal of AUX device from auxiliary input jacks to AV control unit.
- AV control unit transmits the image signal that is input to the front display unit.

## WITHOUT DVD ENTERTAINMENT SYSTEM: Diagnosis Procedure

INFOID:0000000003509224

# 1. CHECK CONTINUITY AUX IMAGE SIGNAL CIRCUIT (AUX INPUT JACKS AND AV CONTROL UNIT)

- 1. Turn ignition switch OFF.
- 2. Disconnect auxiliary input jacks connector and AV control unit connector.
- 3. Check continuity between auxiliary input jacks harness connector and AV control unit harness connector.

Auxiliary input jacks		AV control unit		Continuity	
Connector	Terminals	Connector Terminals		Continuity	
M253	7	M130	66	Existed	
IVIZOS	8	IVITOU	74	Existed	

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

AV cor	ntrol unit		Continuity
Connector	Terminal	Ground	Continuity
M130	66		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK AUX IMAGE SIGNAL (AUX INPUT JACKS TO AV CONTROL UNIT)

- 1. Connect auxiliary connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between AV control unit harness connector using an oscilloscope.

(-	(+)		-)		
AV control unit		AV control unit		Condition	Signal
Connector	Terminal	Connector	Terminal		
M130	66	M130	74	When AUX image is displayed on front display.	(V) 0. 4 0 -0. 4 -40μs SKIB2251J

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check that there is no malfunction in the external device.

# 3.check continuity aux image signal circuit (av control unit and front display unit)

- Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

### **AUX IMAGE SIGNAL CIRCUIT**

### [BOSE AUDIO WITHOUT NAVIGATION]

#### < COMPONENT DIAGNOSIS >

AV cor	trol unit	Front display unit		Continuity
Connector	Terminals	Connector	Terminals	Continuity
M129	36	M49	15	Existed
101129	37	10149	4	LXISIEU

4. Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	15		Not existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

### 4. CHECK AUX IMAGE SIGNAL

- 1. Connect AV control unit connector and front display unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector using an oscilloscope.

(+) Front display unit		(−) Front display unit		Condition	Signal
Connector	Terminal	Connector	Terminal	Condition	Signal
Commodor	Tomma	Comicolor	Tomma	Miles ALIVines as is displayed as	(V) 0. 4
M49	15	M49	4	When AUX image is displayed on front display.	0 -0. 4 → 40µs SKIB2251J

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

### WITH DVD ENTERTAINMENT SYSTEM

### WITH DVD ENTERTAINMENT SYSTEM: Description

Transmits the image signal of external device from auxiliary input jacks to video distributor.

# WITH DVD ENTERTAINMENT SYSTEM: Diagnosis Procedure

# 1. CHECK CONTINUITY AUX IMAGE SIGNAL CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect auxiliary input jacks connector and video distributor connector.
- Check continuity between auxiliary input jacks harness connector and video distributor harness connector.

Auxiliary	input jacks	Video distributor		Continuity
Connector	Terminals	Connector	Terminals	Continuity
M253	7	M258	19	Existed
IVIZOS	8	IVIZO	21	

^{4.} Check continuity between video distributor harness connector and ground.

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# **AUX IMAGE SIGNAL CIRCUIT**

### [BOSE AUDIO WITHOUT NAVIGATION]

### < COMPONENT DIAGNOSIS >

Video d	istributor		Continuity
Connector	Terminal	Ground	Continuity
M258	19		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK AUX IMAGE SIGNAL

- 1. Connect auxiliary input jacks connector and video distributor connector.
- 2. Turn ignition switch ON.
- 3. Check signal between video distributor harness connector using an oscilloscope.

	(+) (-) Video distributor Video distributor		Condition	Signal	
Connector	Terminal	Connector	Terminal		
M258	19	M258	21	When AUX image is displayed.	(V) 0. 4 0 -0. 4 → 40µs SKIB2251J

### Is the inspection result normal?

YES >> Replace video distributor.

NO >> Check that there is no malfunction in the external device.

### **DVD IMAGE SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

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INFOID:0000000003509226

## DVD IMAGE SIGNAL CIRCUIT

Description INFOID:0000000003509225

The DVD player transmits the playback DVD image signal to the video distributor. The video distributor receives the image signal from the DVD player, and auxiliary input jack, and then transmits it to the AV control unit and rear display.

## Diagnosis Procedure

# 1. CHECK CONTINUITY DVD IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect DVD player connector and video distributor connector.
- 3. Check continuity between DVD player harness connector and video distributor harness connector.

DVD	player	Video distributor		Continuity
Connector	Terminals	Connector	Terminals	Continuity
M254	7	M258	23	Existed
IVI234	5	IVIZO	22	Existed

4. Check continuity between video distributor harness connector and ground.

Video d	eo distributor		Continuity
Connector	Terminal	Ground	Continuity
M258	23		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK DVD IMAGE SIGNAL

- 1. Connect DVD player connector and video distributor connector.
- 2. Turn ignition switch ON.
- 3. Check signal between video distributor harness connector and ground using an oscilloscope.

(+) Video distributor		(-)	Condition	Signal
Connector	Terminal			
M258	23	Ground	When DVD image is displayed.	(V) 0. 4 0 -0. 4 → 40µs SKIB2251J

### Is the inspection result normal?

YES >> Replace video distributor.

NO >> Replace DVD player.

### **DISK EJECT SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# DISK EJECT SIGNAL CIRCUIT

**Description** 

The eject signal is output to AV control unit when the eject switch of multifunction switch is pressed.

## Diagnosis Procedure

INFOID:0000000003356807

# 1. CHECK CONTINUITY DISK EJECT SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect multifunction switch connector and AV control unit connector.
- 3. Check continuity between multifunction switch harness connector and AV control unit harness connector.

Multifunc	Multifunction switch		trol unit	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M125	14	M131	103	Existed

4. Check continuity between multifunction switch harness connector and ground.

Multifunc	tion switch		Continuity
Connector	Terminal	Ground	Continuity
M125	14		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector and ground.

(+) AV control unit		(-)	Voltage (Approx.)
Connector	Terminal		(11 - 7
M131	103	Ground	3.3 V

#### Is the inspection result normal?

YES >> Replace preset switch.

NO >> Replace AV control unit.

### MICROPHONE SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

### MICROPHONE SIGNAL CIRCUIT

Description

Supply power from TEL adapter unit to microphone. The microphone transmits the sound/voice to the microphone.

## Diagnosis Procedure

# 1. CHECK CONTINUITY BETWEEN TEL ADAPTER UNIT AND MICROPHONE CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect TEL adapter unit connector and microphone connector.
- 3. Check continuity between TEL adapter unit harness connector and microphone harness connector.

TEL adapter unit		Microphone		Continuity
Connector	Terminals	Connector Terminals		Continuity
-	7		1	
B39	8	R20	2	Existed
	29		4	

4. Check continuity between TEL adapter unit harness connector and ground.

TEL adapter unit			Continuity	
Connector	Terminals	Ground	Continuity	
B39	7	Ground	Not existed	
	29		inot existed	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VOLTAGE MICROPHONE VCC

- 1. Connect TEL adapter unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between TEL adapter unit harness connector.

(+)		(	<b>–</b> )	
TEL ada	apter unit	TEL adapter unit		Voltage (Approx.)
Connector	Terminal	Connector Terminal		, , ,
B39	29	B39	8	5.0 V

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace TEL adapter unit.

# ${f 3.}$ CHECK MICROPHONE SIGNAL

- 1. Connect microphone connector.
- Check signal between TEL adapter unit harness connector using an oscilloscope.

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INFOID:0000000003356809

# **MICROPHONE SIGNAL CIRCUIT**

## < COMPONENT DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

	+) apter unit	-	-) apter unit	Condition	Signal
Connector	Terminal	Connector	Terminal		
B39	7	B39	8	Give a voice	(V) 2.5 2.0 1.5 1.0 0.5 0

### Is the inspection result normal?

>> Replace TEL adapter unit. >> Replace microphone. YES

NO

## **CONTROL SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## **CONTROL SIGNAL CIRCUIT**

Description INFOID:0000000003356810

TEL adapter unit identifies the vehicle model according to the control signal and performs the control.

### Diagnosis Procedure

# 1. CHECK CONTINUITY CONTROL SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect TEL adapter unit connector.
- 3. Check continuity between TEL adapter unit harness connector and ground.

TEL adapter unit		TEL adapter unit	
Connector	Terminals	Ground	Continuity
B39	20	Ground	Existed
<b>D</b> 39	24		Existed

### Is the inspection result normal?

YES >> Replace TEL adapter unit.

NO >> Repair harness or connector.

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# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

Description

Camera control unit outputs camera ON signal to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.

 The camera control unit that inputs the camera image signal transmits the camera image signal to the AV control unit.

### Diagnosis Procedure

INFOID:0000000003509240

# 1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and rear view camera connector.
- Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera o	control unit	Rear view camera		Continuity
Connector	Terminal	Connector Terminal		Continuity
B60	6	D192	3	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit			Continuity
Connector	Terminal	Ground	Continuity
B60	6		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

## 2. CHECK CAMERA IMAGE SIGNAL

- 1. Connect camera control unit connector and rear view camera connector.
- 2. Turn ignition switch ON.
- 3. Check signal between camera control unit harness connector and ground using an oscilloscope.

(+) Camera control unit		(-)	Condition	Signal
Connector Terminal		(-)	Condition	Oignai
B60	6	Ground	Shift the selector lever to "R" position.	(V) 0. 4 0 −0. 4 → 40μs SKIB2251J

#### Is the inspection result normal?

YES >> Replace camera control unit.

NO >> Replace rear view camera.

### **CAMERA ON SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

### CAMERA ON SIGNAL CIRCUIT

Description INFOID:0000000003509241

- Camera control unit outputs camera ON signal to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the AV control unit.

### Diagnosis Procedure

#### INFOID:0000000003509242

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# 1. CHECK CONTINUITY CAMERA ON SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and rear view camera connector.
- Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera o	Camera control unit		w camera	Continuity
Connector	Terminal	Connector Terminal		Continuity
B60	8	D192	1	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit			Continuity
Connector	Terminal	Ground	Continuity
B60	8		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VOLTAGE CAMERA ON SIGNAL

- Connect camera control unit connector and rear view camera connector.
- 2. Turn ignition switch ON.
- 3. Check signal between camera control unit harness connector and ground.

(+)				Voltage
Camera o	control unit	(–)	Condition	Voltage (Approx.)
Connector	Terminal			, , ,
B60	8	Ground	Shift the selector lever to "R" position.	6.0 V

#### Is the inspection result normal?

YES >> Replace rear view camera.

NO >> Replace camera control unit.

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# CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

Description INFOID:000000003509243

• Camera control unit outputs camera ON signal to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.

 The camera control unit that inputs the camera image signal transmits the camera image signal to the AV control unit.

### Diagnosis Procedure

INFOID:0000000003509244

### 1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and AV control unit connector.
- 3. Check continuity between camera control unit harness connector and AV control unit harness connector.

Camera control unit		AV control unit		Continuity
Connector	Terminal	Connector Terminal		Continuity
B60	12	M130	65	Existed
	11	IVITOU	64	Existed

Check continuity between camera control unit harness connector and ground.

Camera control unit			Continuity
Connector	Terminal	Ground	Continuity
B60	12		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK CAMERA IMAGE SIGNAL

- 1. Connect camera control unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between camera control unit harness connector and ground using an oscilloscope.

(+) Camera control unit		(-)	Condition	Signal
Connector	Terminal			
B60	12	Ground	Shift the selector lever to "R" position.	(V) 0. 4 0 −0. 4 → 40μs SKIB2251J

#### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace camera control unit.

### STEERING ANGLE SENSOR SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

### STEERING ANGLE SENSOR SIGNAL CIRCUIT

Description INFOID:000000003566415

- Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.
- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

## Diagnosis Procedure

# 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and steering angle sensor connector.
- Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector Terminals		Continuity
	23		3	
B60	24	M30	6	Existed
	25		8	

4. Check continuity between camera control unit harness connector and ground.

Camera d	control unit		Continuity
Connector	Terminals		Continuity
	23	Ground	
B60	24		Not existed
	25		

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VOLTAGE CAMERA CONTROL UNIT

- Connect camera control unit connector.
- Turn ignition switch ON.
- 3. Check voltage between camera control unit harness connector and ground.

(-	+)		5 (	
Camera d	control unit	(–)	Reference value (Approx.)	
Connector	Terminals		(     - /	
	23			
B60	24	Ground	5.0 V	
	25			

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

# 3. CHECK STEERING ANGLE SENSOR SIGNAL

- Turn ignition switch OFF.
- Connect steering angle sensor connector.

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INFOID:0000000003566416

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- 3. Turn ignition switch ON.
- 4. Check signal between camera control unit harness connector and ground.

(	+)				
Camera o	control unit	(-)	Condition	Reference value	
Connector	Terminals				
	23, 24	Ground	Turn the steering to the right	A: Sensor signal 1 B: Sensor signal 2	
B60			Turn the steering to the left	A: Sensor signal 1 B: Sensor signal 2	
	25	Ground	Turn the steering around the neutral position	A: Sensor signal 3 B: Sensor signal 1	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.

### STEERING SWITCH SIGNAL A CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

### STEERING SWITCH SIGNAL A CIRCUIT

Description INFOID:0000000003356818

Transmits the steering switch signal to AV control unit.

## Diagnosis Procedure

# 1. CHECK STEERING SWITCH SIGNAL A CIRCUIT

- 1. Disconnect AV control unit connector and spiral cable connector.
- 2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector Terminal		Continuity
M127	6	M33	24	Existed

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

AV control unit			Continuity
Connector	Terminal	Ground	Continuity
M127	6		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK SPIRAL CABLE

Check spiral cable.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# 3.CHECK AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector and spiral cable connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector.

(+)		(–)		
AV cor	AV control unit		ntrol unit	Voltage (Approx.)
Connector	Terminal	Connector Terminal		(11 - 7
M127	6	M127 15		3.3 V

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

# 4. CHECK STEERING SWITCH

- Turn ignition switch OFF.
- Check steering switch. Refer to <u>AV-142</u>, "Component Inspection".

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

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INFOID:0000000003356819

Revision: 2008 October AV-141

## STEERING SWITCH SIGNAL A CIRCUIT

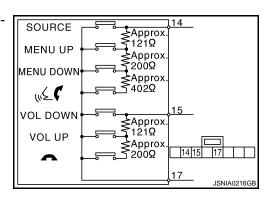
< COMPONENT DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

## Component Inspection

INFOID:0000000003356820

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.



#### Standard

	Steering switch				Resistance
Con- nector	Termi- nal	Con- nector	Termi- nal	Condition	Ω
					709 – 737
	14	14 M303	M303 17	MENU DOWN switch ON	315 – 327
				MENU UP switch ON	119 – 123
M303				17	SOURCE switch ON
				switch ON	315 – 327
	15			VOL UP switch ON	119 – 123
				VOL DOWN switch ON	0

### STEERING SWITCH SIGNAL B CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

### STEERING SWITCH SIGNAL B CIRCUIT

**Description** 

Transmits the steering switch signal to AV control unit.

## Diagnosis Procedure

# 1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

- 1. Disconnect AV control unit connector and spiral cable connector.
- 2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M127	16	M33	31	Existed	

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

AV control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M127	16		Not existed	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK SPIRAL CABLE

Check spiral cable.

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# 3.CHECK AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector and spiral cable connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector.

(+)		(–)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	(11 - )
M127	16	M127	15	3.3 V

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

### 4. CHECK STEERING SWITCH

- 1. Turn ignition switch OFF.
- Check steering switch. Refer to <u>AV-144, "Component Inspection"</u>.

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

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INFOID:0000000003356822

Revision: 2008 October AV-143

## STEERING SWITCH SIGNAL B CIRCUIT

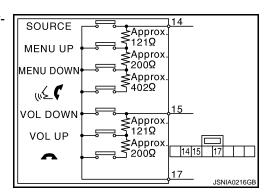
< COMPONENT DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

## Component Inspection

INFOID:0000000003470186

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.



#### Standard

Steering switch					Resistance
Con- nector	Termi- nal	Con- nector	Termi- nal	Condition	$\Omega$
M303	14	M303	17	ແ∕₂ <b>ເ</b> switch ON	709 – 737
				MENU DOWN switch ON	315 – 327
				MENU UP switch ON	119 – 123
				SOURCE switch ON	0
	15			switch ON	315 – 327
				VOL UP switch ON	119 – 123
				VOL DOWN switch ON	0

#### STEERING SWITCH SIGNAL GND CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

#### STEERING SWITCH SIGNAL GND CIRCUIT

Description INFOID:000000003356824

Transmits the steering switch signal to AV control unit.

#### Diagnosis Procedure

# 1. CHECK STEERING SWITCH SIGNAL GND CIRCUIT

- 1. Disconnect AV control unit connector and spiral cable connector.
- 2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV cor	trol unit	Spira	l cable	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M127	15	M33	33	Existed

3. Connect AV control unit connector.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

#### 3.CHECK GROUND CIRCUIT

- 1. Connect AV control unit connector.
- 2. Check continuity between AV control unit harness connector and ground.

AV cor	trol unit		Continuity	
Connector	Terminal	Ground	Continuity	
M127	15		Existed	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

#### 4. CHECK STEERING SWITCH

- Turn ignition switch OFF.
- 2. Check steering switch. Refer to AV-146, "Component Inspection".

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

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Revision: 2008 October AV-145 2009 Murano

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INFOID:0000000003356825

#### STEERING SWITCH SIGNAL GND CIRCUIT

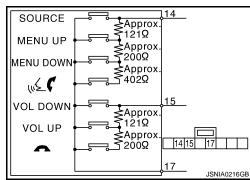
#### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

# Component Inspection

INFOID:0000000003470187

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.



#### Standard

	Steerin	g switch			
Con- nector	Termi- nal	Con- nector	Termi- nal	Condition	Resistance $\Omega$
					709 – 737
	14		17	MENU DOWN switch ON	315 – 327
		M303		MENU UP switch ON	119 – 123
M303				SOURCE switch ON	0
				switch ON	315 – 327
	15			VOL UP switch ON	119 – 123
				VOL DOWN switch ON	0

# **ECU DIAGNOSIS**

# AV CONTROL UNIT

Reference Values

#### INFOID:0000000003478347

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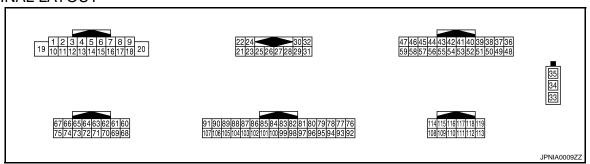
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#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III	MONITOR	ITEM
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Monitor Item		Condition	Value/Status
VHCL SPD SIG	Ignition switch	Vehicle speed > 0 km/h (0 MPH)	On
VHCL SPD SIG	ON	Vehicle speed = 0 km/h (0 MPH)	Off
DIAD OIO	Ignition switch	Parking brake is applied.	On
PKB SIG	ON	Parking brake is released.	Off
	Ignition switch	Light switch ON	On
ILLUM SIG	ON	Light switch OFF	Off
ION SIO	Ignition switch ON	_	On
IGN SIG	Ignition switch ACC	_	Off
REV SIG	Ignition switch	Selector lever in R position	On
	ON	Selector lever in any position other than R	Off

#### **TERMINAL LAYOUT**



#### PHYSICAL VALUES

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
					Keep pressing SOURCE switch.	0 V
				Ignition	Keep pressing $\Delta$ switch.	0.7 V
6 (BR)	15 (L)	Steering switch signal A	Input	switch ON	Keep pressing ∇ switch.	1.3 V
					Keep pressing √∠ C switch.	2.0 V
					Except for above.	3.3 V
7 (R)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
9	Ground	Illumination signal	Innut	OFF	Lighting switch is OFF.	0 V
(R)	Giodila	mummation signal	Input OFF		Lighting switch is ON.	12.0 V

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
15 (L)	Ground	Steering switch signal GND	_	Ignition switch ON	_	0 V
					Keep pressing VOL DOWN switch.	0 V
16 (G)	15 (L)	Steering switch signal B	Input	Ignition switch ON	Keep pressing VOL UP switch.	0.7 V
				0.1	Keep pressing A switch.	1.3 V
					Except for above.	3.3 V
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
20 (B)	Ground	Ground		Ignition switch ON	_	0 V
22 (G)	21 (B)	Satellite radio sound signal LH	Input	Ignition switch ON	When satellite radio mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
24 (W)	23 (R)	Satellite radio sound signal RH	Input	Ignition switch ON	When satellite radio mode is selected.	(V) 1 0 -1 → 2ms SKIB3609E
25		Shield		_	_	_
26	_	Shield	_	_	_	_
28 (R)	Ground	Request signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected.	(V) 10 0 -10 + 10ms SKIA9299J
29 (W)	Ground	Communication signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected.	(V) 10 0 -10 -10 SKIA9300J

	minal e color)	Description			Condition	Reference value
+	-	Signal name	Input/ Output	Condition		(Approx.)
30 (B)	Ground	Communication signal (CONT→SAT)	Output	Ignition switch ON	When satellite radio mode is selected.	(V) 10 0 -10 → 1ms SKIA9301J
33	_	FM sub	Input		_	_
34	<u> </u>	AM-FM main	Input	_	_	_
35	Ground	Antenna amp. ON signal	Output	Ignition switch ACC	_	12.0 V
36 (L)	37 (P)	Without DVD player models  Composite image signal (AUX/Camera image)  With DVD player models	models  • Composite image signal	When composite image is displayed.	0. 4 0	
( )		Composite image signal (DVD/AUX/Camera im-			-0. 4 + 40µs   SKIB2251J	
37 (P)	Ground	Composite image ground	_	Ignition switch ON	_	0 V
38 (Y)	Ground	RGB image signal (B: blue)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4  0  1. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
39 (L)	Ground	RGB image signal (G: green)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4 0 -0. 4 -40\u03bus SKIB2236J
40 (G)	Ground	RGB image signal (R: red)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4 0 -0. 4 → 40μs SKIB2238J

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
41 (B)	Ground	RGB synchronizing signal	Output	Ignition switch ON	_	(V) 4 0 → 20 µs SKIB3603E
42	_	Shield	_	_	_	_
					When RGB image is displayed.	5.0 V
43 (W)	Ground	RGB area (YS) signal	Output	Ignition switch ON	When AUX or camera image is displayed.	(V) 6 4 2 0  → + 200 μ s  PKIB4948J
44 (G)	Ground	Communication signal (DISP→CONT)	Input	Ignition switch ON	When adjusting display brightness.	(V) 6 4 2 0 ++1ms PKIB5039J
45 (G)	Ground	Horizontal synchronizing (HP) signal	Input	Ignition switch ON	_	(V) 4 0 → 20µs SKIB3601E
46 (LG)	Ground	Signal GND	_	Ignition switch ON	_	0 V
47 (O)	Ground	Signal VCC (front display unit power supply)	Output	Ignition switch ACC	_	9.0 V
49	_	Shield	_	_	_	_
50		Shield	_	_	_	_
55		Shield	_	_	_	_
56 (R)	Ground	Communication signal (CONT→DISP)	Output	Ignition switch ON	When adjusting display brightness.	(V) 6 4 2 0 ++1ms PKIB5039J

# [BOSE AUDIO WITHOUT NAVIGATION]

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	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
57 (R)	Ground	Vertical synchronizing (VP) signal	Input	Ignition switch ON	_	(V) 4 0 → 44ms SKIB3598E
58 (BR)	Ground	Inverter GND	_	Ignition switch ON	_	0 V
59 (Y)	Ground	Inverter VCC (front display unit power supply)	Output	Ignition switch ACC	_	9.0 V
64	Ground	Shield (camera image ground)	_	Ignition switch ON	_	0 V
65 (W)	64	Camera image signal	Input	Ignition switch ON	when rear view camera image is displayed.	(V) 0. 4 0 -0. 4 -0. 4 -0. 4 -0. 4 -0. 4 -0. 4
66 74	74	Without DVD player models  • AUX image signal	models AUX image signal  Ignition  With DVD player models  When DVD as AUX image is played.	When AUX image is displayed.	(V) 0. 4 0 -0. 4 SKIB2251J	
(Y) ^{*1} (L) ^{*3}	(B)*1 (R)*3	<ul> <li>Composite image signal</li> </ul>		When DVD or AUX image is displayed.		
68	Ground	Camera-connection recog-	Input	Ignition switch	Connected to camera control unit connector.	0 V
(P)	Cround	nition signal	mpat	ON	Not connected to camera control unit connector.	5.0 V
73	_	Shield	_	_	_	_
74 (B) ^{*1} (BR) ^{*2} (R) ^{*3}	Ground	Without DVD player models  AUX image signal ground  With DVD player models  Composite image signal ground (DVD/AUX image)	_	Ignition switch ON	_	0 V
80 (R)	79 (L)	TEL voice signal	Input	Ignition switch ON	During voice guide output with the 🖍 switch pressed.	(V) 1 0 -1 + 2ms SKIB3609E

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output	Condition		(Approx.)
81	_	Shield	_	_	_	_
83	82	Without DVD player models • Sound signal RH (iPod sound)	Input	Ignition switch	When iPod mode is selected	
(R)	(W)	With DVD player models • Sound signal RH (iPod, DVD and AUX sound)		ON	When iPod, DVD or AUX mode is selected	-1 + 2ms   SKIB3609E
85 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
86 (L)	_	CAN-H	Input/ Output	_	_	_
87 (P)	_	CAN-L	Input/ Output	_	_	_
88 (R)	_	AV communication signal (H)	Input/ Output	_	_	_
89 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
90 (G)	_	AV communication signal (H)	Input/ Output	_	_	_
91 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
95 ^{*4} (R)	97 ^{*4} (W)	AUX sound signal RH	Input	Ignition switch ON	When AUX mode is selected	(V) 1 0 -1 + 2ms SKIB3609E
96 ^{*4} (B)	97 ^{*4} (W)	AUX sound signal LH	Input	Ignition switch ON	When AUX mode is selected	(V) 1 0 -1 + 2ms SKIB3609E
97 ^{*4} (W)	Ground	AUX sound signal ground	_	Ignition switch ON	_	0 V
99 (BR)* ⁴ (B)* ³	98 (L)*4 (G)*3	Without DVD player models • Sound signal RH (iPod sound) With DVD player models	Input	Ignition switch ON	When iPod mode is selected  When iPod, DVD or AUX	(V) 1 0
•		<ul> <li>Sound signal RH (iPod, DVD and AUX sound)</li> </ul>			mode is selected	+ + 2ms   SKIB3609E
100	_	Shield	_			

#### < ECU DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

1200	DI/ (CI 10	70.07			<u>-</u>	
	minal e color)	Description			Condition	Reference value
+	-	Signal name	Input/ Output		Condition	(Approx.)
101 (V)	Ground	SW ground	_	Ignition switch ON	_	0 V
103 (W)	Ground	Eject signal	Input	_	Pressing the eject switch	0 V 3.3 V
104 (G)	Ground	Ignition signal	Input	Ignition switch ON	Except for above —	Battery voltage
105				Ignition	The "R" position	12.0 V
(SB)	Ground	Reverse signal	Input	switch ON	Other than the "R" position	0 V
106	0	Bullingland	1	Ignition	Parking brake ON	0 V
(G)	Ground	Parking brake signal	Input	switch ON	Parking brake OFF	5.0 V
107 (V)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25 MPH)	NOTE:  Maximum voltage may be 12 V due to specifications (connected units).  (V) 6 4 2 0  *** *20ms  SKIA6649J
108 (V)	114 (LG)	Sound signal rear RH	Output	Ignition switch ON	Voice output	(V) 1 0 -1 *** 2ms SKIB3609E
109 (B)	115 (W)	Sound signal front RH	Output	Ignition switch ON	Voice output	(V) 1 0 -1 + 2ms SKIB3609E
110 (P)	Ground	Amp. ON signal	Output	Ignition switch ON	_	10.0 V
111	_	Shield	_	_	_	_
	<u> </u>				·	

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#### < ECU DIAGNOSIS >

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
112 (O) ^{*1} (L) ^{*2}	118 (SB)*1 (R)*2	Sound signal rear LH	Output	Ignition switch ON	Voice output	(V) 1 0 -1 + 2ms SKIB3609E
113 (G)	119 (R)	Sound signal front LH	Output	Ignition switch ON	Voice output	(V) 1 0 -1 ** 2ms SKIB3609E

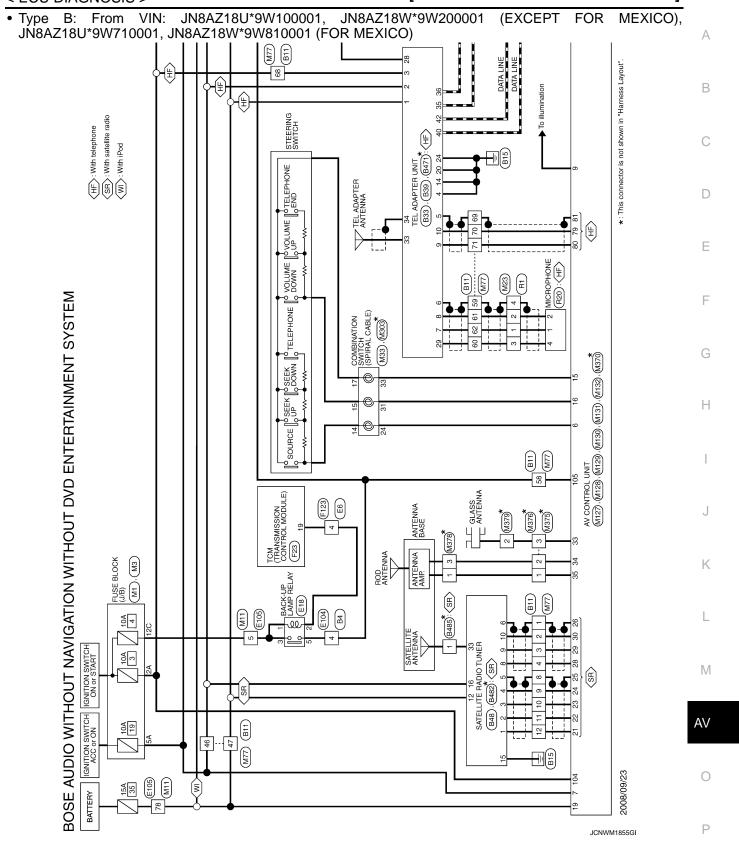
#### NOTE:

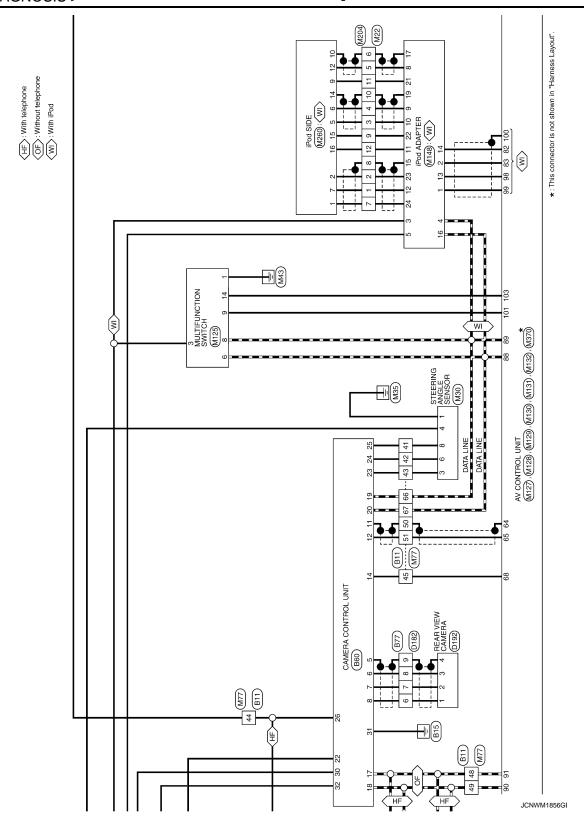
- *1: Without DVD player models (Type A).
- *2: Without DVD player models (Type B).
- *3: With DVD player models.
- *4: Only for models without DVD player.

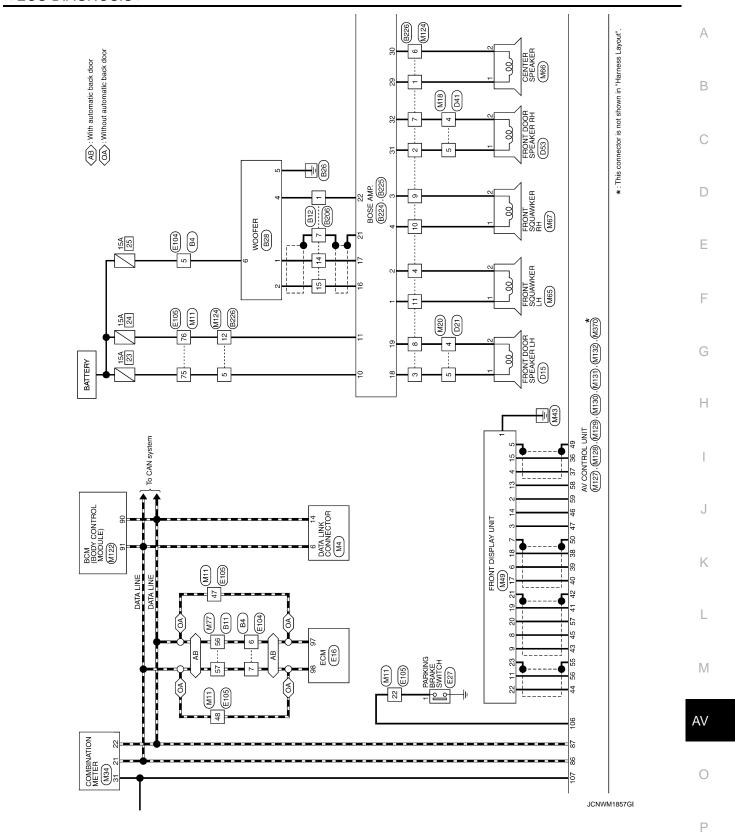
# Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTER-TAINMENT SYSTEM -

#### NOTE:

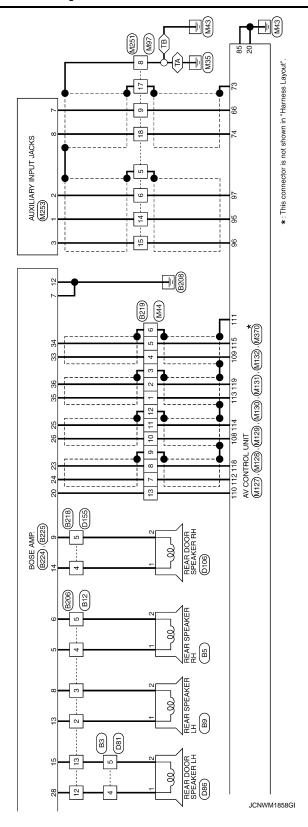
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.
- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)











Connector No. B9 Connector Name REAR SPEAKER LH Connector Type TK02FBR	No. Oolor Signal Name [Specification] 1 SB	Connector No.   E28   Connector Name   WOOFER	A B C
EAKER RH	Signal Nane [Specification]	Name [Specification]	E
nector No. nector Name nector Type	Color   Color   No. of Wire   1	Connector No.   B12	G H
EERTAINMENT SY6	Signal Name [Specification]	view camera and telephone] view camera without telephone]	ı
WITHOUT DVD ENTERTAINMENT SYSTEM   Connector No.   B4   Connector Name   WIFE TO WIFE   Connector Type   NISIBMW-CS   Connec	Color   No.   Color   No.   Color   No.   Color   No.   Color   Colo	43 G G 44 BR 45 L L G G 44 G BR 45 L G G 44 G BR 45 L G G 64 G G G G G G G G G G G G G G G G	J K
	Signal Name [Specification]	CS19 Signal Name (Specification)	L
BOSE AUDIO WITHOUT NAVIGATIO  Connector Name WIPE TO WIRE  Connector Type TK10FW-NSS  TK10FW-NSS  TK10FW-NSS  TK10FW-NSS  TK10FW-NSS  TK10FW-NSS  TK10FW-NSS	O O O O O O O O O O O O O O O O O O O	No.   B11   Nyme   WIRE TO   Type   TH80MW;   Nyme   Nym	AV
BO Corne	No. No. S	Terminal	Р

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		R R REVERSE     G SENSOR SIGNAL 1     SB SENSOR SIGNAL 2     SB SENSOR SIGNAL 3     O SENSOR SIGNAL 3     GR VEHICLE SPEC (8-PULSE)     GR ACTERY     O BATTERY     O BA	
EM		Connector No.   860   23	Terminal   Color   Signal Name [Specification]   Color   No. of Vine   Signal Name [Specification]   Signal Name [Specification]   SHIELD   SHIEL
Connector No. B39 Connector Name TEL ADAPTER UNIT Connector Type TH32FW-NH  LS.	Terminal Color   Signal Name (Specification)     1	16 GR AOC	
BOSE AUDIO WITHOUT NAVIGATION Connector No. B33 Connector Name TEL ADAPTER UNIT Connector Type THOSEW-NH  M.S. 35 37 39 41 36 37 39 41	Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   Signal Name   Si	Connector No. 848  Connector Name SATELLITE RADIO TUNER  Connector Type A16FW  A16FW  2 4 6 7 12 14 16  1 3 5 7 8 9 10 11 13 15	Terminal   Color   Signal Name (Specification)     1

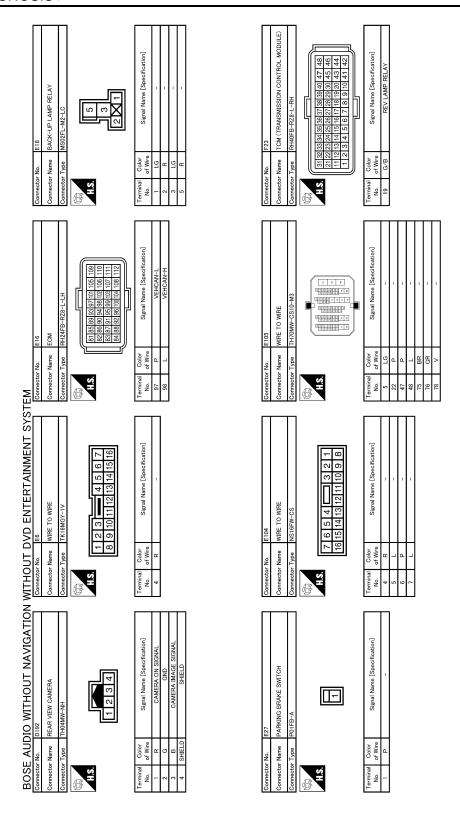
JCNWM1860GI

		GND SOUND SIGNAL REAR SPEAKER LH (+) SOUND SIGNAL REAR DOOR SPEAKER RH (+)			A B C
		12 B 13 GR 14 L			D
5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	2 11 12 10 11 10 10 11	Signal Name (Specification)  SOUND SIGNAL FRONT SOUAWKER LH (+) SOUND SIGNAL FRONT SOUAWKER EN (+) SOUND SIGNAL FRONT SOUAWKER RH (+) SOUND SIGNAL FRONT SOUAWKER RH (+) SOUND SIGNAL FRONT SOUAWKER RH (+) SOUND SIGNAL FRAN SPEAKER RH (+) SOUND SIGNAL FRAN SPEAKER RH (+) SOUND SIGNAL FRAN SOFAKER RH (+) SOUND SIGNAL FRAN BOOR SPEAKER RH (-)		E
BZ18 WIRE TO WIRE TK10FW-NS8	Color Color Color	BOSE AMP.  BOSE AMP.  SGA1PER-SJA  14 13 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Color  LG SOUND SIGNAL I.  SOUND SIGNAL I.  SOUND SIGNAL I.  SOUND SIGNAL I.  Y SOUND SIGNAL I.  Y SOUND SIGNAL I.  P SOUND SIGNAL I.  P SOUND SIGNAL I.  P SOUND SIGNAL I.  P SOUND SIGNAL I.  COUND SIGNAL I.		F G
Connector No. Connector Name Connector Type H.S. 10 9	No. No.	Connector No. Connector Name Connector Type H.S.	Terminal No. No. 1 1 2 2 2 2 2 4 4 4 4 4 4 4 10 9 9 9 9 9 11 11		Н
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM   Connector Name   WIRE TO WIRE	Signal Name [Specification]				I
VD ENTE BEDGG WIRE TO WIRE NSTGMW-CS	Signal N				J
WITHOUT DVD Connector No. Connector Type NS16 H.S.	Terminal Color No. 1 W 2 GR 3 BR 4 Y Y 4 4 Y Y 5 SHELD 7 SHELD 113 R 113 R 114 WRR 115 BR 115	12 SHELD 13 SB			K
GATION	G	3131	G G		L
JT NAVI	Signal Name [Specification]	0 11 12 13 14	Signal Name (Specification)		M
E AUDIO WITHOU  No. 877  Nume WIRE TO WIRE  Type TK/12MW  1 2 6 7 8 9 10	Oolor Signal Name R/L R/W R/W R/W R/W SHELD	Pr No. R219 Pr Name WIRE TO WIRE Type TH32MW-NH  1 2 3 4 5 6 7 8 9 1  1 1 8 9 0 2 1 22 23 24 25 2	Color W/R W/R W/R W/R Signal Nam W/R SHELD GRV/ SHELD GRV/ W/R W/L		AV
BOSE AU. Connector No. Connector Name Connector Type	Terminal No. No. 9 7 7 7 9 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Connector No. Connector Type  Connector Type  H.S.  1 2	Terminal No		0
				JCNWM1861GI	Р

12 GR -		Connector No. D15 Connector Name FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS/02/FBR-CS H.S.	Terminal   Color   Signal Name [Specification]   No.   Cflype A]
TEM   Connector No.   8226   Connector Name   WIRE TO WIRE   Connector Type   NS12MBR-CS	Terminal   Color   Signal Name [Specification]   No. of Wires   Signal Name [Specification]   1   V	Connector No. B485 Connector Name AMTEWA BASE (SATELLITE ANTEWA) Connector Type GT18C-1PP-HU  LAS.	Terminal   Color   Signal Name [Specification]   No.   of Wire   SATELLITE ANTENNA   1   -   SATELLITE ANTENNA
Solution   State   State		Connector No. B482 Connector Name SATELLITE RADIO TUNER Connector Type FAKRA H.S.	Terminal   Color   Signal Name [Specification]   Oct Wire   SafeLLITE ANTENNA   S3   SATELLITE ANTENNA
BOSE AUDIO WITHOUT NAVIGATION  Gamestor No. B225  Connector Name BOSE AMP.  Connector Type SCA19FBR-SGA4  M.S. 37 36 353 341 33	Color   Signal Name [Specification]     No.   of Wire   Signal Name [Specification]     16	Connector No. B471 Connector Name TEL ADAPTER UNIT Connector Type GT16C-1S-HU  #\$3 34	Termitral   Color   Signal Name [Specification]   No. of Wire   33     TELANTENNA   SHIELD   SHIELD   SHIELD

JCNWM1862GI

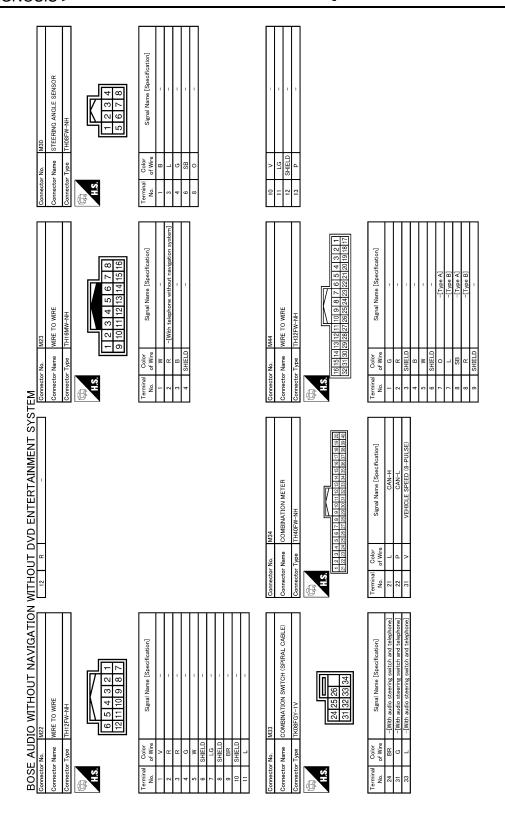
Connector No. D81 Connector Name WIRE TO WIRE Connector Type TK10MW-NS8  H.S. 1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   9   10   11   12   13   14   15   16   17   18   9   10   11   12   13   14   15   16   17   18   10   10   10   10   10   10   10	Terminal Color No. of Wire Signal Name [Specification] 4 L	Connector No. 0182 Connector Name WIRE TO WIRE Connector Type TK12FW  H.S. 5 4 3 2 1 12 11 10 9 8 7 6	Color   Signal Name [Specification]   Color   Signal Name [Specification]   Color   Color		A B C
Connector No. D53 Connector Name PROMT DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS72FBR-CS	Terminal   Color   Signal Name [Specification]   Olov   Signal Name [Specification]   Olov   Signal Name [Specification]	Connector No. 0155 Connector Name WIRE TO WIRE Connector Type TK10MW+NS8	Terminal   Color   Signal Name [Specification]   Color   Clype A]		E F G
MITHOUT DVD ENTERTAINMENT SYSTEM   Cornector No.   D41   Cornector Name   WIRE TO WIRE   Cornector Type   TH40FW-CS15   Co	Terminal Color   Signal Name [Specification]   Odor   Od	Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS  H.S.	Terminal   Color   Signal Name [Specification]   O  [Type A]		J K
BOSE AUDIO WITHOUT NAVIGATION	Terminal   Color   Signal Name [Specification]   A   B/W   -[Type A]   5   W   -[Type A]   5   W   -[Type B]	D86   Comector No.   D86   Comector Name   SYSTEM   SYSTEM   SYSTEM   SYSTEM   Comector Type   NSOZFBR-CS   SYSTEM   S	Termitral Color No. of Wire Signal Name [Specification]	JCNWM1863GI	M AV



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	[va]		А
MA  DATA LINK CONNECTOR  BD16FW  9 10 11 12 13 14 15 16 17 18 11 2 13 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 16 17 18 14 15 18 18 18 18 18 18 18 18 18 18 18 18 18	Signal Name (Specification)		В
M4 DATA LIN BD16FW 9 10 11	O Color O Chire L		С
	No. No. 0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		D
	pecification		Е
25 BL	Signal Name (Specification)		F
No. Name	No. of Wire 12C O William Color	in a cot of the cot of	G
YSTEM Comm	12 C		Н
N WITHOUT DVD ENTERTAINMENT SYSTEM Connector No. MI Connector Name FUSE BLOCK (J/B) Connector Type NSOBFW-M2  ALS SA TABBASA4A	Signal Name (Specification)	Name   WIRE TO WIRE	I
VD ENTER'	Signal Ni	Name   WIRE TO WIRE	J
WITHOUT DV Connector No. M Connector Type M.S. H.S.	No. and No. an	Connector No. M. Connector Name W. Connector Type Tip I Strategies Color No. of Wire 5 B B S S B B S S B B S S B B S S B B S S S B B S S S B B S S S B B S S S S B B S S S S S S S S S S S S S S S S S S S S	К
			L
BOSE AUDIO WITHOUT NAVIGATIO  Connector No. F123  Connector Type TK16FGV-1V  Connector Type TK16FGV-1V	Signal Name (Specification)	UNINE CSIO-M3 CSIO-M3 Signal Name (Specification)	М
F123   WIRE TO WIRE   TK16FGY-1V   7   6   5   4   6   13   1   13   1	Ш	WIRE TO THOMPH-	AV
BOSE AU Connector No. Connector Type Connector Type H.S.	Ferminal   Odor   Odo	Commetter No.  Commetter Name Commetter Type Commetter Type Terminal Color No. of Wire S 5 0 5 5 0 7 2 2 G G 47 P 78 BR 78 R 78 Y	0
<u> </u>	<del></del>		CNWM1865GI
			Р

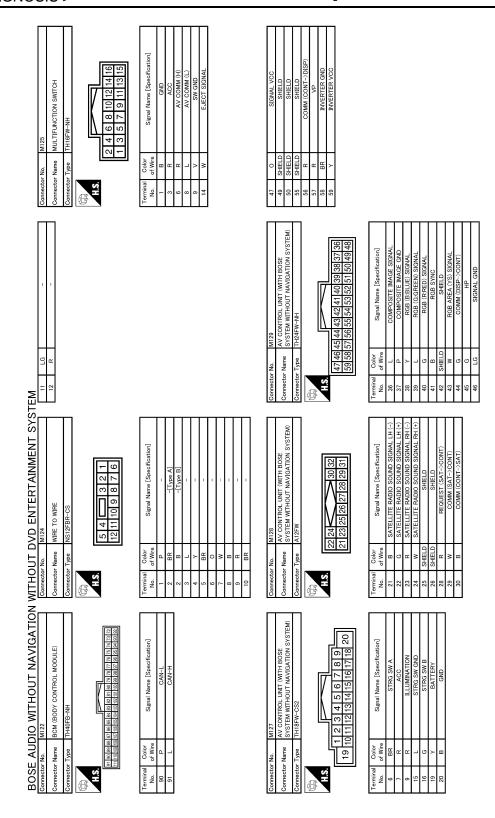
Revision: 2008 October AV-165 2009 Murano



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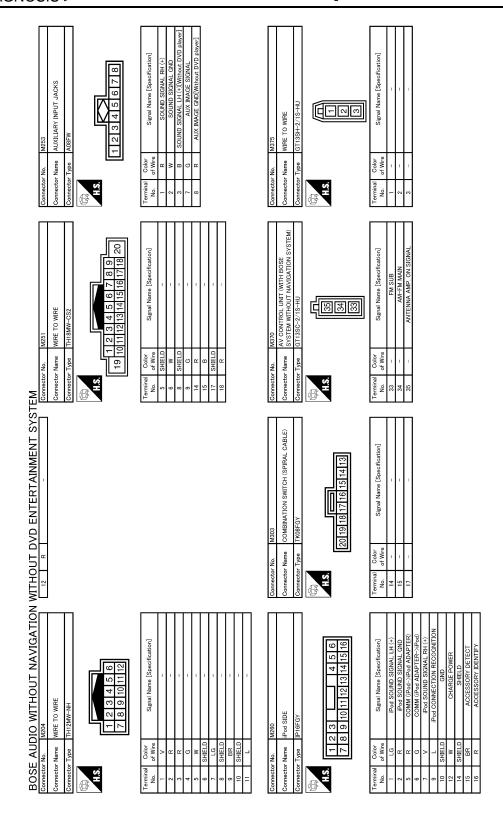
No. M66 Name CENTER TYDE TYGZFBR	To p P P P P P P P P P P P P P P P P P P	Connector No.   M87	A B C
mector No. M65 mector Name FRONT S mector Type TKOZFER	No. mail	43 L 46 P	E F G
NWITHOUT DVD ENTERTAINMENT SYSTEM   14		Connector No.   M77	J K
AUDIO WITHOUT NAVIGATIO  Name FRONT DISPLAY UNIT  Type TH24FW-NH  12[11] 10 9 8 7 6 5 4 3 2 1  24[23] 22[12[0] 18[17] 16[15[14] 13  Color   Co	Partitions   O'Wine   Signal Name (Specification)	Connector No. M67 Cornector Name FRONT SOUAWKER RH Cornector Type TROZEBR  Terminal Color No. of Wire  1 BR — -[With BOSE system]	M AV
		JCNWM1867Gt	

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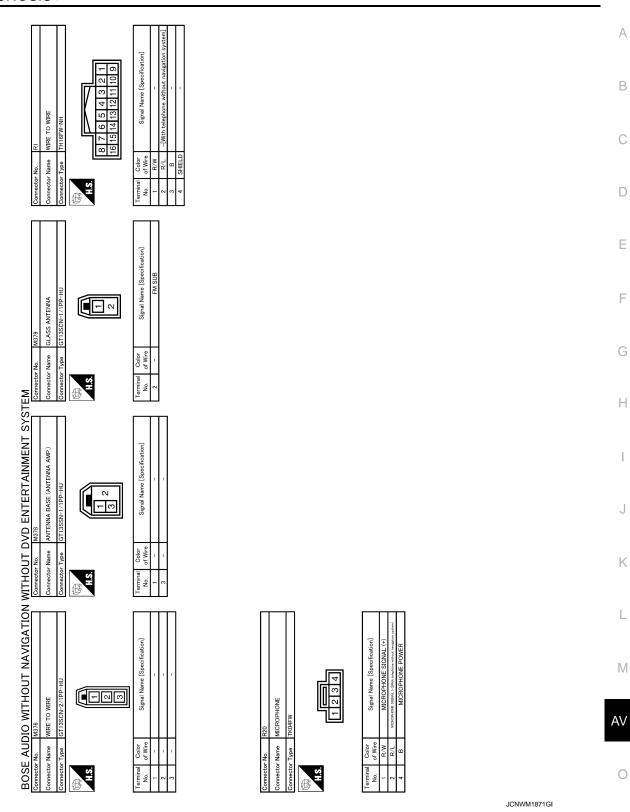
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	Pod SOUND SIGNAL RH (+)  SHELD  AV COMM (+) GND  Pod COMMECTION RECOGNITION ACCESSORY DETECT Pod SOUND SIGNAL LH (+) (+)	АВ
	14 W iPod 15 SHELD 16 SHELD 19 SHELD 19 SHELD 21 L iPod CO 22 BR R iPod 23 R R iPod 24 LG iPod	C
AUX SOUND SIGNAL PH (+) AUX SOUND SIGNAL LH (+) AUX SOUND SIGNAL LH (+) AUX SOUND SIGNAL LH (+) Pod SOUND SIGNAL LH (-)Without DVD player] Pod SOUND SIGNAL LH (-)Without DVD player] SHELD(Without DVD player] SW GND ELECT SIGNAL IGNITION REVERSE PARING BRAKE VEHICLE SPEED (8-PULSE)	PPTER	E
1	Connector No.   M148	G
MITHOUT DVD ENTERTAINMENT SYSTEM	SOUND SIGNAL FRONT LH (-)	I
	80 80 80 80 80 80 80 80 80 80 80 80 80 8	K
NIO WITHOUT NAVIGATION AN 130 AN CORPROL UNIT WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) THIEFW-NH  Signal Name [Specification] Signal Name [Specification] SHELD CONNECTION RECOGNITION SHIELD[Without DVD player] CONNECTION RECOGNITION SHIELD[Without DVD player] AUX IMAGE GND[Without DVD player type A] AUX IMAGE GND[Without DVD player type B]	M132  WY CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)  THI ZEW-NH  [14] H5] H6] H17] H18] H19  Signal Name [Specification]  SOUND SIGNAL, REAR RH (*)  SOUND SIGNAL, REAR RH (*)  SOUND SIGNAL FRAR RH (*)  SOUND SIGNAL REAR LH (*)[Type B]  SOUND SIGNAL REAR LH (*)[Type B]	M
BOSE AUDIO WITHOUT NAVIGATIO   Connector Name   Wilson   Ocured   Wilson   Ocupation   Wilson	11   SHELD   SOUND SIGNAL   SOUND	AV
	JCNWM1869GI	Р



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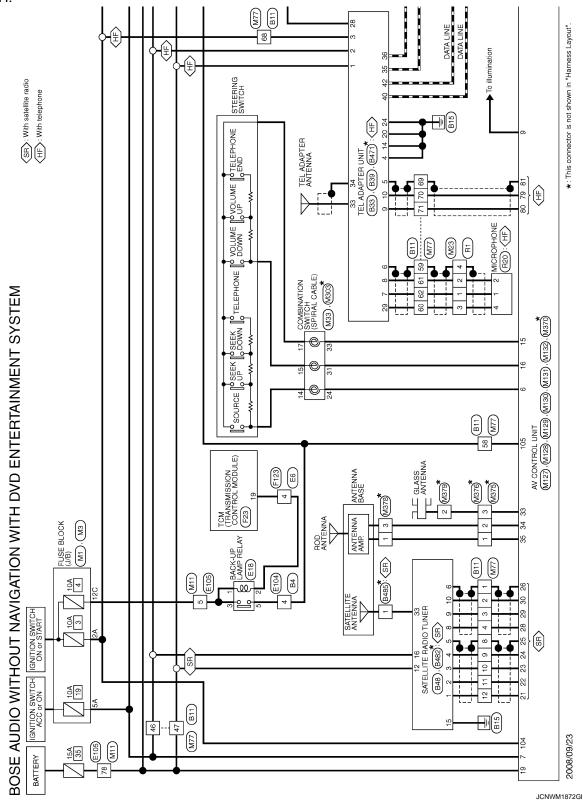
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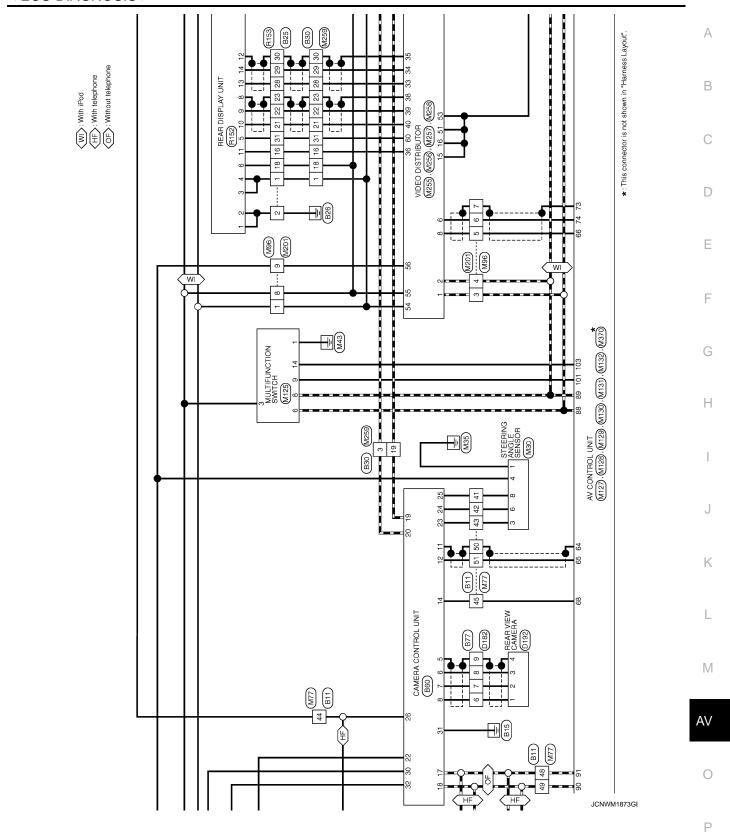


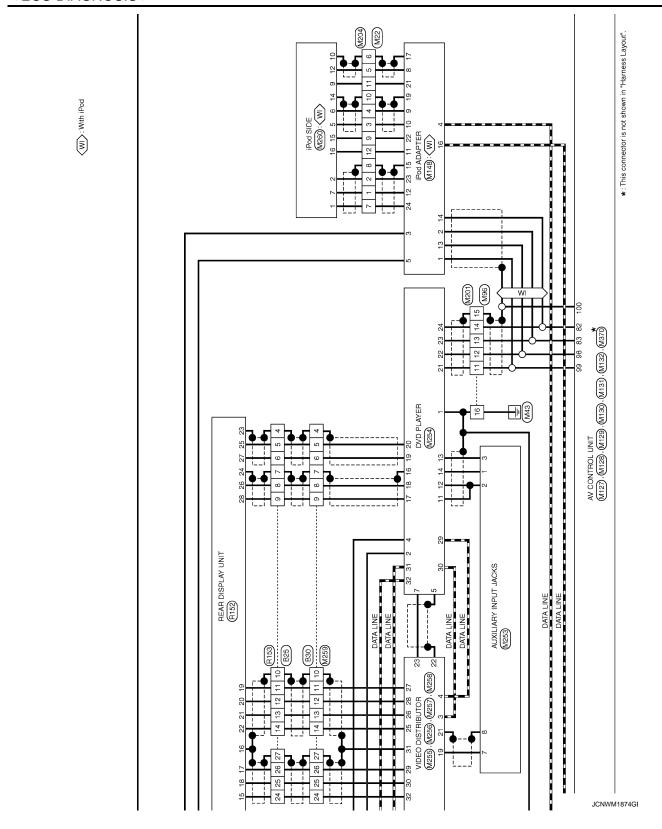
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

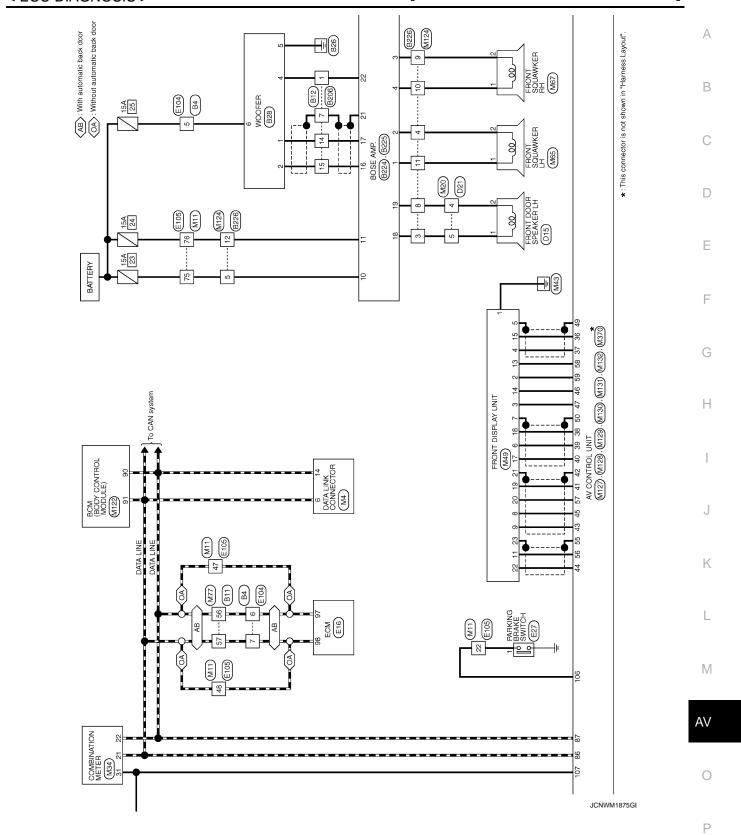
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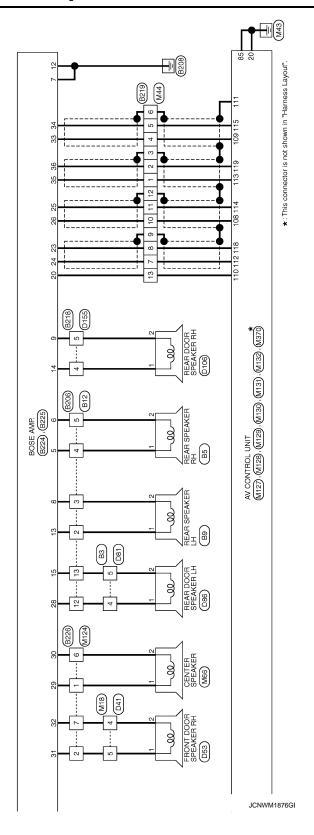
In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.





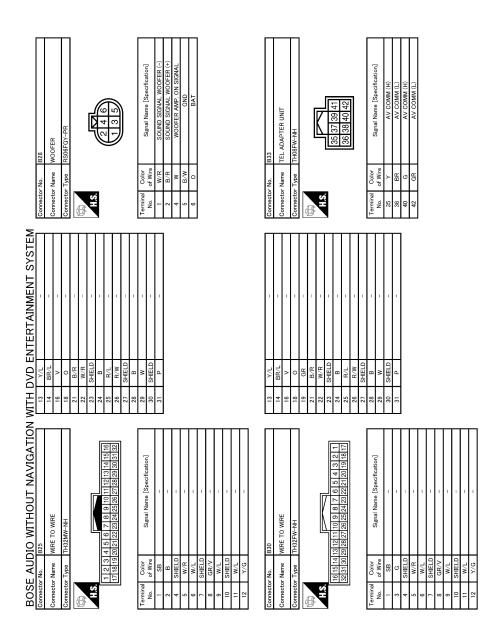






	[iou]		А	
Z T	Signal Name (Specification)		В	
REAR SPE TKOZFBR	Color St SB SB GR GR		С	
Connector No. Connector Name Connector Type H.S.	No.		D	
	recification]	9 2 1 8 8 1	Е	
REAR SPEAKER RH TKOZFBR	Signal Name [Specification]	B12   WIRE TO WIRE   NISIGNA-CS   T   G   G   H   G   G   H   G   G   H   G   G	F	
ector No. ector Type	Terminal Color No. 1 V/Fr 2 LG	10   10   10   10   10   10   10   10	G	
		Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne Conne	Н	
WITH DVD ENTERTAINMENT SYSTEM  Connector No. B4  Connector Name WIRE TO WIRE  Connector Type NS16MW-CS  MA.S. 1 2 3 — 4 5 6 7  R 9 10 11 12 13 14 15 16	Signal Name [Specification]		I	
D ENTERTAINN  84  WIRE TO WIRE  NISIGNM-CS  1 2 3 4 4 8 9 10 11 12 13	Signal Mar	-[With rear view	J	
MITH DVD E Connector Ne.	Terminal   Color   No. of Wire   5   0   6   7   1   1   1   1   1   1   1   1   1	43 G G H 44 BR 45 G G R 44 G G R 45 G R 45 G R 48 G R 48 G R 48 G R 49 G G R 49 G G R 49 G G R 40 G G G G G G G G G G G G G G G G G G	К	
z			L	
BOSE AUDIO WITHOUT NAVIGATIO  Connector No. B3  Connector Name WIRE TO WIRE  Connector Type TK10FW-NS9  M.S.  10 9 8 7 6 6 6 7 8 2 1  18 17 16 15 14 13 12 11	Signal Name [Specification]	RE TO WIRE  BOMW-CS19  Signal Name [Specification]	M	
MUDIO WITH  B3  WRE TO WIRE  B4  WRE TO WIRE  B6  WRE TO WIRE  B7  WRE TO WIRE  WRE	Oolor Sign	1180 WWRE TO Note to the first	AV	
Connector Name Connector Type    10   9	Terminal Oc No. of V	Connector No.	0	
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			Р	

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# [BOSE AUDIO WITHOUT NAVIGATION]

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16 GR ACC		Connector No. B206 Connector Name WIRE TO WIRE Connector Type NS16MW-CS	Terminal Color No. of Wire 1 W		A B C
Connector No. B48 Connector Name SATELLITE RADIO TUNER Connector Type A16FW  A16FW  A16	Color   Signal Name [Specification]   W/L   SOUND SIGNAL LH (-)   SOUND SIGNAL LH (-)   SOUND SIGNAL LH (-)   SOUND SIGNAL LH (-)   SOUND SIGNAL RH (-)   SHIELD   SHIELD	Connector No. 877  Connector Name WIRE TO WIRE  Connector Type TK12MW  H.S. 1 2 3 4 5 6 7 8 9 10 11 12	Terminal   Color   Signal Name (Specification)		E F G
WITH DVD ENTERTAINMENT SYSTEM           20         B.W.         CONTROL SIGNAL           24         B.W.         CONTROL SIGNAL           28         B.R.         VEHICLE SPEED (8-POL/SE)           29         B.         MICROPHONE VGC		22         R         REVERSE           23         G         SENSOR SIGNAL I           24         SB         SENSOR SIGNAL 2           25         O         SENSOR SIGNAL 2           26         BR         VEHICLE SIGNAL 3           26         BR         VEHICLE SIGNAL 3           30         GR         VEHICLE SIGNAL 3           31         B         GR           32         V         BATTERY			J K
BOSE AUDIO WITHOUT NAVIGATION	Terminal   Color   Signal Name [Specification]     1	Corrector No. 880 Corrector Name CAMERA CONTROL UNIT Corrector Type TH32FN-NH  H.S.  [2 4 6 8 1012 14 16 18 20 22 24 28 28 30 32 1 3 5 7 9 11 13 15 17 19 21 23 28 27 29 33	Terminal   Color   Signal Name [Specification]	JCNWM1879Gf	M AV
					Р

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BOSE A	BOSE AUDIO WITHOUT N.		AVIGATION WITH DVD ENTERTAINMENT SYSTEM Connector No.   P2719	12	SHIELD	1		
Connecte	Connector Type   TK10FW-NS8		Connector Name WIRE TO WIRE Connector Type ITH32MM-NH	2	<del>-</del>			
	10 9 8 7 6 E	14 13 12 11	1 2 3 4 5 6 7 8 9 101 12 13 14 15 16   T18 13 22 22 24 25 28 27 28 29 30 31 32					
Terminal No. 4	Color of Wire L	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	Terminal Oolor   Signal Name [Specification]   Oolor   Oolor					
			4 W/R					
			9 W/L					
Connector No. Connector Nar Connector Typ	Connector No. B224 Connector Name BOSE AMP. Connector Type SGA12FBR-SJA2	A2	12 B GND 13 GR SOUND SIGNAL REAR SPEAKER LH (+) 14 L SOUND SIGNAL REAR DOOR SPEAKER RH (+)	Connector No. Connector Name Connector Type		BOSE AMP. SCA19FBR-SGA4	26 GR/V   SOUND SIGNAL REAR FRA SPEAR     28 G   SOUND SIGNAL CENTER SPEAR     29 V   SOUND SIGNAL CENTER SPEAR     30 P   SOUND SIGNAL CENTER SPEAR     31 BR   SOUND SIGNAL FRANTER SPEAR     31 BR   SOUND SIGNAL FRANTER SPEAR     32 SOUND SIGNAL FRANTER SPEAR     33 SOUND SIGNAL FRANTER SPEAR     34 SOUND SIGNAL FRANTER SPEAR     35 SOUND SIGNAL FRANTER SPEAR     36 SOUND SIGNAL FRANTER SPEAR     37 SOUND SIGNAL FRANTER SPEAR     38 SOUND SIGNAL FRANTER SPEAR     39 SOUND SIGNAL FRANTER SPEAR     30 SOUND SIGNAL FRANTER SPEAR S	PE SPE SPE
H.S.	14 13 12 9 8 7 6	11 10		H.S.	37 3638 27 2628	26 25 24 23 22 21 20 19 18 17 16 15	32         Y         Souhu SidAL FRONT Door SreA.           33         W/FR         SOUND SIGAL FRONT R           34         B/R         SOUND SIGAL FRONT R           35         W/R         SOUND SIGAL FRONT R           36         B/R         SOUND SIGAL FRONT R           36         B/R         SOUND SIGAL FRONT R	T L L
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]		
- 2	r r	SOUND SIGNAL FRONT SQUAWKER LH (+) SOUND SIGNAL FRONT SQUAWKER LH (-)		15	B/R	SOUND SIGNAL REAR DOOR SPEAKER LH (-) SOUND SIGNAL WOOFER (+)		
ε 4	L SOUND SIGNA	SOUND SIGNAL FRONT SQUAWKER RH (-)		17	W/R	SOUND SIGNAL WOOFER (-) SOUND SIGNAL FRONT DOOR SPEAKER I H (+)		
2	П	SOUND SIGNAL REAR SPEAKER RH (+)		19	В	SOUND SIGNAL FRONT DOOR SPEAKER LH (-)		
9 ~	BR SOUND SIGN	SOUND SIGNAL REAR SPEAKER RH (-)		20	SB	AMP, ON SIGNAL		
- &	╁	SOUND SIGNAL REAR SPEAKER LH (-)		22	×	WOOFER AMP. ON SIGNAL		
6	Н	SOUND SIGNAL REAR DOOR SPEAKER RH (-)		23	N/L	SOUND SIGNAL REAR LH (-)		
₽ =	SB	BATTERY BATTERY		24 25	GR/V W/L	SOUND SIGNAL REAR LH (+) SOUND SIGNAL REAR RH (-)		

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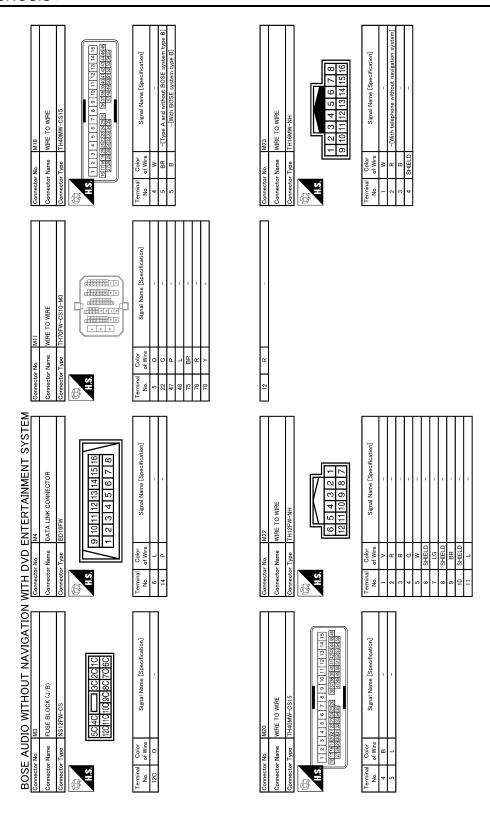
Connector No. B482 Connector Name SATELLITE RADIO TUNER Connector Type FAKRA  HS. San - SATELLITE ANTENNA  San - SATELLITE ANTENNA	Connector Name   D41	A B C
Connector No.   B471	Connector No	E F G
WITH DVD ENTERTAINMENT SYSTEM	Connector No.   D15	J K
BOSE AUDIO WITHOUT NAVIGATION	Cornector No. B485 Connector Name AirBeha, Buck SATELLITE ANTENAN Connector Type GT16C-1PP-HU  A.R.S.  Terminal Color Signal Name [Specification]  1 - SATELLITE ANTENNA	AV O JCNWM1881GI
		Р

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Connector No. 0106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS0ZFBR-CS	Terminal   Color   Signal Name   Specification   No. of Wire   O   -[Type A]	Connector Name WIRE TO WIRE  Connector TX18MGY-1V  T1 2 3	Terminal Color No. of Wire Signal Name (Specification) 4 R
Connector No. D86 Connector Name REAR DOOR SPEAKER LH (WITH BOSE Connector Type NSOZFIEM)  LAS	Terminal   Color   Signal Name [Specification]	Connector No. D192 Connector Name REAR VIEW CAMERA Connector Type TH04MW-NH  H.S.	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]
WITH DVD ENTERTAINMENT SYSTEM  Connector No. 081  Connector Name WIRE TO WIRE  Connector Type TK10MW-NS8  WAS 1 2 3 4 5 6 6 7 8 9 10  11 2 3 4 5 6 6 7 8 9 10  11 12 13 14 15 16 17 18	Terminal   Color   Signal Name [Specification]	Connector No. 0182 Connector Name WIRE TO WIRE Connector Type ITK12FW  H.S. 5 4 3 5 5 1 1 12 11 110 9 8 7 6	Terminal Oolor   Signal Name [Specification]   Oolor   Oolor
BOSE AUDIO WITHOUT NAVIGATION  Connector Name   FRONT DOOR SPEAKER RH (WITH BOSE	Terminal Color   No. of Wire   Signal Name [Specification]	Connector No. D155  Connector Name WIRE TO WIRE  Connector Type Int/10MW-NS8  H.S. 1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   10   10   10   10   10   10   10	Terminal Oolor   Signal Name [Specification]   No.   or   or   or   or   or   or   or

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Name   WIRE TO WIRE	No. MI  Name FUSE BLOCK (J/B)  Type NSD6FW-HZ  3A 2A 2A 1A  Signal Name [Specification]  G G  R  R	A B
Connector No. Connector Type Connector Type Connector Type No. No. Of Wire F. F	Connector No.  Connector Name Connector Type  Connector Type  No.  Color  No.  Color  A.S.  A.S.	D
PARKING BRAKE SWITCH POITB-A  Signal Name [Specification]	FI23 WIRE TO WIRE TKIGFGY-IV    5   4   13   12   11   10   9   8	E
Connector No. E27 Connector Name PARKING Connector Type POLFB-A LS.  Terminal Color No. of Wire 1 P	Connector No.   F123	G H
Signal Name [Specification]	F23 TOM (TRANSMISSION CONTROL MODULE) RH40FB-F22-1-RH R3 44 56 67 88 91 101 411 42 Signal Name (Specification)  FRV LAMP RELAY	ı
H DVD ENTEI nector Name BACK-UF 15.   Color   10.   Color   10.   Color   11.   Color   12.   Color   13.   Color   14.   Color   15.   Color   16.   Color   17.   Color   18.   Color   19.   Color	Cornector No.   F23   Cornector Name   TOM (TRANSMISSION CONTROL	J K
		L
Connector Name   E0M   Connector Name   E0M   Connector Name   E0M   Connector Type   RH24F3-R28-L-LH	Connector No.   E105	AV
BOSE Connector Connector Connector No. 97 96 97	Commetter Commet	
		Р



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		gation system] Travegation system) NAL weigation system) ONT)		А
		SIGNAL GND[Without navigation system]  ROB (REED) SIGNAL  ROB (REED) SIGNAL  ROB STANC  VP  SHELD  COMM (DISP->CONT)  SHELD		В
		14 LG S S S S S S S S S S S S S S S S S S		C D
	eeffeation]	Specification]  16 15 14 13  Specification]  10 transigation system]  14 transigation system]  15 transigation system]  16 transigation system]  17 transigation system]  18 transigation system]		Е
M34 COMBINATION METER TH40FW-NH S 6 7 8 9 10 11 12 13 13 13 13 13 13 13 13 13 13 13 13 13	Signal Name [Specification] CAN-H CAN-L CAN-L VEHICLE SPEED (8-PULSE)	M49   FRONT DISPLAY UNIT		F
Connector No. M. Connector Name Connector Type TI. A.S. H.S. A.S. A.S. A.S. A.S. A.S. A.S	Terminal Color No. of Wire 21 L L 22 P B 31 V	Connector Name   FI   Connector Name   FI   Connector Name   FI   Connector Type   Table   T		G H
NT SYSTEM	orification  to and telephone  toh and telephone  toh and telephone			ı
ENTERTAINMENT SYSTEM M43 COMBINATION SWITCH (SPIRAL CABLE) TKOBFGY-IV  24 25 26 31 32 33 34	Signal Name [Specification] With audio steering switch and telephone] With audio steering switch and telephone] With audio steering switch and telephone			J
WITH DVD EN- Connector No. M33 Connector Name COM Connector TR00 H.S.	Terminal Color No. of Wire 24 BR BR 33 L L	N D D D D D D D D D D D D D D D D D D D		K
Z	lool	[00]		L
BOSE AUDIO WITHOUT NAVIGATIO Connector No. M30 Connector Name STEERING ANGLE SENSOR Connector Type THOBFW-NH  T 2 3 4  T 2 3 4	Signal Name (Specification)	NH  NH  Signal Name [Specification]  Signal Name [Specification]	_	M
M30 WITH W30 WITH M30 WITH W30		M444  M446  TH3ZFW  TH	A	٩V
BOSE AU Connector Nu. Connector Name Connector Type	Terminal Color No. of Wire 1	Connector No.   Connector No.   Connector Name   Connector Type   Connec		0
			JCNWM1885Gł	P

		16 SHELD
Connector No. M67 Connector Name FROMT SOUAWKER RH Connector Type TROZEBR	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   1   BR	M96   Connector Name   WIRE TO WIRE
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM Connector Name FRONT SOUAWKER LH Connector Type TROZFBR Connector Type TROZFBR  Connector Type TROZFBR  Connector Type TROZFBR  Connector Type TROZFBR  Connector Type TROZFBR  Connector Type TROZFBR  Connector Type TROZFBR  Connector Type TROZFBR  Connector Type TROZFBR	Terminal   Color   Signal Name [Specification]   1	45 L
BOSE AUDIO WITHOUT NAVIGATION Connector No. M65 Connector Name FRONT SQUAWKER LH Connector Type TROZEBR	Terminal   Color   Signal Name [Specification]   No. of Wire   Light BOSE system]   2	Connector No.   M77

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Connector No.   MI25		47   0   SIGNAL VOC     49   SHIELD     56   SHIELD     55   SHIELD     56   R   COMM (CON1DISP)     57   R   INVERTER OND     58   BR   INVERTER VCC     59   Y   INVERTER VCC     50   Y   INVERTE		A B C	
11 FG		Connector No. M129 Connector Name System WITHOUT NAVIGATION SYSTEM) Connector Type TH24FW-NH  M1.  17746 45 44 43 42 41140 39 38 37 36 59 58 57 56 55 54 53 52 51 50 49 48	Terminal   Goldor   Signal Name [Specification]     No.	E F G	
WITH DVD ENTERTAINMENT SYSTEM  Connector No. M124  Connector Name WIRE TO WIRE  Connector Type NSIZEBR-CS  ALS.  E 4	O	Connector No. M128 Connector Name AV CONTROL UNIT WITH BOSE System WITHOUT NAVIGATION SYSTEM) Connector Type A12FW  A12 24 30 32  [21 23 25 26 27 28 29 31]	Terminal   Color   Signal Name (Specification]   Color   Signal Name (Specification]   Color   SafeLLITE RADIO SOUND SIGNAL LH (+)   Color   Color	J K	
BOSE AUDIO WITHOUT NAVIGATION  Connector Name BCM (BODY CONTROL MODULE)  Connector Type TH40FB-NH  Connector Type TH40FB-NH  TAS  TEMPORAL PROPERTY OF THAT THAT THAT THAT THAT THAT THAT THA	Ш	Connector No. M127 Connector Type THISTW-GS2  M127 Connector Type THISTW-GS2  M12  M127  M127  M12	Terminal   Color   Signal Name [Speeification]	L  M  AV  O  JCNWM1887GI	

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		14 W iPod SOUND SIGNAL RH (-) 15 SHELD SHELD 16 R AV COMM (+) 17 SHELD GND 21 L IPOd CONNECTION RECOGNITION 22 BR ACCESSORY DETECT 23 R IPOd SOUND SIGNAL CND 24 LG IPOd SOUND SIGNAL LH (+)	
1		Connector No. M148 Connector Type ITHZ4FW-NH  M.S. T 2 3 4 5 6 7 8 9 10 11 12 13 4 5 6 7 18 19 20 21 22 23 24	Terminal   Color   Signal Name   Specification     No.
WITH DVD ENTERTAINMENT SYSTEM Gornector Name SYSTEM WITHOUT NAVIGATION SYSTEM) Gornector Type TH32FW-NH  H3.  G190 88 85 78 86 18 82 87 86 18 18 27 76  G100 88 85 78 86 18 88 87 78 86 18 18 27 77  G100 88 85 78 86 86 81 83 87 77  G100 88 85 78 86 86 81 83 87 77  G100 88 85 78 86 86 81 83 87 77  G100 88 85 78 86 86 81 83 87 77  G100 88 85 78 86 86 81 83 87 77  G100 88 85 78 86 86 81 81 83 87	Terminal   Color   Signal Name (Specification)     No.	119 R SOUND SIGNAL FRONT LH (-)	
BOSE AUDIO WITHOUT NAVIGATION Connector Name AV CONTROL UNIT (WITH BOSE Connector Type THIEFW-NH CONTROL UNIT (WITH BOSE THIEFW-NH CONTROL UNIT (WITH BOSE CONTROL UNIT (WITH	Signal Name [Speeification] SHELD CAMERA MAGE SIGNAL CONPOSITE MAGE SIGNAL[With DVD Buyer] CONNECTION PECOGNITION SHELD[With DVD Buyer] COMPOSITE IMAGE GND]With DVD player]	M 132 AV CONTROL UNIT WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) IH12FW-NH  [14] [16] [16] [17] [18] [19] [100] [10] [11] [11] [11]	Signal Name [Specification] SOUND SIGNAL FEAR RH (+) SOUND SIGNAL FEAR RH (+) SOUND SIGNAL FEAR RH (+) AMP. ON SIGNAL SHIELD SOUND SIGNAL REAR LH (+)[Type B] SOUND SIGNAL REAR RH (+) SOUND SIGNAL RH (+) SOU
BOSE AU Connector Name Connector Name Connector Type H.S.	Terminal   Color	Connector No. Connector Type	Deminal   Color

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## [BOSE AUDIO WITHOUT NAVIGATION]

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- B	Connector No.   M255	A B C
Connector No.   M204	18	E F G
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM   Connector Name   Wife TO Wife   Wife TO Wife TO Wife   Wife TO Wife TO Wife TO Wife   Wife TO Wi	Connector Name	J K
BOSE AUDIO WITHOUT NAVIGATION	Connector No   M253	M AV
	35	Р

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BOSE AUDIO WITHOUT NAVIGATION	BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM			
Connector No. M256	Connector No. M257	G		
Connector Name VIDEO DISTRIBUTOR	Connector Name VIDEO DISTRIBUTOR	38 SHIELD SHIELD 30 V COMM (DISD->DIST)		
Connector Type TH12FW-NH	Connector Type TH16FW-NH			
Ą	1			
	RATE .			
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
	26 28 30 32 34 36 38 40			
121	25 27 29 31 33 35 37 39			
Terminal Color	Terminal Color			
51 B GND	œ			
	L RGB ((			
	27 W RGB GND			
	G RGB (B:B			
	В			
	30 W HP			
	SHIELD			
	B BGB AB			
	5 0			
	SHIFLD			
Connector No. M258	23 P DVD IMAGE SIGNAL	Connector No. M259	13 L	1
Connector Name VIDEO DISTRIBUTOR		Connector Name WIRE TO WIRE		1
			16 G	-
Connector Type TH24FW-NH		Connector Type TH32MW-NH	18 ^	í
			19 F	1
			21	1
			ŀ	1
7		S. F.	J	1
2 4 6 8 10 12 14 16 18 20 22 24		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	t	1
1 3 5 7 9 11 13 15 17 19 21 23		17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	+	
1 2 1 1 1 1 1 1 1 1 1 1 1 1 1			67	ı
			20 50	
L		L	t	
Signal Name [Specification]		æ	5 82	
or wire		No. of Wire	1	ı
1 R AV COMM (H)		- X	ά	O
		3 22	31 R	I
3 R AV COMM (H)		4 SHIELD –		
4 L AV GOMM (L)		- FG -		
6 R COMPOSITE IMAGE GND		- ^ 9		
8 L COMPOSITE IMAGE SIGNAL		7 SHIELD -		
В		- A		
16 B GND		J 9		
G AUX IM		σ		
SHIELD		*		
22 SHIELD SHIELD		:: 0		
		,		

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Name WIRE TO Type GT13SH-	No. of Wire Signal Name (Specification)  1	Connector No.         R1           Connector Name         WIRE TO WIRE           Connector Type         TH16FW-NH           M.S.         R 7 6 5 4 3 2 1           16 15 14 13 12 11 10 9	Terminal Color No. Of Wire 1 R/W 2 R/L -[With telephone without navigation system] 3 B C - [With telephone without navigation system] 4 SHELD	A B C
Name 8/50017 Type GT13SC-77pe GT13SC-70017	No.   Of Wire   Signal Name   Specification	Connector No. M379 Connector Name GLASS ANTENNA Connector Type GT13SON-1/1PP-HU  H.S.	Terminal   Color   Signal Name   Specification	E F G
OVD ENTER Name (COMBIN) Type   TK08FGY	No. of Wire Signal Name [Specification]  14	Connector No. M378 Connector Name AVTENNA BASE (ANTENNA AMP.) Connector Type GT13SSN-1/IPP-HU  H.S.	Terminal   Color   Signal Name [Specification]   No.   of Wire   1   -	J K
AUDIO W. M.	No.   Of Wire   Signal Name (Specification)     1	Connector No. M376 Connector Name WIRE TO WIRE Connector Type GT13SON-2/1PP-HU  H.S.	Terminal Golor Signal Name (Specification)  No. of Wire Signal Name (Specification)  2	M AV

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COMPOSITE MAGE SIGNAL RGB AREA (YS) SIGNAL RGB AREA (YS) SIGNAL VP HP RGB GND
COMPOSITE INAGE SIGNAL RGB AREA (YS) SIGNAL AND VP HP RGB GND RGB GND RGB (BB.LUE) SIGNAL
ROB AREA (YS) SIGNAL  GND  VP  HP  ROB GND  ROB GND  ROB (B B LUE) SIGNAL
GND VP HP HG RGB GND RGB BLUE SIGNAL
VP HP RGB GND RGB GND RGB GND RGB (SORBLUE) SIGNAL
HP RGB GND ROB (SUBLICE) SIGNAL
RGB GND RGB (B:BLUE) SIGNAL
RGB (B:BLUE) SIGNAL
1414010 (1411100 0) 000
RGB (G'GREEN) SIGNAL
RGB (R:RED) SIGNAL
CHIELD
CHIELD
HEADPHONE SOUNDSIGNAL SIGNAL RH (-)
HEADPHONE SOUNDSIGNAL SIGNAL LH (-)
HEADPHONE SOUNDSIGNAL SIGNAL RH (+)
HEADPHONE SOUNDSIGNAL SIGNAL LH (+)

Connector No. R20 Connector Name MICF					_
		Connector No.		R152	
	MICROPHONE	Connector Name		REAR DISPLAY UNIT	
Connector Type TK0	TK04FW	Connector Type	Type	TH32FW-NH	
H.S.	1234	E S.H	2 4 3 5 6	2 4 6 8 10 12 14 16 18 00 22 24 66 28 30 22 13 5 7 9 11 13 15 17 19 21 23 25 27 28 30 31	
Terminal Color No. of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	
1 R/W	MICROPHONE SIGNAL (+)	-	В	GND	
2 R/L ,	MICROPHONE SIGNAL (-XWith telephone without navigation system)	2	В	GND	
4 B	MICROPHONE POWER	က	Y/R	BATTERY	
		4	Y/R	BATTERY	
		2	œ	HEADPHONE ON SIGNAL	
		9	V/Y	ACC	
		8	SHIELD	SHIELD	
		6	>	COMM (DISP->DIST)	

1	1	1	1	1	1	1	-	-	-	=	-	-	-	-
J/X	BR/L	9	V/Y	FG	۸	SHIELD	В	Μ	œ	SHIELD	9	٣	SHIELD	œ
13	14	16	18	21	22	23	24	25	56	27	28	59	30	31

3	WIRE TO WIRE	TH32FW-NH	22 31 30 29 28 27 26 25 24 25 22 21 20 19 16 17	Signal Name [Specification]	1	-	1	_	-	-	-	-	-	-	-
R153	WIRE	TH32	13 12 29 28												
П	Name	Type	16 15 14 30 3 30 30 30 30 30 30 30 30 30 30 30 3	Color of Wire	Y/R	В	SHIELD	PΠ	۸	SHIELD	BR	Υ	SHIELD	M/L	Y/G
Connector No.	Connector Name	Connector Type	₽ HS	Terminal No.	1	2	4	9	9	4	8	6	10	11	12

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# DTC Index

### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display item	Refer to
U1000	CAN COMM CIRCUIT [U1000]	AV-89, "Diagnosis Procedure"
U1010	CONTROL UNIT (CAN) [U1010]	AV-90, "Diagnosis Procedure"

### < ECU DIAGNOSIS >

## [BOSE AUDIO WITHOUT NAVIGATION]

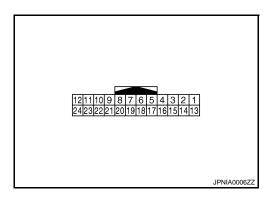
DTC	Display item	Refer to
U1310	CONTROL UNIT (AV) [U1310]	AV-91, "DTC Logic"
U1200	Control Unit FLASH-ROM [U1200]	AV-92, "DTC Logic"
U1216	CAN CONT [U1216]	AV-93, "DTC Logic"
U1243	FRONT DISP CONN [U1243]	AV-94, "Diagnosis Procedure"
U1247	REAR DISP CONN [U1247]	AV-96, "Diagnosis Procedure"
U1250	CAMERA CONT CONN [U1250]	AV-98, "Diagnosis Procedure"
U1255	SAT CONN [U1255]	AV-99, "Diagnosis Procedure"
U1300 U1240	AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]	AV-101, "Description"
U1300 U1246	AV COMM CIRCUIT [U1300]     VIDEO DIST CONN [U1246]	AV-101, "Description"
U1300 U1248	AV COMM CIRCUIT [U1300]     DVD DECK CONN [U1248]	AV-101, "Description"
U1300 U1252	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]	AV-101, "Description"
U1300 U1254	AV COMM CIRCUIT [U1300]     IPod CONN [U1254]	AV-101, "Description"
U1300 U1256	AV COMM CIRCUIT [U1300]     HAND FREE CONN [U1256]	AV-101, "Description"
U1300 U1252 U1256 [*]	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]     HAND FREE CONN [U1256]*	AV-101, "Description"
U1300 U1248 U1252 U1256	AV COMM CIRCUIT [U1300]     DVD DECK CONN [U1248]     REAR CAMERA LAN CONN [U1252]     HAND FREE CONN [U1256]	AV-101, "Description"
U1300 U1246 U1248 U1252 U1254 U1256	<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>VIDEO DIST CONN [U1246]</li> <li>DVD DECK CONN [U1248]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>IPod CONN [U1254]</li> <li>HAND FREE CONN [U1256]</li> </ul>	AV-101, "Description"
U1300 U1246 U1248 U1252 U1256	<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>VIDEO DIST CONN [U1246]</li> <li>DVD DECK CONN [U1248]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>HAND FREE CONN [U1256]</li> </ul>	AV-101, "Description"
U1300 U1240 U1254 [*] U1256 [*]	<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> <li>IPod CONN [U1254][*]</li> <li>HAND FREE CONN [U1256][*]</li> </ul>	AV-101, "Description"
U1300 U1240 U1246 U1248 U1252 U1254 U1256	AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]     VIDEO DIST CONN [U1246]     DVD DECK CONN [U1248]     REAR CAMERA LAN CONN [U1252]     IPOd CONN [U1254]     HAND FREE CONN [U1256]	AV-101, "Description"

### NOTE:

^{*:} Non-equipped item is not displayed.

Reference Values

**TERMINAL LAYOUT** 



### PHYSICAL VALUES

	minal color)	Description			Condition	Reference value		
+	_	Signal name	Input/ Output		Condition	(Approx.)		
1 (B)	Ground	Ground	_	Ignition switch ON	_	0 V		
2 (Y)	Ground	Inverter VCC	Input	Ignition switch ACC	_	9.0 V		
3 (O)	Ground	Signal VCC	Input	Ignition switch ACC	_	9.0 V		
4 (P)	Ground	Composite image GND	_	Ignition switch ON	_	0 V		
5	_	Shield	_	_	_	_		
6 (L)	Ground	RGB signal (G: green)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4 0 -0. 4 SKIB2236J		
7	_	Shield	_	_	_	_		
8 (G)	Ground	Horizontal synchronizing (HP) signal	Output	Ignition switch ON	_	(V) 4 0 → 20µs SKIB3601E		

## [BOSE AUDIO WITHOUT NAVIGATION]

	rminal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
					When RGB image is displayed	5.0 V
9 (W)	Ground	RGB area (YS) signal	Input	Ignition switch ON	When AUX image is displayed	(V) 6 4 2 0 + + 200 μ s PKIB4948J
11 (R)	Ground	Communication signal (CONT→DISP)	Input	Ignition switch ON	When adjusting display brightness.	(V) 6 4 2 0 ++1ms PKIBS039J
13 (BR)	Ground	Inverter GND	_	Ignition switch ON	_	0 V
14 (LG)	Ground	Signal GND	_	Ignition switch ON	_	0 V
15 (L)	4 (P)	Composite image signal	Input	Ignition switch ON	When AUX image is displayed	(V) 0. 4 0 -0. 4 + 40μs SKIB2251J
17 (G)	Ground	RGB signal (R: red)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4 0 -0. 4 + 40μs SKIB2238J
18 (Y)	Ground	RGB signal (B: blue)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0. 4 0



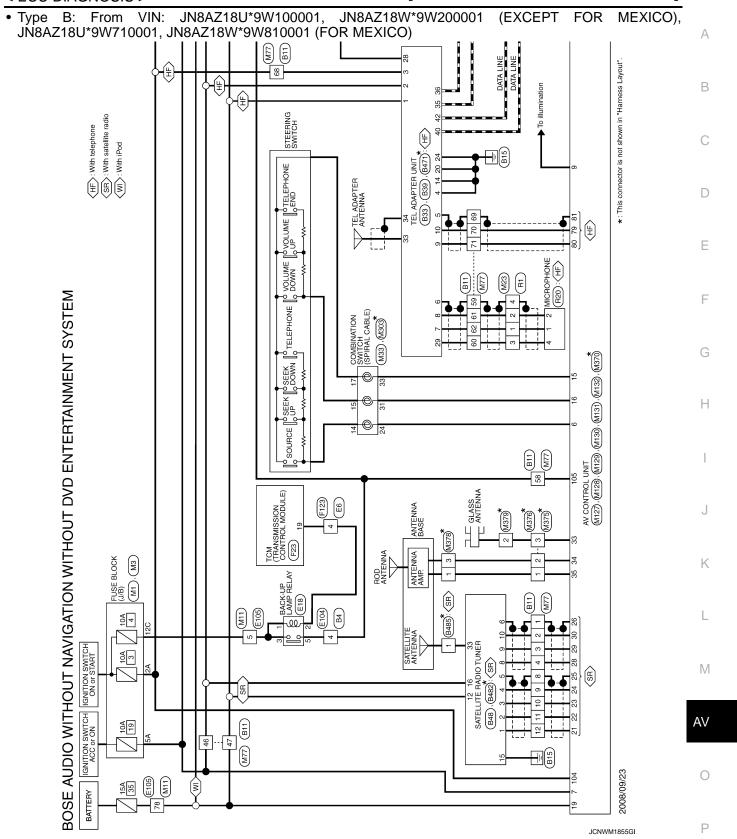
#### < ECU DIAGNOSIS >

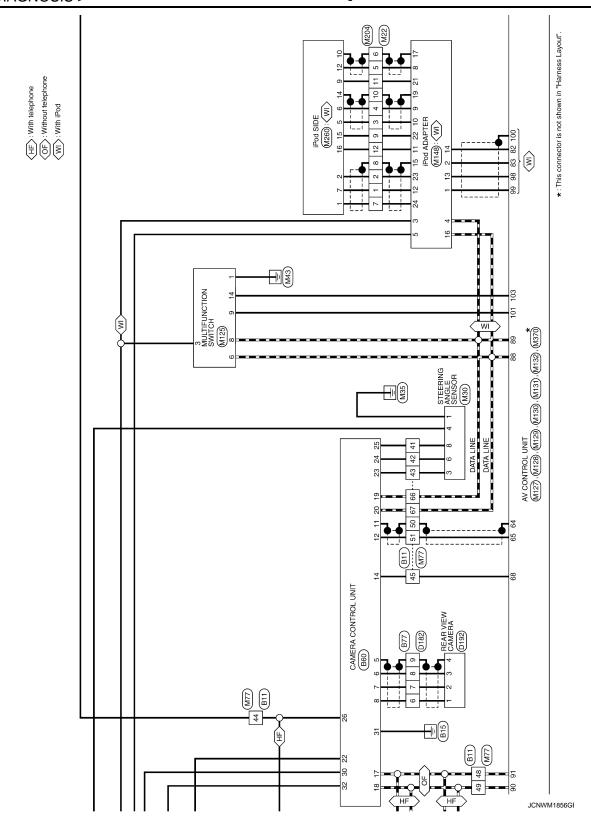
	minal e color)	Description			Condition	Reference value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
19 (B)	Ground	RGB synchronizing signal	Input	Ignition switch ON	_	(V) 4 0 → 20 µs SKIB3603E	
20 (R)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch On	_	(V) 4 0 ++4ms SKIB3598E	
21	_	Shield	_	_	_	_	
22 (G)	Ground	Communication signal (DISP→CONT)	Output	Ignition switch ON	When adjusting display brightness.	(V) 6 4 2 0 •••1ms	
23	_	Shield	_	_	_	_	

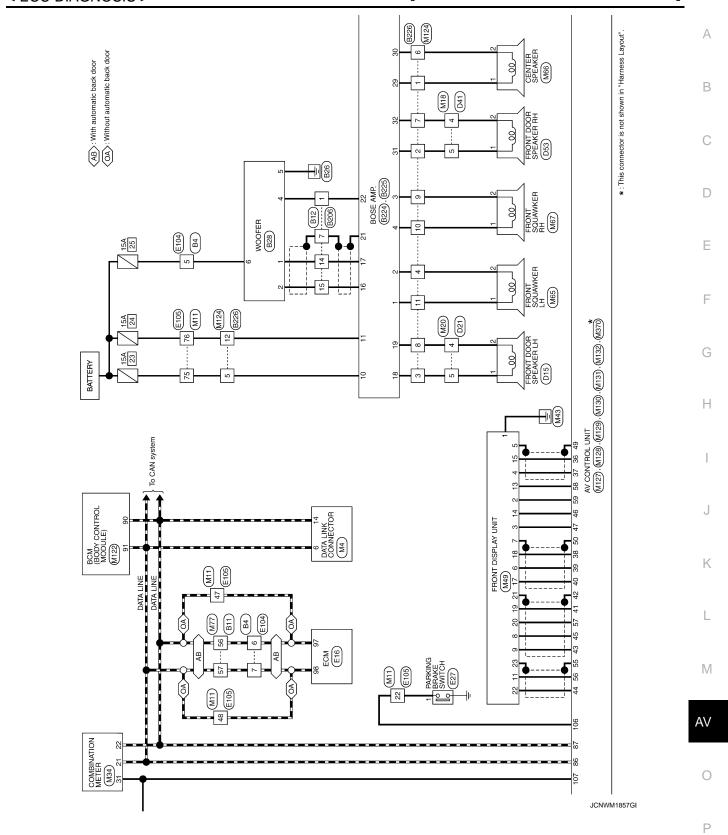
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTER-TAINMENT SYSTEM -

#### NOTE:

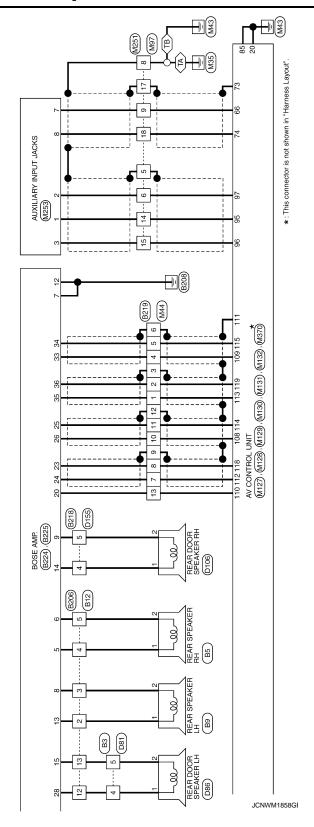
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.
- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)











## [BOSE AUDIO WITHOUT NAVIGATION]

### < ECU DIAGNOSIS >

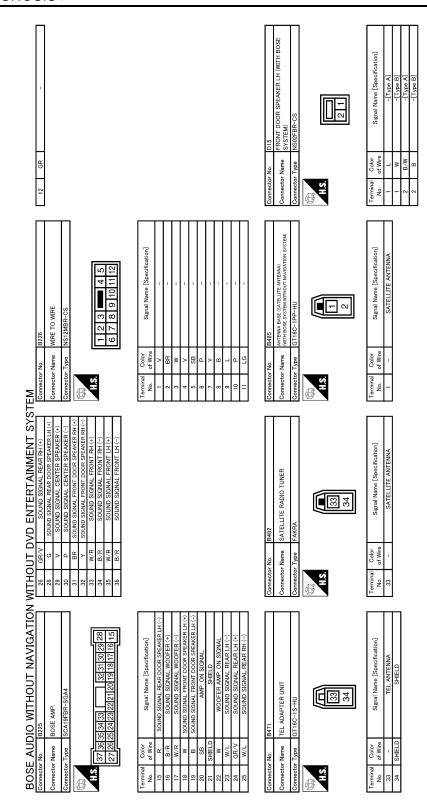
Connector No. B9 Connector Name REAR SPEAKER LH Connector Type TK02FBR	No. Octor Signal Name [Specification] 1 SB	Connector No.   E28   Connector Name   WOOFER	A B C
			Е
BS REAR SPEAKER RH TKRZFBR	Signal Name [Specification]	812 NS16FW-CS Signal Name Signal Name	F
STEM Connector No. Connector Name Connector Type	Terminal Color No. of Wire 1 V Z 2 LG	Connector No.	Н
WITHOUT DVD ENTERTAINMENT SYSTEM  Connector Name WIRE TO WIRE  Connector Type NS16MW-CS  Connector Type NS16MW-CS  LIZIS	Signal Name (Specification)	camera and telephone)	I
VVD ENTERT B4 where TO WHRE TO WHRE [2] [4] [4] [4] [4] [5] [6] [6] [6] [6] [6] [6] [6] [6] [6] [6			J
WITHOUT D'Connector No.	Color   No. of Wire   Color   No. of Wire   Color   Color	45 G G 44 BR 45 C G 44 BR 45 C G 44 BR 45 C G 46 G G 67 C	K
<b>z</b>	ation]	ation]	L
THOUT NAV	Signal Name [Specification]	Signal Name (Speorification)	M
UDIO WI B3 WIRE TO 1 TK10FW-1 17 16	Color 6i Vine 6i 01 Vine 0	MWR TO DO	AV
BOSE ALConnector No. Connector Name Connector Type H.S. 10	Terminal No. 0	Connecton No.   Connecton No.   Connecton No.   Connecton No.   Connecton Type   S.   Connecton No.   Connec	0
			Р

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		22         R         REVERSE           24         SB         SENSOR SIGNAL 1           25         O         SENSOR SIGNAL 2           26         O         SENSOR SIGNAL 3           26         BR         VEHICLE SPEED (9-PULSE)           30         GR         ACC           31         B         GRD           32         V         BATTERY	
EM		Connector No. 860  Connector Name CAMERA CONTROL UNIT  Connector Type TH32FW-NH  H.S.	Terminal   Color
Connector No.   B33   Connector Name   TEL ADAPTER UNIT   Connector Name   TEL ADAPTER UNIT   Connector Name   TEL ADAPTER UNIT   Connector Type   TH32FW-NH   TH3	Terminal   Color   Signal Name [Specification]   Color   1	16 GR AOC	
BOSE AUDIO WITHOUT NAVIGATION Connector Name TEL ADAPTER UNIT Connector Type THOBIN-NH  MAS  15 37 39 41  16 38 38 40 42	Terminal   Color   Signal Name [Specification]   Signal Name   Color   Signal Name   Signal	Connector No.         B48           Connector Name         SATELLITE RADIO TUNER           Connector Type         A16FW           I.S.         2 4 6 7 7 8 9 10 11 13 15           1 3 5 7 8 9 10 11 13 15	Terminal   Color   Signal Name [Specification]   1   W/L   SOUND SIGNAL IH (+)   2   Y/C   SOUND SIGNAL IH (+)   3   Y/C   SOUND SIGNAL IH (+)   4   BR-L   SOUND SIGNAL IH (+)   5   SHIELD   SHIELD

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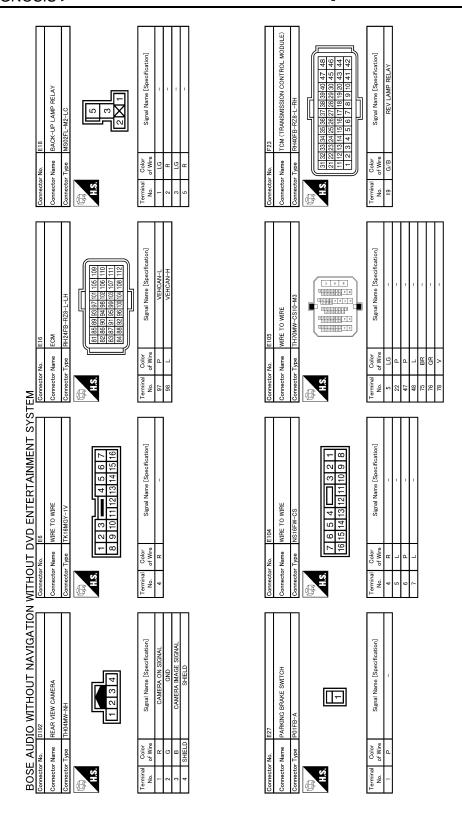
		GND SOUND SIGNAL REAR SPEAKER LH (+) SOUND SIGNAL REAR DOOR SPEAKER RH (+)			A B C
		12 B 13 GR 14 L			D
5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	2 11 12 12 10 11 10 11	Signal Name (Specification)  SOUND SIGNAL FRONT SOUAWKER LH (+) SOUND SIGNAL FRONT SOUAWKER EN (+) SOUND SIGNAL FRONT SOUAWKER RH (+) SOUND SIGNAL FRONT SOUAWKER RH (+) SOUND SIGNAL FRONT SOUAWKER RH (+) SOUND SIGNAL FRAN SPEAKER RH (+) SOUND SIGNAL FRAN SPEAKER RH (+) SOUND SIGNAL FRAN SOFAKER RH (+) SOUND SIGNAL FRAN BOOR SPEAKER RH (-)		E
BZ18 WIRE TO WIRE TK10FW-NS8	Color Color C	BOSE AMP.  BOSE AMP.  SGA1PTBR-SJA  14 13 12	Color  LG SCUND SIGNAL I.  CG SCUND SIGNAL I.  C SCUND SIGNAL I.  C SCUND SIGNAL I.  F SCUND SIGNAL I.  F SCUND SIGNAL I.  F SCUND SIGNAL I.  F SCUND SIGNAL I.  C SCUND SIGNAL I.		F G
Connector No. Connector Name Connector Type H.S. 10 9	No. No.	Connector No. Connector Name Connector Type H.S.	Terminal No. No. 1 1 2 2 2 2 2 4 4 4 4 4 4 4 10 9 9 9 9 9 11 11		Н
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM   Connector Name   WIRE TO WIRE	Signal Name [Specification]				I
VD ENTE BEDGG WIRE TO WIRE NSTGMW-CS	Signal N				J
WITHOUT DVD Connector No. Connector Type NS16 H.S.	Terminal Color No. 1 W 2 GR 3 BR 4 Y Y 4 4 Y Y 5 SHELD 7 SHELD 113 R 113 R 113 R 113 R 115 BR	12 SHELD 13 SB			K
GATION	G	3131	G G		L
JT NAVI	Signal Name [Specification]	0 11 12 13 14	Signal Name (Specification)		M
E AUDIO WITHOU No. 1877  Name WIRE TO WIRE  Type TK/12MW  1 2 6 7 8 9 10	Oolor Signal Name R/L R/W R/W R/W R/W SHIELD	Pr No. R219 Pr Name WIRE TO WIRE Type TH32MW-NH  1 2 3 4 5 6 7 8 9 1  1 1 8 9 0 2 1 22 23 24 25 2	Color W/R W/R W/R W/R Signal Nam W/R SHELD GRV/ SHELD GRV/ W/R W/L		AV
BOSE AU. Connector No. Connector Name Connector Type	Terminal No. No. 9 7 7 7 9 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Connector No. Connector Type  Connector Type  H.S.  1 2	Terminal No		0
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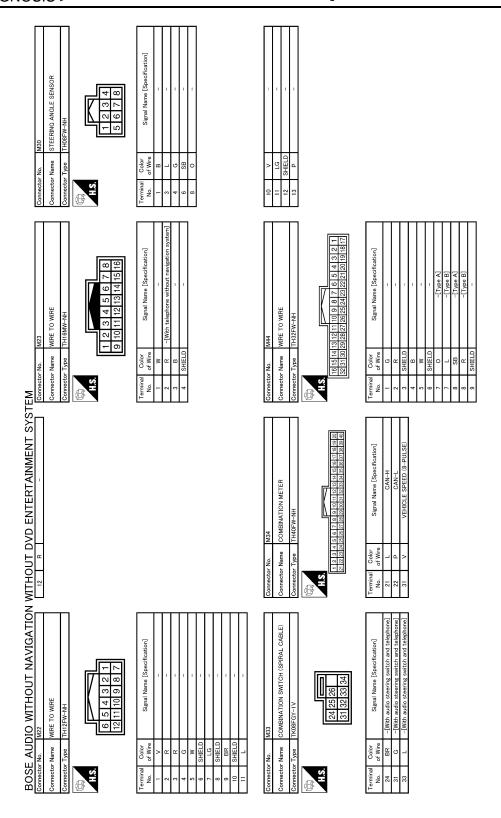
Connector No.   D53	E F
	G
MITHOUT DVD ENTERTAINMENT SYSTEM   Connector Name   WIRE TO WIRE	J K
BOSE AUDIO WITHOUT NAVIGATION  Connector Name WRE TO WIRE  Connector Name Specification  No. of Wire  Signal Name (Specification)  The Lateur Signal Name (Specification)	L M AV

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	Tion]		А
M4  DATA LINK CONNECTOR  BD16FW  9 10 11 12 13 14 15 16   7   8	Signal Name [Specification]		В
	Odlor Si		С
Connector No. Connector Name Connector Type  #:3.	Terminal No. 6 6 14		D
010 000 000 000 000 000 000 000 000 000	Signal Name [Specification]	WIRE  -CS15  -CS16  -CS	Е
M3 FUSE BLOOK (J/B) INST2FW-CS 5C4C 3C2 12011010199807	Signal Name [	No.   M20	F
r No.	Olor Octor O		G
YSTEM Connects Connects Connects AH.S.	Terminal No. 12C		Н
N WITHOUT DVD ENTERTAINMENT SYSTEM  Connector No. MI Connector Name Flust BLOCK (J/B) Connector Type NS08FW-WZ  Som  Som  Som  Som  Som  Som  Som  So	Signal Name [Specification]	No.   M18	I
VD ENTER. MI NSGEW-M2  SA TA EA E	Signal No.	M18 WIRE TO WIRE TH40MW-CS15 TH40MW-CS15 Signal IN Signal IN -[Type A and wit -[Type A and	J
WITHOUT D' Connector Name Connector Type	Terminal Color No. of Wire 2A G 5A R	Compettor No.   Compettor No.   Compettor Name   Commenter Type   Commenter Type   Commenter Type   Compettor Type   Compettor No.   Compett	K
NOITE IN INC.			L
BOSE AUDIO WITHOUT NAVIGATIO Commercion No. F123 Commercion Type Int BFGV-1V    T   E   S   4	Signal Name [Specification]	WIRE CSIO-M3 Signal Name [Specification]	M
UDIO WITH F123  WHE TO WIFE TK18FGY-1V  T 6 5 4 1		MILI TO THE TO T	AV
BOSE AU. Connector Name Connector Type	Terminal Color No. of Wire 4 G/B	Connector No. Connector Name Connector Type  Terminal Color No.  44  47  6  2  2  5  0  22  6  48  1  75  8  78  78	0
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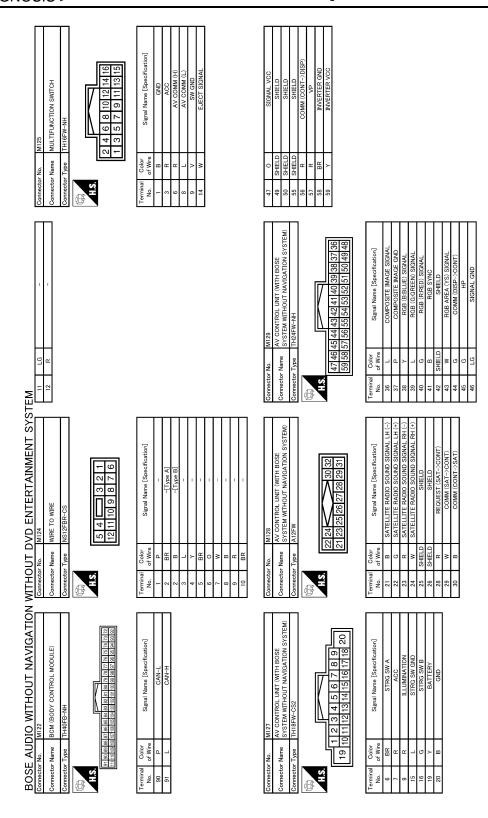
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## [BOSE AUDIO WITHOUT NAVIGATION]

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M66 CEVITER SPEAKER TKOZFBR	Signal Name [Specification]	WIRE TO WIRE THIRPW-CS2    17   16   15   14   13   11   10   19	I	A B
Connector No. M66 Connector Name CENTER Connector Type TKOZFBR	Terminal   Color   No. of Wire   1   P   P   2   O	M87   Commector Name   WIRE TO WIFE		C D
	system]		I	E
M65 FRONT SOUAWKER LH TKGZFBR 2 1	Signal Name [Specification] -[With BOSE system] -[With BOSE system]			F
nector No. nector Type	Color   No. of Wire   LG   Y   Color   T   LG   T   T   T   T   T   T   T   T   T	44 V 44 V 44 V 44 V 47 V 47 V 47 V 47 V		G H
WITHOUT DVD ENTERTAINMENT SYSTEM   14		peo; [Joseph January 1977]	'	I
VD ENTERTAINMENT S' SIGNAL GND/Whoat navigation system] COMPOSITE MACE STOAM/Whoat navigation system] ROBS (RRED) SIGNAL ROBS (RRED) SIGNAL ROBS STOAM COMPOSITE AND STOAM COMPOSITE AND STOAM COMPOSITE AND STOAM COMPOSITE S		WIRE TO WIRE TH80FW-CS19 TH80FW-CS19 Signal Name [Specification]		J
MITHOUT DY 15 L 15 L 16 L 17 C 18 P 19 B 19 B 20 R 21 SHIELD 22 G 23 SHIELD		Connector No.   A   Connector No.   Connector Name   Value   Value	ı	K
	cation] gettion system] atton system] mystem system] mystem system] system] system] system] gatton system]	ocation)		L
MA9 FRONT DISPLAY UNIT TH24FW-NH  10 9 8 7 6 5 4 3 22 21 20 19 18 17 16 15	Signal Name (Specification)  CNO CNO CNO CNO CNO CNO CNO CNO CNO CN	M67 TKGZFBR TKGZFBR Signal Name [Specification]	1	M
M49 M49 FRONT TH24F	Color of Wire B B B B COMPOS SHELD SHIELD COMPOS SHELD SHIELD COMPOS SHELD C COMPOS SHELD C C C C C C C C C C C C C C C C C C C	FRONT S TKOZFBR	A	
BOSE AU Connector Name Connector Type H.S.  1211	Terminal No. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	Connector No. Connector Type Connector Type Connector Type Terminal Odor No.	JCNWM1867GI	0
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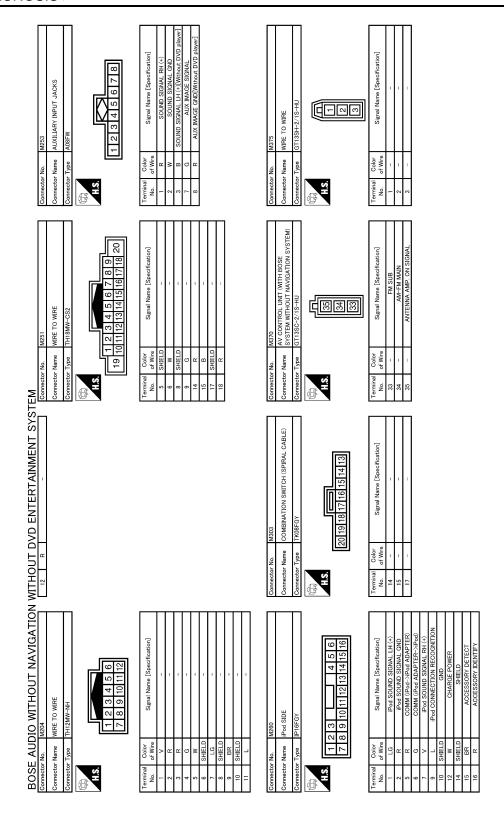
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## [BOSE AUDIO WITHOUT NAVIGATION]

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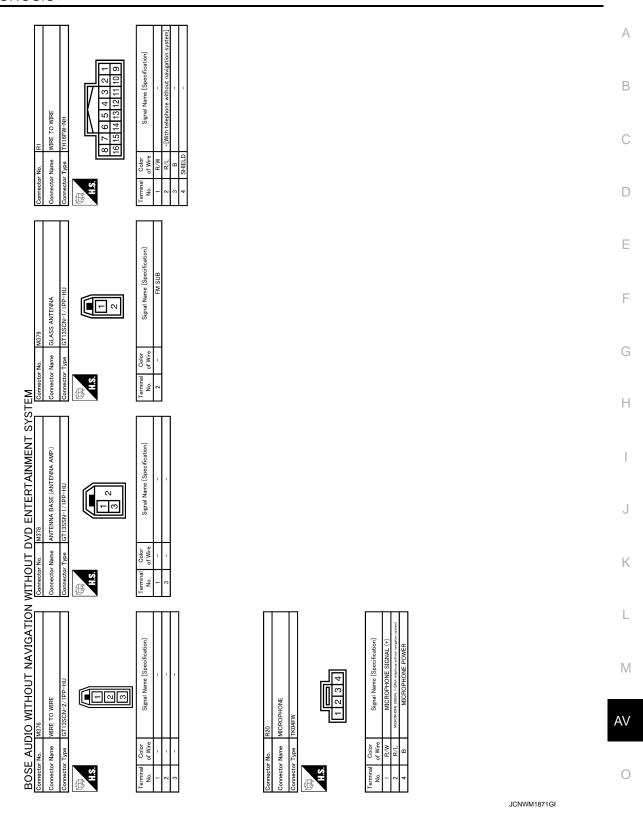
		SHELD   SHELD			A B
		14 15 16 17 17 19 21 22 22 23 23 24			D
	L RH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   LH (+)   L LH (+)   L LH (+)   L LH (+)   L	10 11 12 22 23 24	le (Specification)  D SIGNAL IH (+)  D SIGNAL IH (+)  ACC  ACC  MITERY  ADAPTER->IPO SIGNAL IN THERY  ADAPTER->IPO SIGNAL IN (+)  D SIGNAL IH (+)  D SIGNAL IH (+)  D SIGNAL IH (+)		Е
	AV COMM (L)  AUX SOUND SIGNAL RH (+)  AUX SOUND SIGNAL LH (+)  SHIED SIGNAL LH (+)  SHIED SIGNAL LH (+)  AUX SOUND SIGNAL LH (+)  BARRING SIGNAL SIGNAL LH (+)  AUX SOUND SIGNAL LH (+)  SHIED SIGNAL LH (+)  AUX SOUND SIGNAL LH (+)  BARRING SIGNAL LH (+)  AUX SOUND SIGNAL		Signal Name [Specification] Pod SOUND SIGNAL IH (+) Pod SOUND SIGNAL IH (+) ACC ACC AV COMM (L) BATTERY COMM (Pod ADAPTER-)Pod ACCESSORY IDENTIFY ACCESSORY IDENTIFY Pod SOUND SIGNAL IH (+) Flod SOUND SIGNAL IH (+)		F
	N   N   N   N   N   N   N   N   N   N	No. M148 Name   POd ADAPTER Type   TH24FW-NH	O C C C C C C C C C C C C C C C C C C C		G
TEM	00 00 00 00 00 00 00 00 00 00 00 00 00	Connector No. Connector Name Connector Type H.S. H.S.	Terminal o		Н
	NEN   SYSTEM    100 SYSTEM	NT LH (+)			ı
	Connector Name   Conn	SOUND SIGNAL FRONT LH (~)			J
	No	ж 			
	Connector No   Connector Type   Connec	61			K
	IGA I ION  SYSTEM)  SYSTEM)  I SYSTEM)  TION  I SAY SYSTEM  I SAY SYSTEM	SYSTEM)	## SER H (+)  TR PR (+)  *** TR PR (-)  ** TR PR (-)  *** TR PR (-)  ** TR PR (-)  *** TR PR (-)		L
	M.130  AV CONTROL UNIT (WITH BOSE SYSTEM) THIGFW-NH THIGFW-NH Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] AUX IMAGE SIGNAL [Without DVD blayer] CONNECTION RECOGNITION AUX IMAGE CADD/Without DVD player type a AUX IMAGE CADD/Without DVD player type a AUX IMAGE CADD/Without DVD player type a	M.132 AV CONTROL UNIT (WITH BOSE SYSTEM) THIZEPW-NH  [14 [15] [16] [17] [18] [19] [108] [109] [10] [11] [11]	Name [Specific Specific Specific Strong From Signal From WP. ON SIGNAL FROM NAL REAR LH NAL REAR LH SIGNAL FROM SIGNAL FROM NAL REAR LH		M
		AV CONTROL L SYSTEM WITHO TH12FW-NH 114 115 116 108 109 110 1			AV
	Connector No.	Connector No. Connector Name Connector Type	Color   Colo		0
		[이 이 이 [딸 <b>]</b>	<u> -                                     </u>	JCNWM1869GI	_
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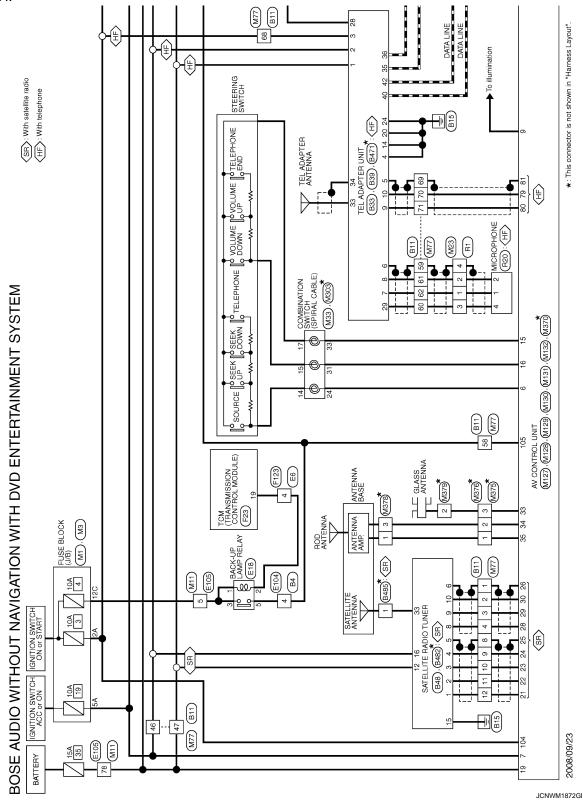
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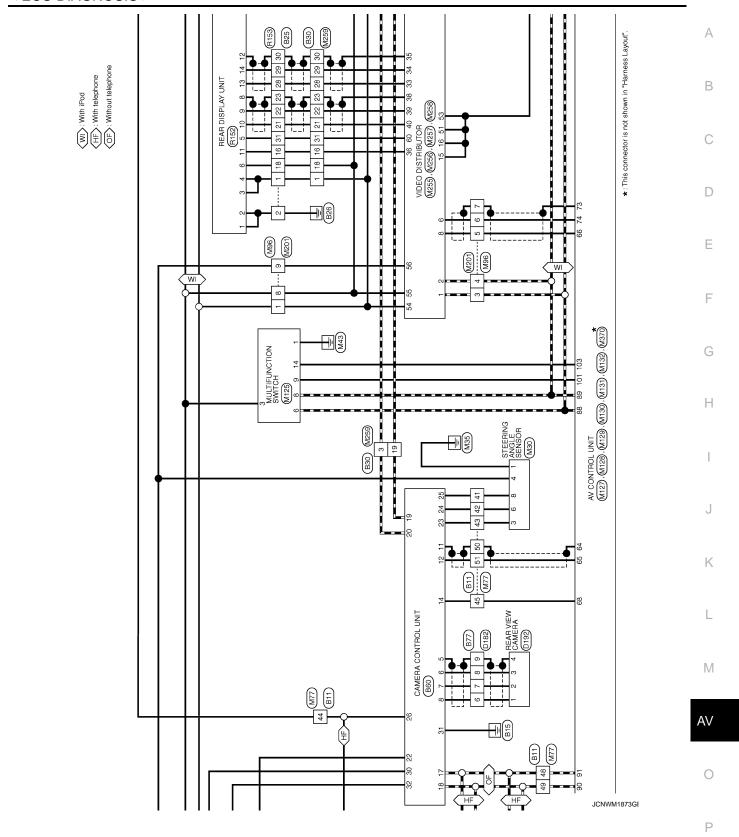


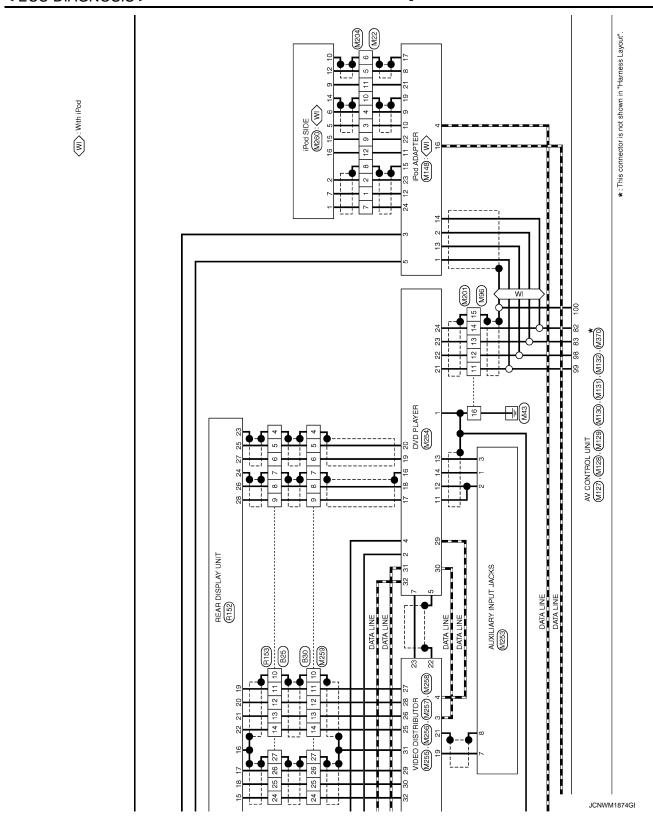
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

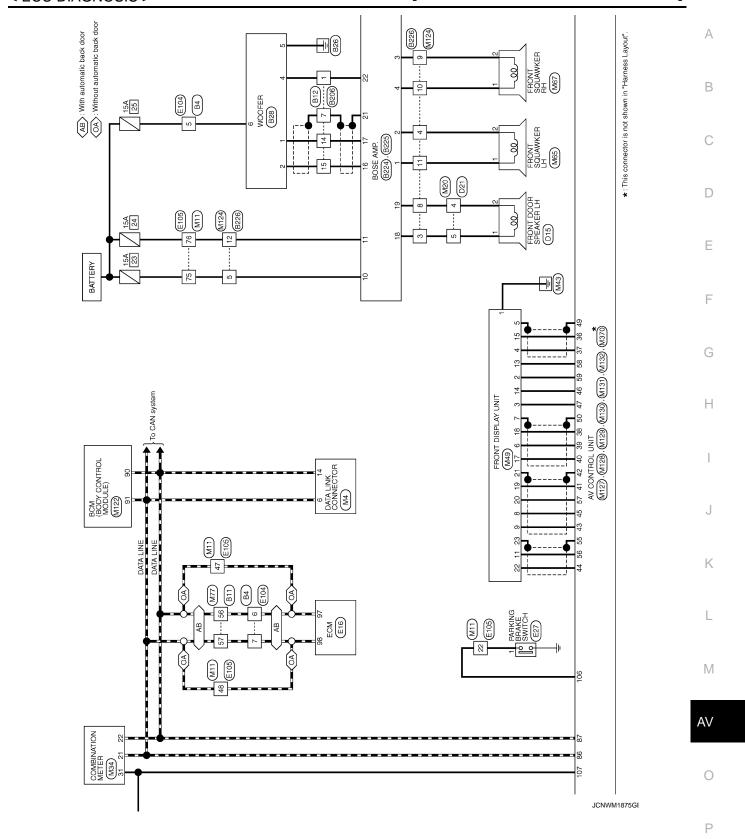
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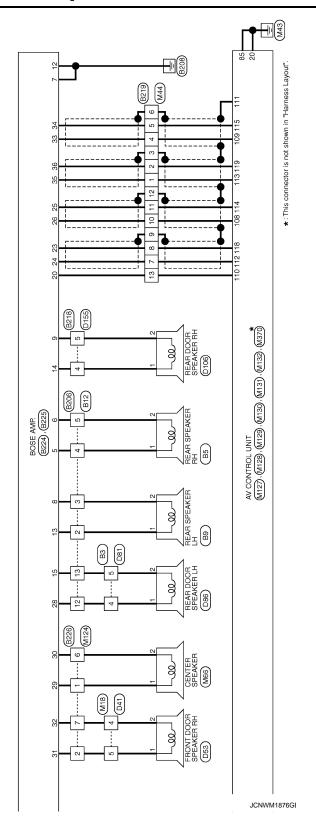
In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.





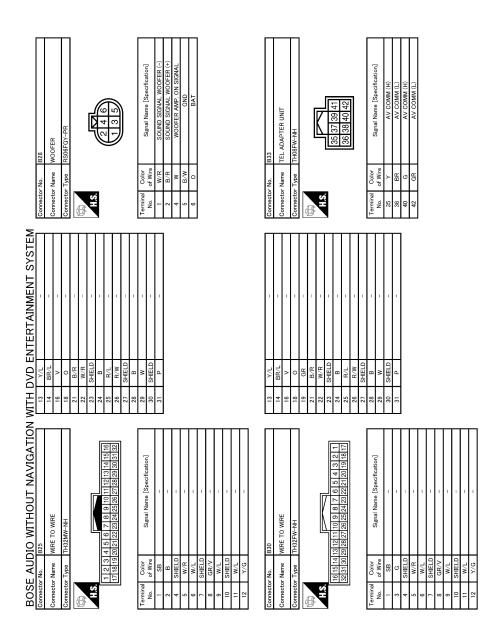






	ntion]			Α
2 1	Signal Name (Specification)			В
REAR SPE TKOZEBR	Color S SB SB GR			С
Connector No. Connector Name Connector Type	Terminal No.			D
	pecification)	9 B   1		Е
BIS REAR SPEAKER RH TKUZPERR  Z 1	Signal Name (Specification)	Signal Name (Specification)		F
r No.	Color of Wire LG	Name		G
	Terminal No. 1	Commetto Commetto Commetto Commetto Terminal No. 1		Н
NMENT SYSTE	Signal Name [Specification]			I
ENTERTAIN  84  WIRE TO WIRE  NSTGMW-CS  1 2 3	Signal Na	-[With rear viev		J
WITH DVD Ellowastor No. B Connector Name M Connector Type M H.S. H.S.	Terminal Color No. of Wire 4 A B B C C C C C C C C C C C C C C C C C	44 44 68 68 88 88 88 88 88 88 88 88 88 88 88		K
NOI Comm		444444449999999999999		L
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	Signal Name [Specification]	CSURE		M
AUDIO WITHOUNT No. 83  Neme WIRE TO WIRE  Type   TK10FW-NSS		MIRE TO DESCRIPTION OF THE STATE OF THE STAT		AV
BOSE AU Connector No. Connector Name Connector Type 18 10 9	No of Wire 5 0	Connector Name Connector Type  Terminal Color No. of Wie 1 SHELD 2 BE 8 SHELD 10 V/G 11 V/L 11 W/L 12 W/L 11 W/L 12 W/L 11 W/L 12 W/L 12 W/L 13 W/L 14 O 15 W/L 16 W/L 17 W/L 18 W/L 19 W/L 11 W/L 12 W/L 12 W/L 12 W/L 13 W/L 14 O 15 W/L 15 W/L 16 W/L 17 W/L 17 W/L 18 W/L 18 W/L 19 W/L 11 W/L 12 W/L 12 W/L 12 W/L 13 W/L 14 O 15 W/L 15 W/L 16 W/L 17 W/L 17 W/L 18 W/L 18 W/L 19 W/L		0
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## [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

16 GR ACC		Connector No. 8206  Connector Name WIRE TO WIRE  Connector Type INSTRAM"-CS  1 2 3	Terminal No.         Color of Wire         Signal Name (Specification)           1         W         -           2         GR         -           3         ER         -           4         Y         -           5         SHELD         -           7         SHELD         -           12         G         -           14         W/R         -           14         W/R         -           15         B/R         -		A B C
		Com	No. ni. ni. ni. ni. ni. ni. ni. ni. ni. ni		
14 16 13 15	(cation) H (-)		[cation]		Е
48 ATELLITE RADIO TUNER 16FW 6 7 8 9 10 11	Signal Name [Specification] SOUND SIGNAL LH (-) SOUND SIGNAL LH (-) SOUND SIGNAL RH (-) SHELD REQUEST (SAT->CONT) COMM (CONT->CONT) CONTROL	917 WIRE TO WIRE TKI 2MW  1 2	Signal Name (Specification)		F
127	Color   Of Wire   Of Wire   V/L   V/L   V/G   BR/L   SHIELD   SHIELD   R/W   R/L   B   B   C   C   C   C   C   C   C   C		of Wire for Wire R/L R/W B SHIELD		G
	Terminal No. 10. 2 2 2 3 4 4 4 4 6 6 6 6 6 10 10 11 12 11 12 11 12 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15	Connector No. Connector Typ	Terminal No. 6 6 7 8 8 9 9		Н
ENTERTAINMENT SYSTEM CONTROL SIGNAL CONTROL SIGNAL VEHICLE SPEED (8-PULSE) MICROPHONE VCC		REVERSE SENSOR SIGNAL 1 SENSOR SIGNAL 2 SENSOR SIGNAL 2 SENSOR SIGNAL 3 VEHICLE SPEED (8-PULSE) GND BATTERY			I
TERTA CC CC VEHICL MICL		SE S			J
WITH DVD  20		22 R 23 G 24 S 25 G 25			К
N N N N N N N N N N N N N N N N N N N		330			L
AUDIO WITHOUT NAVIGATION No. 839 Nume TEL ADAPTER UNIT Nype THR32FW-NH    16   8   10   12   14   16   18   22   22   22   22   23   23   23   2	Signal Name (Specification) BATTERY ACC IGNITION GND SHIELD SHIELD MICROPHONE SIGNAL, TEL VOICE SIGNAL (*) TEL VOICE SIGNAL (*) TEL VOICE SIGNAL (*)	INTROL UNIT	Signal Name (Steerfication) SHELD CAMERA MAGE SIGNAL GNO CAMERA IN SIGNAL SHIELD CAMERA IN REGORDAL CONNESTION RECOGNITION AV COMM (H)		M
E AUDIO WITHOU  The B39  The Abapter unit  Type TH32FW-NH  TH3E B1012[416]8[27]		7 No. B60  Antibode CAMERA CO  Type TH32FW-NH  2   4   6   10   2   4    1   3   5   7   9   11   13    1   3   5   7   9   11   13	ig		AV
BOSE AUD Connector No. Connector Name Connector Type H.S. H.S. T. 2   6   8	Terminal Color No. of Wire 1 V 2 GR 3 RW 4 BVW 5 SHELD 6 SHELD 7 R/W 10 W/R 11 W/R	Connector No. Connector Type Connector Type  A.S.  A.S	Terminal Color No. of Wire No. of Wire S HELD 6 B HELD 17 R/W 8 R/L 11 SHELD 11 B HELD 11 B HELD 11 B R 11		0
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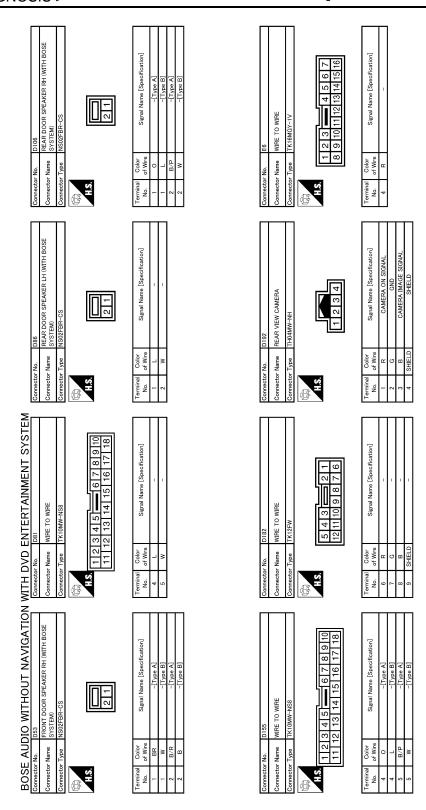
		26 GR/V   SOUND SIGNAL REAR RR.     28 G   SOUND SIGNAL CEATURE SPE.     30 P   SOUND SIGNAL CEATURE SPE.     31 ER   SOUND SIGNAL FROWTE SPE.     32 Y   SOUND SIGNAL FROWT DOOR SPEA.     34 EA/R   SOUND SIGNAL FROWT RR.     35 W/R   SOUND SIGNAL FROWT RR.     36 B/R   SOUND SIGNAL FROWT RR.     37 W/R   SOUND SIGNAL FROWT RR.     38 EA/R   SOUND SIGNAL FROWT RR.     39 EA/R   SOUND SIGNAL FROWT RR.     30 EA/R   SOUND SIGNAL FROWT RR.     31 EA/R   SOUND SIGNAL FROWT RR.     32 EA/R   SOUND SIGNAL FROWT RR.     33 EA/R   SOUND SIGNAL FROWT RR.     34 EA/R   SOUND SIGNAL FROWT RR.     35 EA/R   SOUND SIGNAL FROWT RR.     36 EA/R   SOUND SIGNAL FROWT RR.     37 EA/R   SOUND SIGNAL FROWT RR.     38 EA/R   SOUND SIGNAL FROWT RR.     39 EA/R   SOUND SIGNAL FROWT RR.     30 EA/R   SOUND SIGNAL FROWT RR.     30 EA/R   SOUND SIGNAL FROWT RR.     30 EA/R   SOUND SIGNAL FROWT RR.     31 EA/R   SOUND SIGNAL FROWT RR.     32 EA/R   SOUND SIGNAL FROWT RR.     33 EA/R   SOUND SIGNAL FROWT RR.     34 EA/R   SOUND SIGNAL FROWT RR.     35 EA/R   SOUND SIGNAL FROWT RR.     36 EA/R   SOUND SIGNAL FROWT RR.     37 EA/R   SOUND SIGNAL FROWT RR.     38 EA/R   SOUND SIGNAL FROWT RR.     38 EA/R   SOUND SIGNAL FROWT RR.     39 EA/R   SOUND SIGNAL FROWT RR.     30 EA/R   SOUND SIGNAL FROM RR.     30 EA/R   SOUND SIGNAL FROM RR.     30 EA/R   SOUND SIGNAL FROM RR.     31 EA/R   SOUND SIGNAL FROM RR.     32 EA/R   SOUND SIGNAL FROM RR.     33 EA/R   SOUND SIGNAL FROM RR.     34 EA/R   SOUND SIGNAL FROM RR.     35 EA/R   SOUND SIGNAL FROM RR.     35 EA/R   SOUND SIGNAL FROM RR.     36 EA/R   SOUND SIGNAL FR	
		BOSE AMP.  Scaligher-Sca4  36 35 34 33	Signal Name [Specification] SOUND SIGNAL REAR DOOR STEAKER LH (-) SOUND SIGNAL WOOFER (-) SOUND SIGNAL WOOFER (-) SOUND SIGNAL FRONT DOOR STEAKER LH (-) SOUND SIGNAL FRONT DOOR STEAKER LH (-) SOUND SIGNAL REAR LH (-)
88 88 0.00 0.00 0.00 0.00 0.00 0.00 0.0		Connector No. Connector Type H.S. 37 36	Color   Color     No.   Of Wire     15   R     16   B/R     17   W/R     18   W     19   B     20   SHIELD     21   SHIELD     22   W     23   W/L     24   W/L     25   W/L     25   W/L     26   W/L     27   W/L     28   W/L     29   W/L     20   W/L     21   W/L     22   W/L     23   W/L     24   W/L     25   W/L     26   W/L     27   W/L     28   W/L     29   W/L     20   W/L     20   W/L     21   W/L     22   W/L     23   W/L     24   W/L     25   W/L     26   W/L     27   W/L     28   W/L     28   W/L     29   W/L     20   W/L     20   W/L     20   W/L     20   W/L     21   W/L     22   W/L     23   W/L     24   W/L     25   W/L     26   W/L     27   W/L     28   W/L     28   W/L     29   W/L     20   W/L     20   W/L     20   W/L     20   W/L     21   W/L     22   W/L     23   W/L     24   W/L     25   W/L     25   W/L     26   W/L     27   W/L     28   W/L     38   W/L
	No. of Vivre Signal Name Lispecintation]  2 B.RR	12   B   GN   SOUND SIGNAL REAR SPEAKER LH (+)   14   L   SOUND SIGNAL REAR DOOR SPEAKER RH (+)	
DIO WITHOUT NA B218 WIRE TO WIRE TKUGFW-NS8 17 16 15 14 13 17 16 15 14 13	Ш	8224 BOSE AMP. SGA (ZEBR-S.)AZ 4 113 12 11 10 1 8 7 6 5 4 3 2 1	Signal Name (Specification) SOUND SIGNAL FRONT SQUAWKER LH (+) SOUND SIGNAL FRONT SQUAWKER HH (-) SOUND SIGNAL FRONT SQUAWKER RH (+) SOUND SIGNAL FRONT SQUAWKER RH (+) SOUND SIGNAL FRONT SPEAKER RH (+) SOUND SIGNAL FEAR SPEAKER RH (+) SOUND SIGNAL FEAR SPEAKER HH (+) SOUND SIGNAL FEAR SPEAKER HH (+) SOUND SIGNAL FEAR SPEAKER HH (-)
BOSE AUC Connector No. Connector Name Connector Type 10 9 18 10 9 Terminal Color			Color   Order   Orde
BOSE Connecto Connecto	S 4 w	Connectt Connectt Connectt H.S.	Terminal No. No. 1 1 2 2 3 3 4 4 4 5 5 5 9 9 9 9 110

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## [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

Connector No. B482 Connector Name SATELLITE RADIO TUNER Connector Type FAKRA  ##8	Terminal Color Signal Name [Specification]  No. of Wire SATELLITE ANTENNA  SATELLITE ANTENNA	Connector Name WIRE TO WIRE  Connector Type TH40FW-CS15  (15 14 13 12 11 10 9 8 7 6 5 4 3 2 1  MSG 18 15 11 10 9 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	No.   Color   Signal Name [Specification]     No.   of Wire   Signal Name [Specification]     4   B/R   -[Type B]     5   W   -[Type B]     5   W   -[Type B]		A B C
Connector No.   B471   Connector Name   TEL ADAPTER UNIT   Concector Type   GTIEC-1S-HU   Connector Type   GTIEC-1S-HU   GTIEC	Terminal   Color   Signal Name [Specification]   Terminal   Color   Signal Name [Specification]   Terminal   Signal Name [Specification]   Terminal   Signal Name [Specification]   Terminal   Signal Name   Signa	Corrector Name         WIRE TO WIRE         Corrector Name         WIRE TO WIRE           Connector Name         WIRE TO WIRE         Connector Name         Connector Name           Connector Name         Th40PW-CS15         Connector Name         Connector Name           MA         Trial 13   21   10   9   8   7   6   4   3   2   1         Connector Name         Connector Name	Terminal   Color   No.   Of Wire   Signal Name [Specification]   Terminal   Color   A   B   Color   Color		E F G
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM           Downwetor No.         8226           Downwetor No.         8226           Downwetor No.         8226           Downwetor No.         12		Connector No. D15 Connector Name SYSTEM) Connector Type NSOZFBR-CS H.S. H.S.	Terminal   Color   Signal Name [Specification]		J K
BOSE AUDIO WITHOUT NAVIGATION  Connector No. 8226  Connector Name WIRE TO WIRE  Connector Type INSIAMBR-CS  ##3.      2   3       4   5	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   No. of Wire   No. o	Connector No. B465 Connector Name AMERINA BASE SATELLITE AMERINA) Connector Type GT16C-1PP-HU  Liph  H.S.	Terminal Color No. of Wire Signal Name [Specification]	JCNWM1881GI	M AV
					Р

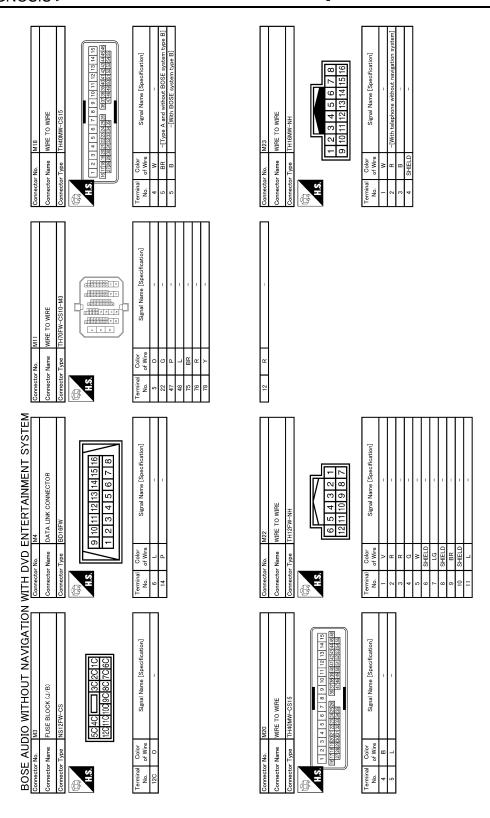


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## [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

BOSE AUDIO WITHOUT NAVIDATION WITH DAD ENTERTAINMENT SYSTEM    Contract to the property of the	Connector No.   E104   Connector Name   WIRE TO WIRE   Connector Type   NS16FW-CS	Connector No.   M1   Connector Name   FUSE BLOCK (J/B)	A B C
DOSE AUDIO WITHOUT NAVIOATION WITH DVD ENTERTAINMENT SYSTEM  Connector has going to the connector has	Connector Connec	Oomeeto Comeeto No. 5A 5A 5A	D
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM    Concessor Name   Est	effoation]	oification]	Е
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM    Commont of the common   Common of the	A A Signal Name (Spe	3 WIFE Signal Name (Spe	F
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTANIMENT SYSTEM  Connector No.   Final   Connector No.   Connector	olor olor		G
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM  Consecutor like 1616  Conse	Connector Connector Connector Connector I eminal No.	Connector Connector Connector Terminal No. 4	Н
Connector Name   ECM   Connector Name   ECM   Connector Name   ECM   Connector Name   ECM   Connector Type   RH24F3-F28-L-LH	NMENT SYSTEM RELAY  The state of the state o	SION CONTROL MODULE)  141  152  153  154  155  155  155  155  155  155	I
Connector Name   ECM   Connector Name   ECM   Connector Name   ECM   Connector Name   ECM   Connector Type   RH24F3-F28-L-LH	Signal N	(TRANSMISS)	J
Connector Name   EM	Connector No. E18 Connector No. E18 Connector Type MXXX  A.S. The Connector Type Color No. of Wire 1 LG 1 LG 2 R 3 LR 3 LR 5 R		К
JCNWM1883GI	NOTE THE TOTAL PROPERTY OF THE TOTAL PROPERT		L
JCNWM1883GI	CHOUT NAVIG	RE Silo-M3	М
JCNWM1883GI	AUDIO WI   E16   Name   ECM   Type   RH24FB-R   RH24F	F   F   F   F   F   F   F   F   F   F	AV
	BOSE Connector Connector Connector Connector No. 097	Connector Connec	0
		JCNWM188	

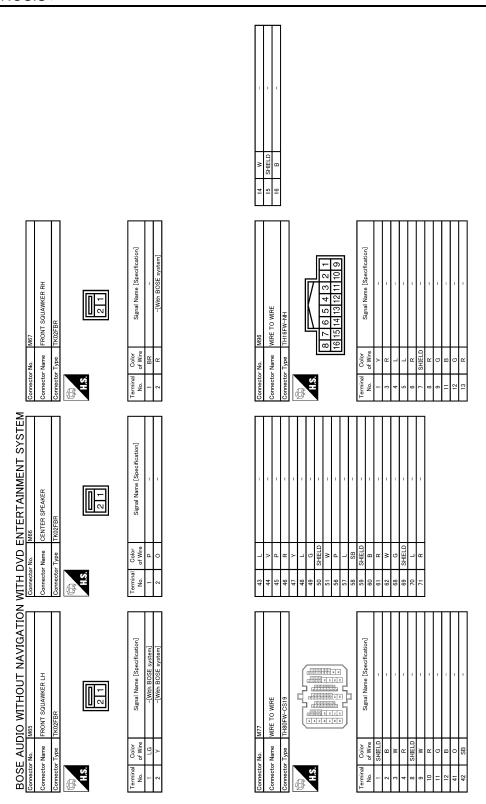


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## [BOSE AUDIO WITHOUT NAVIGATION]

		SIGNAL GND Without navigation system    COMPOSITE MACE SIGNAL Without navigation system    RGB (BRLID) SIGNAL Without navigation system    RGB (BRLID) SIGNAL Without navigation system    RGB (SYNC   VP   VP   VP   VP   VP   VP   VP   V			В
		14 LG 15 C C C C C C C C C C C C C C C C C C C			D
2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	fication]	3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ification]  wigation system]  giggetion system]  ton weaten system]  ton wigation system]  ton system]  Signal,  OISP)		Е
ON METER 00 11 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Signal Name (Specification) CAN-H CAN-H CAN-L CAN-L CAN-L	PISPLAY UNIT	Signal Name [Specification]  GND GND SIGNAL VOC(Without navigation system) SIGNAL VOC(Without navigation system) SHELD(Without navigation system) SHELD(Without navigation system) RGGEREN SIGNALINGOR navigation system) RGGEREN SIGNALINGOR navigation system] RGGEREN SIGNALINGOR navigation system] RGG AREA (VS) SIGNAL COMM (CONT->DISP) INVERTER GND[Without navigation system)		F
No. Name Type	Of Wire of P Color	or No. M49 or Name FRONT or Type TH24F 12 11 10 9 24 23 22 21	Oolor of Wire B B B B P Y Y Y Y Y Y SHIELD C SHIELD G G G G B B B B B B B B B B B B B B B		G
	Terminal No. 18 2 2 2 2 2 2 2 2 2 3 1 2 2 2 2 2 2 2 2 2	Connect Connect H.S.	Terminal No. 1 2 2 2 2 3 3 3 4 4 4 6 5 6 6 6 6 6 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1		Н
ENTERTAINMENT SYSTEM M33 COMBINATION SWITCH (SPIRAL CABLE) TKOSFCY-1V  24 25 26 31 22 33 34	Signal Name [Specification] -[With audio steering switch and telephone] -[With audio steering switch and selephone] -[With audio steering switch and delephone]				I
NTERTAIN M3 COMBINATION SW KGBFGY-1V  24 25 26 31 32 33	Signal Na Signal Na With audio stee With audio stee				J
WITH DVD E	Terminal Color   No. of Wire   24   31   C   1   1   2   33   C   1   1   1   2   33   C   1   1   1   1   2   33   C   1   1   1   1   1   1   1   1   1	10 V 11 LG 12 SHELD 13 P			K
SATION		2 1 18 17			L
BOSE AUDIO WITHOUT NAVIGATIO	Signal Name (Specification)	8 7 6 5 4 3 24 23 22 12 01 19	Signal Name [Specification]		M
DIO WITH HOBEW-NH		or No. M44  or Name WIRE TO WIRE  or Type TH32FW-NH  TI6 15 14 13 12 11 10 9			AV
BOSE AUI Connector No. Connector Type Connector Type H.S.	Terminal   Color     No. of Wire     No. of Wire     1   1     4   0     6   SB     8   0     9   0     1   0     1   0     2   0     3   0     4   0     5   0     6   0     7   0     8   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0     9   0	Connector No. Connector Name Connector Type H.S. (E   5  14	Terminal   Color		0
				JCNWM1885GI	D

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JCNWM1886GI

Connector No. M125  Connector Type TH16FW-NH  Connector Type TH16FW-NH  Terminal Color Signal Name [Specification]  No. of Wive Signal Name [Specification]  1 8 R AV COMM (1)  8 L AV COMM (1)  9 V SW COMM (1)  14 W EJECT SIGNAL	47 O SIGNAL VCC 49 SHELD SHELD 50 SHELD SHELD 55 SHELD SHELD 56 R COMM CONT-DISP) 57 R VP 58 BR INVERTER CND 59 Y INVERTER VCC	A B C
12 R R	Connector No.   M129	E F G
MITH DVD ENITERTAINMENT SYSTEM   Connector No.   Mi24   Connector Name   WIRE TO WIRE   Connector Name   WIRE TO WIRE   Connector Type   NISTRR-CS   Standard   Sta	Av CONTROL INIT WITH BOSE   Av CONTROL INIT WITH BOSE	J K
BOSE AUDIO WITHOUT NAVIGATION Connector Name BCM (BODY CONTROL MODULE) Connector Type TH40FB-NH  Connector Type TH40FB-NH  Connector Type TH40FB-NH  The Color Signal Name (Specification) 90 P CAN-H 91 L CAN-H	Connector No.   M127   Connector No.   M127   Connector Name   SYSTEM WITHOUT NAYGATION SYSTEM   Connector Type   THISPW-CS2   THISPW	M AV
		Р

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		14   W   Prod SOUND SIGNAL RH (~)     15   SHIELD   SHIELD     16   R	
99 G SOUND SIGNAL LH (-)[With DVD player] 99 B SOUND SIGNAL LH (-)[With DVD player] 100 SHIELD SIGNAL LH (-)[With DVD player] 101 V SHIELD SIGNAL LH (-)[With DVD player] 103 W RUD 104 G SHIELD SIGNAL LH (-)[With DVD player] 105 SB RUD 106 SB REVERSE 107 V SHIELD SIGNAL 108 G PARRING BRAKE 109 S B PARRING BRAKE 109 TO VEHICLE SPEED (8-PULSE)		Connector No. MI48 Connector Nane Prod ADAPTER Connector Type TH24FW-NH  12 3 4 5 6 7 8 9 10 11 12  13 14 15 16 17 18 19 20 21 22 23 24	Terminal   Color   Signal Name   Specification   1   BR   Page   Specification   1   BR   Page   Specification   1   Page   Page
BOSE AUDIO WITHOUT NAVIGATION   WITH DVD ENTERTAINMENT SYSTEM	Termina   Color   Signal Name [Specification]     No. of Wire   Signal Name [Specification]     19	119 R SOUND SIGNAL FRONT LH (~)	
M 130	Color   Signal Name [Specification]	M 132  AV CONTROL UNIT (WITH BOSE AV CONTROL UNIT) (WITH BOSE	Color   Signal Name [Specification]     V   SOUND SIGNAL REAR RH (+)     P   AMP. ON SIGNAL REAR RH (+)     SOUND SIGNAL REAR LH (+)     SOUND SIGNAL REAR LH (+)     SOUND SIGNAL REAR LH (+)     SOUND SIGNAL REAR RH (
BOSE AU Connector No. Connector Type Connector Type H.S.	Terminal Co. No. of No.	Connector No. Connector Name Connector Type H.S.	Terminal OC No. 0f 1 108 1109 1112 1112 1113 1115 1115 1115 1115 1118 1118 1118

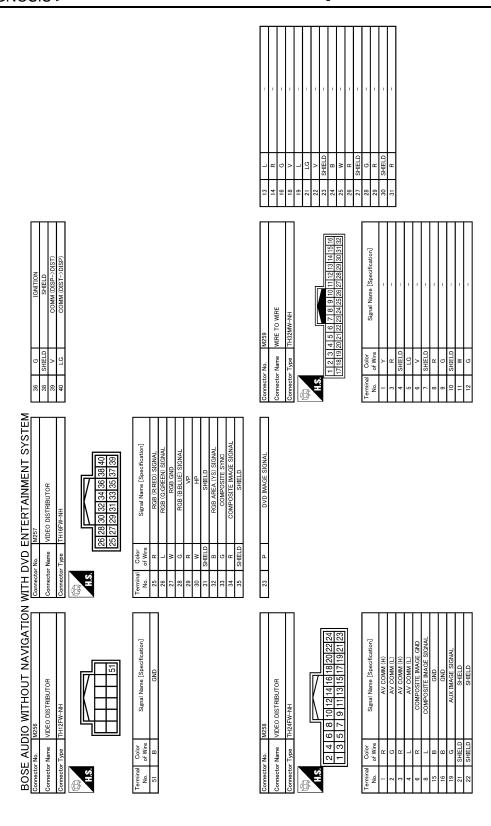
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## [BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

22 22	Connector No.   M255	54 Y   BATTERY   55 W   ACC   56 G G   HEADPHONE ON SIGNAL   HEA	A B C
Mizo4   Connector Name   WIRE TO WIRE   Connector Name   WIRE TO WIRE	18		E F G
WITH DVD ENTERTAINMENT SYSTEM	M254   Connector No.   M254   Connector Name   DVD PLAYER   Connector Type   TH32FW-NH   TH32FW-NH   TH32FW-NH   Th3   Th3	2 Y ACCOUNTY 4 V ACC 5 SHELD SHELD 7 P DVD IMAGE SIGNAL 11 B AUX SOUND SIGNAL LH (-) 12 W AUX SOUND SIGNAL LH (-) 13 G AUX SOUND SIGNAL LH (-) 14 R AUX SOUND SIGNAL LH (-) 15 SHELD 16 SHELD 17 G HADPHONE SOUNDSIGNAL SIGNAL LH (-) 17 G HADPHONE SOUNDSIGNAL SIGNAL LH (-)	J K
BOSE AUDIO WITHOUT NAVIGATION  Connector Name WIRE TO WIRE  Connector Type THIBMW-NH  This A 5 6 7 8  1 2 3 4 5 6 7 8  1 1 2 3 4 5 6 7 8  1 1 2 3 4 5 6 7 8  1 1 2 3 4 5 6 7 8  1 1 2 3 4 5 6 7 8  1 1 2 3 4 5 6 7 8  1 1 2 3 4 5 6 7 8  1 1 2 3 4 5 6 7 8  1 2 3 4 5 6 7 8  1 2 3 4 5 6 7 8  1 2 3 4 5 6 7 8  1 3 7 7  1 5 NHELD  2 SHELD  3 8 7  5 SHELD  4 0  5 SHELD  5 SHELD  6 8 8  7 SHELD  7 SHELD  8 7		2 W SOUND SIGNAL OND 3 G SOUND SIGNAL OND 7 G AUX MAAGE SIGNAL 8 SHELD SHELD[With DVD player]	M AV
		JCNWM1889Gf	Р

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JCNWM1890GI

Connector No. M375  Connector Name WIRE TO WIRE  Connector Type GT13SH-2/1S-HU  LAS  Terminal Color Signal Name [Specification]  1	Connector Name   WRE TO WIRE	A B C D
Connector No.   M370   M370	Connector No. M379 Connector Name GLASS ANTENNA Connector Type GT13SCN-1/1PP-HU  The Grant Connector Type GT13SCN-1/1PP-HU  The Grant Connector Type GT13SCN-1/1PP-HU  The Grant Connector Type GT13SCN-1/1PP-HU  Strain Connector Name (Specification)  The Substrain Connector Signal Name (Specification)  The Substrain Connector Name (Specification)	E F G
WITH DVD ENTERTAINMENT SYSTEM Connector No. M303 Connector Type IntoBFGY  M303 Connector Type IntoBFGY  Connector Type IntoBFGY  M3. [2019]18 17 16 15 14 13   Terninal Color No. of Wire Signal Name (Specification)  14	Connector No. M378  Connector Name ANTENNA BASE (ANTENNA AMP.)  Connector Type GT13SSN-1/1PP-HU  Connector Type GT13SSN-1/1PP-HU  Terminal Color No. of Wire Signal Name [Specification]  1	J K
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			ı											
COMPOSITE IMAGE SIGNAL	RGB AREA (YS) SIGNAL	GND	Ν	НР	RGB GND	RGB (B:BLUE) SIGNAL	RGB (G:GREEN) SIGNAL	RGB (R:RED) SIGNAL	SHIELD	SHIELD	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)	HEADPHONE SOUNDSIGNAL SIGNAL LH (-)	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)	HEADDHONE SOLINDSIGNAL SIGNAL LH (+)
В	В	SHIELD	Я	М	T/M	5/X	J/Y	BR/L	SHIELD	SHIELD	ΓG	BR	۸	<b>&gt;</b>
14	15	16	17	18	19	20	21	22	23	24	25	56	27	28
	~	2 8	R B SHIELD	R B SHIELD	SHIELD W	R B SHIELD R W/L	R SHIELD W W W/L Y/G	B B SHELD W W W/L Y/G	B B SHIELD N W W W W W W W W W W W W W W W W W W	B B SHIELD W W W/L Y/G Y/L BR/LL SHIELD	R SHIELD R W W/L V/G V/C SHIELD SHIELD	R   B   SHIELD   N/G   N/G   SHIELD   SHIELD   SHIELD   SHIELD   LG   LG   CG   CG   CG   CG   CG   CG	R SHIELD SHIELD W W/L Y/C Y/C SHIELD SHIELD SHIELD LG BR	R   R   SHELD   R   W   W/L   V/G   V/L   SHELD   SHELD   SHELD   SHELD   LG   LG   LG   LG   LG   LG   LG

Connector No. R152 Connector Name REAR DISPLAY UNIT Connector Type TH32FW-NH  H.S.  1 6 8 10 12 16 18 22 22 22 23 23 23 23 24 6 8 10 12 16 18 18 22 22 22 24 25 20 23 23 23 23 24 24 24 10 18 18 18 22 22 24 25 20 23 23 23 23 24 25 24 18 18 18 18 22 22 24 25 28 20 23 23 24 25 24 18 18 18 18 18 22 24 25 28 20 23 23 23 24 25 24 18 18 18 18 18 22 24 25 28 20 23 24 25 24 25 24 18 18 18 18 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 24 25 25 25 25 25 25 25 25 25 25 25 25 25
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Terminal No. 1 2 2 3 4 4 5 5 6 8 8 9 9 10	Color of Wire B B B Y/R Y/R Y/R C V/Y SHIELD V/Y C V/Y C C C C C C C C C C C C C C C C C C C	Signal Name (Specification)  GND  GND  GND  BATTERY  EATTERY  HEADPHONE ON SIGNAL  ACC  SHELD  COMM (0ST~>(SIGP)  COMM (0ST~>(SIGP)
11	G	IGNITION
0.0	0 11110	0 111110

Signal Name [Specification]	GND	GND	BATTERY	BATTERY	HEADPHONE ON SIGNAL	ACC	SHIELD	COMM (DISP->DIST)	COMM (DIST->DISP)	IGNITION	SHIELD		1	1	_	1	_	_	-	-	-	-	_	_	_	1
of Wire	В	В	Y/R	Y/R	В	V/Y	SHIELD	۸	ΓG	G	SHIELD		J/Y	BR/L	G	V/Y	LG	۸	SHIELD	В	W	В	SHIELD	G	R	SHIELD
S	-	2	8	4	5	9	8	6	10	11	12		13	14	16	18	21	22	23	24	25	56	27	28	59	30
												-11														

BUSE AUL	BOSE AUDIO WITHOUT NAVIGATION	>
Connector No.	R20	
Connector Name	MICROPHONE	
Connector Type	TK04FW	
H.S.	1234	

Cionel Momes Consideration	oighal naille Lopechication	MICROPHONE SIGNAL (+)	MICROPHONE SIGNAL (-:{With telephone without navigation system]	MICROPHONE POWER	
Color	of Wire	R/W	R/L	В	
Terminal	No.	1	2	4	

p p p p	Connector No. R153	Connector Name WIRE TO WIRE	Sonnector Type TH32FW-NH	
---------	--------------------	-----------------------------	--------------------------	--

Signal Name [Specification]	-	=	1			-	-	-		_	1
Color of Wire	Y/R	В	SHIELD	PΠ	۸	SHIELD	BR	Υ	SHIELD	M/L	J//
Terminal No.	1	2	4	5	9	7	8	6	10	11	12

JCNWM1892GI

## BOSE AMP.

Reference Values

INFOID:0000000003457776

Α

В

C

D

Е

F

G

Н

J

K

L

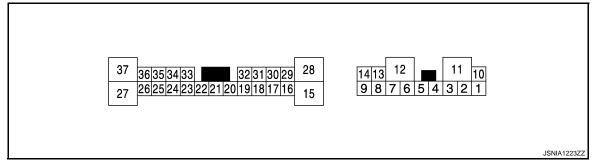
M

ΑV

0

Р

## TERMINAL LAYOUT



#### PHYSICAL VALUES

	minal e color)	Description			0 100	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
1 (LG)	2 (V)	Sound signal front squawker LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
4 (P)	3 (L)	Sound signal front squawker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
5 (Y)	6 (BR)	Sound signal rear speaker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
7 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
10 (SB)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
11 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
12 (B)	Ground	Ground	_	Ignition switch ON	_	0 V

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
13 (GR)	8 (BR)	Sound signal rear speaker LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
14 (L)	9 (O)	Sound signal rear door speaker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
16 (B/R)	17 (W/R)	Sound signal woofer	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
18 (W)	19 (B)	Sound signal front door speaker LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 *** 2ms SKIB3609E
20 (SB)	Ground	Amp. ON signal	Input	Ignition switch ACC	_	12.0 V
21	_	Shield	_	_	_	_
22 (W)	Ground	Woofer Amp. ON signal	Output	Ignition switch ACC	_	12.0 V
24 (GR/V)	23 (W/L)	Sound signal rear LH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 *** 2ms SKIB3609E

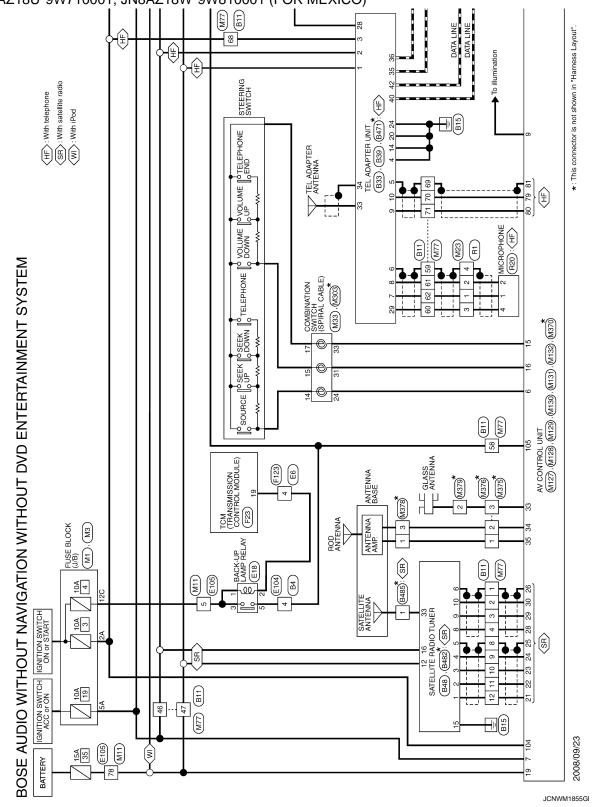
	minal color)	Description		_	Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
26 (GR/V)	25 (W/L)	Sound signal rear RH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 2ms SKIB3609E
28 (G)	15 (R)	Sound signal rear door speaker LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
29 (V)	30 (P)	Sound signal center speaker	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 2ms SKIB3609E
31 (BR)	32 (Y)	Sound signal front door speaker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
33 (W/R)	34 (B/R)	Sound signal front RH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
35 (W/R)	36 (B/R)	Sound signal front LH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 * 2ms SKIB3609E

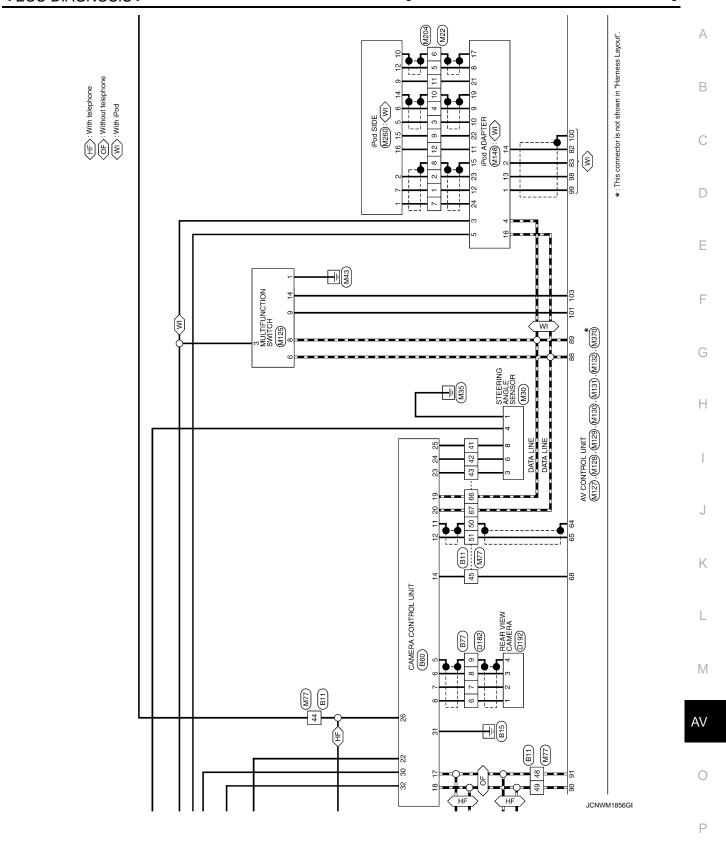
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTER-TAINMENT SYSTEM -

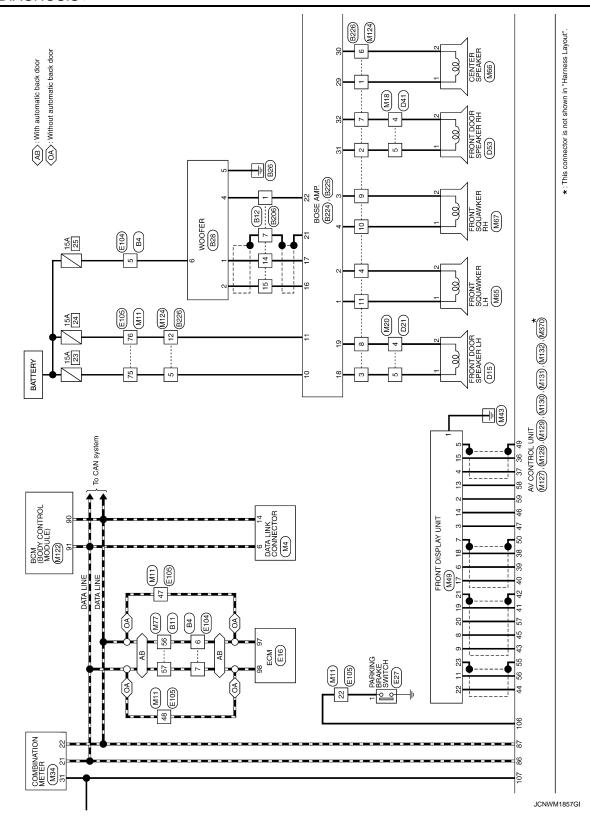
#### NOTE:

 In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.

- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)
- Type B: From VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO), JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)

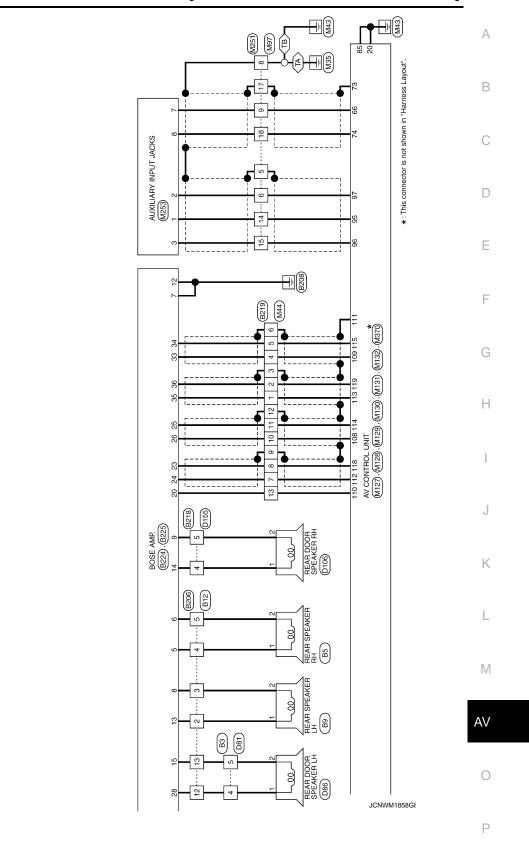






(TA): Type A
(TB): Type B

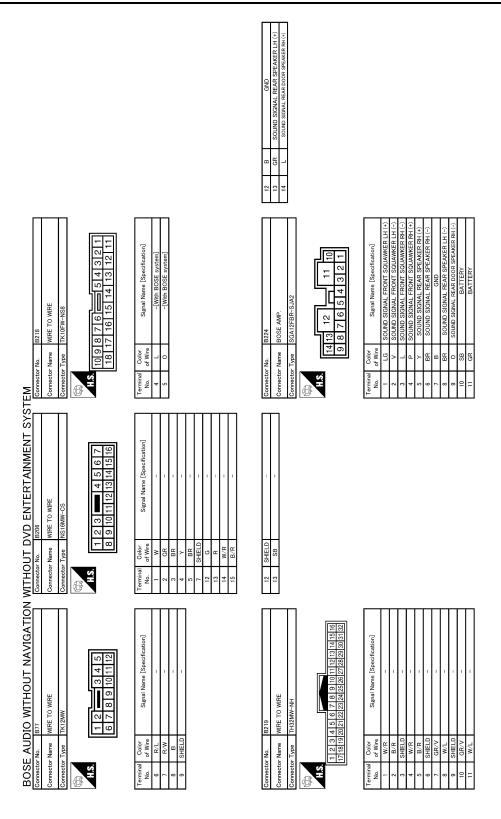
# [BOSE AUDIO WITHOUT NAVIGATION]



BOSE A	E AUDI	BOSE AUDIO WITHOUT NAVIGATION		OUT D	WITHOUT DVD ENTERTAINMENT SYSTEM Connector No. 184	SYSTE	Connector No.	BS		Connector No.	r No.		
Connector Name		WIRE TO WIRE TK10FW-NS8	Connec	e e	WIRE TO WIRE NS16MW-CS		Connector Name Connector Type			Connector Name		REAR SPEAKER LH TKOZFBR	П
H.S.	109	8 7 16 15 14 13 12 11	H.S.		2 3 <b></b> 4 5 6 7 9 10 11 12 13 14 15 16		H.S.	21		H.S.		21	
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No. 9. 4 4 5 5 5 7 7	al Color of Wire	Signal Name [Specification]		Terminal O of 2	Color V LG	ication	Terminal No.	Color of Wire SB SB GR	Signal Name [Specification]	
						[							
Connector No.	$\neg$	B111	4 43	о Ж	1 1		Connector No.	. B12		Connector No.	Т	B28	Τ
Connect		WIRE TO WIRE	42	_	1		Connector Name	. 1		Connect		JOREK	
Connector Type		TH80MW-CS19	46	SP >	ı		Connector Type	pe NS16FW-CS		Connector Type		RS06FGY-PR	
是 H.S.			48 48	> B B	-[With rear view camera and telephone] -[With rear view camera without telephone.	lene]	小 H.S.	[		是 H.S.			
	ı	\$ \$ \$ \$ \$ \$ \$	50 50	SHIELD	1 1 1			7 6 5 4 3 2 16 15 14 13 12 11 10 9	- 8			(2 4 6) 1 3 5)	
			56	۵ -	1 1				]				
Terminal	l Color	Signal Name [Specification]	28	ď	1		la l	Color Signal Name [Specification]	cation	Terminal	-	Signal Name [Specification]	Γ
o.	of Wire		29	SHELD	1 1	T	No.	of Wire		o O	of Wire	SOUND SIGNAL WOOFER (-)	Τ
5	В	-	9	R/L	-		2	SB -		5	B/R	SOUND SIGNAL WOOFER (+)	П
e 4	R/L	1 1	62	R/w	1 1		8	GR		4 u	M d	WOOFER AMP. ON SIGNAL	T
<b>≠</b> ∞	SHIELD	1 1	67	5 0	1 1	T	+	LG V		9	0	BAT	Τ
6	BR/L	1	89	œ	1	 	П	SHIELD -					]
10	5/X	1	69	SHIELD	=	П	Н						
= =	Y/L		2 ا	W/R	1 1	T	13	0 O/W					
4 1 2	W/L		=	מיע		7	+	B/B					
45	SB	1				_	┨						

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	R   REVERSE     C   SERSOR SIGNAL 1     SB   SERSOR SIGNAL 2     C   SERSOR SIGNAL 3     C   SERSOR SIGNAL 1     C   SERSOR SIGNAL 2     C   SERSOR SIGNAL 1     C   SERSOR	A B C
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	D
SIGNAL SIGNAL D (8-POL.SE) NE VOC	A CONTROL UNIT	Е
CONTROL SIGNAL CONTROL SIGNAL WEHGLE SPEED 18-FULSE) MIGROPHONE VCC	TH92PW-NH	F
	B80   OAMER   19   10   12   13   14   14   15   15   15   15   15   15	G
MM	Connector No.   Connector No.   Connector Name   Connector Type   Connec	
\times \( \) \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		Н
NMENT (		I
Connector Name	ACC.	J
B10   ENTER UNIT   TH32FW-NH		0
Connector Name   TE	9 9	K
N N   10   10   10   10   10   10   10		L
BOSE AUDIO WITHOUT NAVIGATION   Connector Name   FEL. ADAPTER UNIT   Connector Type   TH08FW-NH   Terminal   Color   Signal Name [Specification]   Signal	14 16 13 15 14 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	
PTER UNIT NH NH Signal Name [Specification] AV COMM (L)		M
Signal Name  Signal Name  AV C  AV C  AV C  AV C	SATELLITE RADIO TUNIER   A16FW   12   12   13   15   17   18   9   10   11   11   11   11   11   11	AV
BOSE AUD Commetter Name Commetter Name Commetter Type H.S. H.S. H.S. H.S. H.S. H.S. H.S. H.S	17/9re   1/9re   1/9	0
BOSI Connect Connect No. 136 36 36 40 42	Oonnecto   Oonnecto	0
		Р



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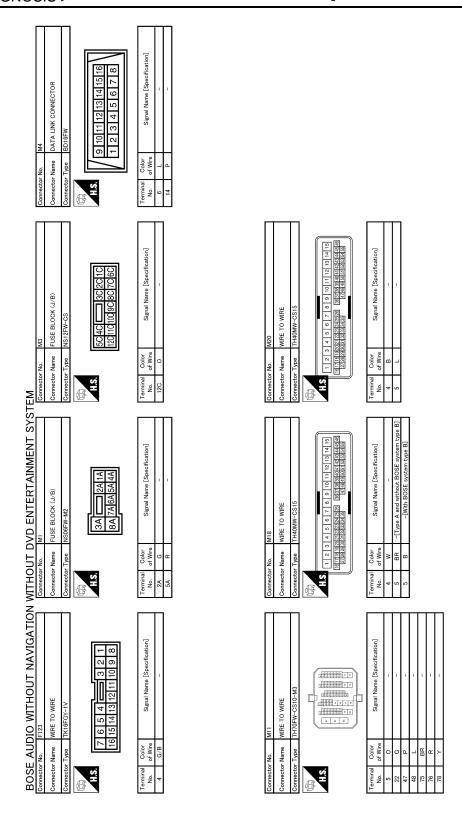
12 GR -		Connector No. D15 Connector Nume FRONT DOOR SPEAKER LH (WITH BOSE SCHEIM) Connector Type NS02FBR-CS H.S.	No.   Color   Signal Name [Speorification]   No.   Color   No.   Color		A B C
1112	Signal Name (Specification)	T HAVIGATION SYSTEM)	Signal Name [Spocification] SATELLITE ANTENNA		Е
B226   WIRE TO WIRE   NS12MBR-CS   1   2   3		B485 ANTERNA BASE (SATELLIE ANTERNA) WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM GT18C-1PP-HU			F
Connector No. Connector Name Connector Type	Color	Connector No. Connector Type	Terminal Color No. of Wire		Н
MITHOUT DVD ENTERTAINMENT SYSTEM   26 GR.V   SOUND SIGNAL, REAR DOOR STEWAREN H (+)   29   C   SOUND SIGNAL CEAR DOOR STEWAREN H (+)   29   V   SOUND SIGNAL CENTER STEWAREN (+)   30   P   SOUND SIGNAL CENTER STEWAREN (+)   31   B   SOUND SIGNAL FRONT RH (+)   32   V   SOUND SIGNAL FRONT RH (+)   34   SOUND SIGNAL FRONT RH (+)   34   SOUND SIGNAL FRONT RH (+)   35   W.R   SOUND SIGNAL FRONT RH (+)   36   W.R   SOUND SIGNAL FRONT RH (+)   37   W.R   SOUND SIGNAL FRONT RH (+)   38   W.R   SOUND SIGNAL FRONT RH (+)   39   W.R   SOUND SIGNAL FRONT RH (+)   30   W.R   SOUND SIGNAL RH (+)   3		SATELLITE RADIO TUNER FAKRA  33 34	Signal Name [Specification] SATELLITE ANTENNA		J
MITHOUT DVD  26 GR/V 28 G SOU 29 V SO 20 P SOU 30 P SOU 31 BR SOUN 32 V SOUN 33 W/R 34 B/R 35 W/R 36 W/R		Connector No. B462 Connector Name SATELL Connector Type FAKRA	Terminal Color No. of Wire 33 -		K
Z	Ation]  FEMER LH (-)  FEM (-)  FEM (-)  FEMER LH (-)  FEMER LH (-)  FEMER LH (-)  HI (-)  HI (-)  HI (-)  HI (-)		tion]		L
ITHOUT NAV	Signal Name [Specification] SOUND SIGNAL REAR DOOR SPEAKER LH (+) SOUND SIGNAL WOOFER (+) SOUND SIGNAL WOOFER (+) SOUND SIGNAL FROW DOOR SPEAKER LH (-) SOUND SIGNAL FROW LH (-) SOUND SIGNAL REAR LH (-)	140 HU 333 34	Signal Name [Specification] TEL ANTENINA SHIELD		M
BOSE AN SCA19FB 55 25 24 23	Color  R. SOUND SIGN  B.R SOUND SIGN  W.R SOUND SIGN  W.R SOUND SIGN  SHELLD  W.W.L SOUN  W.W.L SOUN	me TEL ADAPTI	Color of Wire Sign		AV
BOSE AL. Connector No. Connector Name Connector Type M.S. S7 37	Terminal O of No. 15 15 16 18 18 18 18 18 18 18 18 18 18 18 18 18	Connector No. Connector Name Connector Type H.S.	Terminal O. No. of 33 34 SH	JCNWM1862Gł	0
					Р

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Connector No.   D81   Connector Name   WIRE TO WIRE   Connector Type   TK10MM-NS8   TK10MM-NS8	Terminal Color Signal Name [Specification] No. of Wire 4 4	Connector No.   D182	Terminal Color   Nun. of Wire   Signal Name [Specification]   No. of Wire   Color   Color
Gornector No. D53 Connector Name FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS02FBR-C5 H.S.	Terminal Color   No. of Wire   Signal Name [Specification]   1   W	Connector No. D155 Connector Name WIRE TO WIRE Connector Type TK10MW-NS3  H.S. 1 2 3 4 5 6 7 8 9 10  11 12 13 14 15 16 17 18	Terminal   Color   Signal Name [Specification]   A   O   -[Type A]     A   L   -[Type B]     C   C   C   C   C   C   C   C   C
WITHOUT DVD ENTERTAINMENT SYSTEM	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   4 B   -[Type B]   5 BR   -[Type B]   5 W   -[Type B]	Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NSUZFBR-CS  H.S.	Terminal   Color   Signal Name [Specification]   No. of Wire   -[Type A]   1   0   -[Type B]   2   W   -[Type B]   2   W   -[Type B]
BOSE AUDIO WITHOUT NAVIGATION	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   4	Connector No. D86 Connector Name SYSTEM) Connector Type NS02FBR-CS  H.S.	Terminal   Color   Signal Name [Specification]   No. of Wire     L

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Connector No.   E18	Cornector No.   F23   Cornector No.   F23   Cornector Name   TOM (TRANSMISSION CONTROL MODULE)   Cornector Type   RH40FB-F2821-RH     Top   To	A B C
Connector No.   E16   Connector No.   E16   Connector No.   E16   Connector No.   E16   Connector Type   R4-24FE-R25-L-LH	Cornector Name   WIPE TO WIPE	E F G
MITHOUT DVD ENTERTAINMENT SYSTEM   Connector Name   WIRE TO WIRE   Connector Type   TK18MGY-1V   Connector Type   TK18MGY-1V	Cornector No.   E104   Connector Name   WIRE TO WIRE	J K
BOSE AUDIO WITHOUT NAVIGATION	Connector No. E27 Connector Type POIFB-A Connector Type POIFB-A  Terminal Color No. of Wire Signal Name [Specification]	AV
		JCNWM1864Gf



JCNWM1865GE

				А
STEERING ANGLE SENSOR THOSEW-NH Signal Name [Specification]	1 1 1			В
STEERIN 1408FW	013H8 7			С
Connector No.	23 27 11 20 23 24 24 24 24 24 24 24 24 24 24 24 24 24			D
7 8 15 16 15 16 we revigation system]	7 6 6 4 3 2 1 23 22 21 20 13 18 17	eoification]		Е
SWW-NH  SWW-NH  3 4 5 6  11 12 13 14  Signal Name [S	MIRE NH (10 9 8 26 22 24 24 24 24 24 24 24 24 24 24 24 24	Signal Name   Specification		F
No.  Type  O Color  O Wire  N R R R R R R R R R R R R R R R R R R	r No. r Type r Type 16 15 14	Color   Colo		G
YSTEM Connecto Connecto Terminal No. 1 2 4 4 4	Connect Connect Connect H.S.	Terminal No. 1 1 1 1 2 2 2 2 2 2 5 4 4 4 4 7 7 7 7 7 7 9 8 8 8 8 8 9 9 9 9 9 9 9 9		Н
AINMENT S	24 Sept. 19	Signal Name [Specification]  CAN-H CAN-L CAN-L VEHICLE SPEED (8-PUL.SE)		I
D ENTER!	M34 COMBINATION METER TH40FW-NH	Signal Name [Spec		J
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM   Component Name   Niet TO WITE   Niet TO WITE	Connector No. MG4 Connector Name COMBINA Connector Type TH40FW- TH3 12 3 4 5 6 7 8 Z 12 2 2 4 5 6 7 8	Terminal Color   No. of Wire   No. of Wire		K
AATION I	4BLE)	lephone] lephone] lephone]		L
WIRE NH 10 9 8 7 Signal Name [Specification]	M33 COMBINATION SWITCH (SPIRAL CABLE) TK08FGY-1V  24 25 26 31 32 33 34	Signal Name [Specification] [With audio steering switch and sleephone] [With audio steering switch and telephone] [With audio steering switch and telephone]		M
DIO WITH   M22   WIRE TO WIRE   THI2FPY-NH	1 [ ]	<del></del>		AV
BOSE AUD  Commetter No.  Commetter Type  Commetter Type  Commetter Type  Commetter Type  Color  No. of Wire  No. of Wire  1. This  Shifter	Connector No. Connector Name Connector Type H.S.	Terminal   Color   No. of Wire   No. of Wi		0
			JCNWM1866GI	Р
				1

Connector No. M66 Connector Name GENTER SPEAKER Connector Type TK0ZFBR H.S.	Terminal   Color   Signal Name [Specification]	Connector No. M97  Connector Nume WIRE TO WIRE  Connector Type ITHISPA-CS2  H.S.   Part   Par	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   S SHIELD   Color   Colo
Connector Name FRONT SQUAWKER LH Connector Type TROZEBR  M.S.  1.3	Terrninal   Color   Signal Name [Specification]   No	43 L 44 V 45 P	Shift   D   Shif
Connector No.   M49   M49		Connector No. M77 Connector Name WRE TO WIRE Connector Type TH80PW-CS19 H.S.	Terminal Color Signal Name [Specification] 1 SHELD
BOSE AUDIO WITHOUT NAVIGATION  Connector No. M49  Connector Name FRONT DISPLAY UNIT  Connector Type TH24FW-NH  H.S  T2 [1] [10] 9 8   7 6 5 4 3 2 1 1  Z4 Z3 Z2 [2] [20] 19   17 16 15 14 13	Color   Signal Name [Specification]   Color   Signal Name [Specification]   1	Connector No. M67 Connector Name FRONT SOLAWKER RH Connector Type TR02FBR	Terminal   Color   Signal Name   Specification   No. of Wire   Signal Name   Specification   No. of Wire   R.     R.

JCNWM1867GI

Connector No.   M125	A B C
11   LG	E F G
Connector Name   Wife TO WIRE	J K
Cornector Name   BOM (BODY CONTROL MODULE)   Cornector Name   BOM (BODY CONTROL MODULE)   Cornector Type   TH40FB-NH	AV O

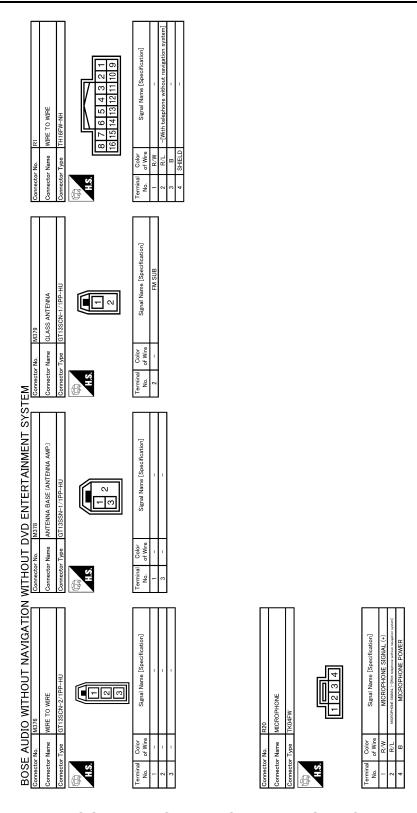
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		14 W   Pod SOUND SIGNAL RH (-)   15 SHIELD   SHIELD   SHIELD   17 SHIELD   18 SHIELD   19 SHIELD   19 SHIELD   19 SHIELD   21 L   Pod CONNECTION RECOGNITION   22 BR   Pod SOUND SIGNAL CND   24 LG   Pod SOUND SIGNAL LH (+)	
STEM	^ V	Connector No. M148 Connector Name   Pod ADAPTER Connector Type   TH24FW-NH	Description   Color   Signal Name [Specification]
Cornector No.   M131   Cornector No.   M131   Cornector No.   M131   Cornector Name   AV CORTROL UNIT (WITH BOSE   Cornector Type   TH32FW-NH   Cornector Type   TH32FW-NH	Terminal   Color   Signal Name [Specification]     No.   Color   Signal Name [Specification]     No.   L	119 R SOUND SIGNAL FRONT LH (-)	
BOSE AUDIO WITHOUT NAVIGATION  Connector Name 8/4/ CONTROL UNIT (WITH BOSE	Terminal   Color   Signal Name [Specification]     No. of Wire   Signal Name [Specification]     64	Connector No. M132 Connector Name System WITHOUT NAVIGATION SYSTEM) Connector Type THI2PIV-NH  H.S.	Terminal   Color   Signal Name [Specification]     No.

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Connector No. M233 Connector Name AUXILIARY INPUT JACKS Connector Type A08FW  H.S. [1 2 3 4 5 6 7 8]	Terminal   Color   Signal Name [Specification]   No. of Wire   SOUND Signal Name [Specification]   2   W   SOUND Signal LH (-)/Winter DVD player]   3   G   AUX IMAGE GND[Without DVD player]   8   R   AUX IMAGE GND[Without DVD player]	Connector No. M/375 Connector Name WIRE TO WIRE Connector Types GT113SH-2/1S-HU  H.S.	Terminal   Color   Signal Name   Specification		A B C
EM   Connector No.   M251   Connector No.   M251   Connector Name   WHEE TO WHEE   Connector Type   TH18MW-CS2   Connector T	Terminal Color No. of Wire Signal Name [Specification] Color No. of Wire S SHELD	Connector No. M370 Connector Name SysTew WITHOUT NAVIGATION SySTEW) Connector Type GT1355-2/15-HJ  MA. Market Mark	Terminal   Color   Signal Name   Specification   Color   No. of Wire   FM Subs   FM Subs   Signal Name   Specification   Signal Name   Specification   Signal Name   Sig		E F G
N WITHOUT DVD ENTERTAINMENT SYSTEM		Connector No. M303  Connector Name COMBINATION SWITCH (SPIRAL CABLE)  Connector Type TKOSFGY  M.S.  [20 19 18 17 16 15 14 13]	Ferminal   Color   No.   Oldve   Signal Name [Specification]		I J K
BOSE AUDIO WITHOUT NAVIGATION V Cornector No. M204 Cornector Name WRE TO WIFE Cornector Type TH/2MV-NH  Cornector Type TH/2MV-NH  TO S S S S S S S S S S S S S S S S S S S	Terminal Color No. of Wire 1 V	Connector No. M/250 Connector Name (Pod SIDE) Connector Type (P10FGY)  1 2 3	Terminal   Codor   Signal Name [Specification]     No.	JCNWM1870GI	M AV

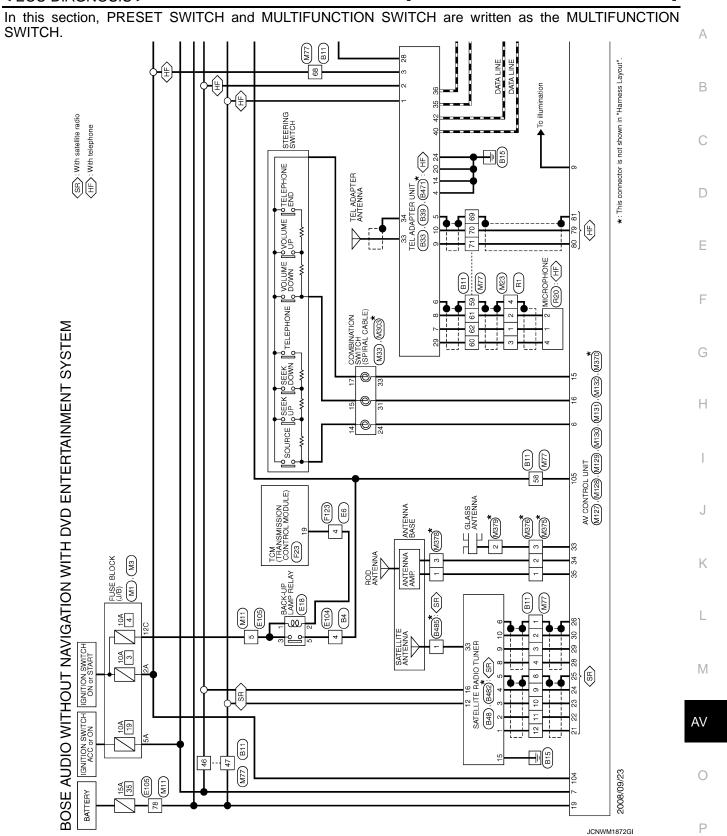
Revision: 2008 October AV-253 2009 Murano

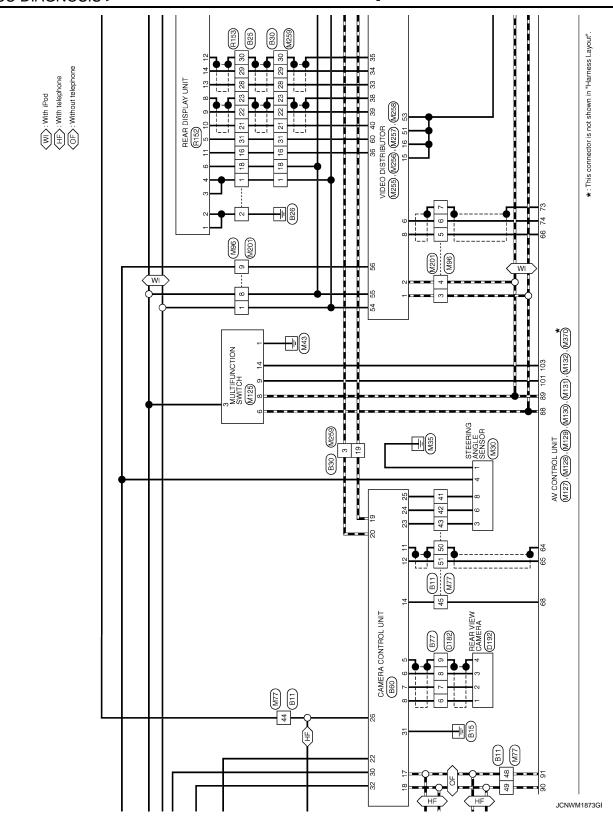


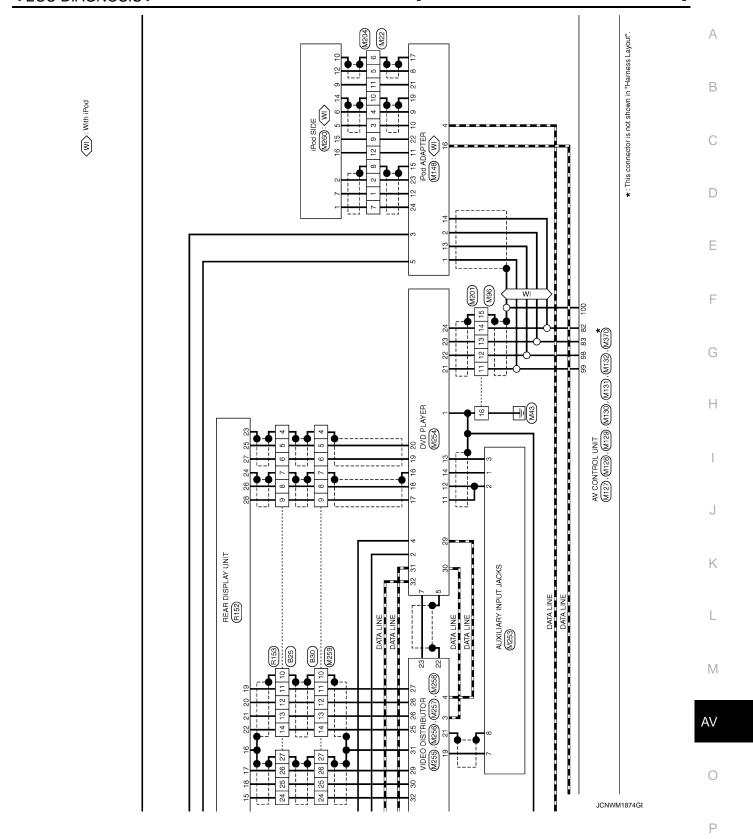
JCNWM1871GI

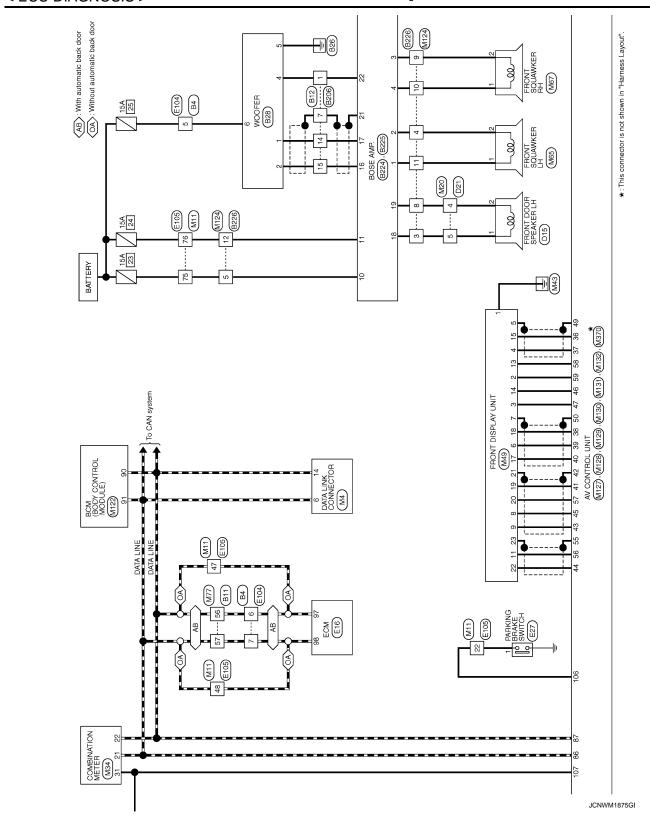
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

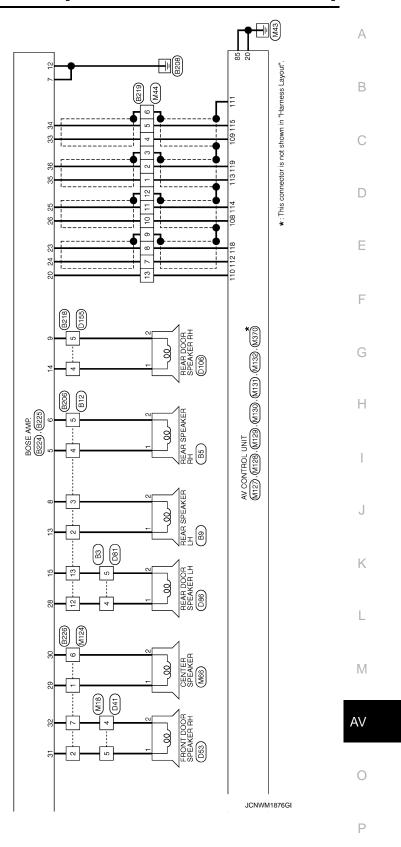
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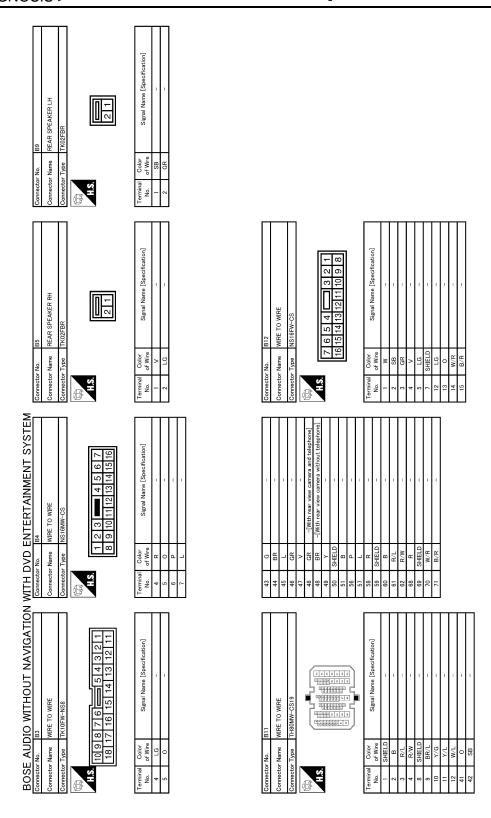












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BOS	E AU	BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	I WITH	2	D ENTERTAINMEI	NT SYSTEM				
Connector No.	ır No.	B25	13	Н			Connector No.		B28	
Omero Mano		WIRE TO WIRE	14		BR/L		Connector Name		and OOM	
00		WINCE TO WINCE	16	Н	- ^		000000			
Connector Type	r Type	TH32MW-NH	18		- 0		Connector Type		RS06FGY-PR	
Q			21	Ш	B/R		Q			
厚			22	>	W/R		F			
HS			23	돐	SHIELD -		SH		Ę	
			24	_	В –					
	1 2 3 4 5	5 7 8 9 10 11 12 13 14 15	25	œ	R/L -				-	
	1/1819	20 21 22 23 24 25 26 27 28 29 30 31 32	26	~	R/W -					
			27	동	SHIELD -				)	
			28							
Terminal	Color		29	Ĺ	- M		Terminal	Color	9	
Š.	of Wire		30	돐	SHIELD -		No.	of Wire	olgna Name [opecmoation]	
-	SB	1	31	L	- 4		-	W/R	SOUND SIGNAL WOOFER (-)	
2	8	1		l			2	B/R	SOUND SIGNAL WOOFER (+)	
4	SHIELD						4	>	WOOFER AMP, ON SIGNAL	
	W/R						· C	B/W	GND	
9	I/M	-					. «	c	BAT	
,	Sulfing Purity						,	,		
	SI III.									
0	25									
50	۸/L									
10	SHIELD									
=	W/L	1								
12	۲/G	1								
Connector No	r N	B30	13	ľ	- I/A		Connector No	Γ	B33	
			14	ă				T		
Connector Name	r Name	WIRE TO WIRE	16	+	1		Connector Name		TEL ADAPTER UNIT	
Connector Type	r Tyne	TH32EW-NH	2 2	+			Connector Type	Ť	TH08EW=NH	
	nd .		2 2	Ļ				1		
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THE STATE OF THE S			2 6	+			ALT.			
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	16 15 14	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	24	1					35 37 39 41	
	32 31 30	29 28 27 26 25 24 23 22 21 20 19 18 17	25	2	- 8/1				36 38 40 42	
_			26	. ~					21 21 22 22	
			7.6	Ţ,	SHELD					
Terminal	Color		80	+			Terminal	Color		
No.		Signal Name [Specification]	29	ŀ				of Wire	Signal Name [Specification]	
-	SB	1	30	동	SHIELD -		t	>	AV COMM (H)	
က	g	1	31	L			36	æ	AV COMM (L)	
4	SHIELD	1					40	g	AV COMM (H)	
2	W/R	ı					42	æ	AV COMM (L)	
9	W/L	-								
7	SHIELD	-								
æ	GR/V									
6	N/L	1								
10	SHIELD									
Ξ	W/L									
12	5/X	1								

Signal Name [Specification]	1	_	1	_	-	1	-	-	_	-	-
Color of Wire	SB	g	SHIELD	W/R	M/L	SHIELD	GR/V	M/L	SHIELD	M/L	Y/G
erminal No.	-	3	4	5	9	7	8	6	10	11	12

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16 GR ACC		Connector No. 8206  Connector Name WIRE TO WIRE  Connector Type INSIGNM*CS  M.S. 1 2 3	Terminal   Color   Signal Name   Specification   No. of Wire   Signal Name   Specification   No. of Wire   No. o
Connector No. 848 Connector Name SATELLITE RADIO TUNER Connector Type A16FW  L.S. 2 4 6 7 8 9 10 11 13 15	Terminal   Color   Signal Name [Specification]     N.	Connector No. 877  Connector Name WIRE TO WIRE  Connector Type TK12MW  M.S. 1 2 3 4 5 6 7 8 9 10 11112	Terminal   Color   Signal Name [Specification]   No. of Wire   N.L   -
MITH DVD ENTERTAINMENT SYSTEM   20   B   CONTROL SIGNAL   24   B/W   CONTROL SIGNAL   25   B   MICHOLE SPEED (S-P-U.SE)   25   B   MICHOLE SPEED (S-P-U.SE)		22         R         REVERSE           23         G         SENSOR SIGNAL 1           24         SB         SENSOR SIGNAL 2           25         O         SENSOR SIGNAL 2           26         BR         VEHICLE SPRES IGNAL 3           36         GR         VEHICLE SPRES IGNAL 3           30         GR         VEHICLE SPRES IGNAL 3           31         B         VEHICLE SPRES IGNAL 3           32         V         BATTERY	
BOSE AUDIO WITHOUT NAVIGATION	Terminal Color   Signal Name [Specification]   V	Connector Nuc.   850  Connector Name   CAMERA CONTROL UNIT  Connector Type   TH32FW-NH    LAS   LAS   R   10   12   14   16   18   20   22   24   25   20   20    T   3   5   7   9   11   13   15   17   19   11   20   25   27   29   19    T   3   5   7   9   11   13   15   17   19   17   12   25   27   29   19    T   1   3   5   7   9   11   13   15   17   19   17   12   25   27   29   19    T   1   2   5   7   9   11   13   15   17   19   17   12   25   27   29   19    T   1   2   5   7   9   11   13   15   17   19   17   12   25   27   29   19    T   1   2   5   7   9   11   13   15   17   19   17   25   27   29   19    T   1   2   5   7   9   11   13   15   17   19   17   25   27   29   19    T   1   2   5   7   9   11   13   15   17   19   17   25   27   29   19    T   1   2   5   7   9   11   13   15   17   18   15   17   25   27   29   18    T   1   2   5   7   9   11   13   15   17   18   18   18   18   18   18   18	Terminal   Color   Signal Name [Specification]

JCNWM1879GI

	26 GR/V SOUND SIGNAL REAR RH (+) 29 C SOUND SIGNAL CENTER SPEAKER (+) 29 V SOUND SIGNAL CENTER SPEAKER (+) 30 P P SOUND SIGNAL ROWTH SPEAKER (-) 32 V SOUND SIGNAL ROWTH RH (-) 33 W/R SOUND SIGNAL ROWTH RH (-) 34 B/R SOUND SIGNAL ROWTH RH (-) 35 W/R SOUND SIGNAL ROWTH (-) 36 B/R SOUND SIGNAL ROWTH (-) 37 W/R SOUND SIGNAL ROWTH (-) 38 B/R SOUND SIGNAL FRONT LH (-)	A B C
12 SHELD 13 SB	Connector No.   B225	E F G
WITH DVD ENTERTAINMENT SYSTEM	12 B GND 13 GR SCOUND SIGNAL REAR SPEAKER LH (+) 14 L SOUND SIGNAL REAR DOOR SPEAKER RH (+)	J K
BOSE AUDIO WITHOUT NAVIGATION  Connector Name WIRE TO WIRE  Connector Type TK10FW-NS8  H.S.  10 9 8 7 6 5 4 3 2 1  18 17 16 15 14 13 12 11  Terminal Color Signal Name [Specification]  No. of Wire Signal Name [Specification]  5 0[With BOSE system]	Cornector No.   R224	M AV O

tor No. D15  FRONT DOOR SPEAKER LH (WITH BOSE Connector tor Type NS0ZEBR-CS  LASS  Connector Connector Connector Connector Connector Connector Connector Connector Connector LASS  L	No. D21  Name WIRE TO WIRE  Type ITHOFW-CS15  151 At 131 Z 11 10 9 8 7 6 5 4 3 2 1 1  Section 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
Signal Name [Specification] No. of Wire Signal Name [Specification] No. SATELLITE ANTENNA 1 L Truce Al 4	Signal Name [Specification] -[Tvpe A]	of Wire B/R	Τ
1 W -[Type B] 4	-[Type A]	x 8	T
- True A	[1 ype 5]	2 8	Τ
-[.lype.A.] 5	-[lype A]	RK RK	T
2 B[Twe B] 5 W	-[Tvne B]	5 W -[Type B]	_
-Liype Bj	Light of		1

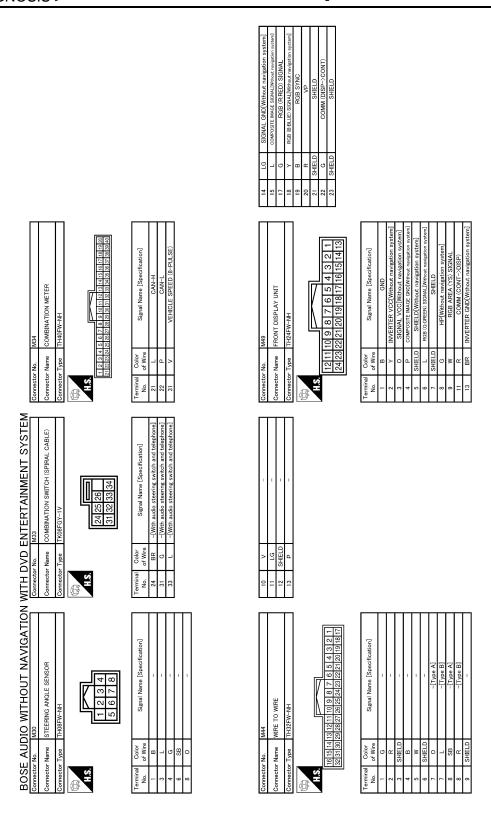
JCNWM1881GI

Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS0ZFBR-CS  H.S.	Terminal   Color   Signal Name   Specification   No. of Wire   Cypecification   1   Color   Cifyoe   1   Ci	Connector No. E6 Connector Name WIRE TO WIRE Connector Type TK16MGY-1V  H.S. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Terminal Color No. of Wire  4 R. — — — — — — — — — — — — — — — — — —		A B C
Connector No. D86 Connector Name REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS  WAS A STATEM NS02FBR-CS	Terminal Color   Signal Name [Specification]	Cornector No. D192 Cornector Name REAR VIEW CAMERA Cornector Type TH04MW-NH  H.S.	Color   Signal Name [Specification]     No. of Wire   CAMERA ON SIGNAL     1		E F G
WITH DVD ENTERTAINMENT SYSTEM  Gennetor Name WIRE TO WIRE  Connector Type   TK10MW-NS8	Terminal Color No. of Wire Signal Name [Specification] 4 L 5 W	Connector No. D182 Connector Name WIRE TO WIRE Connector Type TK12FW  LS 4 3 2 1  12 11 10 9 8 7 6	Terminal   Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]		J K
BOSE AUDIO WITHOUT NAVIGATION  Connector Name FRONT DON SPEAKER RH (WITH BOSE SYSTEM)  Connector Type NSOZEBR-CS  H.S.	Terminal   Color   Signal Name [Specification]	Connector No. D155  Connector Name WIRE TO WIRE  Connector Type TK10MW-NS8  WAS 1 2 3 4 5 6 7 8 9 10  11 12 13 14 15 16 17 18	Terminal   Color   Signal Name (Specification)     No. of Wire   Signal Name (Specification)     4   C   -[Type B]     5   W   -[Type A]     5   W   -[Type B]	JCNWM1882GI	M AV

Connector No. E104 Connector Name WIRE TO WIRE Connector Type NS16FW-CS	18.   7   6   5   4	Terminal   Color   Signal Name   Specification   Color   Col	Connector No.         M1           Connector Name         FUSE BLOCK (J/B)           Connector Type         NS06FW-M2	#S 3A 2A1A 8A7A6A5A4A	Color Signal Name of Wire	2A G	l			
Connector No. E27 Connector Name PARKING BRAKE SWITCH Connector Type POIFE-A	H.S.	Terminal Color No. of Wire  Signal Name [Specification]	Connector No.         F123           Connector Name         WIRE TO WIRE           Connector Type         TK16FGY-1V	H.S. 7 6 5 4 3 2 1 16 15 14 13 12 11 10 9 8	la .	- e/B				
Ownertor Name BACK-UP LAMP RELAY Connector Name BACK-UP LAMP RELAY Connector Type MSCZFL-MZ-LC	#8.	Terminal   Color   Signal Name [Specification]	Connector No. F23 Connector Name TCM (TRANSMISSION CONTROL MODULE) Connector Type RP40FB-RZ8-L-RH	H.S. STI2233343586373839840 47 48 STI223334358637383980 40 47 48 STI223334358637383980 40 47 48 STI2334586171819320 43 44 STI233456171819320 43 44	nal Color Sign	19 G/B REV LAMP RELAY				
BOSE AUDIO WITHOUT NAVIGATION Connector No. E16 Connector Name ECM Connector Type RHZ4FB-RZB-L-LH	H.S.    S1 86 89 89 740 105 109   108 109 104 98 105 105 109   108 109 104 98 105 105 105   109   109 104 98 105 105   109 105   109   109 105   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109	Terminal Golor   Signal Name [Specification]   10	Connector No.         E105           Connector Name         WIRE TO WIRE           Connector Type         TH70MW-CS10-M3	**************************************	o o	22 P -	Н	48 L	╀	┝

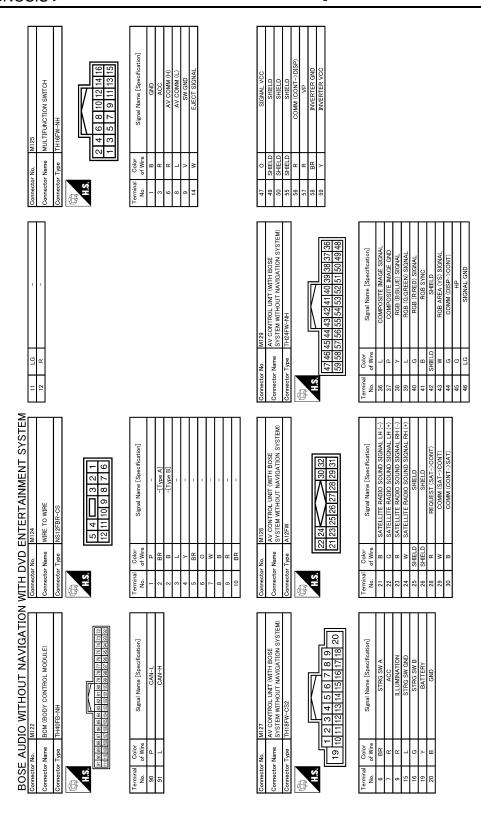
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Cornector No.   M18	Connector No.   M23   Connector Name   WIRE TO WIRE	A B C
Connector No.   MII	12 R	E F G
Connector No.   M4   Connector Type   BD16FW   Connector Type   Conn	M22   Connector No.   M22   Connector Name   WIRE TO WIRE	J K
BOSE AUDIO WITHOUT NAVIGATION   Connector No.   M3   Connector Name   FUSE BLOCK (J/B)   Connector Name   RISIZFW-CS   Connector Type   NSIZFW-CS   EQUAL   SEQUENCIAL   SEQ	Connector No.   MZ0   Connector Name   WIRE TO WIRE	AV  O  JCNWM1884GI



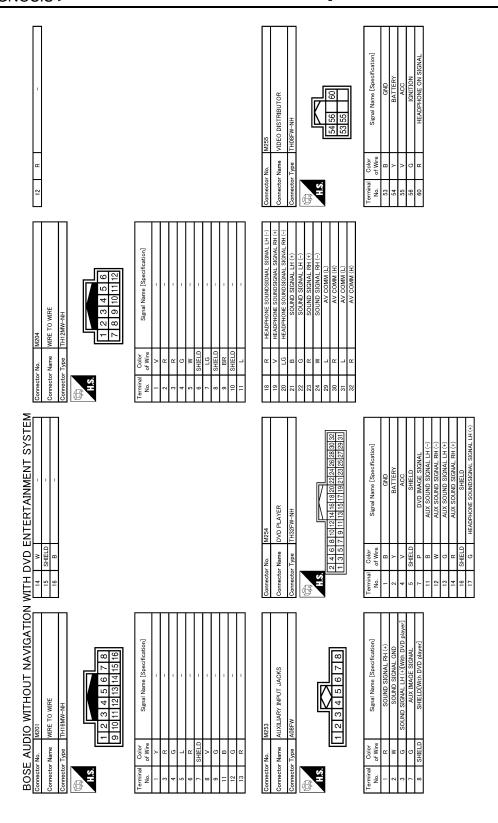
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	poorfication) : system]	[0 1 1	Е
M67 FPONT SOUAWKER RH TKOZFBR	Signal Name [Specification] -[With BOSE system]	M96 TH16PW-NH TH16FW-NH    5 6 5 4 3 2 1     6 15 14 13 12 11     7 6 5 14 3 2 1     8 7 6 5 14 3 2 1     9 7 6 15 14     16 15 14     17 12     17 10 9     18 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12     19 12	F
Connector No. M67 Connector Name FRQ Connector Type TKO	Oolor of Wire	Name   17pe   17pe   18me   18	G
·	Terminal No.	Oommeeton  Oommeeto  No. 1  1	Н
N WITH DVD ENTERTAINMENT SYSTEM  Connector Name CENTER SPEAKER  Connector Type TKOZFBR	Signal Name [Specification]		I
ENTERTAIN M66 CENTER SPEAKER TKOZEBR	Signal Na		J
VITH DVD EP Connector No. M Connector Type THE	of Wire P P O O		K
	Terminal No. 1	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
IGATIO	ion	[uo]	L
GRIH	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	Signal Name (Specification)	M
BOSE AUDIO WITHOUT NAVIGATIO Connector No. M65 Connector Name FRONT SOUAWKER LH Connector Type TROZFBR  H.S.		MIRE TO THROUPY.	AV
BOSE AL Connector Name Connector Type	Terminal Color No. of Wire 2 Y	Connector No.   Connector No.   Connector Name   Connector Type   Connector Type   SHELD   STATE   S	0
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			Р



JCNWM1887GE

	RH (-) SOMITION SUBJECT GND LH (+)	А
	Pod SOUND SIGNAL RH (·)  NU COMM (th)  ACCESSOPR DETECT  Pod SOUND SIGNAL LH (v)  Pod SOUND SIGNAL LH (v)	В
	W W BHELD SHEED SH	С
	14 16 17 17 17 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	D
M (L)  With DVD player]  WD player]  WD player]  MD player]  MD player]  MD player]  SE  SE  SE  SE  SE  SE  SE  SE  SE  S	10   11   12   12   12   12   12   12	Е
AV COMM (L) SOUND SIGNAL LH (-)[With Divyer] SOUND SIGNAL LH (-)[With DVD player] SHELD[With DVD player] E-LEOT SIGNAL IGNITTON FREVERSE PARKING BRAKE VEHICLE SPEED (G-PULSE)	5   6   7   8   17   18   19   20   17   18   19   20   18   19   19   19   19   19   19   19	F
	0 N S N S N S N S N S N S N S N S N S N	G
	Oomrect Commett No. 10 10 10 113 113 113 113 113 113 113 11	Н
ENTERTAINMENT SYSTEM  MI 31  AV CONTROL UNT WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)  TH32FW-NH  TH32FW-NH  Signal Name [Specification]  TEL VOICE SIGNAL (+)  SOUND SIGNAL HH (-) With DVD player]  AN COMM (+)  AN COMM (+)  AN COMM (+)  AN COMM (+)	SOUND SIGNAL FRONT LH (-)	I
ENTERTAINM Miss Ave Cooktroot Unit Tow THEREWHITE THEREMENT THEREWHITE Signal Name [ TEL VOICE TEL VOICE TEL VOICE TEL VOICE SOUND SIGNAL RH SOUND SIGNAL RH SOUND SIGNAL RH CAN AV CO AV	SOLUD SIGN	J
Commetter Numer	α 0 1	K
GATION  on  on  on  on  on  on  on  on  on  o	1   1   1   1   1   1   1   1   1   1	L
IO WITHOUT NAVIGATIC MISO AV CONTROL UNIT (WITH BOSE AV CONTROL UNIT (WITH BOSE TAY SYSTEM WITHOUT NAVIGATION SYSTEM) THIGFW-NH THIGFW-NH SIGNAL SIGNAL (COMPOSITE MAGE SIGNAL COMPOSITE MAGE SIGNAL COMPOSITE MAGE GND[With DVD player] COMMECTION RECOGNITION SHIELDOWN DVD player] COMPOSITE MAGE GND[With DVD player]	AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) THIEFW-NH    108   109   110   111   112   113	M
	A B S C C C C C C C C C C C C C C C C C C	AV
BOSE AL. Commetter Name Commetter Type Commetter Type 64 SHEL 66 L 66 L 66 L 66 L 66 L 73 SHEL 74 R	Cornector Name   Connector Name   Connector Name   Connector Name   Connector Type   Connector Type   Connector Name   Conn	0
	JCNWM1888GI	Р



JCNWM1889GE

		А
		В
	C   C   C   C   C   C   C   C   C   C	С
	113 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D
ION  1->DISP)  1->DISP)	WIRENH	Е
IGNITION SHIELD SOMM (DIST->DISD) OCOMM (DIST->DISD)	WIRE TO WIRE TH3ZMW-NH  4 6 6 7 8 9 10 11 12 13 14 15  20 21 22 23 24 25 26 27 28 29 30 31  Signal Name (Specification)	F
2 HE D S S S S S S S S S S S S S S S S S S	Color   Colo	G
	T T N N N N N N N N N N N N N N N N N N	Н
Connector Name   WISST	DVD MAGE SIGNAL	1
ENTERTAININ M257 VIDEO DISTRIBUTOR THISFW-NH THISFW-NH THISFW-NH TEG 20 32 34 33 32 34 33 32 34 33 32 34 33 33 33 33 33 33 33 33 33 33 33 33	MI OVO	J
MITH DVD ENITERT	23 23	К
z	10 S23 F4 S4	L
STRIBUTOR NH Signal Name [Specification] GND	W-NH	М
MOSION MISSION	MACS 0 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AV
BOSE AUC Commettor No. Commetter Type Fig. 18 Fig. 1	Connector No.   Connector No.   Connector No.   Connector Type   Connect	0
	JCNWM18s	ogi P

BOSE AUDIO WITHOUT NAVIGATION	WITH DVD ENTERTAINMENT SYSTEM		
Connector No. M260	Connector No. M303	Connector No. M370	Connector No. M375
Connector Name iPod SIDE	Connector Name COMBINATION SWITCH (SPIRAL CABLE)	Connector Name SYSTEM WITHOUT NAVIGATION SYSTEM)	Connector Name WIRE TO WIRE
Connector Type IP16FGY	Connector Type TK08FGY	Connector Type GT13SC-2/1S-HU	Connector Type GT13SH-2/1S-HU
色	匮	Ę	<b>E</b>
HS. [123] [1456]	HS.	H.S.	HS.
7 8 9 10 11 12 13 14 15 16	20 19 18 17 16 15 14 13	388	⊠©
Terminal Color   Signal Name [Specification]   No.   of Wire	Terminal Color   Signal Name [Specification]   No.   of Wire	Terminal   Color   Signal Name [Specification]   No.   of Wire	Terminal   Color   Signal Name [Specification]   No. of Wire
1 LG iPod SOUND SIGNAL LH (+)		33 – FM SUB	-
ec (	-	'	-
5 R COMM (iPod->iPod ADAP1ER) 6 G COMM (iPod ADAPTER->iPod)	1/1	35 - ANTENNA AMP. ON SIGNAL	1 2
7 V iPod SOUND SIGNAL RH (+)			
L iPod CONNECT			
SHIELD			
W			
SHIELD			
7			
16 K ACCESSORY IDENTIFY			
Connector No. M376	Connector No. M378	Connector No. M379	Connector No. R1
Connector Name WIRE TO WIRE	Connector Name ANTENNA BASE (ANTENNA AMP.)	Connector Name GLASS ANTENNA	Connector Name WIRE TO WIRE
Connector Type GT13SCN-2/1PP-HU	Connector Type GT13SSN-1/1PP-HU	Connector Type GT13SCN-1/1PP-HU	Connector Type TH16FW-NH
	<b>B</b>		
- 00	2 0	<u> </u>	8 7 6 5 4 3 2 1 16 15 14 13 12 11 10 9
Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal   Color   Signal Name [Specification]   No.   of Wire
Н	1	2 - FM SUB	R/W
3	3 = =		2 R/L -[With telephone without navigation system]
,			Ü

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BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERI

lication]	Terminal No.	Color of Wire	Signal Name [Specification]
NAL (+)	-	В	GND
Shout navigation system]	2	В	GND
OWER	3	Y/R	BATTERY
	4	Y/R	BATTERY
	2	ч	HEADPHONE ON SIGNAL
	9	\/A	ACC
	8	SHIELD	SHIELD
	6	۸	COMM (DISP->DIST)
	10	57	COMM (DIST->DISP)
	11	9	IGNITION
	12	SHIELD	SHIELD

-	1	1	1	-	-	-	1	1	1	=	-	-	1
T/A	BR/L	5	٨/٨	57	۸	CHIELD	8	М	Я	GTEINS	5	ч	<b>GTEINS</b>
13	14	91	18	17	22	23	54	52	97	12	87	67	30
								4 3 2 1	20 19 18 17			Footion	Ication

ector No. R153	Connector Name WIRE TO WIRE	Connector Type TH32FW-NH	.S.   16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1    22 31 30 29 28 27 26 28 22 22 21 20 19 18 17
Connector No.	Connector	Connector	E.S.

Signal Name [Specification]		-	-	1		-	-	-	-		-	
Color	of Wire	Y/R	В	SHIELD	PΠ	۸	SHIELD	BR	Υ	SHIELD	M/L	Y/G
Terminal	No.	1	2	4	5	9	7	8	6	10	11	12

M

ΑV

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В

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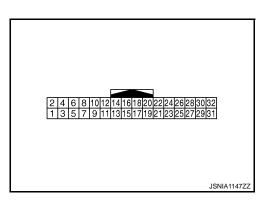
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Revision: 2008 October AV-275 2009 Murano

Reference Values

**TERMINAL LAYOUT** 



INFOID:0000000003457757

#### PHYSICAL VALUES

	minal color)	Description			Condition	Reference value		
+	-	Signal name	Input/ Output		Condition	(Approx.)		
1 (B)	Ground	Ground	_	Ignition switch ON	_	0 V		
2 (B)	Ground	Ground	_	Ignition switch ON	_	0 V		
3 (Y/R)	Ground	Battery power supply	Input	Ignition switch ON	_	Battery voltage		
4 (Y/R)	Ground	Battery power supply	Input	Ignition switch ON	_	Battery voltage		
5	Ground	Headphone amp. ON sig-	Input	Ignition switch	Headphone mode is ON.	4.5 V		
(R)	Olouliu	nal	iliput	ON	Headphone mode is OFF.	0 V		
6 (V/Y)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage		
8	_	Shield	_	_	_	_		
9 (V)	Ground	Communication signal (DISP→DIST)	Output	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear displayed.	(V) 6 4 2 0 +-1ms PKIB5039J		
10 (LG)	Ground	Communication signal (DIST→DISP)	Input	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear displayed.	(V) 6 4 2 0 +-1ms PKIB5039J		

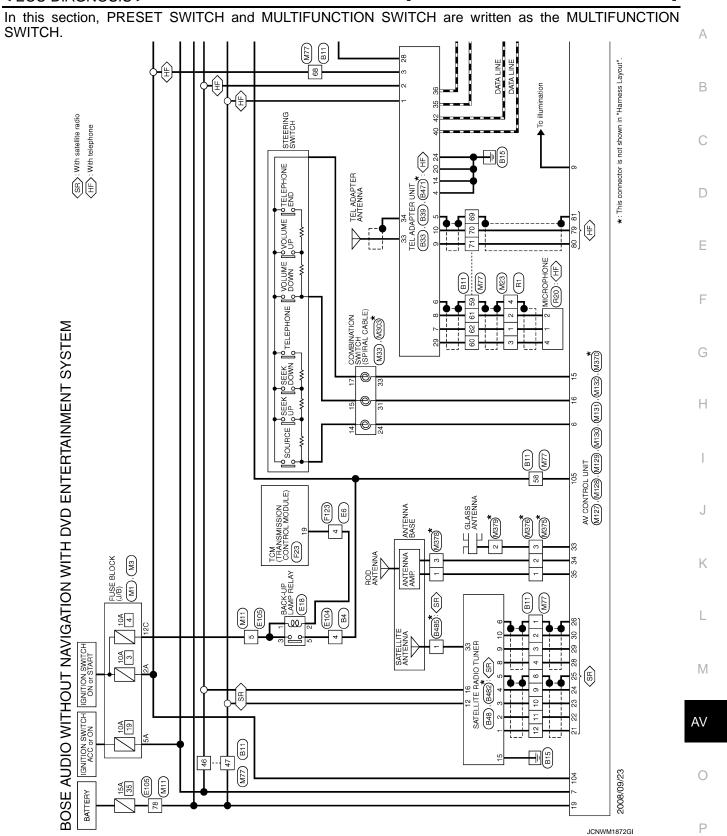
	minal color)	Description			One division	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
11	Ground	Ignition cignal	Input	Ignition switch ON	_	0 V
(G)	Ground	Ignition signal	Input	Ignition switch OFF	_	3.3 V
12	_	Shield	_	_	_	_
13 (G)	Ground	Composite and RGB image synchronizing signal for rear display	Input	Ignition switch ON	When AUX or DVD image is displayed on rear display unit.	(V) 4 0 → 20μs SKIB0825E
14 (R)	Ground	Composite image signal	Input	Ignition switch ON	When AUX or DVD image is displayed on rear display unit.	0. 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
					When AUX or DVD image is displayed.	0 V
15 (B)	Ground	RGB area (YS) signal	Input	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display.	(V) 6 4 2 0
16	_	Shield	-	_	_	PKIB4948J —
17 (R)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch ON	<u>-</u>	(V) 4 0 *** 4ms SKIB3598E
18 (W)	Ground	Horizontal synchronizing (HP) signal	Output	Ignition switch ON	_	(V) 4 0 +-20µs SKIB0825E
19 (W/L)	Ground	RGB ground	_	Ignition switch ON	_	0 V

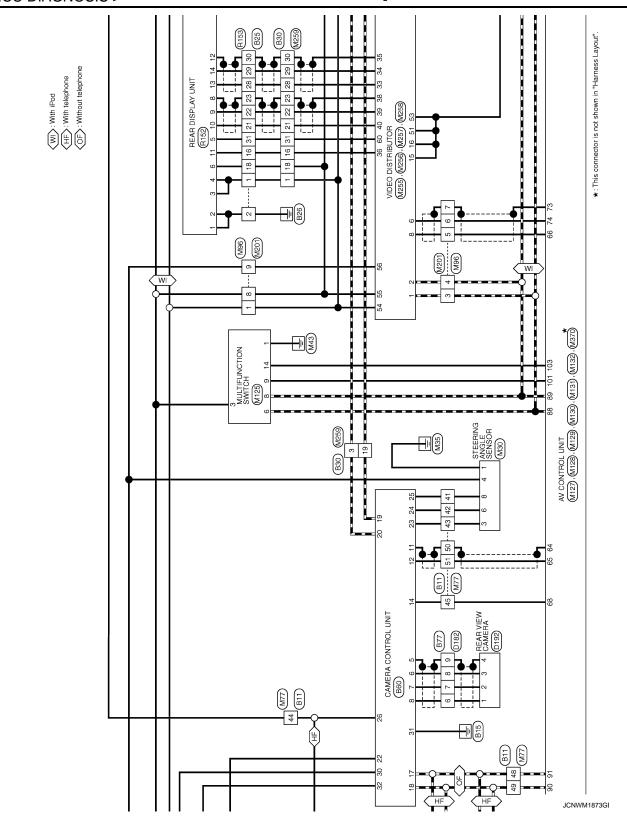
### < ECU DIAGNOSIS >

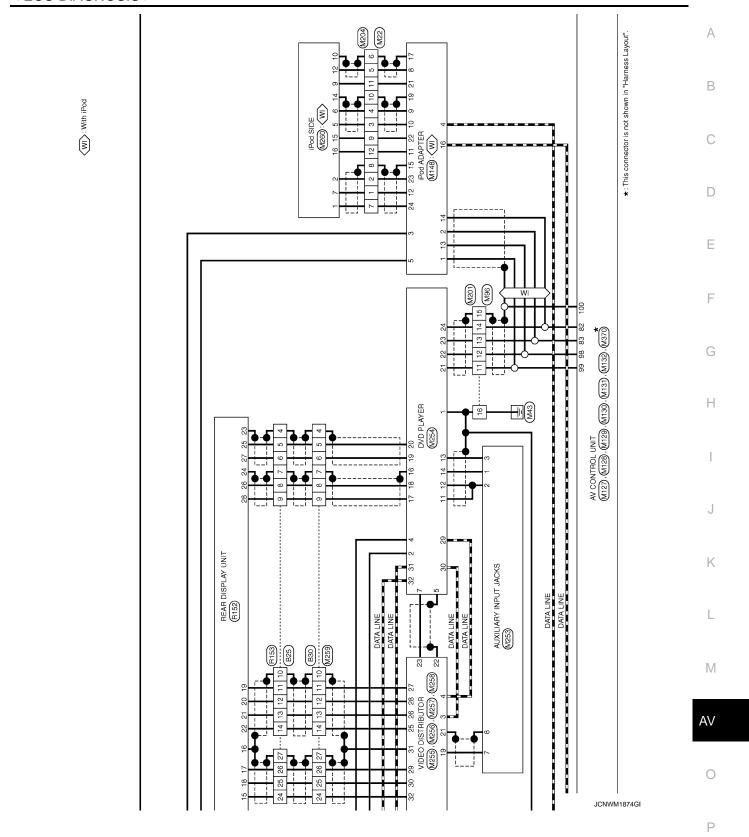
	minal color)	Description			Condition	Reference value		
+	_	Signal name	Input/ Output		Condition	(Approx.)		
20 (Y/G)	Ground	RGB image signal (B: blue)	Input	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 2 0 + +25 \(\mu\)s JSNIA1090ZZ		
21 (Y/L)	Ground	RGB image signal (G: green)	Input	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 1 0 ***5ms JSNIA0984ZZ		
22 (BR/L)	Ground	RGB image signal (R: red)	Input	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 1 0 +-5ms JSNIA0984ZZ		
23	_	Shield	_	_	_	_		
24	_	Shield	_	_	_	_		
27 (V)	25 (LG)	Headphone sound signal LH	Input	Ignition switch ON	Headphone sound output.	(V) 1 0 -1 + 2ms SKIB3609E		
28 (Y)	26 (BR)	Headphone sound signal RH	Input	Ignition switch ON	Headphone sound output.	(V) 1 0 -1 + 2ms SKIB3609E		

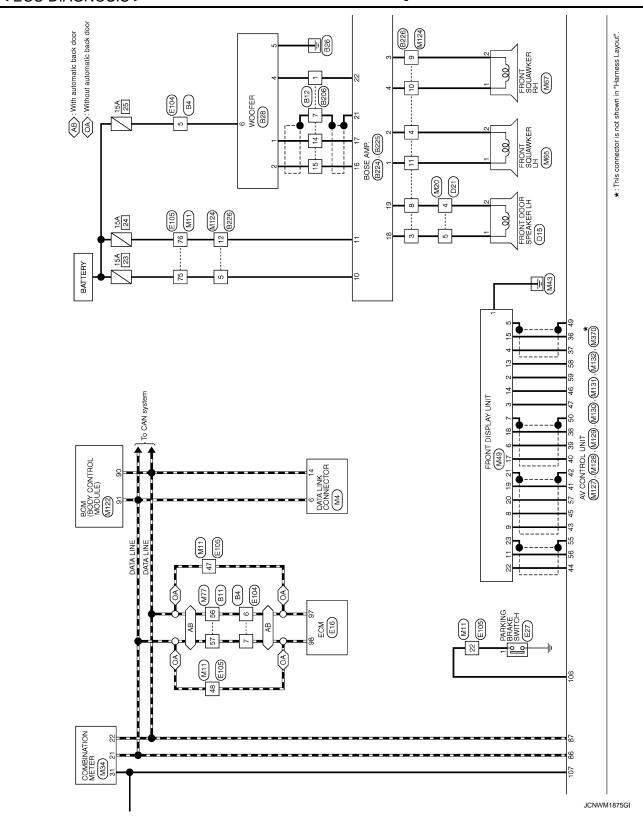
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

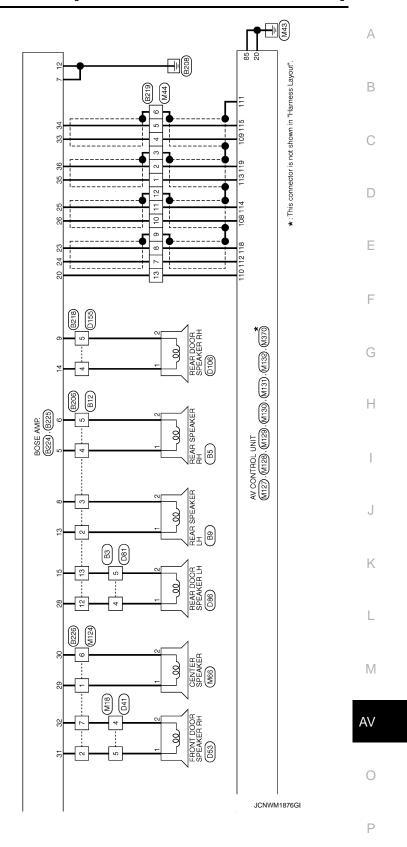
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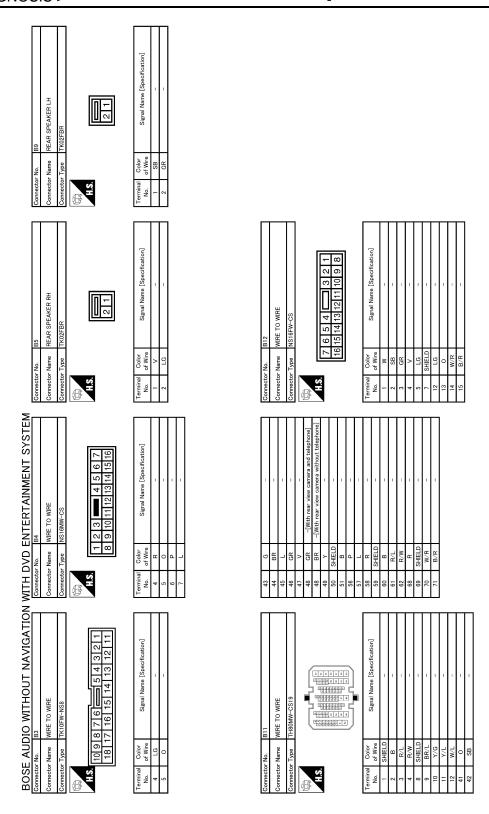












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BOS	E AUI	BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	HLIM	2	D ENTERTAINMEN	IT SYSTEM				
Connector No.	or No.	B25	13	_			Connector No.	or No.	B28	
Connect	Connector Name	WIRE TO WIRE	14		BR/L		Connecto	Connector Name	WOOFER	
			16	4	- >					
Connector Type	or Type	TH32MW-NH	18	4	- 0		Connector Type	or Type	RS06FGY-PR	
Q			21	В	B/R –		Q			
彦			22	\$	W/R -		手			
H			23	SH	SHIELD -		3		Ę	
			24	4	B				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	7 2 3	8 9 10 11 12 13 14 15	22	ď	R/L -				+	
	1/118115	9 20 21 22 23 24 25 26 27 28 29 30 31 32	26	۳	R/W -					
			27	Н	SHIELD -				)	
			28	$\dashv$						
Terminal		Simal Name [Specification]	29	┪	M		Terminal	_	Signal Name [Specification]	
No	of Wire		30	S	SHIELD -		No	of Wire	Topico Colonia de Colo	
-	SB	-	31	$\dashv$			-	W/R	SOUND SIGNAL WOOFER (-)	
2	В	-					2	B/R	SOUND SIGNAL WOOFER (+)	
4	SHIELD	- 0					4	М	WOOFER AMP. ON SIGNAL	
2	W/R	ı					2	B/W	GND	
9	W/L						9	0	BAT	
_	SHELD	-								
~	SR/V	1								
,	200									
ъ Ç	W/L									
2 :	SPIELL									
=	W/L	1								
15	γ/6	1								
Connector No	Y. No	B30	1,5	ľ	-		Connector No	No.	B33	
			1 4	ď						
Connect	Connector Name	WIRE TO WIRE	16	+	1		Connector Name	or Name	TEL ADAPTER UNIT	
Connector Type	r Tvne	TH32FW-NH	2 2	ļ			Connector Type	r Tvne	TH08FW-NH	
50	2		2 5	Ļ			200	2		
1			2 5	<u> </u>	2/8		Œ			
			7 6	1			ALT.			
?			77 66	- 10			2	_		
	16 15 14	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	24	5					35 37 39 41	
	32 31 30	21 20 19	25	1					36 38 40 42	
			36	. 12	B/W				3, 5, 55, 55	
			27	E.	SHELD					
Terminal	Color	L	78	1	8		Terminal	Color	4	
No		Signal Name [Specification]	59	L	- M		No		Signal Name [Specification]	
-	SB	-	30	돐	SHIELD -		32	>	AV COMM (H)	
8	g	1	31	L			36	BR	AV COMM (L)	
4	SHELD	-					40	ŋ	AV COMM (H)	
2	W/R	-					45	GR	AV COMM (L)	
9	W/L	ı								
_	SHIELD	-								
80	GR/V	1								
6	M/L	1								
10	SHIELD	-								
Ξ	M/L	1								
12	5/X	1								

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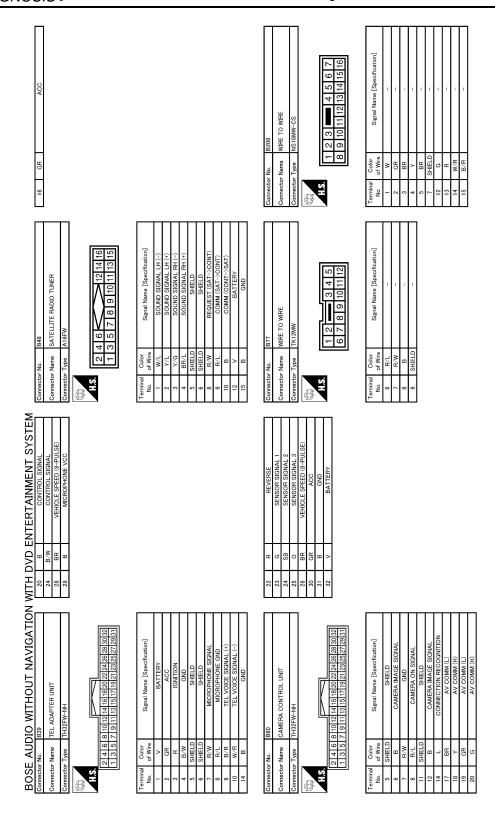
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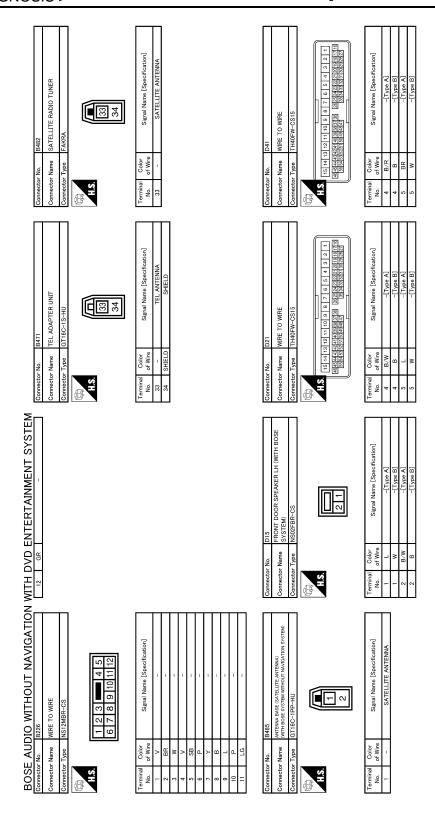
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### [BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

			GR/V   SOUND SIGNAL REAR RH (+)     G   SOUND SIGNAL REAR BH (+)     V   SOUND SIGNAL CENTER SPEAKER (+)     F   SOUND SIGNAL CENTER SPEAKER (+)     F   SOUND SIGNAL ROAT DOOR SPEAKER RH (-)     Y   SOUND SIGNAL ROAT DOOR SPEAKER RH (-)     W/R   SOUND SIGNAL ROAT DOOR SPEAKER RH (-)     B/R   SOUND SIGNAL ROAT RH (-)     B/R   SOUND SIGNAL ROAT RH (-)     B/R   SOUND SIGNAL ROAT RH (-)			В
	$\prod$		0	H (c)		D E
	S S SHIELD		Connector No. B225 Connector Name BOSE AMP. Connector Type SCA19FBR-SGA4  \$\text{\$\text{\$\text{Connector}\$}}\$  \$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\}	Color   Signal Name (Specification]   O'Mire   Sound SigNut Rach Book SFEAKER H (-)   W.R   SOUND SIGNAL WOOFER (-)   W.R   SOUND SIGNAL WOOFER (-)   W.R   SOUND SIGNAL FROM TOOR SEAKER H (-)   SIGNAL SOUND SIGNAL FROM TOOR SEAKER H (-)   SOUND SIGNAL FROM TOOR SEAKER H (-)   W.L   SOUND SIGNAL REAR IH (-)   GRAV   SOUND SIGNAL REAR IH (-)   GRAV   SOUND SIGNAL REAR IH (-)   GRAV   SOUND SIGNAL REAR IH (-)   W.L   SOUND SIGNAL REAR IH (-)   W.L   SOUND SIGNAL REAR IH (-)   GRAV   SOUND SIGNAL REAR IH (-)   CAN TO THE COUND SIGNAL		F
ļ	13 13			Terminal No. No. 15 16 16 18 19 19 27 22 22 24 254		Н
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	MIRENH	Signal Name (Specification)	GND SOUND SIGNAL REAR DOOR SPEAKER RH (-) SOUND SIGNAL REAR DOOR SPEAKER RH (-)			J
WITH DVD ENTE	Connector No. 8219 Connector Name WIRE TO WIRE Connector Type   TH82MM-NH  H.S.	Terminal Color No. of Wire 1 W/R 2 B/R 3 SHELD 4 W/R 6 SHELD 6 SHELD 7 GR/V 8 W/L 11 GR/V 11 W/L	12 B GR SOUN			K
AVIGATION	321	ification] stem]		ification]  JUANKER LH (+)  JUANKER RH (+)  JUANKER RH (+)  PEAKER RH (+)  PEAKER RH (-)  PEAKER RH (-)		L
/ITHOUT N	14 5 4	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	SGA1ZFBR-SJA2  13 12 11 11 12 11 11 12 11 11 12 11 11 12 11 11	Signal Name [Specification] SOUND SIGNAL FRONT SOLAWERE I.H. (*) SOUND SIGNAL FRONT SOLAWERE I.H. (*) SOUND SIGNAL FRONT SOLAWWERE I.H. (*) SOUND SIGNAL FRONT SOLAWWERE I.H. (*) SOUND SIGNAL FEAR SPEAKER I.H. (*)		M
SE AUDIO V	me WIF	al Color L L L	9 14 6	Color   Colo		AV
BOS	Connector No Connector Na Connector Na Connector Na H.S.	Terminal No. 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Connector Na Connector Tyl	Terminal No. 1. 2. 2. 2. 3. 3. 4. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	JCNWM1880GI	0
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Revision: 2008 October AV-287 2009 Murano



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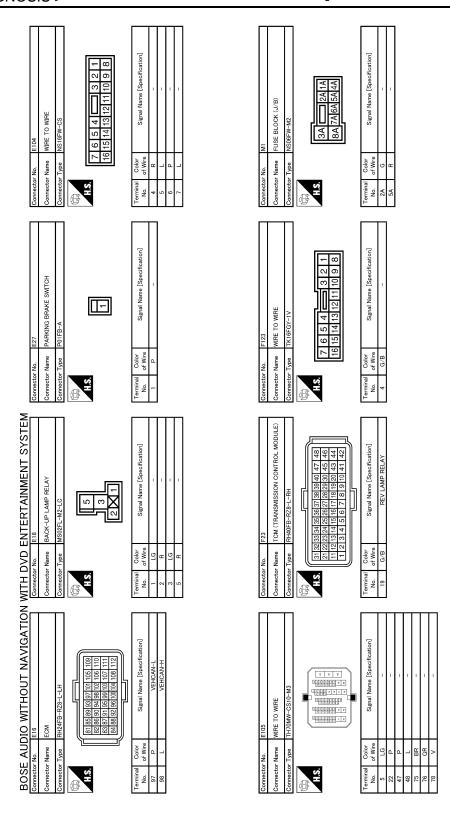
## **REAR DISPLAY UNIT**

# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

No. D106 Nume REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Type NSOZFBR-CS	Color   Signal Name [Specification]   Of Wire   Chipse A]   Chipse A]   W   Chipse B]   W   Chipse B]   Chipse B	mane WIRE TO WIRE  TO THIS MANUAL TO MIRE  1 2 3 4 5 6 7  8 9 10 11 12 13 114 15 16	Color Of Wire R		A B
Connector No. Connector Name Connector Type H.S.	Terminal Of No. of 1	Connector No. Connector Name Connector Type	Terminal Of No. of A		D
4 WITH BOSE	reification)		orification] SIGNAL SIGNAL		Е
DOB REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) NSOZEBR-CS 211	Signal Name (Specification)	D192 REAR VIEW CAMERA THOAMWI-NH	Signal Name [Specification] CAMERA ON SIGNAL CAMERA IMAGE SIGNAL SHIELD SHIELD		F
or No.	of Wire	No. Name Type	al Color of Wire B B B B B B B B B B B B B B B B B B B		G
	No. 1	Connector Connector	7 erminal No. 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		Н
WITH DVD ENTERTAINMENT SYSTEM  Connector No D81  Connector Name WIRE TO WIRE  Connector Type ITK10MW-NS8  Connector Type ITK10MW-NS8  M.S. 1   2   3   4   5   6   7   8   9   10    H.S. 1   1   1   1   1   1   1   1   1   1	Signal Name [Specification]	8 <u>7 </u>	Signal Name [Specification]		I
VD ENTERTAINMEN No. D01 Nume WIRE TO WIRE TX10MW-NSS 1 2 3 4 5 6 7 6 7 1 1 1 1 2 1 3 1 4 1 5 1 6 1 6 7 1 1 1 1 1 2 1 3 1 4 1 5 1 6 1 6 7 1 1 1 1 2 1 3 1 4 1 5 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6	Signal N	D182 WIRE TO WIRE TK12FW 5 4 3 6 12 11 10 9	Signal N		J
WITH DVD EN Connector Name Wife Connector Name Wife Connector Name Wife Connector Type II	Terminal Color No. of Wire 4 L 5 W	Connector No. D182 Connector Name WIRE Connector Type TK12 H.S.	Color   Colo		K
AATION					L
BOSE AUDIO WITHOUT NAVIGATIO  Connector No. D53  Connector Num EVSTEIN)  Connector Type INSOZFBR-CS  H.S.	Signal Name (Specification)  -[Type A]  -[Type B]  -[Type B]  -[Type B]	RE BB BB BB BB BB BB BB BB BB BB BB BB BB	Signal Name [Specification]  -[Type A]  -[Type B]  -[Type B]		M
DDIO WITH		D155 WIRE TO TK10MW			AV
BOSE AU. Connector Name Connector Type H.S.	Terminal   Color   C	Connector No.  Connector Name Connector Type H.S. 112	Color   Colo		0
ш <u>о о о та</u>	<u> -                                     </u>	O O O O	<u> -                                    </u>	JCNWM1882Gł	
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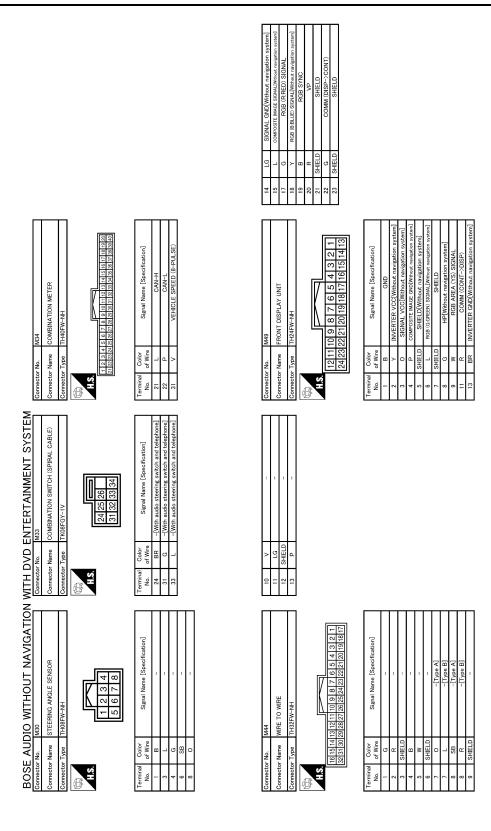


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## **REAR DISPLAY UNIT**

Name   WIRE TO WIRE	WIRE TO WIRE THISMW-NH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Signal Name [Specification]	АВ
Connector No.   MII8	Connector No.   M72	C D
cification]		Е
WIRE TO WIRE TH70FW-CSI0-M3  **		F
ector No.  cctor Name cctor Type  inal Color  of Wire  Color  Col	21	G
		Н
VALINK CONNECTOR 10111213141516 2 3 4 5 6 7 8 Signal Name [Specification]	NH NH	I
ENTERTAINME MA DATA LINK CONNECTOR BD16FW  9 10 11 12 13 14 11 1 2 3 4 5 6 7		J
WITH DVD EN Connector No. MM Connector No. MM Connector Name DV Connector Type BE No. of Viring No. of Viring B Lid L.	Connector No.   M72	K
		L
BOSE AUDIO WITHOUT NAVIGATION Somestor No. M3 Connector Name FUSE BLOCK (J/B) Connector Type NSIZFW-CS  ALS.  SGAC Signal Name [Specification]  Terminal Color Signal Name [Specification]  12C 0	Name   WIRE TO WIRE   Type   TH40MW-CS15	M
DIO WITHOL  M3  FUSE BLOCK (J/B)  NS12FW-CS  S[2040]   30  S[gral   Nar	No.   M20	AV
BOSE AUIC Connector Name Connector Type Connector Type ALS  ALS  Terminal Color No. of Wire No. of Wire 12C 0	Cornector No. Connector Name Connector Type Connect	0
		JCNWM1884Gŧ
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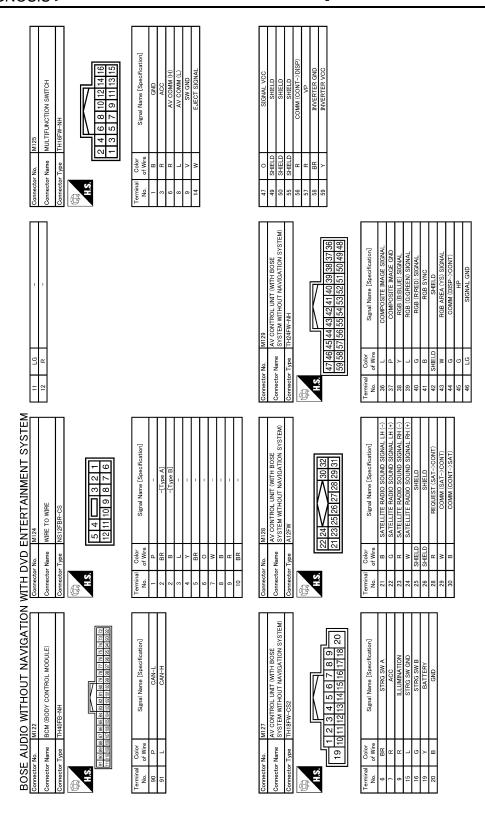


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## **REAR DISPLAY UNIT**

			А
		W W SHELD B B B B B B B B B B B B B B B B B B B	C
			E
M67 FRONT SQUAWKER RH TKQZFBR	Signal Name [Specification] [With BOSE system]	M86 WIRE TO WIRE THIGFW-NH	F
ector No. ector Name ector Type	Terminal Color No. of Wire 1 BR 2 R	ector No.	G
	Tempir	Termin   No   No   No   No   No   No   No   N	Н
WITH DVD ENTERTAINMENT SYSTEM Connector Name CENTER SPEAKER Connector Type TROZFBR	Signal Name [Specification]		J
ENTERTAIN M66 CENTER SPEAKER TK02FBR			J
WITH DVD ENTER Connector Name CENTER. Connector Type TKGZFBR  M.S.	Color	45	К
Z			L
BOSE AUDIO WITHOUT NAVIGATIO Connector Name FRONT SQUAWKER LH Connector Type TK02FBR  H.S.	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	WIRE TO WIRE TH80FW-CS19 Signal Name [Specification]	M
BOSE AUDIO Connector No. M65 Connector Name FRO Connector Type TKO	No. of Wire LG Color 1 LG Y	Connector No.   M77	0
<u> </u>			JCNWM1886GI

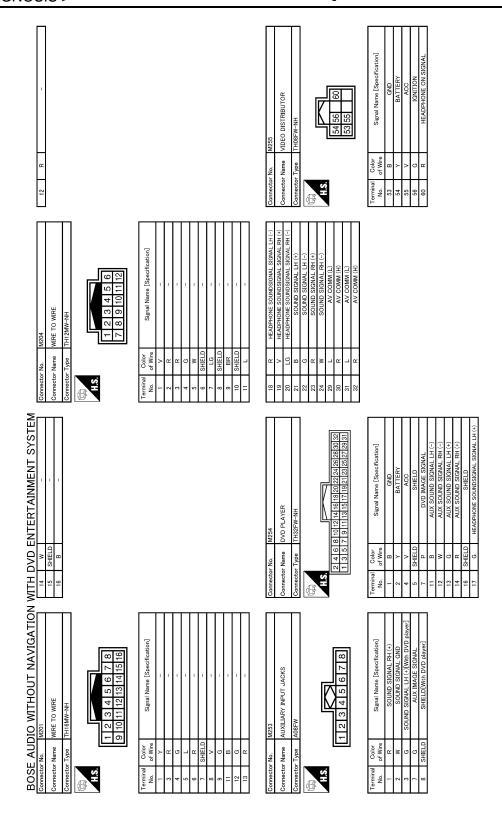
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JCNWM1887GE

	H)  H)  COGNITION  TIECT  AL LH (+)	А
	Find SOLIND SIGNAL RH (+)  AV COMM (+)  GND  AV COMM (+)  GND  Find SOLIND SIGNAL RH (+)  Find SOLIND SIGNAL LH (+)  Find SOLIND SIGNAL LH (+)	В
	14 W W 15 SHIELD 15 SHIELD 21 SHIELD 22 SHIELD 22 SH R 24 LG 23 R 7 24 LG 7 24	D
AV COMM (L) SIGNAL LH (-)[With DVD player] SHELD[With LDVD player] SHELD[With DVD player] SW GND EJECT SIGNAL IGNITION REVERSE PARKING BRAKE EHOLE SPEED (8-PULSE)	10   11   12   23   24   29   10   11   12   23   24   24   25   24   25   24   25   24   25   24   25   24   25   24   25   25	Е
QNNos	Name	F
198 98 98 99 98 99 98 99 99 99 99 99 99 9	Connector Name   Conn	G H
VERTAINMENT SYSTEM   STEM WITHOUT NAVIGATION SYSTEM   COURTOOL UNIT (WITH BOSE   COURTON SYSTEM   COURTON   COURTON	SOUND SIGNAL FRONT LH (-)	I
	SOUND STGAN	J
NWTH DVD	<u>c</u>	K
BOSE AUDIO WITHOUT NAVIGATIO	1122 V CONTROL UNIT (WITH BOSE V STEWN WITHOUT NAVICATION SYSTEM) HIPPW-NH  SIGNAL REAR RH (+) SOUND SIGNAL REAR RH (+) SOUND SIGNAL REAR RH (-) SOUND SIGNAL REAR LH (-) SOUND SIGNAL REAR LH (-) SOUND SIGNAL REAR LH (-) SOUND SIGNAL REAR RH (-)	L M
DIO WITHOUT NAVIGATI MI33 AV CONTROL UNIT WITH BOSE SISTEM WITHOUT NAVIGATION SYSTEM) THISFW-NH THISFW-NH SIGNAL SIGNAL COMPOSITE MAGE SIGNAL(Wich DVD player) COMPOSITE MAGE SIGNAL(Wich DVD player) COMPOSITE MAGE GONOL(Wich DVD player)		AV
BOSE AUII Connector Name Connector Type ALS  Terminal Color No. of Wire 64 SHELD 65 W 66 L 68 P 73 SHELD 74 R	Commetter Name   Commetter Name   Commetter Name   Commetter Type   100   V   V   110   V   V   110   V   V   V   V   V   V   V   V   V	0
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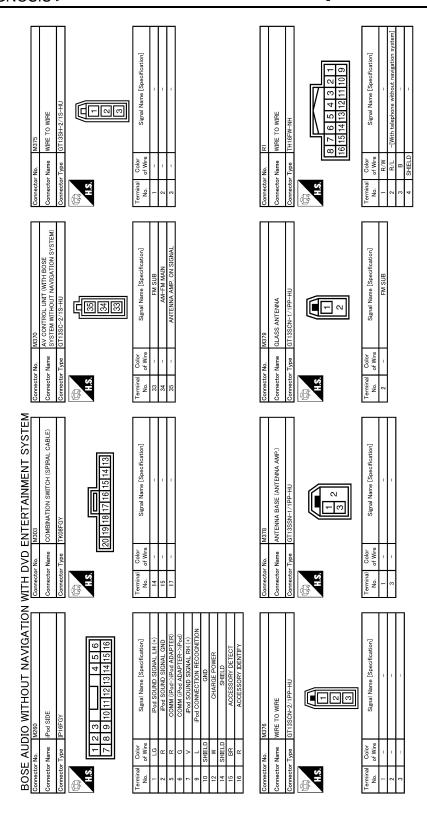
## **REAR DISPLAY UNIT**

# [BOSE AUDIO WITHOUT NAVIGATION]

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100N 1.00 P->DISET) 17->DISEP)	[1] [2] [3] [4] [5] [6] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2	Е
IGNITION SHELD COMM (DISP->DISP) COMM (DISP->DISP)	MW-NH E MW-NH E Signal Name Signal Name	F
		G
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Connector Name   WIDEO DISTRIBUTOR   Connector Name   VIDEO DISTRIBUTOR   Connector Name   VIDEO DISTRIBUTOR   Connector Name   VIDEO DISTRIBUTOR   Connector Type   TH15PW-NH   Connector Type   TH16PW-NH   Connector T	DVD IMAGE SIGNAL	I
Mass	MI OVO	J
Connector Name   Connector Name   Connector Name   Connector Name   Connector Type   The Co	Δ 33	K
N C C C C C C C C C C C C C C C C C C C	<u> </u>	L
STRIBUTOR NH  Signal Name [Specification]  GND	18 20 22    18 20 22    17 19 21    18 20 22    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21    17 19 21 21 21 21 21 21 21 21 21 21 21 21 21	M
AUDIO WITHOUT No. M256 Name VIDEO DISTRIBUTOR Type THIZPW-NH Ocior Signal Name   B Gg	MW236 MDEO DI MDEO DE DI MDEO DI MDEO DI MDEO DE DI MDEO DE DE MDEO	AV
BOSE AU Connector Name Connector Type No. of Wir. St. B	Commector Name   Commector Name   Commector Name   Commector Type   Commercior Typ	0
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<u>.</u>	13	ď	COMPOSITE SYNC
_	5 4	2 00	COMPOSITE SING
	15	В	RGB AREA (YS) SIGNAL
	16	SHIELD	GND
	17	×	ΛÞ
	18	W	HP
	19	N/L	RGB GND
	70	5/X	RGB (B:BLUE) SIGNAL
	21	J/X	RGB (G:GREEN) SIGNAL
	22	BR/L	RGB (R:RED) SIGNAL
	23	SHIELD	SHIELD
	24	SHIELD	SHIELD
	52	PΠ	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)
	56	BR	HEADPHONE SOUNDSIGNAL SIGNAL LH (-)
	27	^	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)
	28	Υ	HEADPHONE SOUNDSIGNAL SIGNAL LH (+)

BOSE AUD	BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	WITH DVD	ENTERTAINMENT SYSTEM
Connector No.	R20	Connector No.	R152
Connector Name MICROPHONE	MICROPHONE	Connector Name	Connector Name REAR DISPLAY UNIT
Connector Type	TK04FW	Connector Type	TH32FW-NH
H.S.	1234	H.S.	6 8 10 12 14 16 18 20 22 24 26 28 30 32 5 7 9 11 11 13 15 17 119 21 23 25 527 29 31

Ter				
Signal Name [Specification]	MICROPHONE SIGNAL (+)	[wateks ungelijnen groups aucydejes upwij;) TENDIS ENOHOOSOW	MICROPHONE POWER	
Color of Wire	R/W	R/L	В	
Terminal No.	-	2	4	
	Color Signal Name [Specification]	Oolor Signal Name [Specification] of Wire R/W MICROPHONE SIGNAL (+)	Color   Signal Name [Specification]	Color Signal Name [Specification]  R/W MICROPHONE SIGNAL (+)  R/L MICROPHONE SIGNAL (+)  B MICROPHONE POWER

Signal Name [Specification]	GND	GND	BATTERY	BATTERY	HEADPHONE ON SIGNAL	ACC	SHIELD	COMM (DISP->DIST)	COMM (DIST->DISP)	IGNITION	SHIELD
Color of Wire	В	В	Y/R	Y/R	Я	٨/٨	SHIELD	^	ΡT	G	SHIELD
Terminal No.	1	2	3	4	5	9	8	6	10	11	12

Š	1	7	3	4	2	9	8	6	10
Signal Name [Specification]	MICROPHONE SIGNAL (+)	[westeks uogstējesu эпоцам энецdэрэ цим];-) TVNDIS ЭКОННОНОІМ	MICROPHONE POWER						
of Wire	R/W	R/L	В						

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J/Y	BR/L	9	٨/٨	PΠ	۸	SHIELD	В	М	Я	SHIELD	5	Я	SHIELD	ď
13	14	16	18	21	22	23	24	25	56	27	28	59	30	31
				1										
ı	l		ı	ı										

Connector No.		R153
Connector Name	r Name	WIRE TO WIRE
Connector Type	r Type	TH32FW-NH
是 HS.		
	32 31 30	29 28 27 28 25 24 23 22 21 20 19 18 17
Terminal	Color	
No.	of Wire	olgnal Name Lopecinication]
1	Y/R	-
2	В	-
4	SHIFLD	1

[moiston@inner] come[N   come[S	oighal naille [opecincation]	-	=	1		-	-	-	1		-	-	
Color	of Wire	Y/R	В	SHIELD	ΓG	٨	SHIELD	BR	Υ	SHIELD	W/L	Y/G	
Terminal	No.	1	2	4	5	9	7	8	6	10	11	12	

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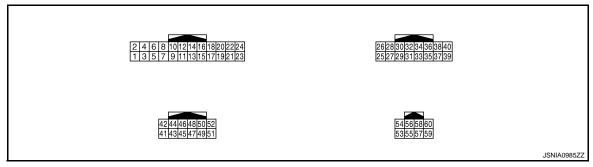
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Reference Values

## TERMINAL LAYOUT



#### PHYSICAL VALUES

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
1 (R)	_	AV communication signal (H)	Input/ Output	_	_	_
2 (G)	_	AV communication signal (L)	Input/ Output	_	_	_
3 (R)	_	AV communication signal (H)	Input/ Output	_	_	_
4 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
8 (L)	6 (R)	Composite image signal for AV control unit	Output	Ignition switch ON	When AUX or DVD image is displayed on front display unit.	(V) 0. 4 0 -0. 4 •••40μs skiB2251J
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
16 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
19 (G)	Ground	AUX image signal	Input	Ignition switch ON	When AUX image is displayed.	(V) 0. 4 0 -0. 4  SKIB2251J
21	_	Shield (AUX image GND)	_	_	_	_
22		Shield (DVD image GND)	_		_	_

# [BOSE AUDIO WITHOUT NAVIGATION]

(Wire	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
23 (P)	Ground	DVD image signal	Input	Ignition switch ON	When DVD image is displayed.	(V) 0. 4 0 -0. 4 SKIB2251J
25 (R)	Ground	RGB image signal (R: red) for rear display unit	Output	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 1 0 **5ms JSNIA0984ZZ
26 (L)	Ground	RGB image signal (G: green) for rear display unit	Output	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 1 0 ***5ms
27 (W)	Ground	RGB ground for rear display unit	_	Ignition switch ON	_	J\$NIA0984ZZ
28 (G)	Ground	RGB image signal (B: blue) for rear display unit	Output	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 2 0 **25 \(\mu\s\) JSNIA1090ZZ
29 (R)	Ground	Vertical synchronizing (VP) signal for rear display unit	Input	Ignition switch ON		(V) 4 0 +-4ms SKIB3598E
30 (W)	Ground	Horizontal synchronizing (HP) signal for rear display	Input	Ignition switch ON	_	(V) 4 0 +-20µs
						SKIB0825E

# [BOSE AUDIO WITHOUT NAVIGATION]

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
					When AUX or DVD image is displayed on rear display unit.	0 V
32 (B)	Ground	RGB area (YS) signal for rear display	Output	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 6 4 2 0 ++200μs PKIB4948J
33 (G)	Ground	Composite and RGB image synchronizing signal for rear display	Output	Ignition switch ON	When AUX or DVD image is displayed on rear display unit.	(V) 4 0 → 20µs SKIB0825E
34 (R)	Ground	Composite image signal for rear display unit	Output	Ignition switch ON	When AUX or DVD image is displayed on rear display unit.	(V) 0. 4 0 -0. 4 -0. 4 -0. 4 -0. 4
35	_	Shield	_	— Ignition	<del>-</del>	<del>-</del>
36	Ground	Ignition signal	Output	switch ON	_	0 V
(G)		3 3		Ignition switch OFF	_	3.3 V
38	_	Shield	_	_	_	_
39 (V)	Ground	Communication signal (DISP→DIST)	Input	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 6 4 2 0 +-1ms
40 (LG)	Ground	Communication signal (DIST→DISP)	Output	Ignition switch ON	Rear seat remote controller operation when AUX or DVD image is displayed on rear display unit.	(V) 6 4 2 0 + 1ms
51 (B)	Ground	Ground	_	Ignition switch ON	_	0 V

#### < ECU DIAGNOSIS >

#### [BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
53 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
54 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	
55 (V)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage	
56 (G)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage	
60		Headphone amp. ON sig-		Ignition	Headphone mode is ON.	4.5 V	
(R)	Ground	nal	Output	switch ON	Headphone mode is OFF.	0 V	

Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

NOTE:

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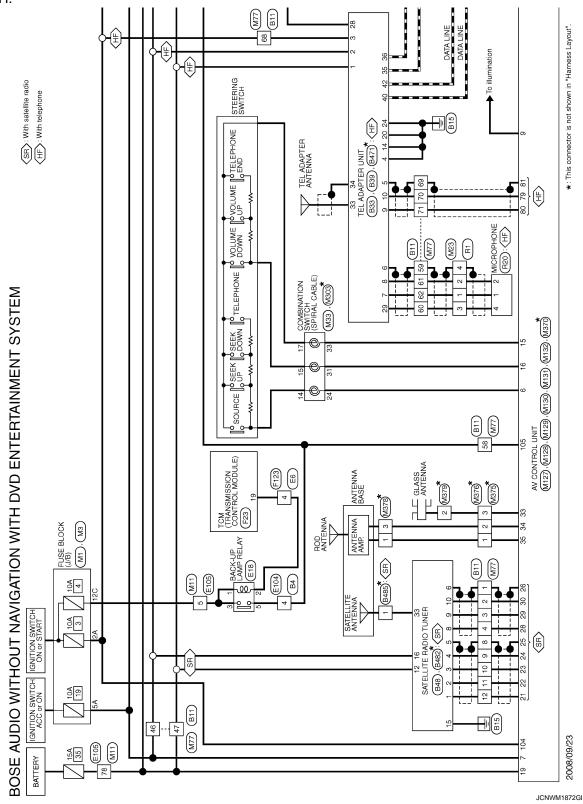
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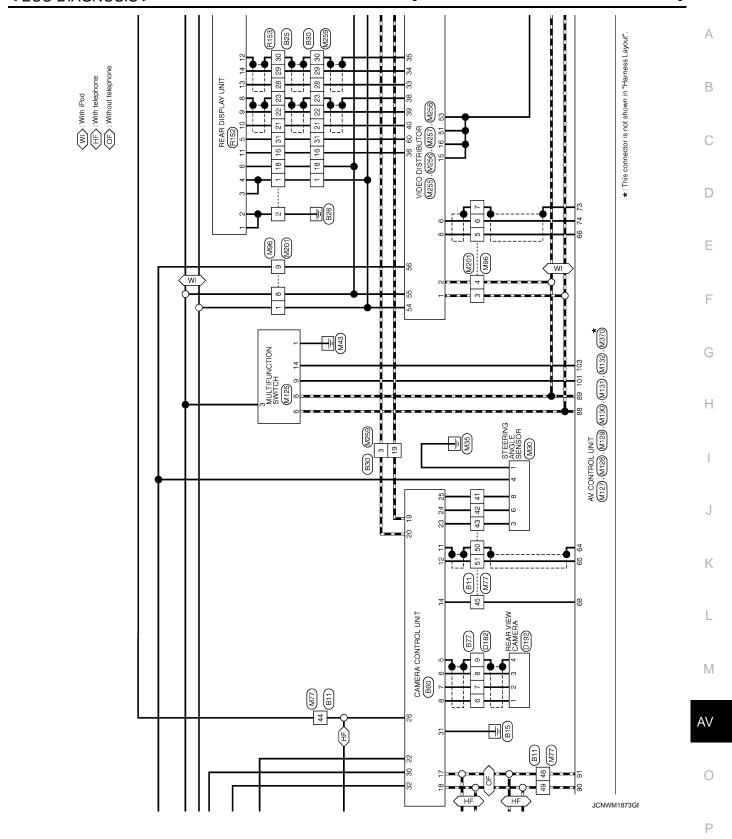
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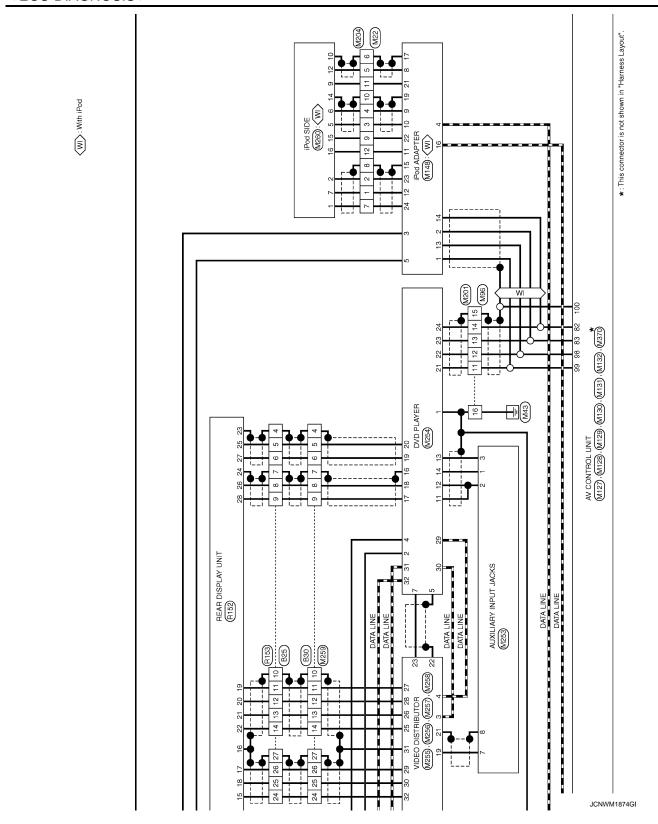
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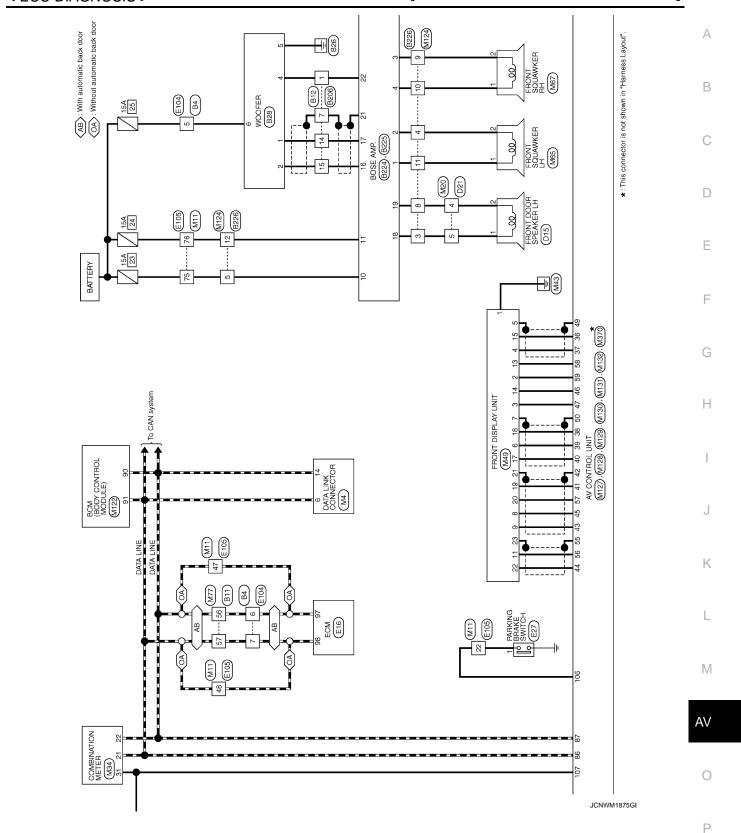
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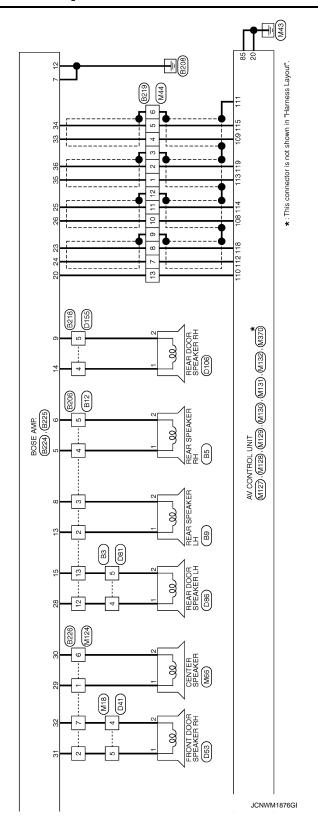
In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.





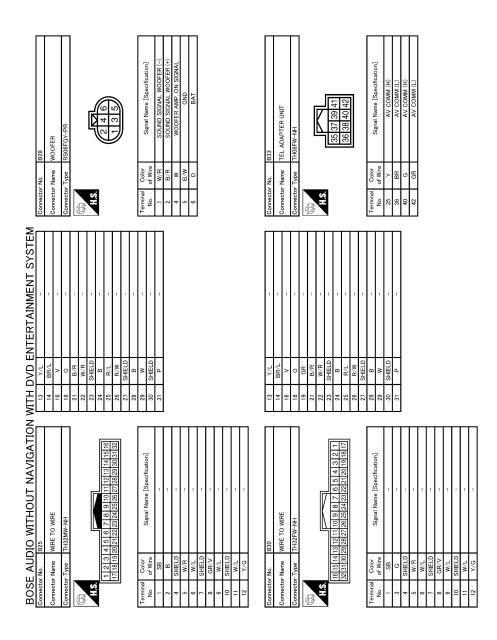






	feation		А
SPEAKER LH	Signal Name (Specification)		В
Connector No. 69 Connector Name REAR SPEAKER LH Connector Type TK02FBR	Of Wire SB SB GR		С
Connector Name Connector Name Connector Type H.S.	Terminal No. No.		D
	pecification]	9 2 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Е
BS REAR SPEAKER RH TKOZFBR	Signal Name (Specification)	B12   WIRE TO WIRE   NIS IEFW-CS   Signal Name   Specification   Specification   Signal Name   Specification   Signal Name   Specification   Signal Name   Specification   Specification   Signal Name   Specification   Signal Name   Specification   Specificati	F
2 0	O Color of Wire	8 8 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	G
	Terminal No. 1	Connector No.	Н
Connector No.   64   Connector No.   64   Connector Name   WIRE   Connector Name   WIRE   Connector Type   NS18MW-CS	Signal Name [Specification]		I
ENTERTAIN Bet WIRE TO WIRE INSTRIMM-CS 2 3	Signal Nar	-(With rear view	J
WITH DVD EN Gomestor No. B4 Connector Name WI Connector Type NO. Conne	Terminal Color No. 9 R Wre 5 0 6 7 L L	44 44 44 44 44 44 45 46 44 45 46 46 47 47 47 47 47 47 47 47 47 47 47 47 47	К
z			L
BOSE AUDIO WITHOUT NAVIGATIO    Same core   Same core	Signal Name [Specification]	Signal Name (Specification)	M
AUDIO WITH No. 83 Name WIRE TO WIRE Type TK10FW-NSS  10  9  8  7  6  15		MWRE TO THE STATE OF THE STATE	AV
BOSE AU Connector No. Connector Type MS 10 9	Color   Colo	Connector No.  Connector Name Connector Type  1 S. 18 E. 19 E. 11 E. W.V.C. 10 V.V.C. 11 V.V.C. 11 V.V.C. 11 V.V.C. 11 V.V.C. 11 V.V.C. 11 V.V.C. 12	0
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# [BOSE AUDIO WITHOUT NAVIGATION]

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16 GR ACC		Connector No. 8206  Connector Name WIRE TO WIRE  Connector Type INSTRAM*CS  1 2 3	Terminal No.         Color of Wire         Signal Name (Specification)           1         W         -           2         GR         -           3         ER         -           4         Y         -           5         SHELD         -           7         SHELD         -           12         G         -           14         W/R         -           14         W/R         -           15         B/R         -		A B C
		Com	No. ni. ni. ni. ni. ni. ni. ni. ni. ni. ni		
14 16 13 15	(cation) H (-)		[cation]		Е
48 ATELLITE RADIO TUNER 16FW 6 7 8 9 10 11	Signal Name [Specification] SOUND SIGNAL LH (-) SOUND SIGNAL LH (-) SOUND SIGNAL RH (-) SHELD REQUEST (SAT->CONT) COMM (CONT->CONT) CONTROL	917 WIRE TO WIRE TKI 20MW  1 2	Signal Name (Specification)		F
127	Color   Of Wire   Of Wire   V/L   V/L   V/G   BR/L   SHIELD   SHIELD   R/W   R/L   B   B   C   C   C   C   C   C   C   C		of Wire for Wire R/L R/W B SHIELD		G
	Terminal No. 10. 2 2 2 3 4 4 4 4 6 6 6 6 6 10 10 11 12 11 12 11 12 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15 11 15	Connector No. Connector Typ	Terminal No. 6 6 7 8 8 9 9		Н
ENTERTAINMENT SYSTEM CONTROL SIGNAL CONTROL SIGNAL VEHICLE SPEED (8-PULSE) MICROPHONE VCC		REVERSE SENSOR SIGNAL 1 SENSOR SIGNAL 2 SENSOR SIGNAL 2 SENSOR SIGNAL 3 VEHICLE SPEED (8-PULSE) GND BATTERY			I
TERTA CC CC VEHICL MICL		SE S			J
WITH DVD  20		22 R 23 G G R 8 B R 25 G R			К
N N N N N N N N N N N N N N N N N N N		330			L
AUDIO WITHOUT NAVIGATION No. 839 Nume TEL ADAPTER UNIT Nype THR32FW-NH    16   8   10   12   14   16   18   22   22   22   22   23   23   23   2	Signal Name (Specification) BATTERY ACC IGNITION GND SHIELD SHIELD MICROPHONE SIGNAL, TEL VOICE SIGNAL (*) TEL VOICE SIGNAL (*) TEL VOICE SIGNAL (*)	INTROL UNIT	Signal Name (Steerfication) SHELD CAMERA MAGE SIGNAL GNO CAMERA IN SIGNAL SHIELD CAMERA IN REGORDAL CONNESTION RECOGNITION AV COMM (H)		M
E AUDIO WITHOU  F. No. B39  F. L. ADAPTER UNIT  F. Type TH32FW-NH  T. L. ADAPTER UNIT  F. Type TH32FW-NH  T. L. ADAPTER UNIT  F. Type TH32FW-NH  T. Type TH32FW-NH		7 No. B60  Antibode CAMERA CO  Type TH32FW-NH  2   4   6   10   2   4    1   3   5   7   9   11   13	ig		AV
BOSE AUD Connector No. Connector Name Connector Type H.S. H.S. T. 2   6   8	Terminal Color No. of Wire 1 V 2 GR 3 RW 4 BVW 5 SHELD 6 SHELD 7 R/W 10 W/R 11 W/R	Connector No. Connector Type Connector Type  A.S.  A.S	Terminal Color No. of Wire No. of Wire S HELD 6 B HELD 17 R/W 8 R/L 11 SHELD 11 B HELD 11 B HELD 11 B R 11		0
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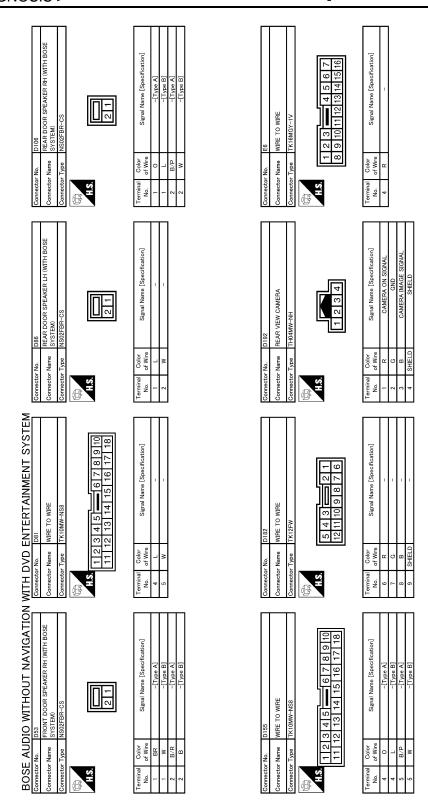
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BOSE A	BOSE AUDIO WITHOUT N.		AVIGATION WITH DVD ENTERTAINMENT SYSTEM Connector No.   P2719	12	SHIELD	1		
Connecte	Connector Type   TK10FW-NS8		Connector Name WIRE TO WIRE Connector Type ITH32MM-NH	2	<del>-</del>			
	10 9 8 7 6 E	14 13 12 11	1 2 3 4 5 6 7 8 9 101 12 13 14 15 16   T18 13 22 22 24 25 28 27 28 29 30 31 32					
Terminal No. 4	Color of Wire L	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	Terminal Oolor   Signal Name [Specification]   Oolor   Oolor					
			4 W/R					
			9 W/L					
Connector No. Connector Nar Connector Typ	Connector No. B224 Connector Name BOSE AMP. Connector Type SGA12FBR-SJA2	A2	12 B GND 13 GR SOUND SIGNAL REAR SPEAKER LH (+) 14 L SOUND SIGNAL REAR DOOR SPEAKER RH (+)	Connector No. Connector Name Connector Type		BOSE AMP. SCA19FBR-SGA4	26 GR/V   SOUND SIGNAL REAR FRA SPEAR     28 G   SOUND SIGNAL CENTER SPEAR     29 V   SOUND SIGNAL CENTER SPEAR     30 P   SOUND SIGNAL CENTER SPEAR     31 BR   SOUND SIGNAL FRANTER SPEAR     31 BR   SOUND SIGNAL FRANTER SPEAR     32 SOUND SIGNAL FRANTER SPEAR     33 SOUND SIGNAL FRANTER SPEAR     34 SOUND SIGNAL FRANTER SPEAR     35 SOUND SIGNAL FRANTER SPEAR     36 SOUND SIGNAL FRANTER SPEAR     37 SOUND SIGNAL FRANTER SPEAR     38 SOUND SIGNAL FRANTER SPEAR     39 SOUND SIGNAL FRANTER SPEAR     30 SOUND SIGNAL FRANTER SPEAR S	PE SPE SPE
H.S.	14 13 12 9 8 7 6	11 10		H.S.	37 3638 27 2628	26 25 24 23 22 21 20 19 18 17 16 15	32         Y         Souhu SidAL FRONT Door SreA.           33         W/FR         SOUND SIGAL FRONT R           34         B/R         SOUND SIGAL FRONT R           35         W/R         SOUND SIGAL FRONT R           36         B/R         SOUND SIGAL FRONT R           36         B/R         SOUND SIGAL FRONT R	T L L
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]		
- 2	r r	SOUND SIGNAL FRONT SQUAWKER LH (+) SOUND SIGNAL FRONT SQUAWKER LH (-)		15	B/R	SOUND SIGNAL REAR DOOR SPEAKER LH (-) SOUND SIGNAL WOOFER (+)		
ε 4	L SOUND SIGNA	SOUND SIGNAL FRONT SQUAWKER RH (-)		17	W/R	SOUND SIGNAL WOOFER (-) SOUND SIGNAL FRONT DOOR SPEAKER I H (+)		
2	П	SOUND SIGNAL REAR SPEAKER RH (+)		19	В	SOUND SIGNAL FRONT DOOR SPEAKER LH (-)		
9 ~	BR SOUND SIGN	SOUND SIGNAL REAR SPEAKER RH (-)		20	SB	AMP, ON SIGNAL		
- &	╁	SOUND SIGNAL REAR SPEAKER LH (-)		22	×	WOOFER AMP. ON SIGNAL		
6	Н	SOUND SIGNAL REAR DOOR SPEAKER RH (-)		23	N/L	SOUND SIGNAL REAR LH (-)		
₽ =	SB	BATTERY BATTERY		24 25	GR/V W/L	SOUND SIGNAL REAR LH (+) SOUND SIGNAL REAR RH (-)		

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Connector No. B482 Connector Name SATELLITE RADIO TUNER Connector Type FAKRA  HS. San - SATELLITE ANTENNA  San - SATELLITE ANTENNA	Connector Name   D41	A B C
Connector No.   B471	Connector No	E F G
WITH DVD ENTERTAINMENT SYSTEM	Connector No.   D15	J K
BOSE AUDIO WITHOUT NAVIGATION	Cornector No. B485 Connector Name AirBeha, Buck SATELLITE ANTENAN Connector Type GT16C-1PP-HU  A.R.S.  Terminal Color Signal Name [Specification]  1 - SATELLITE ANTENNA	AV O JCNWM1881GI
		Р

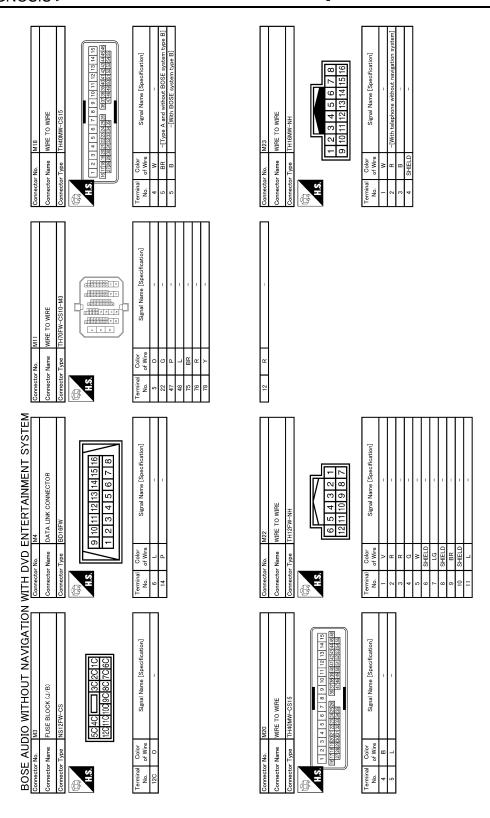
Revision: 2008 October AV-313 2009 Murano



JCNWM1882GI

BOSE AUDIO WITHOUT NAVIGATION WITH DVO ENTERTAINMENT SYSTEM    Conceptual Designation   Conceptu	No. E104  Name WIRE TO WIRE  Type NS16FW-CS  7 6 5 4  3 2 1  16 15 14 13 12 11 10 9 8  16 15 14 13 12 11 10 9 8  16 15 14 13 12 11 10 9 8  16 15 14 13 12 11 10 9 8  17 15 14 15 14 15 12 11 10 9 8  18	Name   FUSE BLOCK (J/B)     Type	A B C
BOSE AUDIO WITHOUT MAYIGATION WITH DVD ENTERTAINMENT SYSTEM  Connecte than 1014  Conne	Connector Name Connector Type Connec	ininal S	D
BOSE AUDIO WITHOUT NAVIGATION WITH DVO ENTERT AINNENT SYSTEM    Conception for production for pr	H H Seeffication)	9 1 1 Seeffication)	Е
BOSE AUDIO WITHOUT NAVIGATION WITH DVO ENTERTAINMENT SYSTEM    Control Number   Number   Control Number   Co	G BRAKE SWITCI	3 VIRE 3 12 11 10 Signal Name [St	F
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTANIMENT SYSTEM    Conceils have been been been been been been been be	tor No. E27  tor Name PARKIN  Type POIFB-  Of Wire  P	Trips  Tr	G
BOSE AUDIO WITHOUT NAVIGATION		Connect Connect No.	Н
BOSE AUDIO WITHOUT NAVIGATION	RELAY Anne (Specification)	ISION CONTROL MODULE) RH 88 9340 47 48 89 910 41 42  Mann (Specification) V LAMP RELAY	I
BOSE AUDIO WITHOUT NAVIGATION	NTERTAL 18 3 Ack-up Lamp Signal h	23 CM (TRANSMIS) H40FB-R2B-L- 20 34 35 36 37 (5 2 2 7 7 8 1 4 15 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 5 (6 17 7 8 1 4 1 4 1 5 (6 17 7 8 1 4 1 4 1 5 (6 17 7 8 1 4 1 4 1 4 1 5 (6 17 7 8 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	J
Connector Name   E18	MITH DVD E.  Connector Name B.  Connector Type M.  I.S.  I.S.  I.S.  I. LG  I.		К
BOSE  Terminal  No. 19  Somector P  No. 19  Somector P  No. 10  So	NOTE OF THE PROPERTY OF THE PR		L
BOSE  Terminal  No. 19  Sumestor P  No. 19  Sumestor P  No. 10  Su	HOUT NAVIG	In Name Specification	M
BOSE  Terminal  No. 19  Sumestor P  No. 19  Sumestor P  No. 10  Su	E CM RH24FB-RZ8 RH24 RH24 RH24 RH24 RH24 RH24 RH24 RH24	WIRE TO THYDINW	AV
JCNWM1883Gł	BOSE AL Connector No. Connector Type Connector Type Connector Type ALS ALS AN Of With Street Color Of With Street	Connector No.   Connector Name   Connector Name   Connector Type   Conne	0

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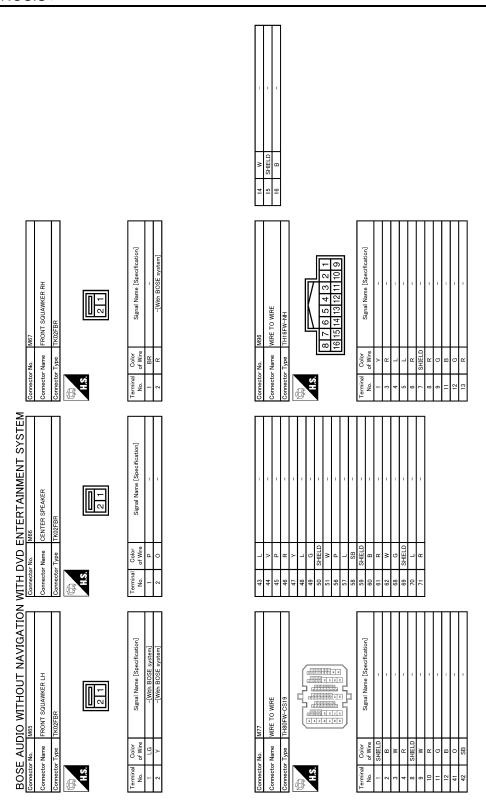
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# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

		SIGNAL GND[Without navigation system] COMPOSITE MACE SIGNAL/Weater avegation system] RGB (RPRED) SIGNAL RGB RDLUE SIGNAL/Weater avegation system) RGB RSTWAC WP SHELD SOMM (OISES->CONT)			АВ
		14   L/G   SIGNA     15   L   COMPET     17   G   COMPET     18   F   F   COMPET     19   B   F   COMPET     20   R   COMPET     21   SHIELD     23   SHIELD     23   SHIELD     24   COMPET     25   COMPET     26   COMPET     27   COMPET     28   COMPET     29   COMPET     20   COMPET     20   COMPET     21   COMPET     22   COMPET     23   SHIELD     24   COMPET     25   COMPET     26   COMPET     27   COMPET     28   COMPET     29   COMPET     20   COMPET     20   COMPET     20   COMPET     20   COMPET     21   COMPET     22   COMPET     23   COMPET     24   COMPET     25   COMPET     26   COMPET     26   COMPET     27   COMPET     28   COMPET     29   COMPET     20   COMPET     20   COMPET     20   COMPET     20   COMPET     20   COMPET     21   COMPET     22   COMPET     23   COMPET     24   COMPET     25   COMPET     26   COMPET     26   COMPET     27   COMPET     28   COMPET			C
######################################	Signal Name (Specification) CANH-H GANH-L GANH-L FINGLE SPEED (8-PULSE)	W UNIT	Signal Name [Specification]  OND  SIGNAL VCC[Without navigation system] SIGNAL VCC[Without navigation system] SHELD (Without navigation system] SHIELD (Without navigation system) HP[Without navigation system] HP[Without navigation system] COMM (CONT->DISD)  INVERTER GND[Without navigation system]		E
Connector No. M34 Connector Name COMBINATION METER Connector Type TH40FW-NH  1.2 3 4 5 6 7 8 9 10 11 12 12 22 22 22 22 22 22 22 22 22 22	of Wire	Connector No. M49 Connector Name FRONT DISPLAY UNIT Connector Type THZ4FW-NH  1.2 1.2 1.2 1.2 1.2 1.1 1.0 9 8 7 6 5 6 5 7 1.4 1.3 1.2 1.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Color of Wire B W W W W W W W W W W W W W W W W W W		G
	Terminal Terminal 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Conne	1 eminal No. 1		Н
ENTERTAINMENT SYSTE  MASS COMBINATION SWITCH (SPIRAL CABLE)  TKOBFGY-1V  24 25 26 31 32 33 34	Signal Name [Specification]  -[With audio steering switch and telephone] -[With audio steering switch and telephone] -[With audio steering switch and telephone]				I
INTERTAIN MA3 COMBINATION SW TKG8FGY-1V  TKG8FGY-1V  14 25 26  11 32 33	Signal Na With audio stee With audio stee With audio stee				J
Sometor No.   M30	Color   No.   Of Wire     Of Wire     Of Wire     Of Wire     Of Wire     Of   Of   Of   Of   Of   Of   Of	10 V 11 LG 12 SHELD 13 P			К
AATION					L
M30 STEERING ANGLE SENSOR THORPW-NH  1 2 3 4 5 6 7 8	Signal Name (Specification)	8 7 6 5 4 3 24 23 22 21 20 19	Signal Name (Specification		M
UDIO WIT		MA44 WIRE TO WI TH32FW-NI-			AV
BOSE AU Connector No. Connector Name Connector Type	Color   Colo	Connector No. Connector Name Connector Type H.S. H.S. 16 15 11	Color   Colo		0
<u> </u>				JCNWM1885GI	Р
					r

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Connector No. M125  Connector Type TH16FW-NH  Connector Type TH16FW-NH  Terminal Color Signal Name [Specification]  No. of Wive Signal Name [Specification]  1 8 R AV COMM (1)  8 L AV COMM (1)  9 V SW COMM (1)  14 W EJECT SIGNAL	47 O SIGNAL VCC 49 SHELD SHELD 50 SHELD SHELD 55 SHELD SHELD 56 R COMM CONT-DISP) 57 R VP 58 BR INVERTER CND 59 Y INVERTER VCC	A B C
12 R R	Connector No.   M129	E F G
MITH DVD ENITERTAINMENT SYSTEM   Connector No.   Mi24   Connector Name   WIRE TO WIRE   Connector Name   WIRE TO WIRE   Connector Type   NISTRR-CS   Standard   Sta	Av CONTROL INIT WITH BOSE   Av CONTROL INIT WITH BOSE	J K
BOSE AUDIO WITHOUT NAVIGATION Connector Name BCM (BODY CONTROL MODULE) Connector Type TH40FB-NH  Connector Type TH40FB-NH  Connector Type TH40FB-NH  The Color Signal Name (Specification) 90 P CAN-H 91 L CAN-H	Connector No.   M127   Connector No.   M127   Connector Name   SYSTEM WITHOUT NAYGATION SYSTEM   Connector Type   THISPW-CS2   THISPW	M AV
		Р

Revision: 2008 October AV-319 2009 Murano

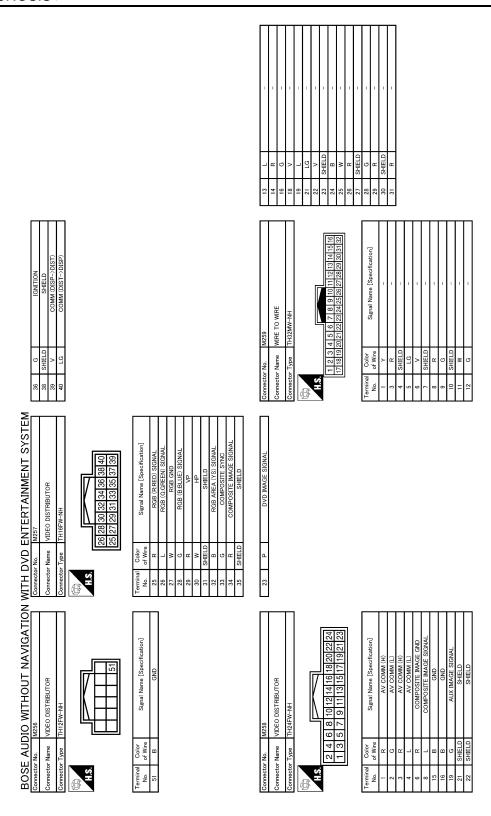
		14   W   Prod SOUND SIGNAL RH (~)     15   SHIELD   SHIELD     16   R	
99 G SOUND SIGNAL LH (-)[With DVD player] 99 B SOUND SIGNAL LH (-)[With DVD player] 100 SHIELD SIGNAL LH (-)[With DVD player] 101 V SHIELD SIGNAL LH (-)[With DVD player] 103 W RUD 104 G SHIELD SIGNAL LH (-)[With DVD player] 105 SB RUD 106 SB REVERSE 107 V SHIELD SIGNAL 108 G PARRING BRAKE 109 S B PARRING BRAKE 109 TO VEHICLE SPEED (8-PULSE)		Connector No. MI48 Connector Nane Prod ADAPTER Connector Type TH24FW-NH  12 3 4 5 6 7 8 9 10 11 12  13 14 15 16 17 18 19 20 21 22 23 24	Terminal   Color   Signal Name [Specification]   1   BR   Page   Signal Name [Specification]   1   BR   Page   Signal Name [Specification]   1   BR   Page   Signal Name   Specification]   1   BR   Page
BOSE AUDIO WITHOUT NAVIGATION   WITH DVD ENTERTAINMENT SYSTEM	Termina   Color   Signal Name [Specification]     No. of Wire   Signal Name [Specification]     19	119 R SOUND SIGNAL FRONT LH (~)	
M 130 M 140 M 150	Color   Signal Name [Specification]	M 132  AV CONTROL UNIT (WITH BOSE AV CONTROL UNIT) (WITH BOSE	Color   Signal Name [Specification]     V   SOUND SIGNAL REAR RH (+)     P   AMP. ON SIGNAL REAR RH (+)     SOUND SIGNAL REAR LH (+)     SOUND SIGNAL REAR LH (+)     SOUND SIGNAL REAR LH (+)     SOUND SIGNAL REAR RH (
BOSE AU Connector No. Connector Type Connector Type H.S.	Terminal Co. No. of No.	Connector No. Connector Name Connector Type H.S.	Terminal OC No. 0f 1 108 1109 1112 1112 1113 1115 1115 1115 1115 1118 1118 1118

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# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

72 B	Connector No.   M255	A B C
M204   Connector No.   M204	18   R   HEADPHONE SOUNDSIGNAL BIGAL LH (-)	E F G
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM   Cornector Name   WIFE TO WIFE   Service   Cornector Type   TH16MV-NH   Cornector Type   TH16MV-NH   Terminal   Color   Signal Name [Specification]   Terminal   Color   Signal Name [Specification]   Color   Color	Connector No.   M254   Connector Name   DVD PLAYER	J K
Connector Name   WIFE TO WIFE	Connector No.   M253	AV O
		Р



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Connector No. M375 Connector Name WIRE TO WIRE Connector Type GT13SH-2-/IS-HU H.S. The Connector Type GT13SH-2-IS-HU The Connector Type GT13SH-2-IS-HU The Connector Type GT13SH-2-IS-HU The Connector Name	Terminal Color Signal Name [Specification]	Connector No.   R1   Connector Name   WIRE TO WIRE	A B C
Connector No. M370 Connector Name SystEM WITHOUT WITH BOSE Connector Type GT135C-2-1/5-HU  M3.  H.S. [33]	Terminal   Color   Signal Name [Spacification]   No.   23	Connector No.  Connector Type GT13SCN-1 / IPD-HU  Connector Type GT13SCN-1 / IPD-HU  Terminal Color  No. of Wire Signal Name [Specification]  2	E F G
Connector Name COMBINATION SWITCH (SPIRAL CABLE) Connector Type TKOBFGY  Conne	Terminal   Color   Signal Name [Specification]   14	Connector No. M378 Connector Type GT13SSN-1/1PP-HU  Connector Type GT13SSN-1/1PP-HU  H.S.  Terminal Color No. of Wire Signal Name [Specification]  1  3	J K
BOSE AUDIO WITHOUT NAVIGATION  Connector Name Prod SIDE  Connector Type Prisfror  Connector Type Prisfror  (1 2 3 4 5 6 7 8 9 101111213141516	Terminal   Color   Signal Name [Specification]	Connector Name WIRE TO WIRE Connector Type GT13SON-2/IPP-HU  Connector Type GT13SON-2/IPP-HU  Terminal Color No of Wire Signal Name (Specification)  1	M O P

$\overline{}$	_														
COMPOSITE SYNC	COMPOSITE IMAGE SIGNAL	RGB AREA (YS) SIGNAL	GNĐ	dΛ	dH	GND BDR	RGB (B:BLUE) SIGNAL	RGB (G:GREEN) SIGNAL	RGB (R:RED) SIGNAL	GTISHS	GTISHS	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)	(-) HEADPHONE SOUNDSIGNAL SIGNAL LH (-)	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)	(+) HI INDIS INDISIONI SIGNAL I H (+)
9	В	В	SHIELD	Я	М	T/M	5/X	J/Y	BR/L	SHIELD	SHIELD	ΓG	BR	۸	٨
13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28

ION WITH DVD ENTERTAINMENT SYSTEM	R152	ne REAR DISPLAY UNIT	e TH32FW-NH	6   8   10   12   14   16   18   20   22   24   26   29   30   22   14   16   18   17   18   22   12   25   27   29   31   31   31   31   31   32   32   33   33
WIH DVL	Connector No.	Connector Name	Connector Type	H.S.
NO!				

Terminal	Color	[
No	of Wire	olgnal Name [opecinication]
-	В	GND
2	В	GND
3	Y/R	BATTERY
4	Y/R	BATTERY
2	۳	HEADPHONE ON SIGNAL
9	٨/٨	ACC
8	SHIELD	SHIELD
6	^	COMM (DISP->DIST)
10	97	COMM (DIST->DISP)
11	9	IGNITION
12	SHIFLD	SHELD

1	1	1	1	1	1	1	1	1	1	1	-	1	-	-
Y/L	BR/L	g	٨/٨	ΓG	>	SHIELD	В	W	α	SHIELD	9	ч	SHIELD	α
13	14	16	18	21	22	23	24	22	56	27	28	59	30	31

BOSE AUD	BOSE AUDIO WITHOUT NAVIGATION WITH	TIM 1
Connector No.	R20	Conne
Connector Name	MICROPHONE	Conne
Connector Type	TK04FW	Conne
H.S.	1234	<b>€</b>

-		÷	ation system]		
Signal Name [Specification]	Oignal Ivanie Copecinication	MICROPHONE SIGNAL (+)	MICROPHONE SIGNAL (-XWith telephone without navigation system)	MICROPHONE POWER	
Color	of Wire	R/W	R/L	В	
Terminal	No.	1	2	4	

Connector Name	R153 WIRE TO WIRE TH32FW-NH
H.S. 16 15 14	1312[1110] 9   8   7   6   5   4   3   2   1
32 31 30 2	29 28 27 26 25 24 23 22 21 20 19 18 17

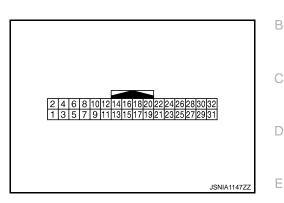
Color of Wire Y/R B B SHIELD LG V V V V Y SHIELD BR BR BR W/L	Signal Name [Specification]	-	=	1		-	-	-	-		_	1
	Color of Wire	Y/R	В	SHIELD	ΓG	۸	SHIELD	BR	Υ	SHIELD	M/L	J//G

JCNWM1892GI

## **DVD PLAYER**

Reference Values

**TERMINAL LAYOUT** 



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INFOID:0000000003457759

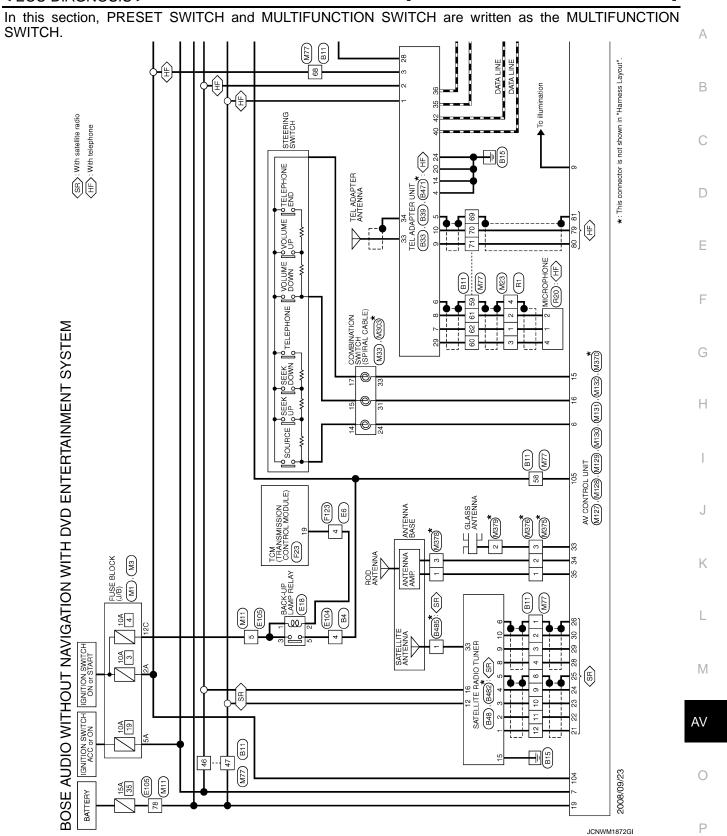
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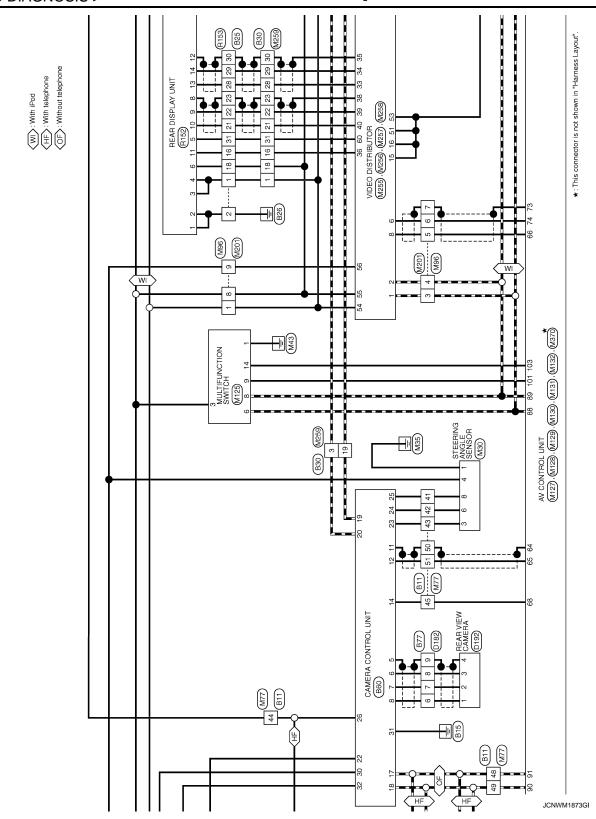
	minal color)	Description				Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
1 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
4 (V)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
5	_	Shield (DVD image GND)	_	_	_	_
7 (P)	Ground	DVD image signal	Output	Ignition switch ON	When DVD image is displayed.	(V) 0. 4 0 -0. 4 -40µs SKIB2251J
13 (G)	11 (B)	AUX sound signal RH	Input	Ignition switch ON	AUX sound output.	(V) 1 0 -1 + 2ms SKIB3609E
14 (R)	12 (W)	AUX sound signal RH	Input	Ignition switch ON	AUX sound output.	(V) 1 0 -1 + 2ms SKIB3609E
16	_	Shield	<u> </u>	_	_	_

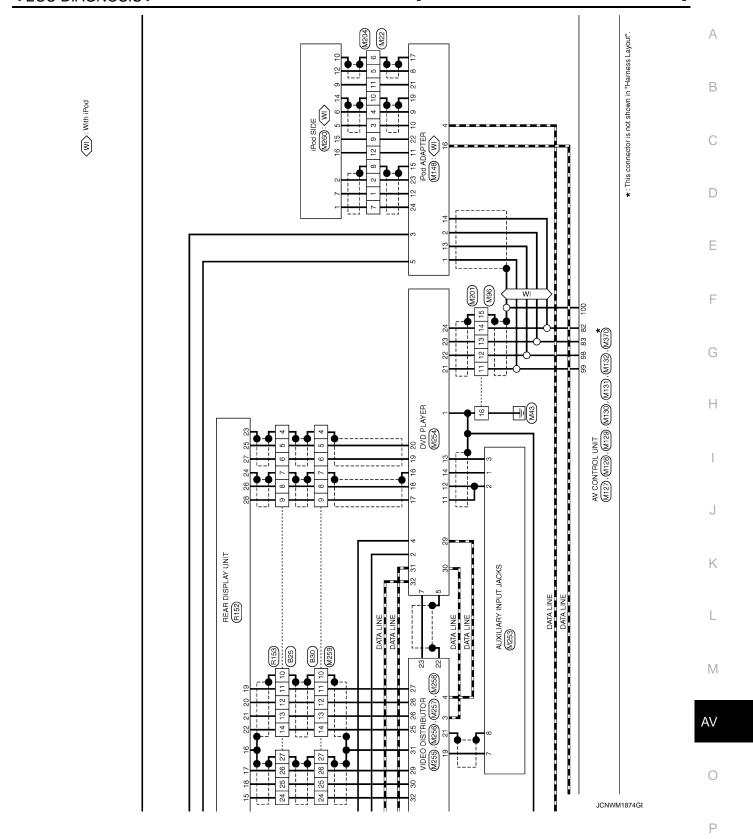
	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
17 (G)	18 (R)	Headphone sound signal LH	Output	Ignition switch ON	Headphone sound output.	(V) 1 0 -1 + 2ms SKIB3609E
19 (V)	20 (LG)	Headphone sound signal RH	Output	Ignition switch ON	Headphone sound output.	(V) 1 0 -1 ++2ms SKIB3609E
21 (B)	22 (G)	Sound signal LH (DVD and AUX sound)	Output	Ignition switch ON	DVD or AUX sound output.	(V) 1 0 -1 + 2ms SKIB3609E
23 (R)	24 (W)	Sound signal RH (DVD and AUX sound)	Output	Ignition switch ON	DVD or AUX sound output.	(V) 1 0 -1 +2ms SKIB3609E
29 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
30 (R)	_	AV communication signal (H)	Input/ Output		_	_
31 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
32 (R)	_	AV communication signal (H)	Input/ Output	_	_	_

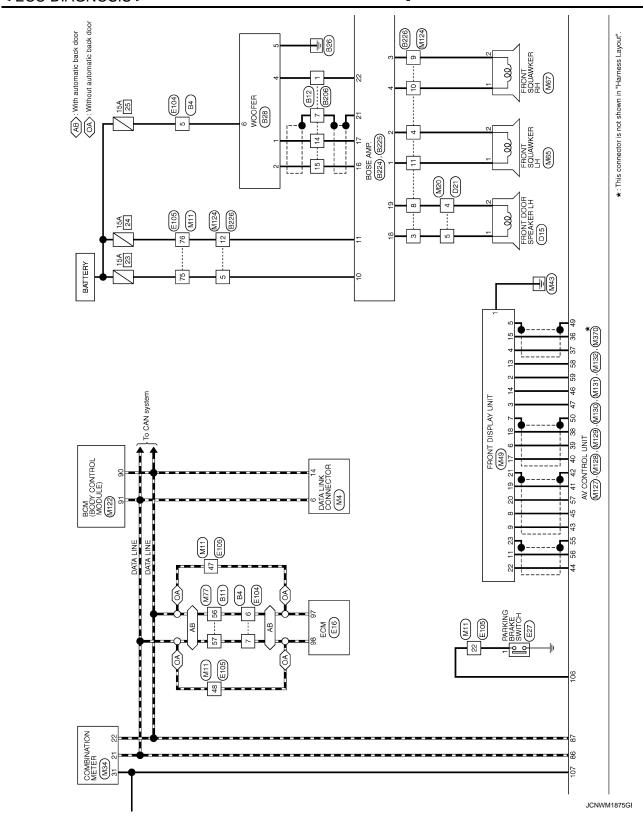
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

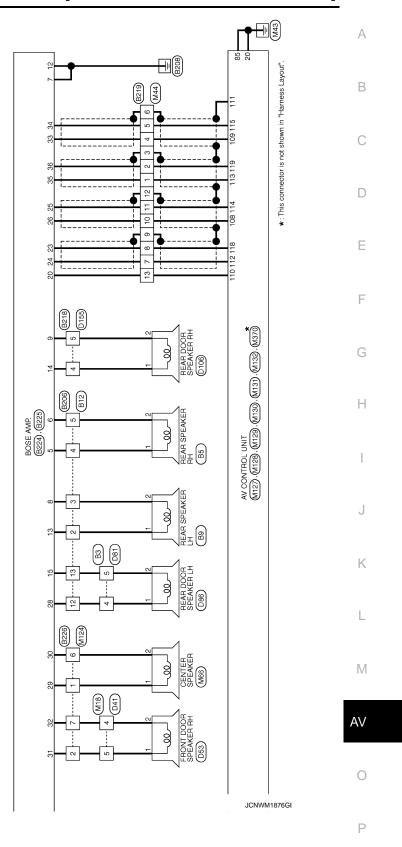
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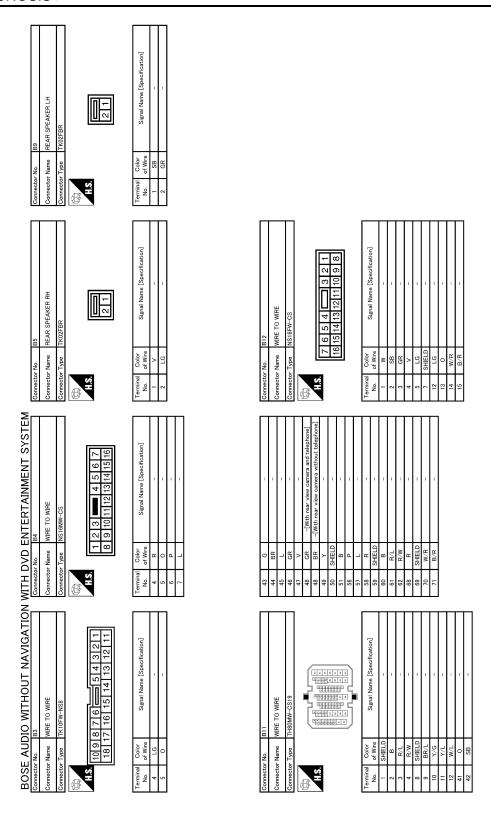












JCNWM1877GE

Connector No. B28 Connector Name WOOFER Connector Type RSOBFGY-PR HS	Color   Signal Name [Specification]   No.   of Wire   Supral Name [Specification]   1   W/FR   SOUND SIGNAL WOOFER (-)   2   B/R   SOUND SIGNAL WOOFER (-)   4   W   WOOFER AMP. ON SIGNAL   5   B/W   GND   6   D   BAT   COLOR SIGNAL   COLOR SIGN	Connector No. 833 Connector Type TEL ADAPTER UNIT Connector Type TH08FW-NH  1.5 36 37 39 41	Terminal   Color   Signal Name   Specification   No. of Wire   Signal Name   Specification   No. of Wire   Signal Name   Specification   Signal Name   Specification   Signal Name   No. COMM (L)   42   GR
ENTERTAINM ENTERTAINM DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	29 W	13   Y/L	<del>                                     </del>
BOSE AUDIO WITHOUT NAVIGATION Connector Name Wife TO WIRE Connector Type TH32MW-NH  M.S.  H.S.  L.T. 18 19 20 21 22 23 44 25 62 77 8 29 01112 12 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Terminal Color   Signal Name [Specification]   Color   No.   Of Wire   Signal Name [Specification]   SB   Color   Co	Connector No. 830  Connector Name WIRE TO WIRE  Connector Type TH3EPV-NH  H.S.  [6] 51 30 29 28 27 28 22 21 20 19 18 17	Terminal Color   Signal Name [Specification]   1   38   38   4   SHELD   -

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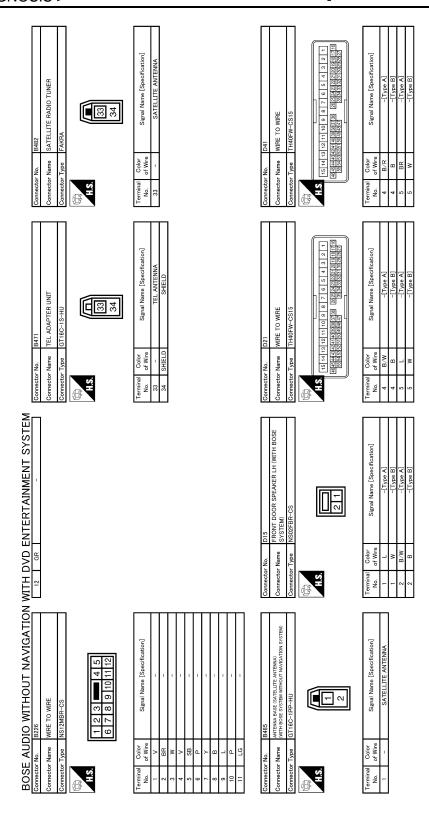
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BOSE AUDIO WITHOUT NAVIGATION Connector No. B39 Connector Name TEL ADAPTER UNIT Connector Type TH32FW-NH	WITH DVD ENTERTAINMENT SYSTEM   20   B   CONTROL SIGNAL   24   B./w   CONTROL SIGNAL   28   BR   VEHICLE SPEED (8-PULSE)   29   B   MICROPHONE VCC	Connector No. B48 Connector Name SATELLITE RADIO TUNER Connector Type A16FW	16 GR AOC
1.5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   5   7   9   11   13   15   7   9   11   13   15   7   9   11   13   15   7   9   11   13   15   7   9   11   13   15   7   9   11   13   15   7   9   11   13   15   7   9   11   13   15   7   9   11   13   15   7   9   9   9   9   9   9   9   9   9		13578910111315	
Terminal   Color   Signal Name [Specification]   Ool Wre   Stagnal Name [Specification]   Ool Wre   Stagnal Name [Specification]   Ool Wre   Ool		Terminal   Color   Signal Name [Specification]   Oil Wire   Soulnb SignAL LH (-)   2   V/L   Soulnb SignAL LH (-)   3   V/G   Soulnb SignAL LH (-)   3   V/G   Soulnb SignAL RH (-)   5   SHIELD   SHIE	
Connector Name CAMERA CONTROL UNIT  Connector Type TH32FW-NH  Connector 1 1 2 1 6 8 100 12 14 16 18 20 22 24 26 28 30 32 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 11 13 15 17 19 18 18 18 18 18 18 18 18 18 18 18 18 18	22         R         REVERSE           23         G         SENSOR SIGNAL 1           24         SB         SENSOR SIGNAL 2           25         O         SENSOR SIGNAL 3           26         BR         VEHIOLE SPEED (6-PULSE)           30         GR         ACC           31         B         GND           32         V         BATTERY	Connector No. 877  Connector Name WIRE TO WIRE  Connector Type TK12MW  1 2 3 4 5 6 7 8 9 10 11 12	Connector No. B206 Connector Name WIRE TO WIRE Connector Type NS16MW-CS
Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   Signal Name   Signa		Terminal   Color   Signal Name [Specification]   Color   No. of Wire   S.     Color	Terminal   Color   Signal Name [Specification]   No.   Of Wire   Signal Name [Specification]   No.   Color   No.

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	GR-V   SOUND SIGNAL FEAR RH (+)			A B C
13 SB	Connector No.         B225           Connector Name         BOSE AMP.           Connector Type         SCA19FBR-SGA4           Image: Connector Type         SCA19FBR-SGA4           Image: Connector Type         SCA1302928           Image: Connector Type         SCA1302928           Image: Connector Type         SCA1302928           Image: Connector Type         SCA1302928	Terminal   Color   Signal Name [Specification]   Color   R   South Signal Name [Specification]   Signal Name [Specification]   South Signal Name   South Signal Name		E F G
WITH DVD ENTERTAINMENT SYSTEM   Connector Name   WIRE TO WIRE   Connector Type   TH32MW-NH	12 B GND SIGNAL REAR SPEAKER LH (+) 13 GR SOUND SIGNAL REAR DOOR SPEAKER RH (+) 14 L SOUND SIGNAL REAR DOOR SPEAKER RH (+)			J K
BOSE AUDIO WITHOUT NAVIGATION National Connector Name   WIRE TO WIRE	Connector No. B224  Connector Name BOSE AMP.  Connector Type SGA1ZFBR-SJA2  H.S.  14 13 12 11 10  9 8 7 6 5 4 3 2 1	Terminal   Color   Signal Name   Specification   Orlor   No.   Orlor   Signal Name   Specification   Orlor   Orlor   South Signal FRONT SOUAWKER HH (-)   Orlor   South Signal FRONT SOUAWKER RH (-)   Orlor   South Signal FRONT SOUAWKER RH (-)   Orlor	JCNWM1880Gi	M AV
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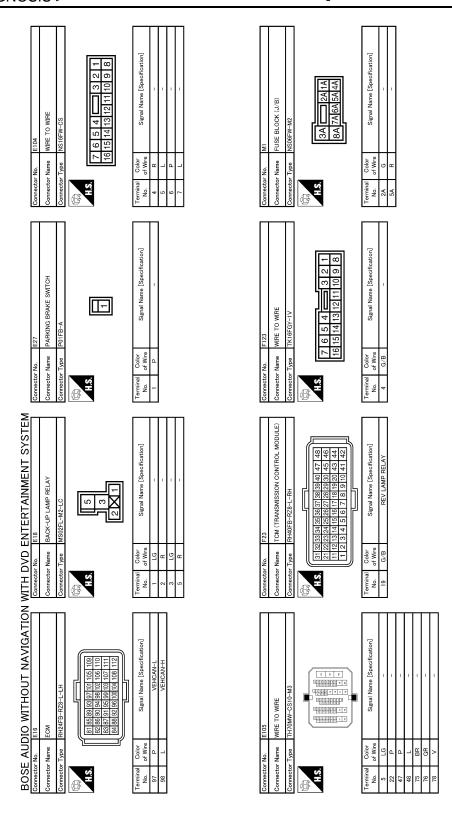
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Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS  H.S.	Terminal   Color   Signal Name [Specification]   1   C   C   C   C   C   C   C   C   C	Connector No. E6  Connector Name WIRE TO WIRE  Connector Type TK18MGY-1V  LAS  1 2 3 4 5 6 7  8 9 10 11 12 13 14 15 16	Terminal Color No. of Wire Signal Name [Specification] 4 R -		A B C
Connector No. D86 Connector Name ReAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS H.S.	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   1	Connector No. D192 Connector Name REAR VIEW CAMERA Connector Type TH04MW-NH  H.S.	Terminal   Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]   1		E F G
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	Terminal Color No. Color Signal Name [Specification] 4 L. 5 W	Connector No. D182 Connector Name WIRE TO WIRE  Connector Type TK12FW  LLS  5 4 3 2 1  12 11 10 9 8 7 6	Terminal Color No. of Wire Signal Name (Specification) 6 R		J K
BOSE AUDIO WITHOUT NAVIGATION  Connector Name FRONT DOOR SPEAKER RH (WITH BOSE  Connector Type NSOZFBR-CS  H.S.	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   1   BR	Connector No. D155  Connector Name WIRE TO WIRE  Connector Type TK10MW-NS8  H.S. 1 2 3 4 5 6 7 8 9 10  11 12 13 14 15 16 17 18	Terminal   Color   Signal Name [Specification]   No. of Wire   Of Wire   CType A]   4   C   CType B]   5   B/P   CType B]   5   W   CType B]   CTYPE BB B]   CTYPE BB	JCNWM1882Gi	M AV

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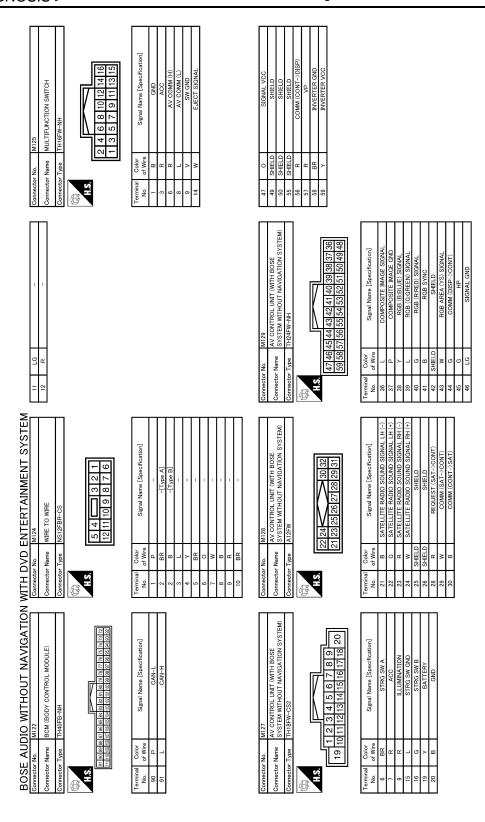
	ion aystem]	А
MI8	IRE TO WIRE   H16kW-NH	В
		С
Connector No. Connector Type Connector Type H.S.	Connector No. Connector Name Connector Type Connector Type H.S. H.S.  Terminal Color No. Of Wire  1 W 2 R 3 B 4 SHELL	D
offeatien)		Е
WINTE TO WIRE THYOFW-CS10-M3  Signal Name [Specification]		F
	α	G
Connector No.	12	Н
MITH DVD ENTERTAINMENT SYSTEM   Connector Name   DATA LINK CONNECTOR   Connector Type   BD16FW	NH	I
ENTERTAINMENT  M4  DATA LINK CONNECTOR  BD10FW  1 2 3 4 5 6 7 8  Signal Name [Specifica	WIRE TO WIRE THI 2FW-NH  6 5 4 3 2  12 11 10 9 8  Signal Name [S	J
VITH DVD EN Connector Name DA Connector Type BG Connector Type BG Ms Of Wire 6 14 P P	Connector No.   M   Connector Name   M   Connector Type   T   Terminal   Color No.   Col	К
NOTA IN THE STATE OF THE STATE		L
BOSE AUDIO WITHOUT NAVIGATION Connector No. M3 Connector Nate FUSE BLOCK (J/B) Connector Type INSIZPY-CS  ALS  FCAC TOO TOO TOO TOO TOO TOO TOO TOO TOO TO	Name   WIRE TO WIRE   Type   TH40MW-CS15   STREET   TH40MW-CS15   STREET   TH40MW-CS15   STREET   TH40MW-CS15   STREET	M
NSTEPW-CS   NSTEPW-CS     NSTEPW-CS	M20   WIRE TO WIRE   TH40MW-CS15   Signal   Si	AV
BOSE AUC Connector Name Connector Type Connector Type Terminal Color No. or Wife	Connector No. Connector Name Connector Type Connect	0
<u> </u>		JCNWM1884GI

BOSE AUDIO WITHOUT NAVIGATION Connector No.   M30	ON WITH DVD ENTERTAINMENT SYSTEM	Connector No. M34	
ne	Connector Name COMBINATION SWITCH (SPIRAL CABLE)		
Connector Type TH08FW-NH	Connector Type TK08FGY-1V	Connector Type TH40FW-NH	
H.S. 1 2 3 4 4 5 6 7 8 4	H.S. 2425.26 3132.33.34	1. 2. 3. 4. 5. 6. 7. 8. 9. 10.11 22.13.14.15.16.17.18.19.20.20.15.18.20.15.18.17.18.19.20.20.15.18.20.15.18.20.20.15.18.20.20.15.18.20.20.20.20.20.20.20.20.20.20.20.20.20.	
Terminal Color   Signal Name [Specification]   No.   Of Wire   Signal Name [Specification]	Terminal Color   Signal Nane [Specification]   No. of Wire   Signal Nane [Specification]   24 BR   -[With audio steering switch and telephone]   31 C   -[With audio steering switch and telephone]	Terminal   Color   Signal Name [Specification]     No.	
Connector No. M44 Connector Name WIRE TO WIRE Connector Type IT42E/W-NH	10 V	Connector No. M49 Connector Name FRONT DISPLAY UNIT Connector Type TH24FW-NH	14
H.S.    1615 4 13 2 11 10 9 8 7 6 6 4 3 2 1   22 3 30 20 20 20 20 20 20 3 18 17		HS 1211109 8 7 6 5 4 3 2 1 24232212019181716151413	SHIELD COM
or Signal Name		Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   1   6   GND	
R SHIELD		> O	
5 W =		4 P COMPOSITE IMAGE GND[Without navigation system] 5 SHIELD SHIELD[Without navigation system]	
SHIELD		RG	
/ 0 -[1ype A] 7 L -[Type B]		/ SHIELD SHIELD 8 G HP[Without navigation system]	
SB		Α.	
8 R -[Type B] 9 SHIELD -		11 R COMM (CONT~>DISP) 13 BR INVERTER GND[Without navigation system]	

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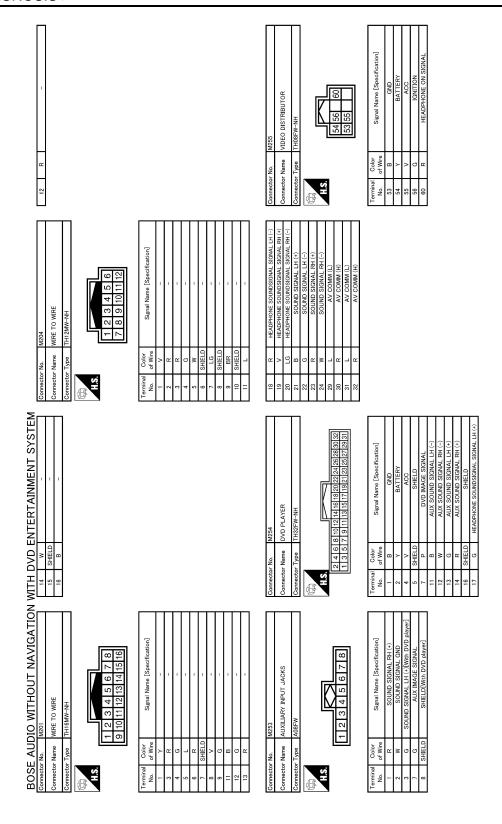
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	secification)	10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Е
M67 FRONT SOUAWKER RH TKOZFBR	Signal Name (Specification)	3 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	F
r No.	of Wire BR R		G
·	Terminal No. 1	Connector Nam   Connector Type   Conne	Н
WITH DVD ENTERTAINMENT SYSTEM Connector No. M66 Connector Name GENTER SPEAKER Connector Type TK02FBR	Signal Name (Specification)		I
ENTERTAIN M66 CENTER SPEAKER TKOZFBR	Signal N		J
WITH DVD EP Connector No. M Connector Name C Connector Type II	Terminal   Color   No. or Wire   2   0   P   2   0   1   1   1   2   0   1   1   1   1   1   1   1   1   1	44 V 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 45 44 4	К
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BOSE AUDIO WITHOUT NAVIGATIO	Signal Name (Specification)  -[With BOSE system]  -[With BOSE system]	RE TO WIRE SOFW-CS 19 Signal Name (Specification)	M
UDIO WI M65 INCOPERS		MIRE TO THROUPY.	AV
BOSE AU Connector No. Connector Name Connector Type ALS	Terminal Color of Wire LG 2 Y	Connector No.   Connector Name   Connector Name   Connector Type   Connector Type   SHELD	0
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	PH (-) PH (-) PH (-) PH (-)		А	
	POG SOUND SIGNAL RH (+)  AV COMM (+) GND  GND  GND  SHELD  AV COMM (+) GND  SHOUN  CONNECTION  CODESSORY DETECT  POG SOUND SIGNAL LH (+) FOG SOUND SIGNAL LH (+)		В	
	W SHELD SHELD L SPORT R R R R R R R R R R R R R R R R R R		С	
	2 2 2 2 2 4 4 2 4 4 2 4 4 5 4 4 5 4 6 6 6 6 6 6 6 6 6 6 6 6 6		D	ı
d (L) (With DVD player) (With DVD player) (With DVD player) (D player) (D player) (D player) (S player) (S player) (S player) (S player)	21222324 21222324	eoification] INAL LH (+) INAL RH (+) A (L) RY OWER OWER A (DADTER) IDENTIFE IDENTIFE IDENTIFE INAL RH (+) INAL LH (-) INAL LH (-)	Е	
AV COMM (L) SOUND SIGNAL LH (-)With DVD player] SOUND SIGNAL LH (-)With DVD player] SHELD!With DVD player] ELECT SIGNAL IGNITION FREEE FOR SIGNAL IGNITION FREEE PARRING BRAKE VEHICLE SPEED (8-PUL.SE)	ъм-мин Б. Б. Б. Т. В 17/18/19/20	Signal Name [Specification] Pod SOUND SIGNAL LH (+) Pod SOUND SIGNAL LH (+) Pod SOUND SIGNAL RH (+) ACC AV COMM (L) RAPTIERY COMM (Pod ADAPTER) COMM (Pod ADAPTER) ACCESSORY IDENTIFY Pod SOUND SIGNAL RH (+) Pod SOUND SIGNAL LH (+)	F	
101   102   103   104   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105	rector No.	Terminal   Color   No. Of Wire   Color   Col	G	I
		<u> </u>	Н	
M 31  M 31  M 31  M 31  AV CONTROL UNIT WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)  TH22FW-NH  TH22FW-NH  Signal Name [Specification]  TEL VOICE SIGNAL (-)  TEL VOICE SIGNAL (-)  TEL VOICE SIGNAL (-)  TEL VOICE SIGNAL (-)  SCUND SIGNAL RH (-) WITHOUT DISPARATION  SCUND SIGNAL RH (-	NO SIGNAL HOUND DEAD PROVIDED TO PROVIDED		I	
ENTERTAINI M131 AVSTEW WITHOUT IT TH32FW-NH TH02FW-NH TH03F08 68 64 83 68 IMIGHTON INDER Signal Nam TEL VOIC TEL VOIC TEL VOIC SOUND SIGNAL F.	SOUND SIGNAL IN		J	
tor No.  ctor Name ctor Type  gridiogli color of Wire L R R SHELL W	2		К	
z	/D player]	1) (+) (+) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-	L	
M130	SHEDDWith DVD player] COMPOSITE IMAGE GND[With DVD player] AV CONTROL UNIT (WITH BOSE THISFW-NH	Signal Name [Specification] SOUND SIGNAL REAR RH (+) SOUND SIGNAL RONT RH (+) AMP. ON SIGNAL SHELD SHOUND SIGNAL REAR LH (+)[Type A] SOUND SIGNAL REAR LH (+)[Type B] SOUND SIGNAL REAR HH (+)[Type B] SOUND SIGNAL REAR HH (+) SOUND SIGNAL REAR HH (-) SOUND SIGNAL REAR RH (-) SOUND SIGNAL REAR RH (-) SOUND SIGNAL REAR RH (-) SOUND SIGNAL REAR LH (-)[Type A] SOUND SIGNAL REAR LH (-)[Type B] SOUND SIGNAL REAR LH (-)[Type B]	M	
			AV	
BOSE AUIC Connector No. Connector Type Connector Type Terminal Color No. Free 64 SHELD 66 L 66 L 66 L	Connector No. Connector No. Connector Type	Terminal Color No. of Wire 108 V 109 B 110 P 111 SHELD 112 D 112 D 113 C 113 C 114 LG 115 W 116 W	0	i
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	Name	С	
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10N 1.D 3F->D(SF) 5F->D(SF)	-NH 7 8 9 10 11 12 13 14 15 16 23 24 25 26 27 28 29 30 31 32 Signal Name [Specification]	Е	
IGNITION SHIELD COMM (DIST->DISD) COMM (DIST->DISD)	MRE TO WIRE  TH32MW-NH  A 5 6 7 8 9 101 11 12 13 14 15 20 21 22 23 24 25 28 27 28 29 30 31  Signal Name (Specification)	F	
D SHIFT ON A COLUMN TO THE COL	No.   No.	G	
	Connector Connector Connector Connector Terminal No. 1 1 1 1 11 112	Н	
PISTRIBUTOR W-NH  W-NH  30 32 34 36 38 40  29 31 33 35 37 39  Signal Name [Specification]  RGB (RRED) SIGNAL  RGB (RRED) SIGNAL  RGB (GGREEN) SIGNAL  SHIELD  SHIELD  SHIELD  SHIELD  SHIELD	DVD IMAGE SIGNAL	1	
ENTERTAININ M257 THISPW-NH THISPW-NH TEG 28 30 32 34 36 26 28 30 32 34 36 26 28 30 32 34 38 Signal Name RGB (RRIR RGB (GARIA RGB	DVD IMA	J	
Connector No.   M23	D D D D D D D D D D D D D D D D D D D	K	
	23 4 P	L	
STRIBUTOR NH  Signal Name [Specification]  GND	WA286   WIDED DISTRIBUTOR   WIDED DISTRIBUTO	М	
MINISTO WINDER DI LITTITUTE DI		AV	
BOSE AUC Commetter Name Connector Type Connector Type A.S.  H.S.  Terminal Color No. of Wive	Cornector Name   Cornector Type   Corn	0	
		JCNWM1890GI	

BOSE AUDIO WITHOUT NAVIGATION	N WITH DVD ENTERTAINMENT SYSTEM	Connector No. M370	Connector No. M375
Connector Name iPod SIDE	Connector Name COMBINATION SWITCH (SPIRAL CABLE)	Connector Name SYSTEM WITHOUT NAVIGATION SYSTEM)	Connector Name WIRE TO WIRE
Connector Type IP16FGY	Connector Type TK08FGY	Connector Type GT13SC-2/1S-HU	Connector Type GT13SH-2/1S-HU
6	<b>E</b>		<b>B</b>
123 1456	侕	H.S.	H.S.
7 8 9 10 11 12 13 14 15 16	20 19 18 17 16 15 14 13	<u>\$</u>	<b>Z</b>  E
Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]
		1	-
œ	-	<u>'</u>	1
5 R COMM (iPod->iPod ADAPTER) 6 G COMM (iPod ADAPTER->iPod)	- 17	35 – ANTENNA AMP. ON SIGNAL	3 = =
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SHIELD			
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SHIELD			
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16 K ACCESSORY IDENTIFY			
	Γ		
Connector No. M3/6	Connector No. M378	Connector No. M3/9	Connector No. R1
Connector Name WIRE TO WIRE	Connector Name ANTENNA BASE (ANTENNA AMP.)	Connector Name GLASS ANTENNA	Connector Name WIRE TO WIRE
Connector Type GT13SCN-2/1PP-HU	Connector Type GT13SSN-1/1PP-HU	Connector Type GT13SCN-1/1PP-HU	Connector Type TH16FW-NH
SH SH	·		
<u>-                                      </u>	Z <u> </u>	<u> </u>	8 7 6 5 4 3 2 1 16 15 14 13 12 11 10 9
Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification] No.	Terminal Color Signal Name [Specification]
		2 – FM SUB	Н
3	3		2 R/L -[With telephone without navigation system]
			ψ.

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IENI SYSIEM			
	13	5	COMPOSITE SYNC
	14	ч	COMPOSITE IMAGE SIGNAL
	15	8	RGB AREA (YS) SIGNAL
	16	CHIELD	GND
	17	ч	dΛ
	18	М	HP
	19	T/M	RGB GND
	20	5/X	RGB (B:BLUE) SIGNAL
22 24 26 28 30 32	21	T/A	RGB (G:GREEN) SIGNAL
21 23 25 27 29 31	22	BR/L	RGB (R:RED) SIGNAL
	23	SHIELD	SHIELD
	24	SHIELD	SHIELD
Cassification	25	ยา	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)
Copecification	26	BR	HEADPHONE SOUNDSIGNAL SIGNAL LH (-)
ND	27	۸	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)
ON	28	Y	HEADPHONE SOUNDSIGNAL SIGNAL LH (+)

BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTE	Connector Name REAR DISPLAY UNIT	Connector Type TH32FW-NH	H.S.
BOSE AUDIO WITHOUT NAVIGATION	e e	Connector Type TK04FW	HS. 1234

MICROPHONE	TK04FW	1234	Signal Name [Specification]
onnector Name	r Type		Color of Wire
onnecto	onnector Type	H.S.	erminal No.

Te					l
[aciteofficers] emeN lensis	Figure 1000 of	MICROPHONE SIGNAL (+)	[wateks upgetives program acceptages span);-) TANDS SHOH-BOHDIM	MICROPHONE POWER	
Color	of Wire	R/W	R/L	В	
Terminal	No.	1	2	4	

GND	BATTERY	BATTERY	HEADPHONE ON SIGNAL	ACC	SHIELD	COMM (DISP->DIST)	COMM (DIST->DISP)	IGNITION	SHIELD	1	1	1	1	1	1	-	1	1	1	-	-	1	-	
В	Y/R	Y/R	œ	٨/٨	SHIELD	>	ΓG	ŋ	SHIELD	J/Y	BR/L	Ð	٨/٨	FC	۸	SHIELD	В	Μ	œ	SHIELD	5	ď	SHIELD	٥
2	3	4	5	9	8	6	10	11	12	13	14	16	18	21	22	23	54	52	97	12	87	67	30	1.6

or No. R153	or Name WIRE TO WIRE	or Type TH32FW-NH	
Connector No.	Connector Name	Connector Type	

Signal Name [Specification]	-	-	ì		-	-	1	ì	-	-	-	
Color of Wire	Y/R	В	SHIELD	ΓG	^	SHIELD	BR	Υ	SHIELD	M/L	Y/G	
Terminal No.	1	2	4	2	9	7	8	6	10	11	12	

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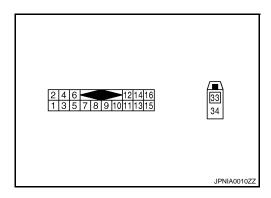
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Reference Values



### PHYSICAL VALUES

Terr	minal	Description				Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
2 (Y/L)	1 (W/L)	Satellite radio sound signal LH	Output	Ignition switch ON	When satellite radio mode is selected	(V) 1 0 -1 + 2ms SKIB3609E
4 (BR/L)	3 (Y/G)	Satellite radio sound signal RH	Output	Ignition switch ON	When satellite radio mode is selected	(V) 1 0 -1 *** 2ms SKIB3609E
5	_	Shield	_	_	_	_
6	_	Shield	_	_	_	_
8 (R/W)	Ground	Request signal (SAT→CONT)	Output	Ignition switch ON	When satellite radio mode is selected	(V) 10 0 -10 → +10ms SKIA9299J
9 (R/L)	Ground	Communication signal (SAT→CONT)	Output	Ignition switch ON	When satellite radio mode is selected	(V) 10 -10 + 1ms SKIA9300J

#### < ECU DIAGNOSIS >

#### [BOSE AUDIO WITHOUT NAVIGATION]

Ter	minal	Description				Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
10 (B)	Ground	Communication signal (CONT→SAT)	Input	Ignition switch ON	When satellite radio mode is selected	(V) 10 0 -10 + 1ms SKIA9301J
12 (V)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
16 (GR)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
33	_	Satellite antenna	Input	_	_	_

Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTER-TAINMENT SYSTEM -

#### NOTE:

- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.
- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)

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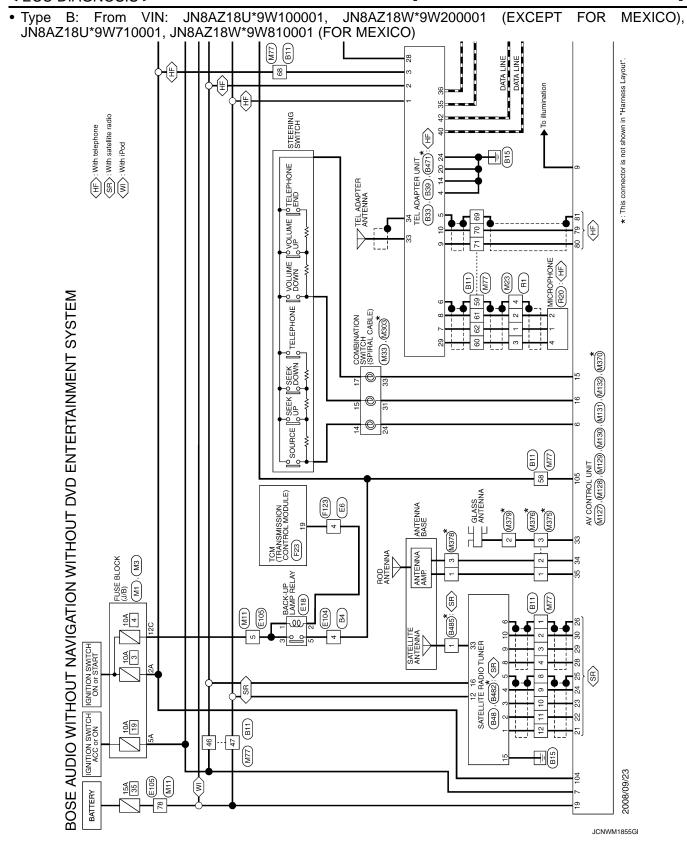
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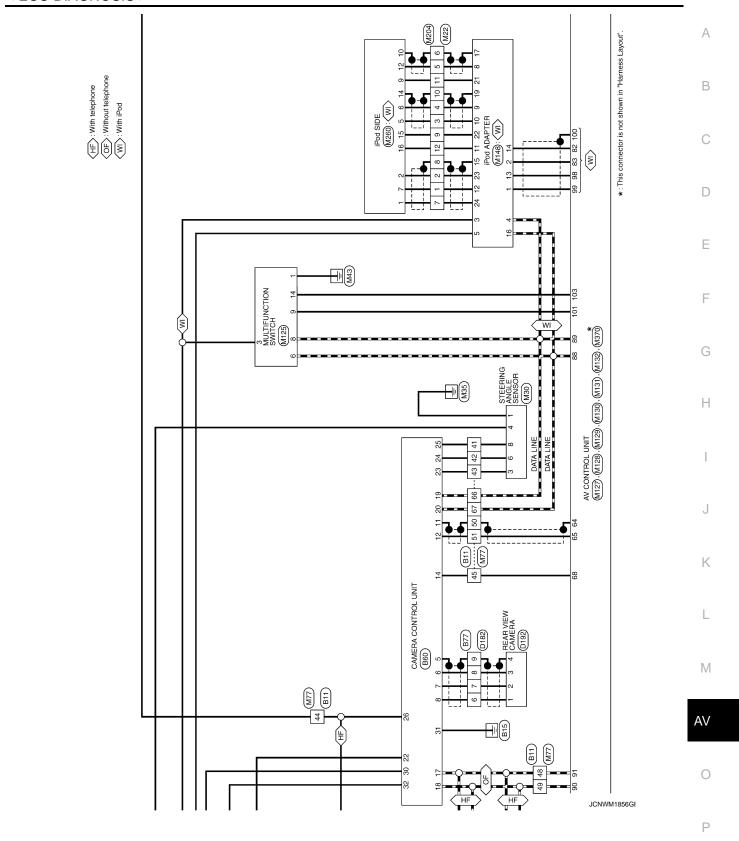
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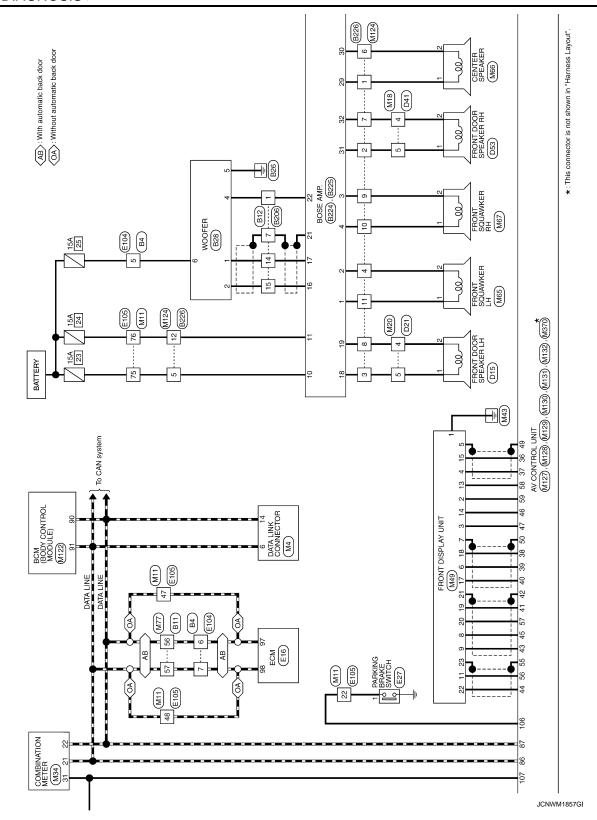
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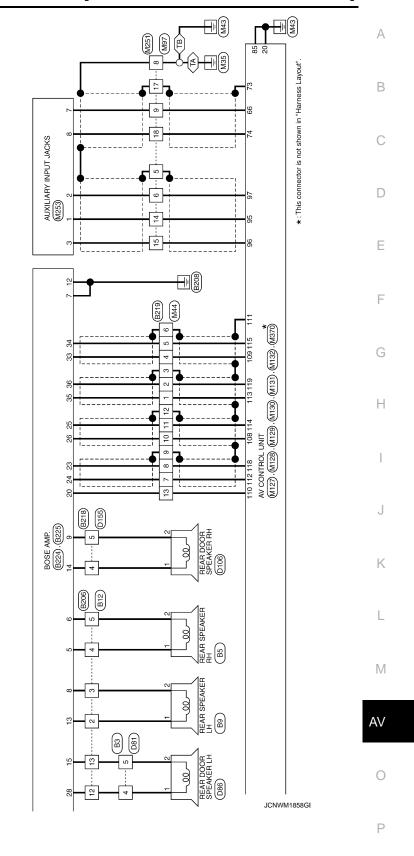


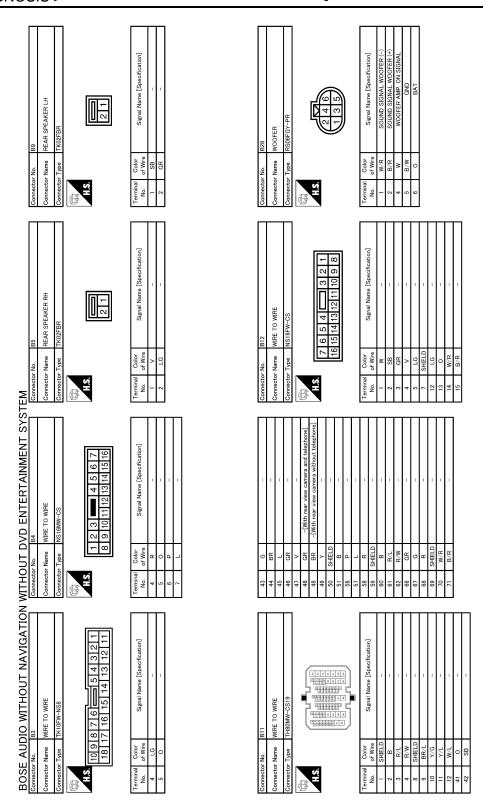




(TA): Type A
(TB): Type B

### [BOSE AUDIO WITHOUT NAVIGATION]





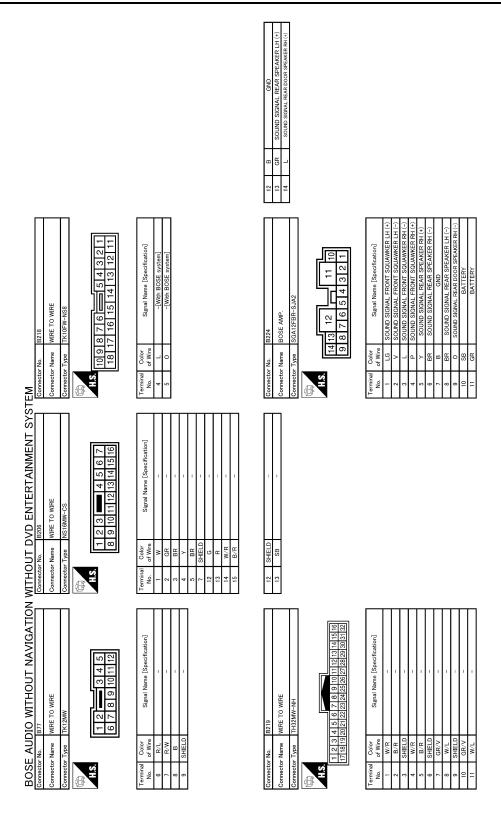
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[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

			REVERSE SENSOR SIGNAL 1 SENSOR SIGNAL 2 SENSOR SIGNAL 2 SENSOR SIGNAL 3 VEHICLE SPEED (8-PULSE) ACC GND BATTERY			A B
			22 R R 23 G G 23 G G 8 B B B B B B B 33 G G R 33 G G B B B B G G G G G G G G G G G G			D
	CONTROL SIGNAL COUNTROL SIGNALS MICROPHONE VCC MICROPHONE VCC		NNIT 22 24 28 28 39 32 21 25 25 27 28 31	Signal Name [Specification] SHELD CAMERA IMAGE SIGNAL GAND CAMERA IMAGE SIGNAL SHELD CAMERA IMAGE SIGNAL CONNECTION RECOGNITION AV COMM (L)		Е
			io. 860  CAMERA CONTROL UNIT  TH32FW-NH  1 6 8 10121416180222  3 5 7 9 111 13151719212			F G
STEM	20 B WW 24 B/W 28 B R 29 B R		Connector No. Connector Name Connector Type  1 2 4 6 1 3 6	Terminal   Color		Н
TAINMENT SY	0 22 24 58 28 30 32 92 12 23 25 27 29 31	Signal Name [Specification]  ACC ACC IGNITION GNU SHELD SHELD SHELD SHELD TEL VOICE SIGNAL TEL VOICE SIGNAL GNO TEL VOICE SIGNAL GNO	Acc			I
DVD ENTER	Pr No. B39  or Name TEL ADAPTER UNIT  pr Type TH82FW-NH  2 4 6 8 101/21/4161/8120122[22[22[22]23[22]23[22]23[22]23[22]23[22]23[22]23[22]23[22]23[22]23[22]23[23[22]23[22]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23[23]23[23]23[23					J
TUOHTIM N	Connector No. Connector Type Connector Type 13 [2 4 6	Terminal   Color   No. of Wire   V   V   S   S   S   S   S   S   S   S	91			K
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM	UNIT 1 339 41 41 40 42	Signal Name [Specification]  A COMM (4)  AV COMM (L)  AV COMM (L)  AV COMM (L)	20 TUNER 12 14 16 9 10 11 13 15	Signal Name [Specification] SOUND SIGNAL LH (+) SOUND SIGNAL RH (+		M
AUDIO WITHC	No. B33 Name TEL ADAPTER UNIT	Color of Wire Signal N Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	848 SATELLITE RAI A16FW 4 6 6 7 8	Color Signal N W/L SOUN W/L SOUN W/L SOUN W/L SOUN W/G SO		AV
BOSE	Connector No. Connector Name Connector Type H.S.	O   O   O   O   O   O   O   O   O   O	Connector No. Connector Name Connector Type H.S.	Terminal  N	JCNWM1860Gł	0
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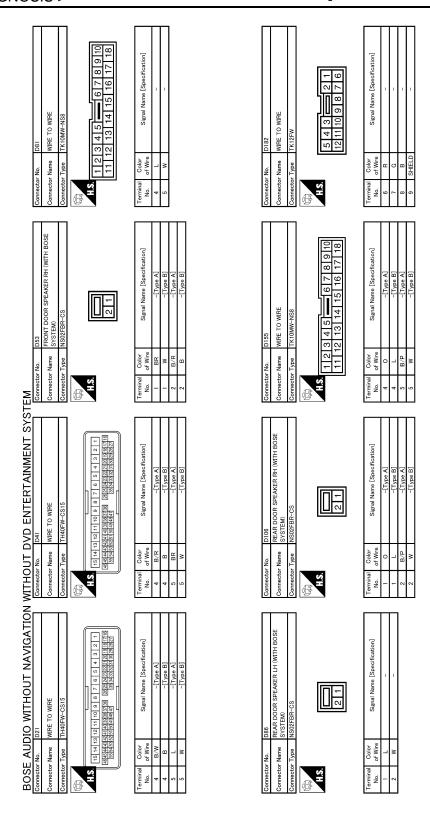


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### [BOSE AUDIO WITHOUT NAVIGATION]

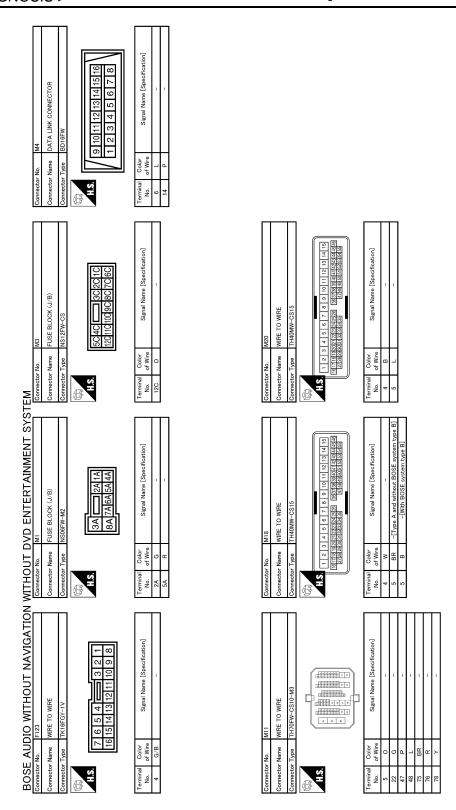
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		Connector No. D15 Connector Name FROMT DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS	Color   Signal Name [Specification]		A B
21		Connectc Connectc ConnectC	Terminal No. 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		D
1112	Signal Name [Specification]	BARS ANTERNA BASE (SATELLITE ANTERNA) WITH BOSE SYSTEM WITHOUT RAA/LOATON SYSTEM) GT16C-1PP-HU  2	Signal Name [Specification] SATELLITE ANTENNA		Е
1000	Signal Name [	ASE (SATELLITE A ASE (SATELLITE A PP-HU	Signal Name (Specification		F
No. B226  Name WIRE TO Type NS12MB	al Color of Wire V W W V Y P P P P P P P P P P P P P P P P P P	و و	al Color of Wire		G
<u> </u>	Terminal No. 1 1 1 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Connector No. Connector Typ	Terminal No.		Н
MITHOUT DVD ENTERTAINMENT SYS		DIO TUNER	Signal Name [Specification] SATELLITE ANTENNA		I
SOUND SIGNAL SOUND SIGNAL SOUND SIGNAL SIGNAL SIGNAL SIGNAL SIGNAL SIGNAL SOUND SOUND SIGNAL SOUND SOUND SIGNAL SOUND SOUND SIGNAL SOUND SOUND SOUND SIGNAL SOUND SIGNAL SOUND SIGNAL SOUND SOUND SOUND		E482 SATELLITE RADIO TUNER FAKRA  34	Signal SAT		J
MITHOUT DV  28 GR/V 29 V S 30 W/R 34 B/R 36 B/R		Connector No. B8 Connector Name SA Connector Types FA H.S.	No. of Wire		K
	() H1 (·)				L
BOSE AUDIO WITHOUT NAVIGATION    Someter No.   8225	Signal Name [Specification] SOUND SIGNAL REAR BOORS SPEAKER IH (-) SOUND SIGNAL WOOFER (-) SOUND SIGNAL WOOFER (-) SOUND SIGNAL FRONT DOOR SPEAKER IH (-) SOUND SIGNAL FRONT DOOR SPEAKER IH (-) SOUND SIGNAL FRONT DOOR SPEAKER IH (-) SOUND SIGNAL FRAR IH (-) SOUND SIGNAL REAR IH (-) SOUND SIGNAL REAR IH (-) SOUND SIGNAL REAR IH (-)	HIU HIU 34	Signal Name (Spacification) TEL ANTENNA SHIELD		M
DIO WITHC 8225 BOSE AMP. SCAT9FBR-SGAA 35 34 33 [	<del>                                     </del>	B471 TEL ADAPTER UNIT			AV
BOSE AU Connector No. Connector Type M.S. 3738 2728	Terminal Color No. of Wire No.	Connector No. Connector Name Connector Type	Termina  Color   No. of Wire   33   - 34   SHIELD		0
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Connector No. E18 Connector Name BACK-UP LAMP RELAY Connector Type MS02FL-M2-LC  H.S. 2	Cornector No.   F23   Cornector Name   TCM (TRANSMISSION CONTROL MODULE)   Cornector Type   RH40FB-R251-RH	A B C
Connector No.   E16   Connector No.   E16   Connector Name   ECM   Connector Type   RH24FB-R28-L-LH   RH24FB-R28-LH   RH24	Connector No.   E105	E F G
Connector Name   WIRE TO WIRE   Connector Type   TK18MGY-1V	Connector No   E104   Connector Type   WIRE TO WIRE	J K
BOSE AUDIO WITHOUT NAVIGATION Cornector None REAR VIEW CAMERA Connector Type ITHORMA-NH  Terminal Color Signal Name [Specification]  No. of Wire Signal Name [Specification]  Terminal Color Signal Name [Specification]  The CAMERA ON SIGNAL  CAMERA ON SIGNAL  SIGNAL  A SHIELD SHIELD  SHIELD  SHIELD  SHIELD  SHIELD  SHIELD	Connector No. E27 Connector Name PARKING BRAKE SWITCH Connector Type POIFE-A  H.S.  Terminal Color Signal Name [Specification]  Terminal Of Wire Signal Name [Specification]	AV O
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ANGLE SENSOR NH C 3 4 4 C 7 8 4 C 7 8 4 C 7 8	1 1 1			АВ
Connector No. M30 Connector Name STEERING ANGLE SENSOR Connector Type THOSPW-NH  Terminal Color No. of Wire No. of Wire 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 V 11 LG 12 SHELD 13 PP			C
12 3 4 5 6 7 8 10 11 12 13 14 15 16 16 16 16 16 17 16 16 16 16 16 16 16 16 16 16 16 16 16	7r No. M44  2r Type   TH32PW-NH    16 15 14 13 12 11 10 9 18   7 6 5 4 3 12 1    22 31 30 29 29 27 26 25 22 27 21 20 19 18 17	Signal Name [Specification]		E
The control of the co	Connector No. M44 Connector Name WIRE TO WIRE Connector Type TH3ZPW-NH M.S. H.S. [16] 14 [13] 12 [11] 10 9 [22] 31 [30] 29 [29] 27 [26] 25	Terminal Color No. of Wire No. of Wire Since Shifteld Shi		G
N WITHOUT DVD ENTERTAINMENT SYSTEM    12   R	ON METER 1	Signal Name [Specification] CAN+H CAN+L CAN+L VEHICLE SPEED (8-PULSE)		I J
WITHOUT DVD EN	Connector No.   M34	Terminal Color   Si		K
WIRE NH  NH  (4 3 2 1 1 10 9 8 7 7 10 9 8 7 7 10 9 8 7 7 1 10 9 8 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M33 TKOBFGY-IV    24   25   26   31   32   33   34   34   35   35   34   35   35	Signal Name [Specification]  With audio steering switch and selephone]  -[With audio steering switch and telephone]  -[With audio steering switch and telephone]		M
BOSE AUDIO WITHOUT NAVIGATIO   Connector No.   M22	Connector No. M33 Connector Name COMBINATION Connector Type TK08FGY-IV TK1S.	Color   Signa		AV
			JCNWM1866GI	Р

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Connector No. M66 Connector Name CENTER SPEAKER Connector Type ITKQFBR	Terminal Color No.   Signal Name [Specification]   1   p   -   -   -   -	Connector No. M97  Connector Name WIRE TO WIRE  Connector Type THISPW-CS2  MS  LS  LS  LS  LS  LS  LS  LS  LS  LS	Terminal Color   Signal Name [Specification]   Color   Signal Name [Specification]   Color
Commetter No. M65 Commetter Name FRONT SOUAWKER LH Commetter Type TROZFBR  H.S.	Color   Signal Name [Specification]	43 L	
MITHOUT DVD ENTERTAINMENT SYSTEM   14   LG   SIGNAL GAID[Without navigation system]   Gord   17   G   Consensite mont suspets system]   Consensite mont suspets system]   Consensite mont suspets system]   Consensite mont suspets   Consensite mont system]   Consensite mont system   Con		Connector No. M77  Connector Name WIRE  Connector Type TH80PW-CS19  H.S.	Terminal   Color   Signal Name [Specification]   Color   1   Signal Name [Specification]   1   Signal Name
BOSE AUDIO WITHOUT NAVIGATION WITHOUT Connector No.   M49   14   LG   LG	Terminal   Color   Signal Name [Specification]   1	Connector No. M67  Connector Name FRONT SOUAWKER RH  Connector Type TK02FBR  LAS.	Terminal   Color   Signal Name [Specification]   No.   of Wire   BR   -[With BOSE system]   2   R   -[With BOSE system]

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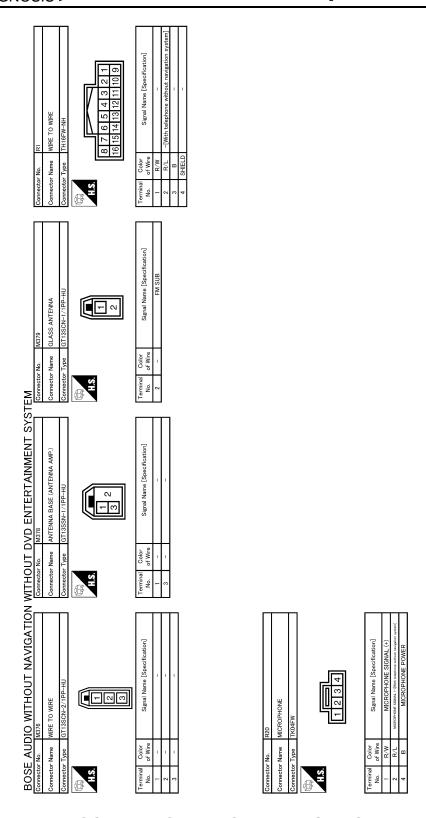
Connector No.         M125           Connector Name         MULTIPUNCTION SWITCH           Connector Type         TH16FW-NH           H.S.         2 4 6 8 10 12 14 16           T 3 5 7 9 11 13 15	Terminal   Color   Signal Name [Specification]	47         O         SIGNAL VCC           49         SHIELD         SHIELD           50         SHIELD         SHIELD           56         SHIELD         SHIELD           56         SHIELD         SHIELD           57         R         COMM (CONT-DISP)           57         R         NP           58         BR         INVERTER GND           59         Y         INVERTER VCC			A B C
		ATION SYSTEM)  138 37 36  50 49 48	ege Signal. Age Grob Signal. Signal. Signal. Signal. Signal. Signal. Signal. Signal. Signal.		Е
		No. MI29 Name AV CONTROL UNIT (WITH BOSE SYSTEM) Type THZ4FW-NH  47 46 45 44 43 42 41 40 39 38 37 36 55 55 54 53 25 150 49 48	Signal Name [Specification] COMPOSITE IMAGE GIDAL COMPOSITE MAGE GIDAL COMPOSITE MAGE GIDAL ROB (CORTEN) SIGNAL ROB (CORTEN) SIGNAL ROB RARED) SIGNAL ROB AREA (YS) SIGNAL COMM (DISP-XONT) H H SIGNAL GND		F
M		Connector No. M12 Connector Name 8/4/ System 1742 Connector Type 1742 M3 M3 M4 M5	Color   No. of Wire   No. of		G
ENT SYSTE	ation]				Н
WIRE R-CS 109876	Signal Name [Specification] -[Type B] -[Type B] Type B] Type B] Type B] Type B] Type B] - Type B	M.128 AV CONTROL UNIT (WITH BOSE SYSTEM A12FW A12FW  2 24	Signal Name [Specification]  SATELLITE RADIO SOUND SIGNAL LH (+)  SATELLITE RADIO SOUND SIGNAL LH (+)  SATELLITE RADIO SOUND SIGNAL HH (+)  SATELLITE RADIO SOUND SIGNAL HH (+)  SATELLITE RADIO SOUND SIGNAL HH (+)  SHELD  REQUEST (SAT->CONT)  COMM (SAT->CONT)  COMM (CONT->SAT)		J
WITHOUT DVD ENTERTAINMENT SYSTEM Connector Name WRE TO WRE  Connector Type NS12FBR-OS  H.S. 5 4 3 2 1  12 11 10 9 8 7 6	Color of Wife B B B B B B B B B B B B B B B B B B B	Connector No. MI28 Connector Name SYSTEM Connector Type A1ZPW MATERIAL STATEM	Color Of Wire B R N N N N N N N N N N N N N N N N N N		K
<b>z</b>	Terminal No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		Terminal No. 10		L
M122 BCM (BODY CONTROL MODULE) TH40FB-NH TH80FB-NH	Signal Name [Specification] CAN-H CAN-H	M127 AV CONTROL UNIT (WITH BOSE SYSTEM) THIBFW-CS2  2 3 4 5 6 7 8 9 11 12 13 14 15 16 17 18 20	Signal Name [Specification] STRG SWA AOC ILLUMINATION STRG SW GND STRG SW B BATTERY GND		M
	Color Sign		Ocior Signa BR R R R R R R R R R R R R R R R R R R		AV
BOSE AL Connector Name Connector Name Connector Type	Terminal O	Connector Nuc Connector Name Connector Type H.S.	Terminal of No. 10 of 10	JCNWM1868GI	0
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ninal C o of of	neutor No.		A B C
To WIRE  WW-CS2  3 4 5 6 7 8 9  12 13 14 15 16 17 18 20  Signal Name [Specification]	ONTROL UNIT (WITH BOSE  SC-2/1S-HU  SG-2/1S-HU  SG-2/1S-HU	ame (Specification) FM SUB M-FM MAIN A AMP. ON SIGNAL	E
HS. Type  19. Type	SHEID   SHEI	Terminal Color No. of Wire No.	G H
WITHOUT DVD ENTERTAI	Commettor No. M303 Comestor Name COMBINATION SWITCH (SPIRAL CABLE) Commettor Type TK08FGY    M303	Terminal   Color   Signal Name [Specification]   14   -	J
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM   Commercior Name   WIRE   Commercior Name   WIRE   Commercior Type   THI2MW-NH   Commercial   Commercial Terminal   Color   Commercial   Color   Color	M260 Pod SIDE PrinterGY 2 3	Color   Signal Name (Specification)	M
BOSE AUII Connector Name Connector Type Connector Type Terminal Color No. 1 VW. 1	3   8   8   8   8   8   8   8   8   8	Color   Colo	O JCNWM1870GI

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JCNWM1871GI

Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

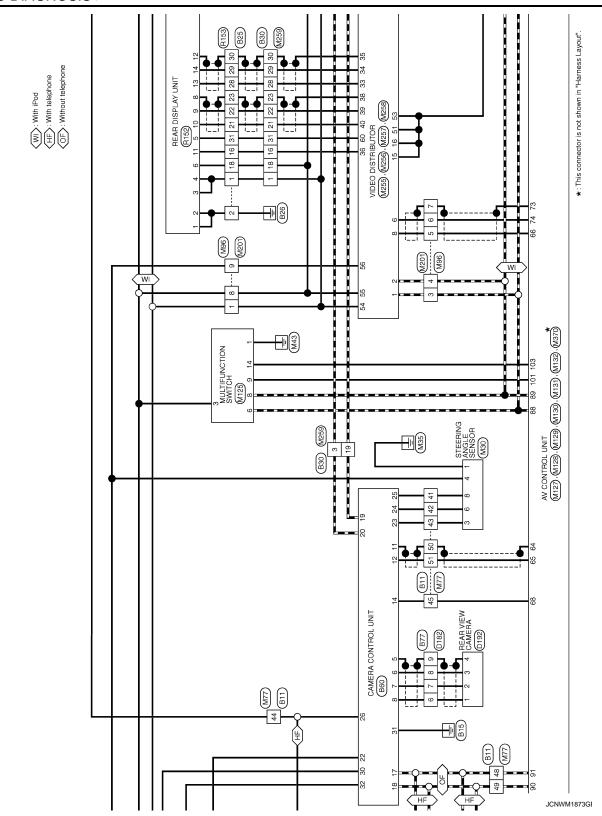
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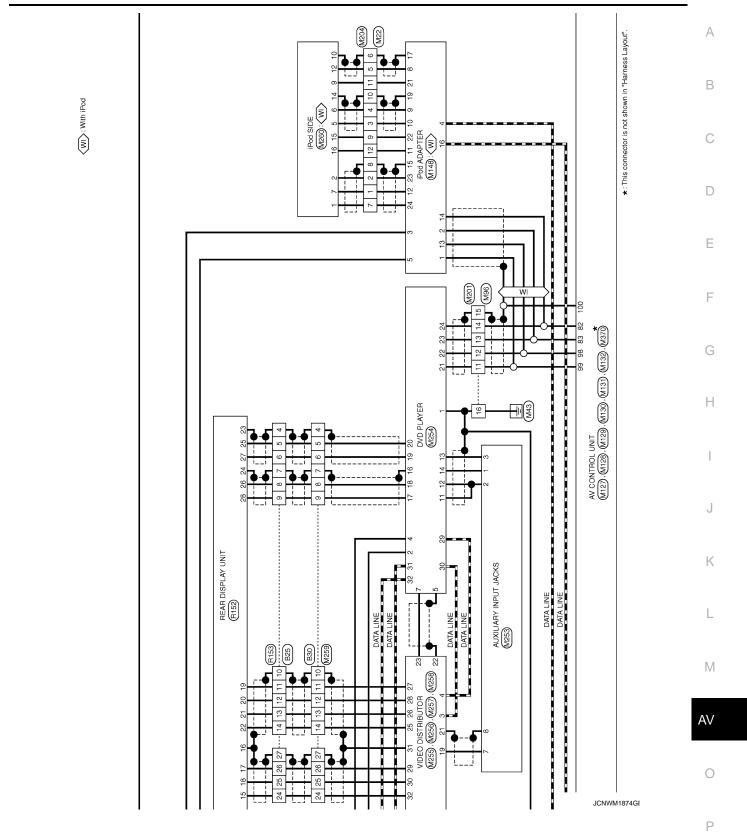
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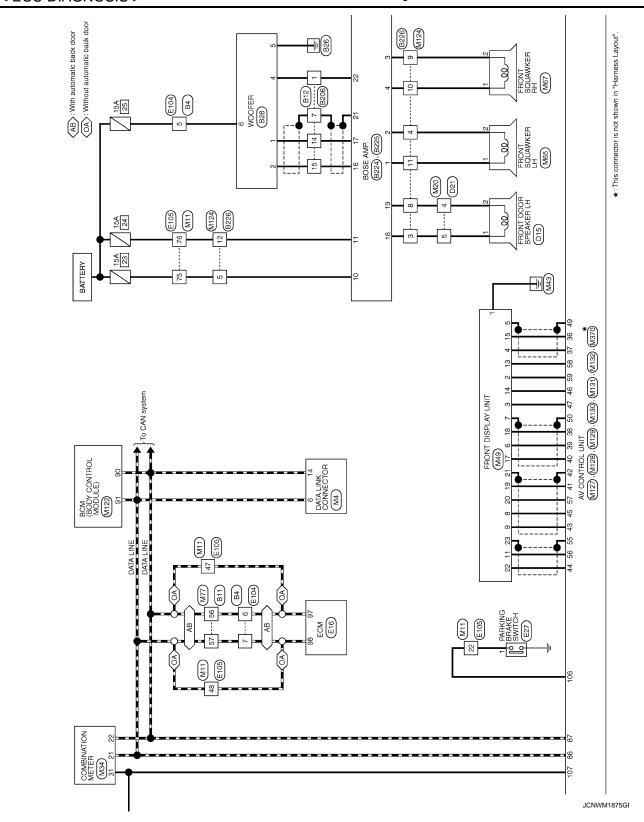
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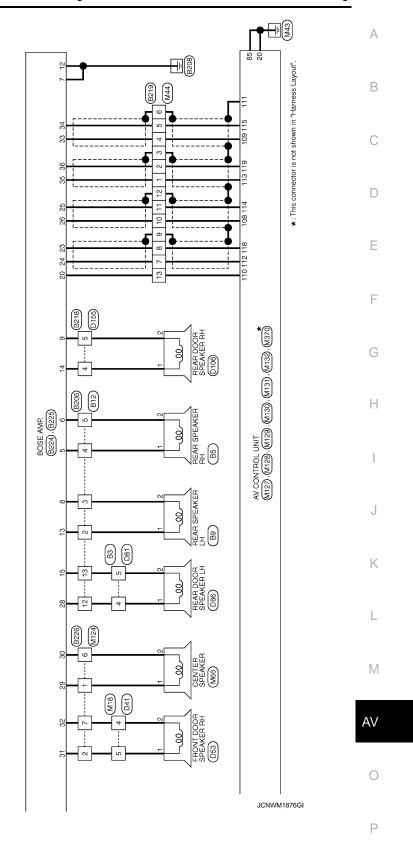
BATTERY

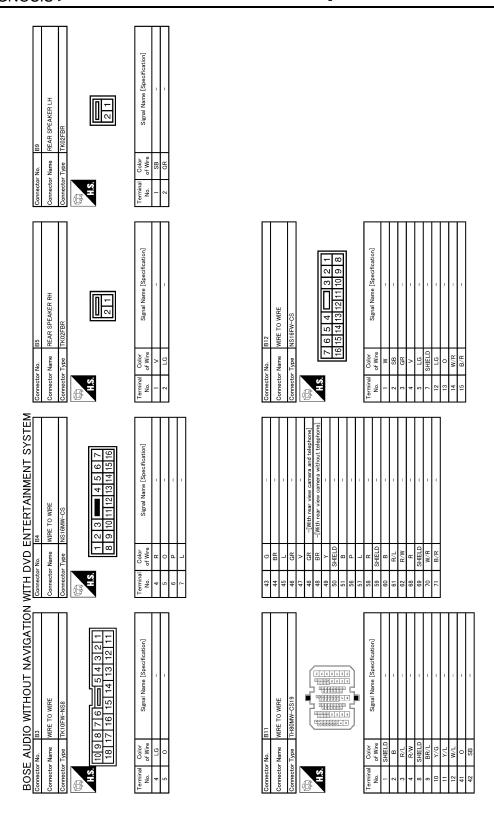
In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH. Α 88 B11 M77 DATA LINE DATA LINE *: This connector is not shown in "Harness Layout". В To illumination STEERING SWITCH SB⟩: With satellite radio HF⟩: With telephone C VOLUME OTELEPHONE 33 34
TEL ADAPTER UNIT
(B33), (B39), (B471) *< TEL ADAPTER ANTENNA D (4) Е VOLUME OU MICROPHONE R20: (HF) F TELEPHONE COMBINATION SWITCH (SPIRAL CABLE) *(M303) BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM M33 G ₩370 SEEK O SEEK ,M132, Н M131 Source | M130 B11 (M77) AV CONTROL UNIT (M127) (M128) (M129), TCM (TRANSMISSION CONTROL MODULE) (F23) GLASS ANTENNA F123 (9) J *(EW) *****@£W *****(675M) FUSE BLOCK (J/B) (M1). (M3) K M T L 10A SATELLITE RADIO TUNER IGNITION SWITCH ON or START 10A M (S) IJæ. GNITION SWITCH ACC or ON ΑV 10A B11) 46 47 (M77) 0 2008/09/23 M11)











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				ו ני			
Connector No.	tor No.	B25	13	1//L	_	Connector No.	B28
Connect	Connector Name	WIRE TO WIRE	14	BR/L	_	Coppector Name	WOOFER
			16	>	1		
Connect	Connector Type	TH32MW-NH	18	0	_	Connector Type	RS06FGY-PR
ą			21	B/R	-	ą	
彦			22	W/R	-	国	
SII.			23	SHIELD	-	VII.	
			24	В	1		
	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	25	R/L	1		((5 4 0))
	17 18 19	20 21 22 23 24 25 26 27 28 29 30 31 32	26	R/W	1		3 2
			27	SHIELD	1		)
			78	В	1		
Terminal	Color	3 3 3	59	>	1	Terminal Color	
N	_	Signal Name [Specification]	30	SHIELD	1	_	Signal Name [Specification]
-	gg	1	31	۵	1	1 W/R	SOUND SIGNAL WOOFER (-)
2	œ					2 B/R	SOUND SIGNAL WOOFER (+)
4	SHFID	1				t	WOOFFR AMP ON SIGNAL
۳.	α/M					ľ	GND
9	1////					t	Tva
,	W/L					+	l Ka
\	SHIELD	1					
œ	GR/V	1					
6	W/L	1					
10	SHIELD	1					
=	W/L	-					
12	5/,k						
Connector No.	tor No.	B30	13	J/,K	-	Connector No.	B33
	- N	TO MUDE	14	BR/L	1	N. T.	TIMI GOTGO AND
Connec	tor Name	WIRE TO WIRE	16	>	1	Connector Name	IEL ADAPIER UNII
Connect	Connector Type	TH32FW-NH	18	0	1	Connector Type	TH08FW-NH
			19	GR	1		
E			21	B/R	-	G G	
É			22	W/R	1	Š	R
2		7	33	CHIELD	1	ė.	П
	16 15 14	13 12 11 10 9 8 7 6 5 4 3 2 1	20	2			35 37 39 41
	32 31 30	32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17	25	- Z	1		36 38 40 42
		1	22	100			24 04 00 00
			07	1 L	í I		
Townsian	_		1200	و الد	1	Tominal	L
S	of Wire	Signal Name [Specification]	2 00	3		No. of Wire	Signal Name [Specification]
-	9		62	o III		t	AV COMM (E)
-   •	3 (		8 5	ol III.		- 0	AV COMM (II)
າ	5		2	,	1	+	AV COMIN (L.)
4	SHELD	1				4	AV COMM (H)
2	W/R	-				42 GR	AV COMM (L)
9	M/L						
7	SHIELD	1					
8	GR/V	-					
6	M/L	1					
10	SHIELD						
=	M/L	-					
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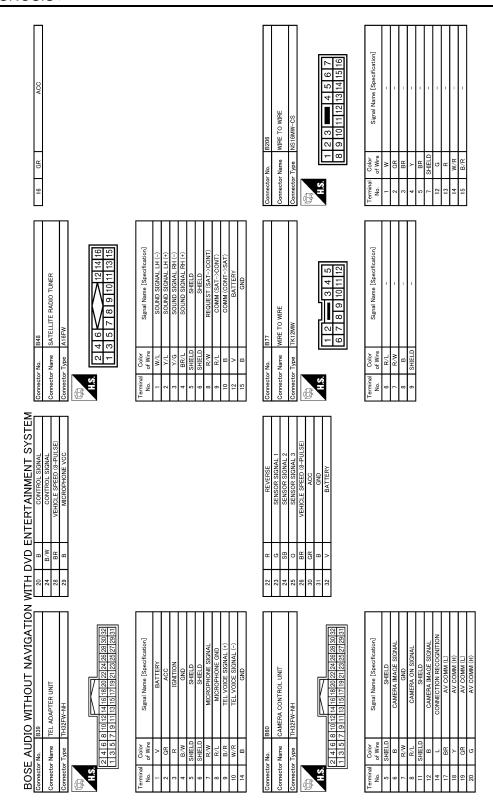
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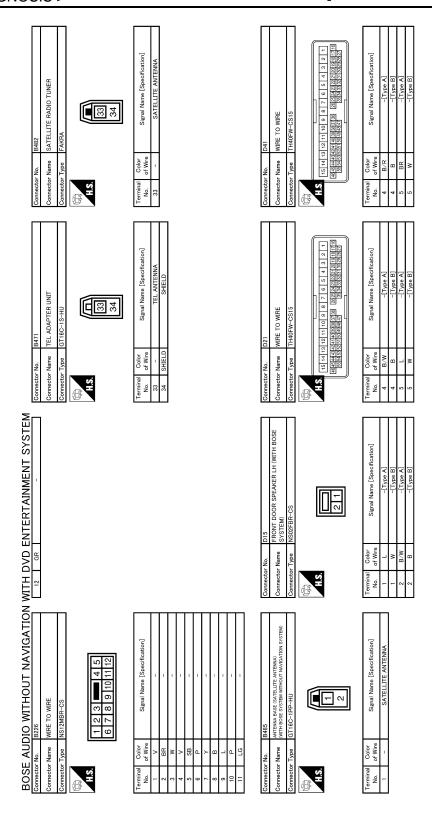
JCNWM1879GE

# [BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

			SOUND SIGNAL REAR RH (+) SOUND SIGNAL, REAR RH (+) SOUND SIGNAL, CENTER SPEAKER (+) SOUND SIGNAL CENTER SPEAKER (+) SOUND SIGNAL CENTER SPEAKER (+) SOUND SIGNAL FRONT DAY SOUND SIGNAL FRONT RH (+) SOUND SIGNAL FRONT RH (-) SOUND SIGNAL FRONT RH (-) SOUND SIGNAL FRONT RH (-)			АВ
			26 GR/V   SOUND SIGNAL     28 G   SOUND SIGNAL     29 V   SOUND SIGNAL     30 P   SOUND SIGNAL     31 W/R   SOUND SIGNAL     32 Y   SOUND SIGNAL     34 B/R   SOUND SIGNAL     35 W/R   SOUND SIGNAL     36 B/R   SOUND SIGNAL     37 W/R   SOUND SIGNAL     38 B/R   SOUND SIGNAL     39 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     31 W/R   SOUND SIGNAL     32 W/R   SOUND SIGNAL     33 W/R   SOUND SIGNAL     34 W/R   SOUND SIGNAL     35 W/R   SOUND SIGNAL     36 W/R   SOUND SIGNAL     37 W/R   SOUND SIGNAL     38 W/R   SOUND SIGNAL     39 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     31 W/R   SOUND SIGNAL     32 W/R   SOUND SIGNAL     34 W/R   SOUND SIGNAL     35 W/R   SOUND SIGNAL     36 W/R   SOUND SIGNAL     37 W/R   SOUND SIGNAL     38 W/R   SOUND SIGNAL     39 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL     31 W/R   SOUND SIGNAL     32 W/R   SOUND SIGNAL     34 W/R   SOUND SIGNAL     35 W/R   SOUND SIGNAL     36 W/R   SOUND SIGNAL     37 W/R   SOUND SIGNAL     38 W/R   SOUND SIGNAL     39 W/R   SOUND SIGNAL     30 W/R   SOUND SIGNAL			C
			32 31 30 22 28 31 30 22 28 31 31 18 17 16 15	Signal Name [Specification] SOUND SIGNAL FACE DOOR SEAWER H. () SOUND SIGNAL WOOFER (-) SOUND SIGNAL WOOFER (-) SOUND SIGNAL WOOFER (-) SOUND SIGNAL FOOT DOOR SEAWER H. (-) SOUND SIGNAL FEONT DOOR SEAWER H. (-) AMP ON SIGNAL SOUND SIGNAL FEAR I.H (-)		Е
	SB		r Name BOSE AMP. Type SCA19FBR-SGA4  37 36 25 24 29 22 21 12	Color of Wire R R WW/R WW/R WW/R SB SHIELD W W/W W/W W/W W/W W/W W/W W/W W/W W/W		F G
į	<u></u>		Connecto Connecto The state of	Terminal No. No. 15 16 16 18 19 20 21 22 22 22 22 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25		Н
!	HE H	Signal Name [Specification]	GND SIGNAL REAR SPEAKER LH (+) SQUIND SIGNAL REAR DOOR SPEAKER RH (+)			ı
	Cornector Type   TH32MW-NH   TT   TT   TT   TT   TT   TT   TT	Terminal Color No. of Wire 1 W/R 1 W/R 3 SHELD 4 W/R 6 SHELD 6 SHELD 9 SHELD 11 GR/V 11 W/L	12 B SOUND S 13 GR SOUND S 14 L SOUND SI			J K
i				H (+)		L
!	DOUGH AUDIO WILLIAM INCOLLINAVIGATION Connector Name WIRE TO WIRE  Connector Type TKIOFW-NS8    10   9   7   6   6   7   1   1   1   1   1   1   1   1   1	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	SJA2 11 10 5 4 3 2 1	Signal Name [Specification] SOUND SIGNAL FRONT SOLAWRER IH (+ SOUND SIGNAL FRONT SOLAWRER IH (+ SOUND SIGNAL FRONT SOLAWRER IH (+ SOUND SIGNAL FRONT SOLAWRER IH (+) SOUND SIGNAL FRONT SOLAWRER IH (+) SOUND SIGNAL FRONT SOLAWRER IH (-) SOUND SIGNAL FRANT SPEAKER IH (-)		M
(	Mile TO WILLIAM   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170   170		B224 BOSE AMP. SGA12FBR-SJA2 14 13 12 14 13 12 14 13 12 15 15 15 15 15 15 15 15 15 15 15 15 15			AV
: : :	Connector Name Connector Type H.S. 10 9	Color of Wire of Color of Wire of Color	Connector No.	Color   Colo		0
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						Р

Revision: 2008 October AV-375 2009 Murano



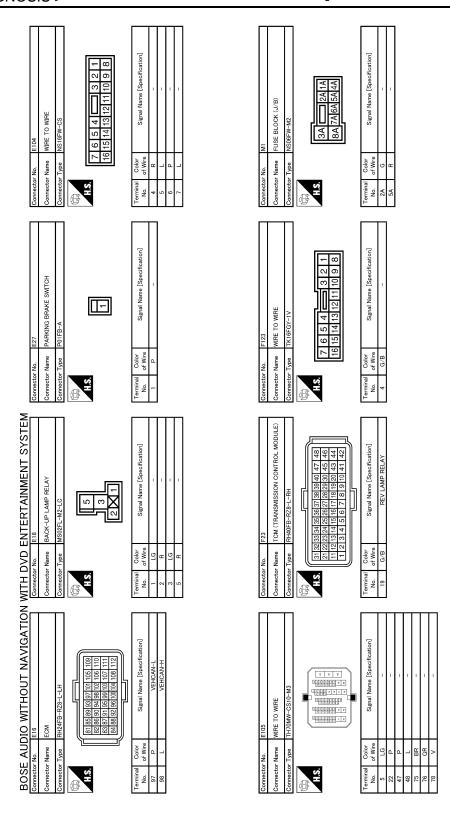
JCNWM1881GI

# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

No. D106 Nume REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Type NSOZFBR-CS	Color   Signal Name [Specification]   Of Wire   Chipse A]   Chipse A]   W   Chipse B]   W   Chipse B]   Chipse B	mane WIRE TO WIRE  TO THIS MANUAL TO MIRE  1 2 3 4 5 6 7  8 9 10 11 12 13 114 15 16	Color Of Wire R		A B
Connector No. Connector Name Connector Type H.S.	Terminal Of No. of 1	Connector No. Connector Name Connector Type	Terminal Of No. of A		D
4 WITH BOSE	reification)		orification] SIGNAL SIGNAL		Е
DOB REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) NSOZEBR-CS	Signal Name (Specification)	D192 REAR VIEW CAMERA THOAMWI-NH	Signal Name [Specification] CAMERA ON SIGNAL CAMERA IMAGE SIGNAL SHIELD SHIELD		F
or No.	of Wire	No. Name Type	al Color of Wire B B B B B B B B B B B B B B B B B B B		G
	No. 1	Connector Connector	10 minal No. 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		Н
WITH DVD ENTERTAINMENT SYSTEM  Connector No D81  Connector Name WIRE TO WIRE  Connector Type ITK10MW-NS8  Connector Type ITK10MW-NS8  M.S. 1   2   3   4   5   6   7   8   9   10    H.S. 1   1   1   1   1   1   1   1   1   1	Signal Name [Specification]	8 <u>7 </u>	Signal Name [Specification]		I
VD ENTERTAINMEN No. D01 Nume WIRE TO WIRE TX10MW-NSS 1 2 3 4 5 6 7 6 7 1 1 1 1 2 1 3 1 4 1 5 1 6 1 6 7 1 1 1 1 1 2 1 3 1 4 1 5 1 6 1 6 7 1 1 1 1 2 1 3 1 4 1 5 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6	Signal N	D182 WIRE TO WIRE TK12FW 5 4 3 6 12 11 10 9	Signal N		J
WITH DVD EN Connector Name Wife Connector Name Wife Connector Name Wife Connector Type II	Terminal Color No. of Wire 4 L 5 W	Connector No. D182 Connector Name WIRE Connector Type TK12 H.S.	Color   Colo		K
AATION					L
BOSE AUDIO WITHOUT NAVIGATIO  Connector No. D53  Connector Num EVSTEIN)  Connector Type INSOZFBR-CS  H.S.	Signal Name (Specification)  -[Type A]  -[Type B]  -[Type B]  -[Type B]	RE BB BB BB BB BB BB BB BB BB BB BB BB BB	Signal Name [Specification]  -[Type A]  -[Type B]  -[Type B]		M
DDIO WITH		D155 WIRE TO TK10MW			AV
BOSE AU. Connector Name Connector Type H.S.	Terminal   Color   C	Connector No.  Connector Name Connector Type H.S. 112	Color   Colo		0
ш <u>о о о та</u>	<u> -                                     </u>	O O O O	<u> -                                    </u>	JCNWM1882Gł	
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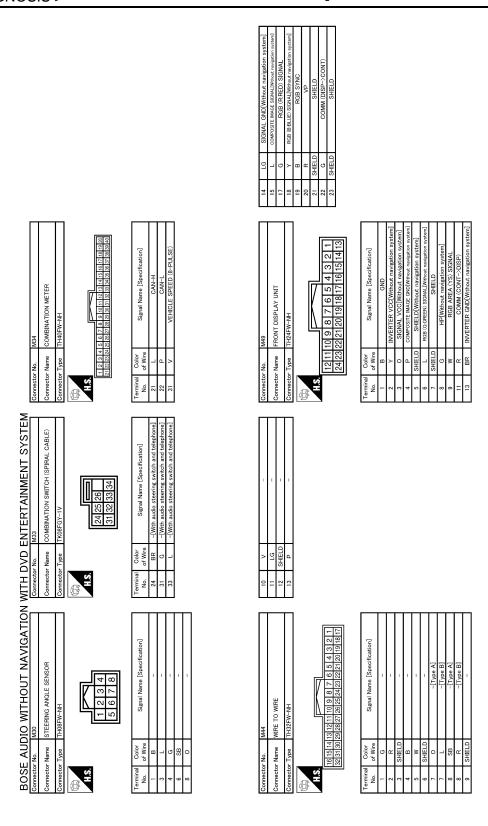
Revision: 2008 October AV-377 2009 Murano



JCNWM1883GI

Name   WIRE TO WIRE	WIRE TO WIRE THISMW-NH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Signal Name [Specification]	АВ
Connector No.   MII8	Connector No.   M72	C D
cification]		Е
WIRE TO WIRE TH70FW-CSI0-M3  **		F
ector No.  cctor Name cctor Type  inal Color  of Wire  Color  Col	21	G
		Н
VALINK CONNECTOR 10111213141516 2 3 4 5 6 7 8 Signal Name [Specification]	NH NH	I
ENTERTAINME MA DATA LINK CONNECTOR BD16FW  9 10 11 12 13 14 11 1 2 3 4 5 6 7		J
WITH DVD EN Connector No. MM Connector No. MM Connector Name DV Connector Type BE No. of Viring No. of Viring B List List List List List List List List	Connector No.   M72	K
		L
BOSE AUDIO WITHOUT NAVIGATION Somestor No. M3 Connector Name FUSE BLOCK (J/B) Connector Type NSIZFW-CS  ALS.  SGAC Signal Name [Specification]  Terminal Color Signal Name [Specification]  12C 0	Name   WIRE TO WIRE   Type   TH40MW-CS15   TH40MW-CS15   Standard   T	M
DIO WITHOL  M3  FUSE BLOCK (J/B)  NS12FW-CS  S[2040] 30  S[gral Nar	No.   M20	AV
BOSE AUIC Connector Name Connector Type Connector Type ALS  ALS  Terminal Color No. of Wire No. of Wire 12C 0	Cornector No. Connector Name Connector Type Connect	0
		JCNWM1884Gŧ
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Revision: 2008 October AV-379 2009 Murano

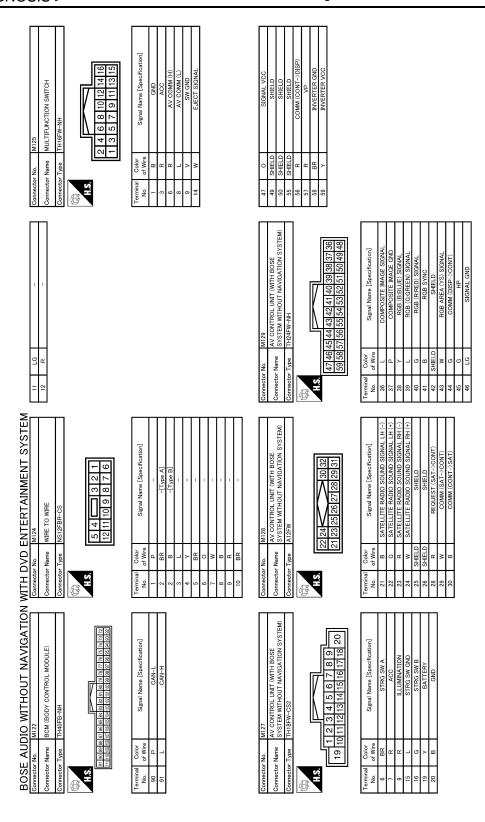


JCNWM1885GI

[BOSE AUDIO WITHOUT NAVIGATION]

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	В
M HS D	С
4 5 5	D
Specification]  E system]  Specification]	Е
Signal Name E Si	F
Name	G
	Н
SPEAKER  Signal Name [Specification]	I
Signal Nam	J
MITH DVD ET	К
N N N N N N N N N N N N N N N N N N N	L
AUDIO WITHOUT NAVIGATION   WITH DVD ENTERTAINMENT SYSTEM	M
M65 WE TO WITHOUT THOUT SOUAWKER LH THOOF Soural Name [S Signal Na	AV
Connector Name   Conn	0
JCNWM1886GI	D

Revision: 2008 October AV-381 2009 Murano



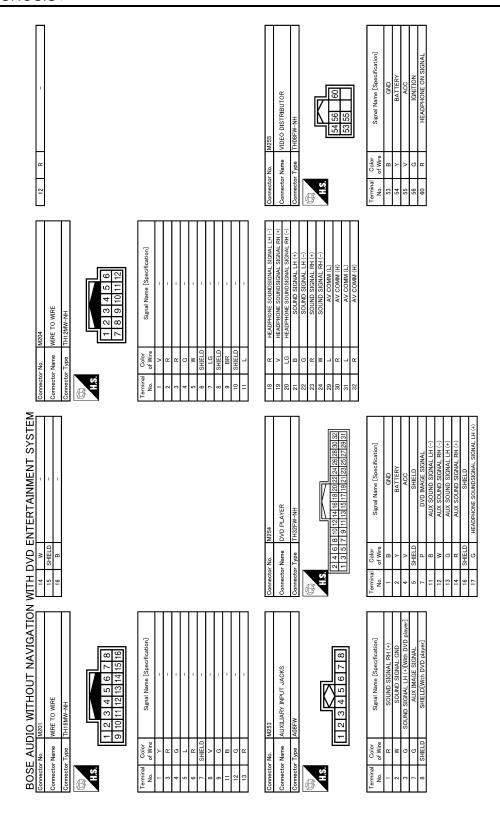
JCNWM1887GE

# [BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

	Pod SOUND SIGNAL, PH (+)  AV COMM (+)  AV COMM (+)  AV COMM (+)  AD STATE OF THE OF TH	АВ
	W SHIELD SOLUTION OF THE POOL	С
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D
M (L)  (With DVD player)  (With DVD player)  (Wo player)  DO  ST  ST  ST  ST  ST  ST  ST  ST  ST  S	21 [22 [33 24] [21 [22 [33 24] [22 [33 24] [23 [34] [24 [25] [24 [25] [25] [25] [25] [25] [25] [25] [25]	Е
AV COMM (L) SOUND SIGNAL LH (-)[With DVD player] SOUND SIGNAL LH (-)[With DVD player] SHELD[With DVD player] SW GND EMEYERSE PARKING BRAKE VEHICLE SPEED (6-PULSE)	Signal Name [5   6   7   8   19   20	F
99 98 0 0 0 100 0 8 HEB 0 0 0 100 0 8 HEB 0 0 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0 0	Military	G
		Н
ENTERTAINMENT SYSTEM MIST AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) THESEW-NH THESEW-NH THE VOICE SIGNAL (+) TEL VOI	SOUND SIGNAL FRONT LH (*)	I
	DIS COUNTS	J
Connector No.   Connector No.   Connector Name   Connec	α 6:	K
	NSTEM)    1	L
MI 30  SYSTEM WITHOUT NAVIGATION  SYSTEM WITHOUT NAVIGATION SYSTEM)  THISPW-NH  SHELD  COMMETCION RECOGNITION  SHELD/With DVD player]  COMPOSITE IMAGE GIND/With DVD player]	SYSTEM WITHOUT NAVIGATION SYSTEM) THISPW-NH  [14] 115 [116] 117 [118] 119  [106] 109 [110] 111 [112] 113  Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]  SOUND SIGNAL REAR HH (+)  SOUND SIGNAL REAR HH (+)  SOUND SIGNAL REAR HH (+)  SOUND SIGNAL REAR HH (-)  SOUND S	M
		AV
BOSE AU Connector Name Connector Type Connector Typ	Connector No.   Connector Name   Conne	0
	JCNWM1888GI	Р

Revision: 2008 October AV-383 2009 Murano

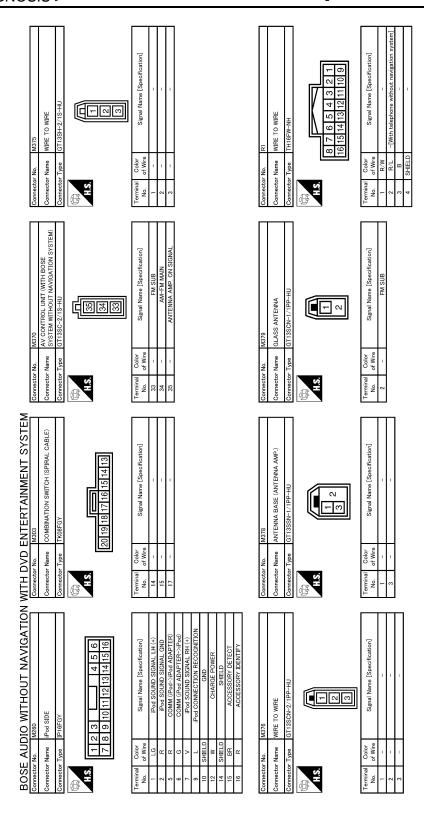


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# [BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

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IONITION SHIELD COMM (DISPDISP) COMM (DISTDISP)	WRE 28   24   25   26   27   28   29   30   31   32   29   24   25   29   29   30   31   32   29   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   29   29   30   31   32   20   24   25   25   29   30   31   32   20   24   25   25   29   30   31   32   20   24   25   25   25   25   25   25   20   24   25   25   25   25   25   20   24   25   25   25   25   25   20   24   25   25   25   25   20   25   25   25   25   25   20   25   25   25   25   20   25   25   25   25   20   25   25   25   20   25   25   25   25   20   25   25   25   20   25   25   25   20   25   25   20   25   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   25   20   25   20   25   25   20   25   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20   25   20	Е
INDI		F
		G
	Connector Connector Connector Connector In I	Н
PISTRIBUTOR W-WH  TO STATISH STATISH  SUBJECT STATISH  SUBJECT STATISH  SUBJECT STATISH  SUBJECT STATISH  SUBJECT STATISH  ROB GOOD STATISH  FOR STA	DVD IMAGE SIGNAL	I
M357  WDEO DISTRIBUTOR THISPW-WH THISPW-WH  THISPW-WH TO SIGNA  26 28 30 32 34 36 38 40  26 28 30 32 34 36 38 40  25 27 29 31 33 35 37 39  ROB (RARE) SIGNA ROB (GAREN) SIGNA ROB (GAREN) SIGNA ROB (GAREN) SIGNA ROB (GAREN) SIGNA ROB (CAREN) SIGNA ROB ROB (NO ROB PAREN (YS) SIGNA ROB ROB (NO ROB PAREN (YS) SIGNA ROB ROB (NO ROB PAREN (YS) SIGNA ROB ROB (NO SHELD COMPOSITE SINGA SHELD	MI DVD	J
Connector Name   WISTA   WISTA   WISTA   WISTA   WISTA   WISTA   Connector Name   WIDEO DISTRIBUTOR   Connector Name   WIDEO DISTRIBUTOR   WIDEO	D 23	K
Z	200 F	L
StriButor NAVIG	DIED DISTRIBUTOR   PAGE VAINT	M
M NISSE NISS		AV
BOSE AUC Connector Name Connector Type Connector Type (1.3.)  I eminal Color No. of Wire 51 B	Connector Name   Connector Name   Connector Name   Connector Type   Conn	0
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JCNWM1891GE

BOSE AUI	JIO WILLHOOF INAVIGATION	Connector No.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	DOSE AUDIO WILDOLI NAVIGALION WILL DVD ENTERTAINMENT STSTEM Connector No. 1822	13	9	COMPOSITE SYNC
	rivoridodom			Time VA region of and	14	œ	COMPOSITE IMAGE SIGNAL
	Connector Name MICROPHONE	Connector	Name	Connector Name REAR DISPLAT UNIT	15	В	RGB AREA (YS) SIGNAL
Connector Type	TK04FW	Connector Type		TH32FW-NH	16	SHIELD	GND
		Ģ			17	۲	dΛ
		F			18	W	HP
		S I			19	N/L	RGB GND
				/ 	20	5/X	RGB (B:BLUE) SIGNAL
	1 2 3 4		ဖ	8 10 12 14 16 18 20 22 24 26 28 30 32	21	J/X	RGB (G:GREEN) SIGNAL
			135	7   9   11   13   15   17   19   21   23   25   27   29   31	22	BR/L	RGB (R:RED) SIGNAL
					23	SHIELD	SHIELD
					24	SHIELD	SHIELD
Color	Cinnel Manne [Consideration]	Terminal Color	Color	Cimple Nome Consideration	52	PΠ	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)
of Wire		No.	of Wire	olgilai Naille Lopeciilcauori	56	BR	HEADPHONE SOUNDSIGNAL SIGNAL LH (-)
R/W	MICROPHONE SIGNAL (+)	-	В	GND	27	۸	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)
R/L	MICROPHONE SIGNAL (-: (With telephone without navigation system)	2	В	GND	28	Υ	HEADPHONE SOUNDSIGNAL SIGNAL LH (+)

Signal Name [Specification]	GND	GND	BATTERY	BATTERY	HEADPHONE ON SIGNAL	ACC	SHIELD	COMM (DISP->DIST)	COMM (DIST->DISP)	IGNITION	SHIELD
Color of Wire	В	В	Y/R	Y/R	Я	٨/٨	SHIELD	۸	ГG	G	SHIELD
Terminal No.	-	2	3	4	2	9	8	6	10	11	12
	Г	Г		l							

1	1	1	1	1	1	1	1	1	1	-	-	-	-	
J/Y	BR/L	9	V/Y	ΓG	۸	SHIELD	В	W	ď	SHIELD	9	ч	SHIELD	
13	14	16	18	21	22	23	24	25	56	27	28	59	30	
				1										Ī

Signal Name [Specification]	MICROPHONE SIGNAL (+)	MICROPHONE SIGNAL (-:\With telephone without navigation system)	MICROPHONE POWER	
Color of Wire	R/W	R/L	В	
Terminal No.	1	2	4	

Connector Name	R153 WIRE TO WIRE TH32FW-NH
H.S. 16 15 14 32 31 30 2	13 12 11 10 9 8 7 6 5 4 3 2 1 23 28 27 26 25 24 23 22 12 130 19 18 17

Signal Name [Specification]	=	=	=	_	_	_	_	_	_	_	_	
Color of Wire	Y/R	В	SHIELD	PΠ	۸	SHIELD	BR	Υ	SHIELD	M/L	Y/G	
Terminal No.	1	2	4	5	9	7	8	6	10	11	12	

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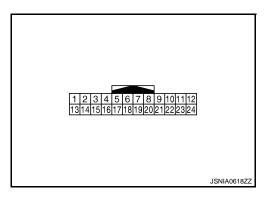
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# **IPOD ADAPTER**

Reference Values

INFOID:0000000003625753

**TERMINAL LAYOUT** 



#### PHYSICAL VALUES

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
1 (BR)	13 (L)	iPod sound signal LH	Output	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
2 (R)	14 (W)	iPod sound signal RH	Output	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
3 (R)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
4 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
5 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
8 (W)	Ground	iPod battery charge	Output	Ignition switch ON	Connected to iPod [®] .	12.0 V

#### **IPOD ADAPTER**

#### [BOSE AUDIO WITHOUT NAVIGATION]

	rminal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
9 (G)	Ground	Communication signal (iPod adapter→iPod [®] )	Output	Ignition switch ON	The wave pattern is displayed just after iPod connection.	JPNIA0462GB  NOTE:  After the wave pattern display, the value continues Approx 3.3 V
10 (R)	Ground	Communication signal (iPod [®] →iPod adapter)	Input	Ignition switch ON	Connected to iPod [®] .	(V) 3 2 1 0 → +2ms JPNIA0462GB
11 (R)	Ground	ACCESSORY-IDENTIFY	_	Ignition switch ON	Connected to iPod [®] .	0 V
12 (V)	23 (R)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
15	_	Shield	_	_	_	_
16 (R)	_	AV communication signal (H)	Input/ Output	_	_	_
17	Ground	Ground	_	Ignition switch ON	_	0 V
19	_	Shield		_		_
21	Ground	iPod connection recogni-	Input	Ignition switch	Not connected to iPod [®] .	4.0 V
(L)	Siddild	tion signal	mput	ON	Connected to iPod [®] .	0 V
22 (BR)	Ground	ACCESSORY-DETECT		Ignition switch ON	Connected to iPod [®] .	0 V
24 (LG)	23 (R)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E

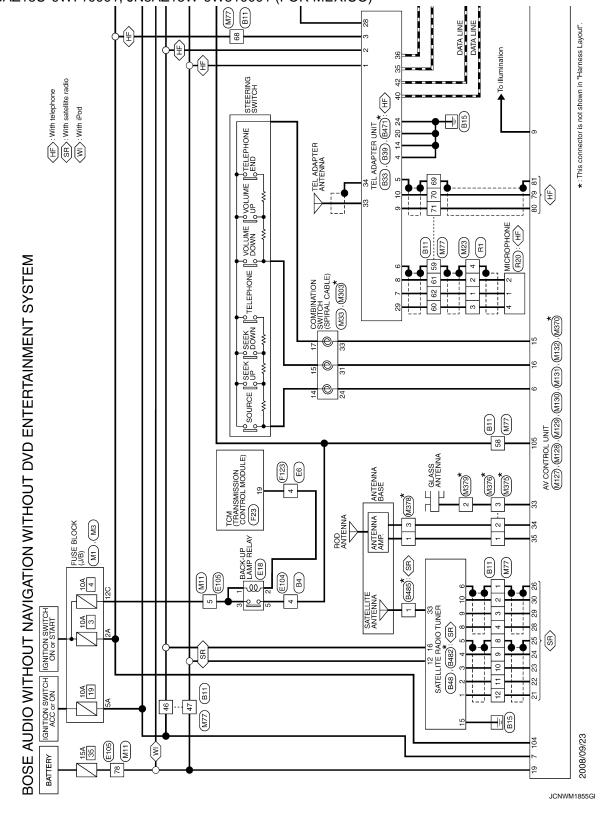
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTER-

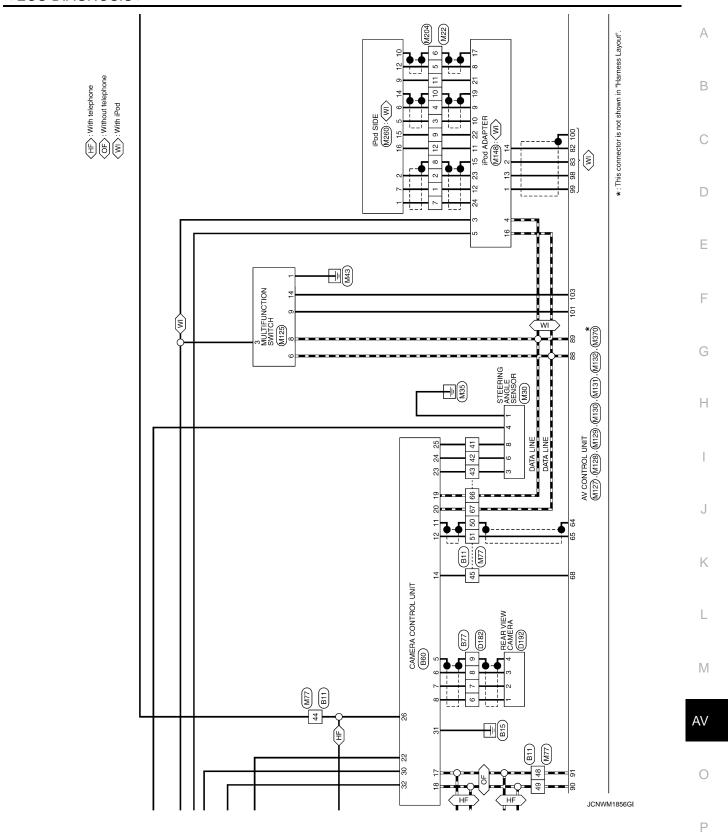
#### TAINMENT SYSTEM -

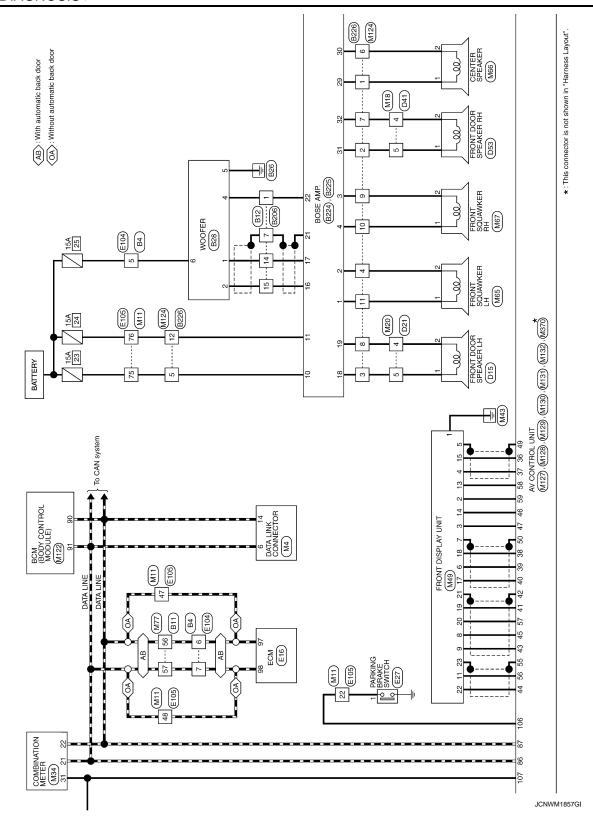
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#### NOTE:

- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.
- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)
- Type B: From VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO), JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)

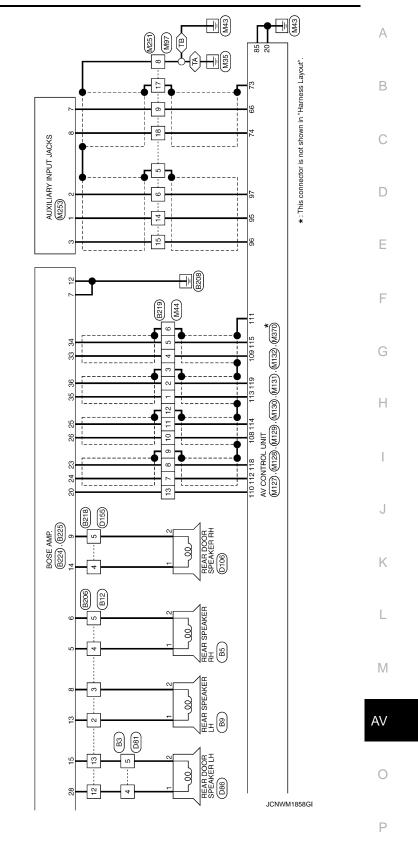






(TA): Type A
(TB): Type B

# [BOSE AUDIO WITHOUT NAVIGATION]



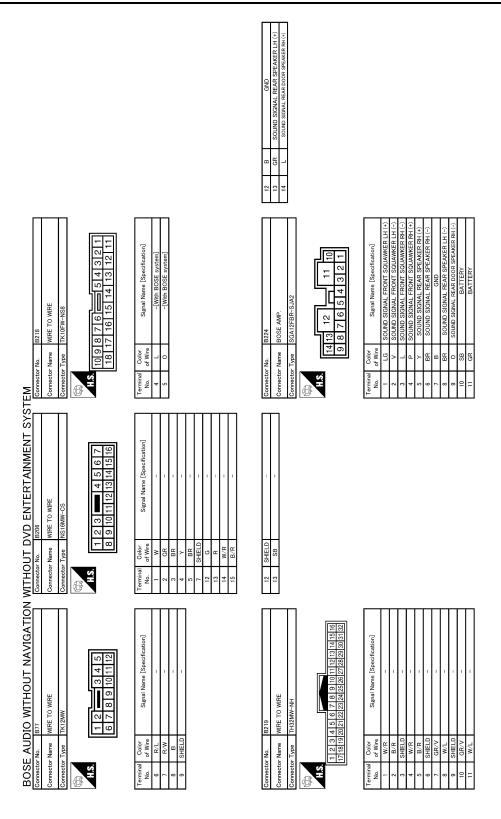
BOSE ALConnector No. Connector Name Connector Type H.S. H.S. 10 5	E AUDIO 7 No. 83 7 Nome WIR 7 Type TK1 10 9 8	BOSE AUDIO WITHOUT NAVIGATION Connector No. 83 Connector Name WIRE TO WIRE Connector Type ITK10FW-NS3  Connector Type ITK10FW-NS3  WIE TO 9 8 7 6 5 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WITHOUT Connector No. Connector Name Connector Type H.S.	MITHOUT DVD ENTERTAINMENT SYSTEM   Gonnector No.   B4   Gonnector No.   Gonnector Type   NS16MW-CS   Gonnector Type   Gonnector Type	TSYSTI	Connector No. Connector Name Connector Type H.S.		BS TROAR SPEAKER RH TKOZFBR  2 1	Connector No. Connector Type	B9 REAR SPEAKER LH TK02FBR	пп
Terminal No.	O O O O O O O O O O O O O O O O O O O	Signal Name [Specification]	Terminal No. 5 5 7 7	Color Signal Name [Specification] of Wire R =		Terminal No. 1	Octor of Wire V	Signal Name [Specification]	Terminal   Color   No. of Wire   1   SB   2   CR	Signal Name [Specification]	
Connector No. Connector Name Connector Type		WIRE TO WIRE THBOMW-CS 19	43 44 44 45 46 47 48 48 49 50 50 51	G	phone] [ephone]	Connector No. Connector Name Connector Type		B12 WHE TO WIRE NSIGNW-CS 6 5 4	Connector No. Connector Name Connector Type H.S.	MOOFER RSGEGY-PR	ПП
Terminal No. 0. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Color of Wire SHIELD B R/L R/W SHIELD BR/L V/G Y/C V/C O O SB	Signal Name [Specification]	57 58 59 60 60 61 67 67 69 70	SHIELD		Terminal No. No. No. 1	Color of Wire SB SB GR GR CLG CLG CO O O O O O O O O O O O O O O O O O O	Signal Name [Specification]	Color   No.   Color   No.   Color   No.   Color   No.   Color   Colo	Signal Name [Specification] SOUND SIGNAL WOOFER (+) SOUND SIGNAL WOOFER (+) WOOFER AMP. ON SIGNAL GND BAT	

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# [BOSE AUDIO WITHOUT NAVIGATION]

22 R SENSOR SIGNAL 1 23 G SENSOR SIGNAL 1 24 SB SENSOR SIGNAL 2 25 O SENSOR SIGNAL 2 26 O SENSOR SIGNAL 2 27 G M ACC 30 GR ACC 31 B GAD 32 V BATTERY	A B C
EM	E F G
Connector Name	I J K
BOSE AUDIO WITHOUT NAVIGATION	M AV

Revision: 2008 October AV-395 2009 Murano



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## **IPOD ADAPTER**

12 GR -		Connector Name FRONT DOOR SPEARER LH (WITH BOSE SYSTEM) Connector Type NSOZEBR-CS  H.S.	Terminal   Color   Signal Name [Specification]		A B C
EM	Terminal   Color   Signal Name   Specification	Connector No. B485 Connector Name Antrewa BASE CATELLITE ANTENNA Connector Type GT16C-IPP-HU  HS.	Terminal Color Signal Name [Specification]  No. of Wire Stand Name [Specification]  SATELLITE ANTENNA		E F G
WITHOUT DVD ENTERTAINMENT SYSTEM   26   GR/V   SOUND SIGNAL REAR RH (+)   Con   28   G   SOUND SIGNAL REAR DOOR SEARRER H+ (+)   29   V   SOUND SIGNAL CENTER SPEAKER (+)   30   P   SOUND SIGNAL CENTER SPEAKER (+)   Con   31   BR   SOUND SIGNAL CENTER SPEAKER RH (+)   32   Y   SOUND SIGNAL ROUT DOOR SPEAKER RH (+)   33   W/R   SOUND SIGNAL FRONT RH (-)   34   B/R   SOUND SIGNAL FRONT RH (-)   35   W/R   SOUND SIGNAL FRONT RH (-)   36   B/R   SOUND SIGNAL FRONT RH (-)   37   SOUND SIGNAL FRONT RH (-)   38   B/R   SOUND SIGNAL FRONT LH (-)   39   B/R   SOUND SIGNAL FRONT LH (-)   30   B/R   SOUND		Connector No. B482 Connector Name SATELLITE RADIO TUNER Connector Type FARRA  # S.  34	Terminal Color No. of Wire 33		I J K
BOSE AUDIO WITHOUT NAVIGATION  Cornector Name BOSE AMP.  Cornector Type SCA19FBR-SGA4  (18) 37 36 36 34 33	Terminal   Color   Signal Name [Specification]	Connector No. B471 Connector Name TEL ADAPTER UNIT Connector Type GT16C-1S-HU  #1.8	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   33   E.   E.   TEL ANTERNA   SHIELD   SHIEL	JCNWM1862GI	M AV
					Р

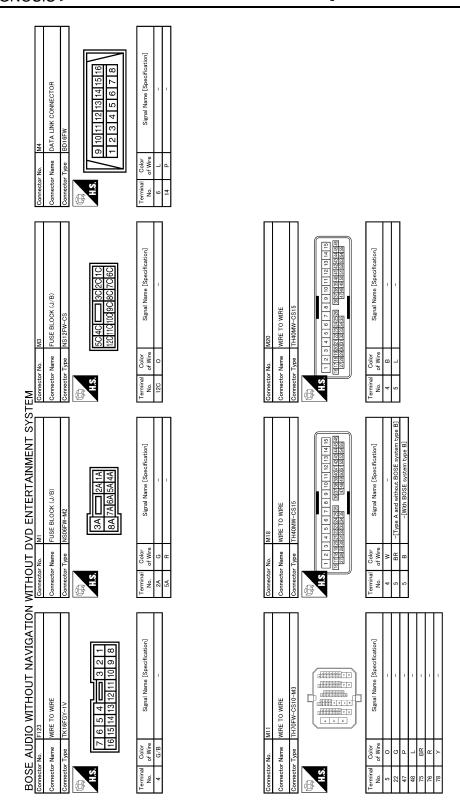
Revision: 2008 October AV-397 2009 Murano

Connector No. D81 Connector Name WIRE TO WIRE Connector Type TK10MW-NS8      2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   18   18   18   18   18   18	Terminal Color No. of Wire Signal Name [Specification] 4 L - 5 W -	Connector No. D182 Connector Name WIRE TO WIRE Connector Type TK12PW  M.S.  12 11 10 9 8 7 6	Terminal   Color   Signal Name [Specification]   Color   Cr Wine   Signal Name [Specification]   Cr Wine   Cr
TEM Commetter No. D53 Commetter Name FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM) Commetter Type NSQPTEM-C5  H.S.	Terminal   Color   No.   of Wire   Signal Name [Specification]     No.   Of Wire	Oomestor No. D155 Connector Name WRE TO WIRE Connector Type TK/10MW-NS9	Terminal   Color   Signal Name   Specification]   No. of Wire   Signal Name   Specification]   4   0   -[Type B]   5   B/P   -[Type A]   5   W   -[Type B]   5   W
WITHOUT DVD ENTERTAINMENT SYSTEM   Cornector No.   D41   Cornector Name   WIRE TO WIRE   Cornector Type   TH40FW-CS15   Co	Terminal   Color   Signal Name [Specification]     No.	Connector No. D106 Connector Name ERCA DOOR SPEAKER RH (WITH BOSE Connector Type NSOZFBR-CS	Terminal   Color   Signal Name [Specification]   No.   Of Wire   O   -[Type A]     O   -[Type B]     O   O   O   O   O   O   O   O   O
BOSE AUDIO WITHOUT NAVIGATION Connector No. D21 Connector Name WRE TO WRE Connector Type TH40FW-CS15  WAS 15 1413 12 1110 9 8 7 7 6 5 4 1 8 2 1  GENERAL STATES AND S	Terminal   Color   Signal Name [Specification]     No. of Wire   Signal Name [Specification]     4   B.W   -[Type A]     5   L   -[Type B]     5   W   -[Type B]	Connector No. D86 Connector Name REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS	Terminal   Color   Signal Name [Specification]   No.   Color   Color

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## **IPOD ADAPTER**

Connector No. E18 Connector Name BACK-UP LAMP RELAY Connector Type MS02FL-M2-LC  H.S. 2	Cornector No.   F23   Cornector Name   TCM (TRANSMISSION CONTROL MODULE)   Cornector Type   RH40FB-R251-RH	A B C
Connector No.   E16   Connector No.   E16   Connector Name   ECM   Connector Type   RH24FB-R28-L-LH   RH24FB-R28-LH   RH	Connector No.   E105	E F G
Connector Name   WIRE TO WIRE   Connector Type   TK18MGY-1V	Connector No   E104   Connector Type   WIRE TO WIRE	J K
BOSE AUDIO WITHOUT NAVIGATION Cornector None REAR VIEW CAMERA Connector Type ITHORMA-NH  Terminal Color Signal Name [Specification]  No. of Wire Signal Name [Specification]  Terminal Color Signal Name [Specification]  The CAMERA ON SIGNAL  CAMERA ON SIGNAL  SIGNAL  SIGNAL  SHIELD  SHIELD  SHIELD  SHIELD  SHIELD  SHIELD	Connector No. E27 Connector Name PARKING BRAKE SWITCH Connector Type POIFE-A  H.S.  Terminal Color Signal Name [Specification]  Terminal Of Wire Signal Name [Specification]	AV O
		JCNWM1864GI



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## **IPOD ADAPTER**

ANGLE SENSOR NH C 3 4 4 C 7 8 4 C 7 8 4 C 7 8	1 1 1			АВ
Connector No. M30 Connector Name STEERING ANGLE SENSOR Connector Type THOSPW-NH  Terminal Color No. of Wire No. of Wire 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 V 11 LG 12 SHELD 13 PP			C
12 3 4 5 6 7 8 10 11 12 13 14 15 16 16 16 16 16 17 16 16 16 16 16 16 16 16 16 16 16 16 16	7r No. M44  2r Type   TH32PW-NH    16 15 14 13 12 11 10 9 18   7 6 5 4 3 12 1    22 31 30 29 29 27 26 25 22 27 21 20 19 18 17	Signal Name [Specification]		E
The control of the co	Connector No. M44 Connector Name WIRE TO WIRE Connector Type TH3ZPW-NH M.S. H.S. [16] 14 [13] 21 [11] [10] 9 [22] 31 [30] 29 [29] 27 [26] 25	Terminal Color No. of Wire No. of Wire Since Shifted Street Stree		G
N WITHOUT DVD ENTERTAINMENT SYSTEM    12   R	ON METER 1	Signal Name [Specification] CAN+H CAN+L CAN+L VEHICLE SPEED (8-PULSE)		I J
WITHOUT DVD EN	Connector No.   M34	Terminal Color   Si		K
WIRE NH  NH  (4 3 2 1 1 10 9 8 7 7 10 9 8 7 7 10 9 8 7 7 1 10 9 8 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M33  **TKOBFGY-IV    TRABFGY-IV    24   25   26   31   32   33   34   34   35   34   35   34   35   34   35   35	Signal Name [Specification]  With audio steering switch and selephone]  -[With audio steering switch and telephone]  -[With audio steering switch and telephone]		M
BOSE AUDIO WITHOUT NAVIGATIO   Connector No.   M22	Connector No. M33 Connector Name COMBINATION Connector Type TK08FGY-IV TK1S.	Color   Signa   Signa   No.   Order   Signa   Order   Signa   Order   Order and   Order   Or		AV
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Revision: 2008 October AV-401 2009 Murano

Connector No. Miss Connector Name GENTER SPEAKER Connector Type TKOZFBR	Terminal   Color   No. of Wire   Signal Name [Specification]   1   p   -   -   -	Connector Name   WIRE TO WIRE
Connector No. MES Connector Name FRONT SOUAWKER LH Connector Type TK02FBR H.S.	Terminal   Codor   Signal Name [Specification]   1   LG   -[With BOSE system]   2   Y   -[With BOSE system]	44 V V
MITHOUT DVD ENTERTAINMENT SYSTEM   14   LG   SIGNAL GND[Without, navigation system]   15   L   Coup-051FT lawds Signal, (western system)   17   G   ROB (BRLD) SiGNAL, (western system)   Con   18   Y   ROB (BRLD) SIGNAL, (western system)   Con   19   B   ROB (BRLD) SIGNAL, (western system)   Con   19   B   ROB (BRLD) SIGNAL, (western system)   Con   19   B   ROB (BRLD) SIGNAL, (western system)   Con   Co		Connector No. M77  Connector Name WIRE TO WIRE  Connector Type TH80FW-CS19  H.S.  I SHELD  2 B SHELD  3 W P  4 R R  8 SHELD  1 SHELD  1 SHELD  1 SHELD  1 SHELD  1 SHELD  2 B SHELD  4 R R  8 SHELD  1 SHELD  1 SHELD  1 SHELD  2 B SHELD  4 R R  6 SWan Name [Specification]
BOSE AUDIO WITHOUT NAVIGATION  Connector No. M49  Connector Name FRONT DISPLAY UNIT  Connector Type THZ4FW-NH  12 [12 [11 10 9 8 7 6 5 4 3 2 1 1 2 1 1 2 2 2 2 1 2 0 19 18 17 16 15 14 13 3 2 2 2 1 2 0 19 18 17 16 15 14 13	Color	Connector No.   M67   Connector Name   FRONT SOLAWKER RH     Connector Type   TK02FBR   TK02FB

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MUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM	Connector No. MI25  Connector Name MULTFUNCTION SWITCH  Connector Type TH16FW-NH  LS	47   O   SIGNAL VCC     49   SHELD   SHELD     50   SHELD   SHELD     55   SHELD   SHELD     56   R   COMM (CONT-DISP)     57   R   VP     58   R   INVERTER OLD     59   Y   INVERTER VCC	A B C
MIZE   Connector Municipal   MIZE   Connect	_ 2	8 9 4 4 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	F G
MI22 BOM (BODY CONTROL MOULE) TH40FB-NH  W. CONTROL UNIT (WITH BOSE SYSTEM) TH18FW-GS2 STRESS WISH WITHOUT NAVIGATION SYSTEM STRESS	MITHOUT DVD ENTERTAINMENT SYSTE	MI 28	I J
BOSE  BOSE  Annual Commettor Na  BOSE  Commettor Na  BOSE  Annual Commettor Na  BOSE	SE AUDIO WITHOUT NAVIGATION ector No. M122 ector Name BOM (BODY CONTROL MODULE) ector Tryse TH40FB-NH  Exercity Control MODULE)  Exercity Control MODULE)  Exercity Control MODULE)  Exercity Control MODULE)  Exercity Control MODULE  Exercity Control MODULE)  Exercity Control MODULE  Exercity Cont	Comector No.   M127	AV

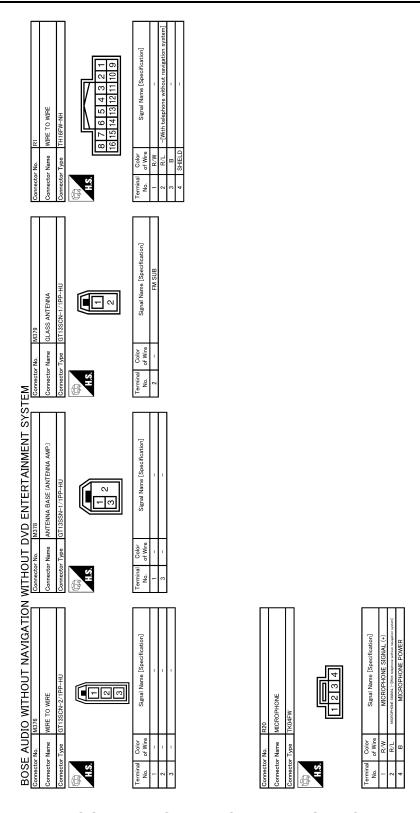
Revision: 2008 October AV-403 2009 Murano

		14   W   iPod SOUND SIGNAL RH (+)     16   SHIELD   SHIELD     17   SHIELD   GND     19   SHIELD   SHIELD     19   SHIELD   SHIELD     21   L   iPod CONNECTION RECOGNITION     22   BR   ACCESSORY DETECT     23   R   iPod SOUND SIGNAL LH (+)     24   LG   iPod SOUND SIGNAL LH (+)	
TEM		Connector Nume   Pod ADAPTER Connector Type   TH24FW-NH  M.S.     2   3   4   5   6   7   8   9   10   11   2   14   15   16   17   18   19   20   21   22   23   24   13   14   15   16   17   18   19   20   21   22   23   24   13   14   15   16   17   18   19   20   21   22   23   24   24   24   24   24   24	Terminal   Color   Signal Name   Specification     No. of Wires   Ped SOLIND SIGNAL, IH (+)     2
Competer Name	<del>-111"                                   </del>	119 R SOUND SIGNAL FRONT LH (-)	
DIO WITHOUT NAVIGATION  W. GONTON ON THE BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)  THISPAN-NH  67 66 68 64 68 62 61 60  75 74 73 72 71 70 69 68	Signal Name (Specification) SHELD CAMERA IMAGE SIGNAL AUX IMAGE SIGNAL[Without DVD player] CONNECTON RECOGNATION SHIELD[Without DVD player] AUX IMAGE GND[Without DVD player] AUX IMAGE GND[Without DVD player type B]	M 132  Y CONTROL UNIT (WITH BOSE  SYSTEM WITHOUT NAVIGATION SYSTEM)  THI 12FW-NH  [14] 116 [116] 117 [118] 119  [108] 109 [110 [111 [112]]	Signal Name [Specification] SOUND SIGNAL, REAR RH (+) SOUND SIGNAL, ERAN RH (+) AMP, ON SIGNAL SHELD SOUND SIGNAL, REAR LH (+)[Type 8] SOUND SIGNAL, REAR LH (+)[Type 8] SOUND SIGNAL, REAR RH (+)
BOSE AUC Connector No. Connector Name Connector Type H.S. H.S.	<del>-  "       "     </del>	Connector No. Connector Name Connector Type	Terminal Color No. of Wire 108 V 109 B 110 P 111 SHELD 0 112 L 111 C 112 C 113 C 114 LG 115 W 118 SR

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# [BOSE AUDIO WITHOUT NAVIGATION]

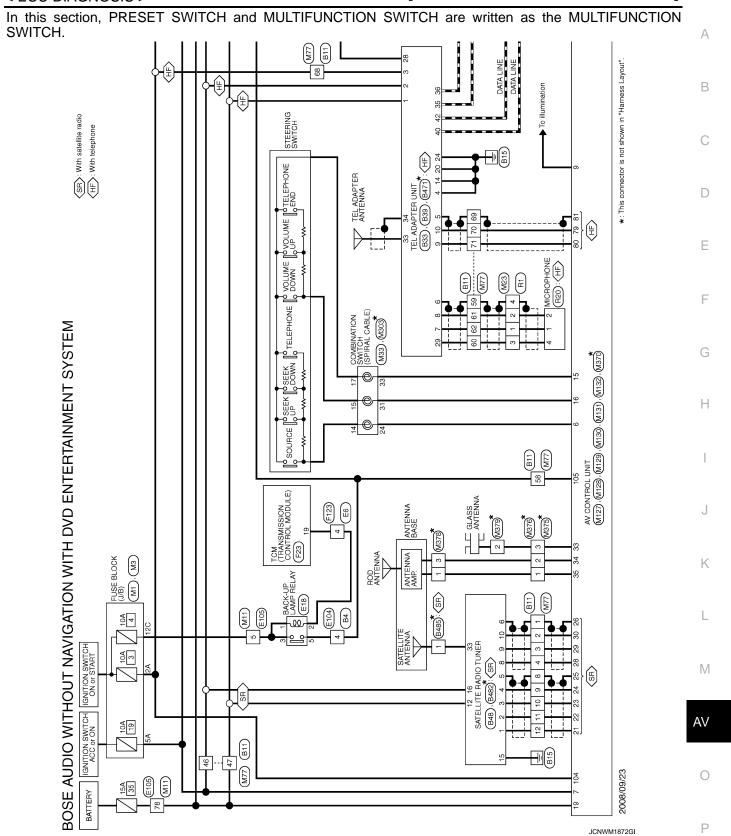
Connector No.   M263	Terminal   Color   Signal Name [Specification]   No. of Mire   Signal Name [Specification]	Connector No. M375 Connector Name WIRE TO WIRE Connector Type GT135H-2/15-HU H.S. 11	Terminal   Color   Signal Name [Specification]		A B C
TEM   Connector No.   M251   Connector Name   WIRE TO WIRE   Connector Type   TH18MM-CS2   H.S.   TH18MM-CS2   TH18MM-CS	Terminal   Color   Signal Name [Specification]   Color   Signal Name [Specification]   Signal Name [Specification]   Signal Name [Specification]   SHIELD   Color   Color	Cornector No. M370  Connector Name SySTEM WITHOUT WITH BOSE Connector Type GT13SC-2/1S-HU  M3.  M4.8. 33  M3.00  M	Terminal   Color   Signal Name   Spacification   No. of Wire   Signal Name   Spacification   Signal Name   Signa		E F G
N WITHOUT DVD ENTERTAINMENT SYSTEM		Connector No. M303 Connector Name COMBINATION SWITCH (SPIRAL CABLE) Connector Type TK08FGY  M.S. T00 19 18 17 16 15 14 13	Terminal Color Signal Name [Specification]  No. of Wire   Signal Name [Specification]  14		J K
BOSE AUDIO WITHOUT NAVIGATION  Connector No. M204  Connector Name WIRE TO WIRE  Connector Type THI2MW-NH  H.S. 1 2 3 4 5 6  7 8 9 10 11 12	Terminal   Color   No. of Wire   Signal Name [Specification]	Connector No.         M280           Connector Name         Prof SIDE           Connector Type         IP 16F GY           M.S.         1 2 3 4 5 6           T 8 9 10 11 112 13 14 15 16	Terminal   Color   Signal Name [Specification]   No.   of Wire   Fig.   Fod SOUND SIGNAL LH (+)   2	JCNWM1870Gł	M AV

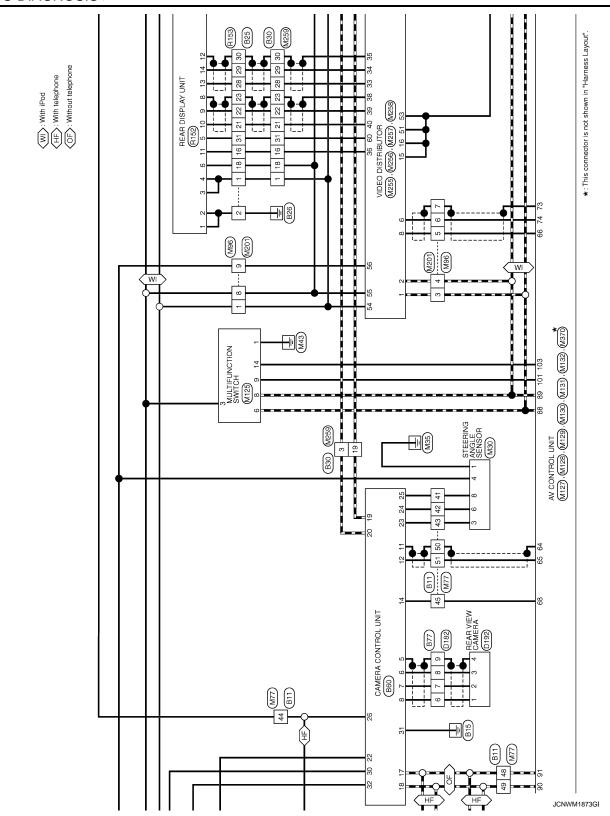


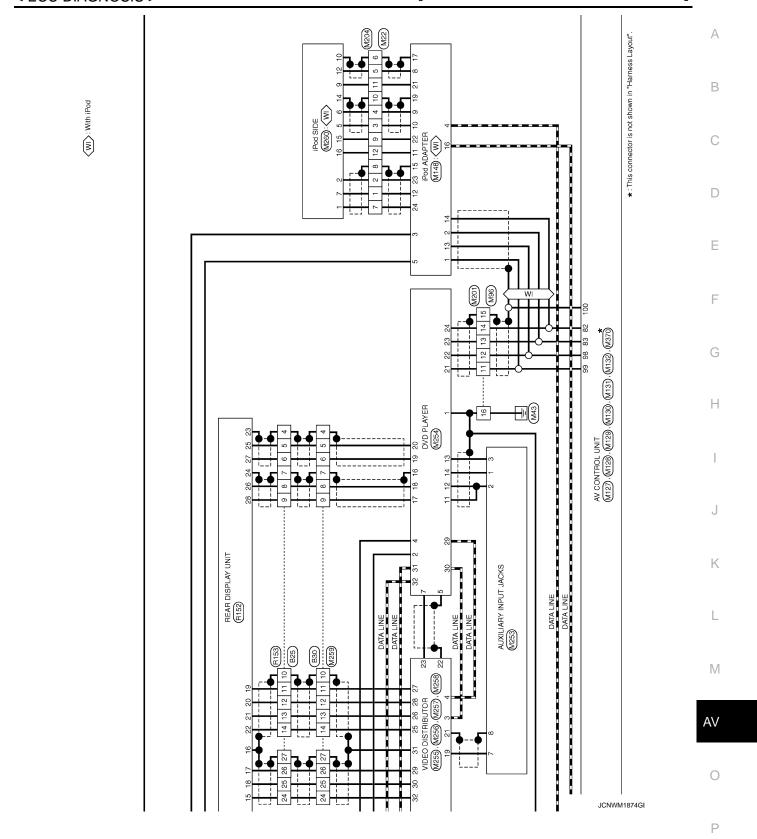
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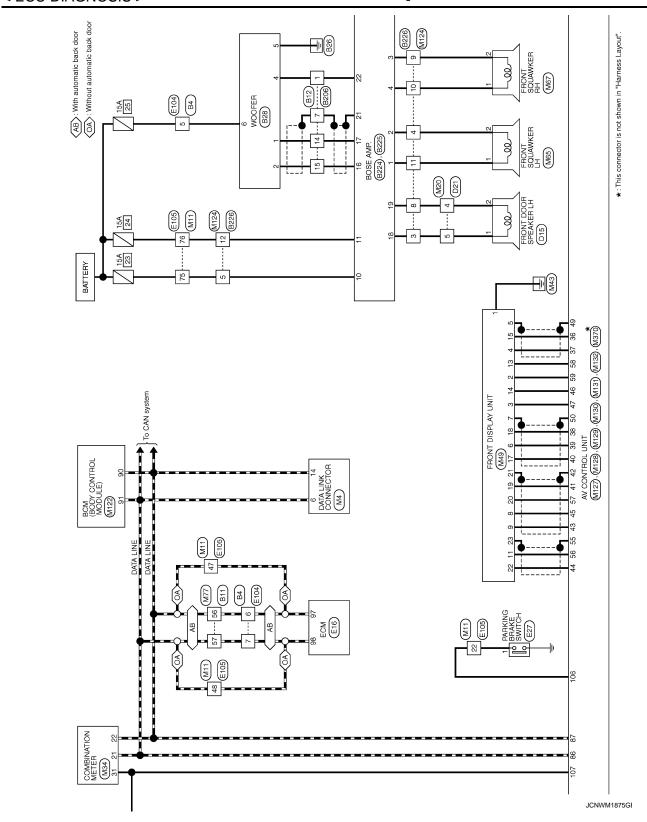
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

NOTE:

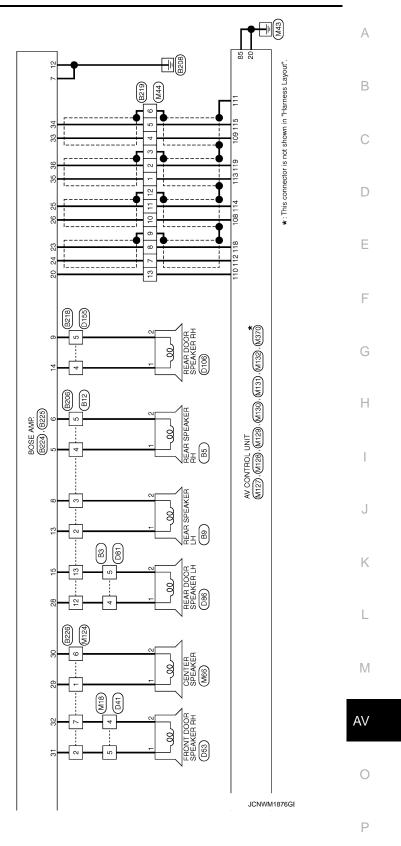


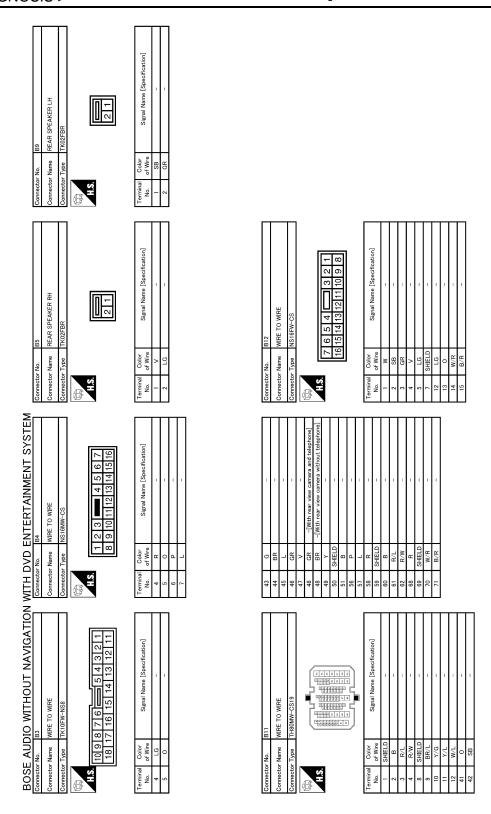






# [BOSE AUDIO WITHOUT NAVIGATION]





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BOSI	E AU	DIO WITHOUT NAVIGATION	I WITH	<u>&gt;</u>	BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM		
Connector No.	or No.	B25	13	_	1/A	Connector No.	B28
Connector Name	w Mama	Edin OF Edin	14	Н	BR/L –	Connector Name	and
Collinear	n warne		16	L	/	Collifector Ivallie	WOOTEN
Connecto	Connector Type	TH32MW-NH	18		- 0	Connector Type	RS06FGY-PR
Q			21	B.	B/R –	Q	
厚			22	≥	W/R -	居	
\ \ \			23	SHI	SHIELD -	Š	Ę
			24		- B		
	123	12	22	Я	R/L		
	17 18 15	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	26		R/W -		13 5
			27	r	SHIELD		)
			88	Ĺ	- 8		
Terminal	Color		29	ľ	- M	Terminal Color	
N		Signal Name [Specification]	8	т	SHEID	_	Signal Name [Specification]
-	SB		31	т		1 W/R	SOUND SIGNAL WOOFER (-)
٥	<u> </u>	1		1		2 B/B	SOLIND SIGNAL WOOFER (+)
4	SHIFLD	1				W W	WOOFER AMP ON SIGNAL
- 4	311111					ľ	CND CND SIGNAL
,	1					+	ann
٥	N/L	1				9	BAT
7	SHIELD						
8	GR/V	-					
6	M/L	1					
10	SHIELD						
Ξ	I/M	1					
12	ا ۲	1					
Connector No.	or No.	B30	13	×	\/\	Connector No.	B33
		г	14	H	BR/L -		F1141 CULT
Connector Name	or Name	WIRE TO WIRE	16			Connector Name	IEL ADAPIER UNII
Connector Type	or Type	TH32FW-NH	18	-	- 0	Connector Type	TH08FW-NH
	  -		19	┝			
E			21	╁	B/R	· · · · · · · · · · · · · · · · · · ·	
\			22	3		ŧ	R
ė E			33	5		2	
	16 15 14	4 13 12 11 10 9 8 7 6 5 4 3 2 1	200	T			35 37 39 41
	32 31 30	23 22 21 20 19	200	t			36 38 40 42
_			00	+			24 04 00 00
			20 6	2 5			
Tarminal	, do	L	7 86	5		Tarminal	
Š		Signal Name [Specification]	20	ľ	1	No. of Wire	Signal Name [Specification]
-	9		62	9	-	t	VV COMM (II)
- 6	9		9	5		+	AV COMM (F)
,,	9	1	9	-	1	4	AV COMM (L.)
4	SHIELD	1				4	AV COMM (H)
5	W/R	ı				42 GR	AV COMM (L)
9	M/L	1					
7	SHIELD						
80	GR/V	ı					
6	M/L	ı					
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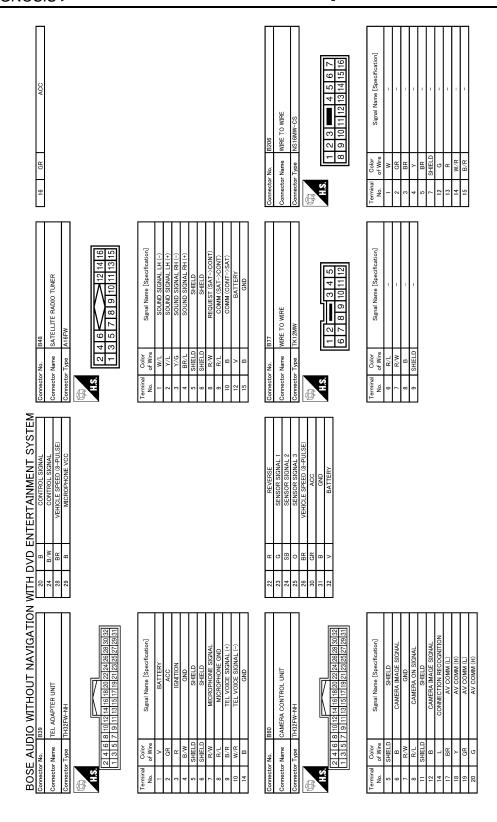
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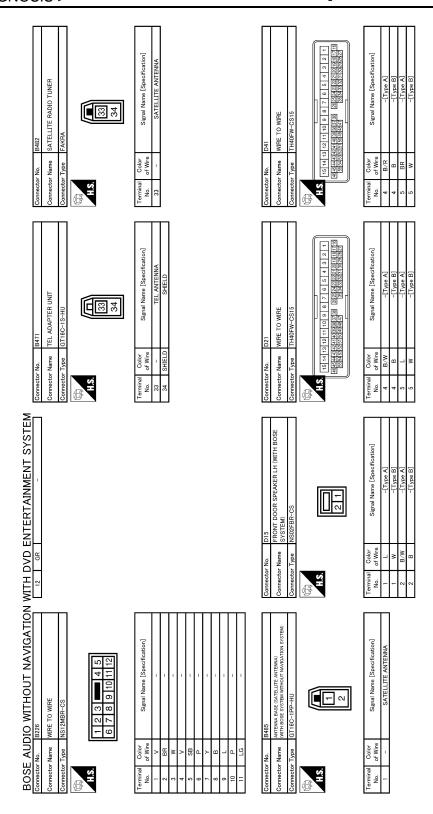
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# [BOSE AUDIO WITHOUT NAVIGATION]

	SOUND SIGNAL REAR RH (+) SOUND SIGNAL REAR PH (+) SOUND SIGNAL CENTER SPEAKER (+) SOUND SIGNAL CENTER SPEAKER (+) SOUND SIGNAL FRONT CORNER SPEAKER RH (+) SOUND SIGNAL FRONT DOOR SPEAKER RH (-) SOUND SIGNAL FRONT RH (+) SOUND SIGNAL FRONT RH (+) SOUND SIGNAL FRONT RH (+)			A B
	GR/V			С
	26 29 30 31 31 32 34 34 35 36 36 37 37 37 37 37 37 37 37 37 37 37 37 37			D
	31 30 29 28 18 17 16 15	eeification] WOOFER (+)		Е
	s AMP. 9FBR-SGA4 33	Signal Name [Specification] SOUND SIGNAL REAR H (-) SOUND SIGNAL WOOFER (+) SOUND SIGNAL WOOFER (+) SOUND SIGNAL WOOFER (+) SOUND SIGNAL FEAR IH (-) SOUND SIGNAL FEAR IH (-) SOUND SIGNAL FEAR IH (-) SOUND SIGNAL FEAR IH (+) SOUND SIGNAL FEAR IH (+) SOUND SIGNAL FEAR IH (+)		F
S SHELD	ector No.  lector Name lector Type  37 36 2  27 26 2	Color   Colo		G
[2] E2	Conn	No. 10 10 10 10 10 10 10 10 10 10 10 10 10		Н
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	GND SOUND SIGNAL REAR SPEAKER LH (+) SOUND SIGNAL REAR DOOR SPEAKER HH (+)			I
ENTERTAIN B219 WRE TO WIRE TH32MW-NH 4   5   6   7   8   9   20 21 22 23 24 25	SOUND SIGNAL RESOUND SIGNAL RE			J
MITH DVD   Connector Name   Connector Name   Connector Type   Connector	12 B 13 GR 14 L			K
GATION V		m) (KER LH (+) (KER RH (-)		L
WIRE NSS  15   4   3   2   15   14   13   12   15   14   13   12   16   14   13   12   17   14   18   12   18   14   18   18   19   14   18   18   19   14   18   18   19   14   18   18   19   14   18   18   19   14   18   18   10   14   18   18   10   14   18   18   10   14   18   18   10   14   18   18   10   14   18   18   11   14   18   18   11   14   18   18   11   14   18   18   11   14   18   18   11   14   18   18   11   14   18   18   11   14   18   18   11   14   18   18   11   14   18   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   14   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11   18   11	11 10	Signal Name [Specification] SOUND SIGNAL FRONT SOUANWEER LH (+) SOUND SIGNAL FRONT SOUANWEER LH (+) SOUND SIGNAL FRONT SOUANWEER HH (+) SOUND SIGNAL FRONT SOUANWEER HH (+) SOUND SIGNAL FEAR SPEAKER RH (+) SOUND SIGNAL FEAR SOOS SPEAKER RH (+) SOUND SIGNAL FEAR SOOS SPEAKER RH (-) SOUND SIGNAL FEAR SPEAKER RH (-)		M
AUDIO WITHOUT  No. 18218  Name WIRE TO WIRE  Type   TK10FW-NS8  10  9  8  7  6	B224 e BOSE AMP. SGA1ZFBR-SLA2 14 13 12 14 13 12 6 5 1	MODE CHANCE CHAN		AV
BOSE AUIC Connector Name Connector Type  Connector Type  IO 9  I 10 9  I 18 I  Terminal Color No.  4 L  5 0	Connector No. Connector Name Connector Type	Terminal   Color		0
			JCNWM1880GI	Р



JCNWM1881GE

# [BOSE AUDIO WITHOUT NAVIGATION]

Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NSQFIRM:	Terminal   Coolor   Signal Name [Specification]   1   O  [Type A]   1   L  [Type A]   2   B/P  [Type B]  [Type B]   2   W  [Type B]  [Type B]    [Type B]    [Type B]    [Type B]      [Type B]	Connector No. E6  Connector Name WIRE TO WIRE Connector Type TKI6MGV-1V  LLS  1 2 3 4 5 6 7  8 9 10 11 112 13 14 15 16	Terminal Color No. of Wire Signal Name (Specification) 4 R -	A B C
Connector No. 1986 Connector Name REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS	Terminal   Color   Signal Name [Specification]   1   L   2   W   - 2   W   - 2   W   - 2   W   - 2   W   - 2   W   - 2   W   - 2   W   - 2   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W   - 3   W	Connector No. D192 Connector Name REAR VIEW CAMERA Connector Type TH04MW-NH  H.S.	Terminal   Color   Signal Name   Specification   Of Nine   Color   1   R   CoMEPA ON SIGNAL   2   G   GND   COMEDA   3   B   CAMEDA   SHIELD   SHIELD   SHIELD   COLOR   COL	E F G
WITH DVD ENTERTAINMENT SYSTEM Connector Name WIFE TO WIFE Connector Type TK10MW-NS8        2   3   4   5   6   7   8   9   10	Terminal   Color   Signal Name [Specification]   No.   Color   Signal Name [Specification]   4	Connector No. D182  Connector Name WIPE TO WIPE  Connector Type TK12FW  H.S. 5 4 3 2 1  [12 11 10 9 8 7 6	Terminal   Color   Signal Name   Specification	J K
BOSE AUDIO WITHOUT NAVIGATION Connector Name FRONT DOOR SPEAKER RH (WITH BOSE Connector Type NSGFER-CS  ALS	Terminal   Golor   Signal Name [Specification]	Connector No. D155  Connector Name WIRE TO WIRE  Connector Type TK10MW-NS8  TK10MM-NS8  TS 3 4 5 6 7 8 9 10  TT 12 13 4 15 6 7 8 9 10	Terminal   Color   Signal Name [Specification]	AV O JCNWM1882GI

Revision: 2008 October AV-417 2009 Murano

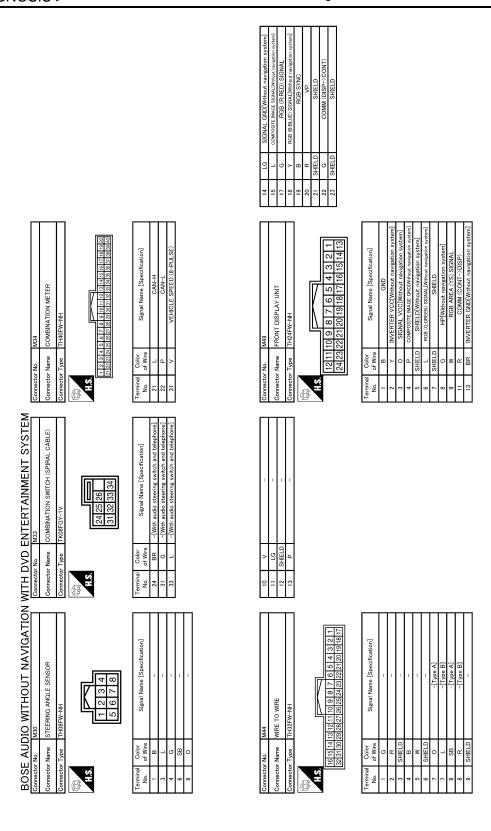
BOS	BOSE AUD	BOSE AUDIO WITHOUT NAVIGATION	I WITH DVD ENTERTAINMENT SYSTEM Connector No. 1E18	Connector No. E27	Connector No.   E104
Connec	Connector Name	ECM	g.	Connector Name PARKING BRAKE SWITCH	9
Connec	Connector Type	RH24FB-RZ8-L-LH	Connector Type MS02FL-M2-LC	Connector Type P01FB-A	Connector Type NS16FW-CS
H.S.		81 55 689 50 97 700 1105 1109 82 66 90 94 96 102 106 1110 82 98 79 155 59 103 107 111	#8. 18.	HS.	H.S. 7 6 5 4 3 2 1 16 15 14 13 12 11 10 9 8
Terminal No. 97 98	of Wire	Signal Name [Specification] VEHCAN-L VEHCAN-H	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]     1   LG	Terminal Color Signal Name [Specification]	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]
Connector No.	tor No.	E105	Connector No. F23	Connector No. F123	Connector No. M1
Connec	Connector Name	WIRE TO WIRE			_
Connec	Connector Type	TH70MW-CS10-M3	Connector Type RH40FB-RZ8-L-RH	Connector Type TK16FGY-1V	Connector Type NS06FW-M2
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Terminal No.	al Color of Wire	Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]
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## **IPOD ADAPTER**

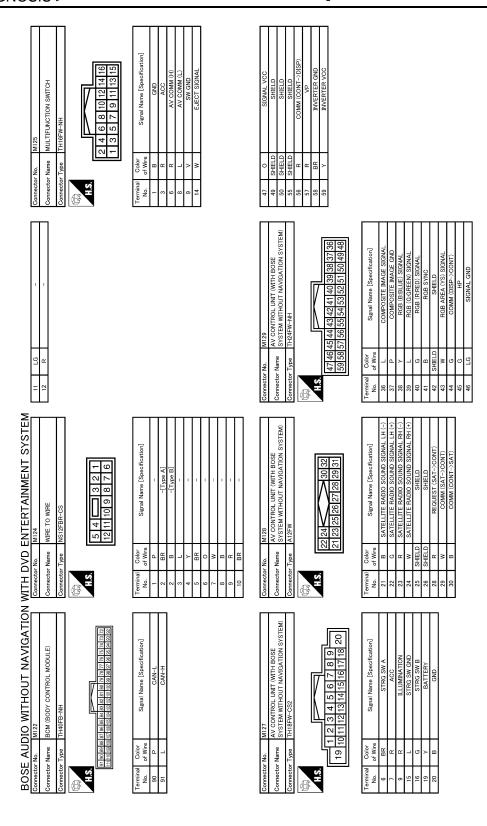
# [BOSE AUDIO WITHOUT NAVIGATION]

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BOSE AUDIO WITHOUT NAVIGATION  Connector Name   NISTEN-CS   Connector Name	NTERTAINN W4  AATA LINK CONNEC BD16FW  10 11 12 13 1 1 5 6  Signal Name	мле то write гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични гитетични ги	J
BOSE AUDIO WITHOUT NAVIGATION  Connector Name   NISTEN-CS   Connector Name	WITH DVD E Connector Name Connector Type H.S. H.S. Ferminal Color No. of Wire 6 L		К
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JCNWM1884Gł	10UT NAVIG	10   11   12   13   14   15   15   14   15   15   15   15	M
JCNWM1884Gł	UDIO WITH   WIS   WIS	M20   MRE TO WIRE   TH40MW-CS1    MRE TO WIRE   TH40MW-CS1    MRE TO WIRE   MRE TO W	AV
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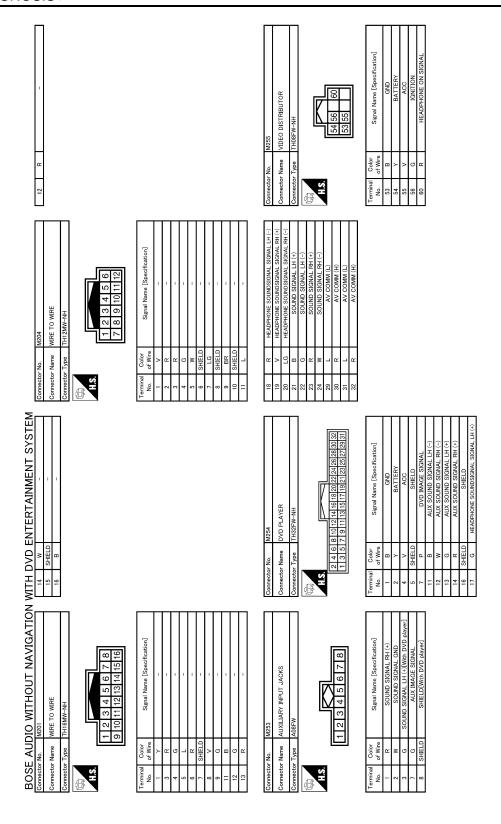
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	system]	Specification	Е
M67 FRONT SOUAWKER RH TK02FBR	Signal Name [Specification]	TO WIRE Signal Name E	F
Connector No. M67 Connector Name FRC Connector Type TTKI	Octor of Wire BR	Name Name O Color O B B B B B B B B B B B B B B B B B B	G
·	Terminal No.	Oomrecto Connecto  Connecto  1	Н
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM  Connector No. M65  Connector Name FRONT SOUAWKER LH  Connector Type TKOZFBR	Signal Name [Specification]		I
ENTERTAIN M66 CENTER SPEAKER TKOZFBR	Signal Na		J
WITH DVD EN Connector No. MY Connector Name Of Connector Type TK	of Wire		K
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BOSE AU Connector Name Connector Type Connector Type ALS	Terminal Color No. of Wire LG 2 Y	Connector No.   Connector No.   Connector No.   Connector Type   Connector Type   SHELD   SH	0
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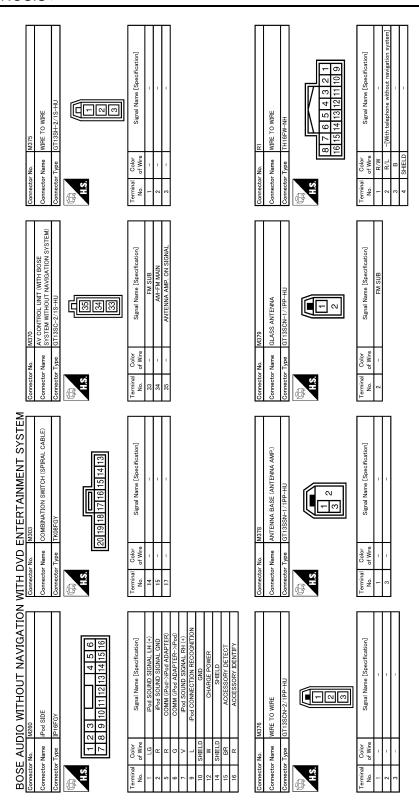
	PH (-)  COT  COT  COT  COT  COT  COT  COT  CO	А
	Pod SOUND SIGNAL RH (+)  AV COMM (+)  CHELD  AV COMM (+)  CHELD  SHELD  SHELD  Pod CONNECTION RECOGNITION  ACCESSORY DETECT  Pod SOUND SIGNAL LH (+)  Pod SOUND SIGNAL LH (+)	В
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AV COMM (L.) SIGNAL, L.H. (-)(Mith DVD player) SIGNAL, L.H. (-)(Mith DVD player) SIGNAL L.H. (-)(Mi	9 10 11 12 23 24 24 21 22 23 24 24 22 23 24 24 24 24 24 24 24 24 24 24 24 24 24	Е
AV COMM (L) SOUND SIGNAL LH (-T)With DVD player) SOUND SIGNAL LH (-T)With DVD player) SHELD(With DVD player) SHELD(With DVD player) SHELD(SHEND DVD player) ELECT SIGNAL IGNATION FEVERSE PARKING BRAKE VEHICLE SPEED (8-PULSE)	FER   1   1   1   1   1   1   1   1   1	F
99 8 8 G S S S S S S S S S S S S S S S S S	13 14   1   2   1   2   2   2   2   2   2   2	G
_		Н
ENTERTAINMENT SYSTEM  M 31  AV CONTROL UNIT WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)  THGZFW-NH  THGZFW-NH  THGZFW-NH  THGZFW-NH  Signal Name [Specification]  Signal Name [Specification]  TEL VOICE SIGNAL (-)  TEL VOICE SIGNAL (-)  TEL VOICE SIGNAL (-)  SOUND SIGNAL RH (-) With DVD player]  AV COMM (+)	SOUND SIGNAL FRONT LH (-)	I
Military	SOUND SIGN	J
Cornector No.	α 61 1-	K
z	1   1   1   1   1   1   1   1   1   1	L
Miso	M132	M
M130		AV
Connector No.  Connector No.  Connector Name Connector Type  Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Connector Type Conne	Connector No.	0
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IGMITON COMM (DIST-\DISP) COMM (DIST-\DISP)	Signal Name [5]	F
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S	Commetto	Н
Connector Name   WITH DVD ENTERTAINMENT SYSTEM	DVD IMAGE SIGNAL	I
ENTERTAINN MAS7 VDEO DISTRIBUTOR THIGFW-NH THI	ii qAq	J
MITH DVD EN   MICHOLIST   MI	D D D D D D D D D D D D D D D D D D D	К
z		L
BOSE AUDIO WITHOUT NAVIGATIO Jonnector No. M256 Connector Type TH12FW-NH  TH2FW-NH  TH2FW-NH  Signal Name [Specification]  Signal Name [Specification]	18   20   22   17   19   21   18   20   22   17   19   21   19   21   21   21   21   21	M
MZ56 VIDEO WITHOUT NITH EPW-NH Signal Name 0	M286 VIDEO DI VIDEO D	AV
BOSE AUIC Gonnector Ne. Connector Type Connector Type H.S. H.S. SI B SI B	Connector No.   Connector Name   Connector Name   Connector Type	0
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BOS	E AUI	BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	MITH	DVD E	ENTERTAINMENT SYSTEM			
Connector No.	ı	R20	Connector No.	l	R152	13	9	COMPOSITE SYNC
,		PINOPODICAL		Name of	TIMIL VALIGNED GARD	14	۲	COMPOSITE IMAGE SIGNAL
Colline	name or Name		noallieon	all la	NEAR DISPLATION!	15	В	RGB AREA (YS) SIGNAL
Connecto	Connector Type	TK04FW	Connecto	onnector Type	TH32FW-NH	16	SHIELD	GND
4			Ç			17	۲	ΛÞ
修			厚			18	Μ	HP
Ė			S II			19	T/M	RGB GND
	_			IΓ	7	20	5/X	RGB (B:BLUE) SIGNAL
		1 2 3 4		2 4 6	6 8 10 12 14 16 18 20 22 24 26 28 30 32	21	1//L	RGB (G:GREEN) SIGNAL
				1 3 5	7   9   11   13   15   17   19   21   23   25   27   29   31	22	BR/L	RGB (R:RED) SIGNAL
						23	SHIELD	SHIELD
						24	SHIELD	SHIELD
Terminal	Terminal Color	Cimal Nama [Cassification]	Terminal	Color	[noiteoficenS] ameN lemiS	25	ΡΠ	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)
Ñ.	of Wire		No.	of Wire	Ognal valle [Openication]	56	BR	HEADPHONE SOUNDSIGNAL SIGNAL LH (-)
-	R/W	MICROPHONE SIGNAL (+)	-	В	GND	27	>	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)
2	R/L	MICROPHONE SIGNAL ()(With telephone without navigation system)	2	В	GND	28	Υ	HEADPHONE SOUNDSIGNAL SIGNAL LH (+)

No. R152	Name REAR DISPLAY UNIT	Type TH32FW-NH	<u> </u>	2 4 6 8 10 12 14 16 18 20 22 24 26 3 5 7 9 11 13 15 17 19 21 23 25	Color Signal Name [Specification]
Connector No.	Connector Name	Connector Type	是 H.S.	1	Terminal

4			
3	MICROPHONE POWER	В	
2	MICROPHONE SIGNAL (-:\With telephone without navigation system)	R/L	
- 1	MICROPHONE SIGNAL (+)	R/W	
Terminal No.	Signal Name [Specification]	Color of Wire	la
ı			
J			

	Signal Name [Specification]	GND	GND	BATTERY	BATTERY	HEADPHONE ON SIGNAL	ACC	SHIELD	COMM (DISP->DIST)	COMM (DIST->DISP)	IGNITION	SHIELD		
No. No. 1 No	Color of Wire	В	В	Y/R	Y/R	В	V/Y	SHIELD	^	ΓG	G	SHIELD		>
	Terminal No.	1	2	3	4	5	9	8	6	10	11	12		ç
		_	_	_										

40	1153	WIRE TO WIRE	TH32FW-NH	
	Connector No. R153	Connector Name WIRE	Connector Type TH32	14 13 12 30 29 28

Signal Name [Specification]	=	=	=	_	_	_	_	_	_	_	_
Color of Wire	Y/R	В	SHIELD	PΠ	۸	SHIELD	BR	Υ	SHIELD	M/L	Y/G
Terminal No.	1	7	4	9	9	4	8	6	10	11	12

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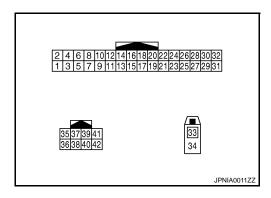
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# **TEL ADAPTER UNIT**

Reference Values



#### PHYSICAL VALUES

	minal color)	Description			Condition	Reference value
+	-	Signal name	Input/ Output		Condition	(Approx.)
1 (V)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
2 (GR)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
3 (R)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage
4 (B/W)	Ground	ground	_	Ignition switch ON	_	0 V
5	_	Shield	_	_	_	_
6	_	Shield	_	_	_	_
7 (R/w)	8 (R/L)	Microphone signal	Input	Ignition switch ON	Give a voice	(V) 2. 5 2. 0 1. 5 1. 0 0. 5 0
8 (R/L)	Ground	Microphone GND	_	Ignition switch ON	_	0 V
9 (B/R)	10 (W/R)	TEL voice signal	Output	Ignition switch ON	During voice guide output with the 🌿 🌈 switch pressed	(V) 1 0 -1 + 2ms SKIB3609E

#### **TEL ADAPTER UNIT**

#### [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
14 (B)	Ground	GND	_	Ignition switch ON	_	0 V
20 (B)	Ground	Control signal	Input	Ignition switch ON	_	0 V
24 (B/W)	Ground	Control signal	Input	Ignition switch ON	_	0 V
						NOTE: Maximum voltage may be 12 V due to specifications (connected units).
28 (BR)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25MPH)	(V) 6 4 2 0 *** 20ms SKIA6649J
29 (B)	Ground	Microphone VCC	Output	Ignition switch ON	_	5.0 V
33	_	TEL antenna	Input	_	_	_
34	_	Shield	_	_	_	_
35 (Y)	_	AV communication signal (H)	Input/ Output	_	_	_
36 (BR)	_	AV communication signal (L)	Input/ Output	_	_	_
40 (G)	_	AV communication signal (H)	Input/ Output	_	_	_
42 (GR)	_	AV communication signal (L)	Input/ Output	_	_	_

Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTER-TAINMENT SYSTEM -

#### NOTE:

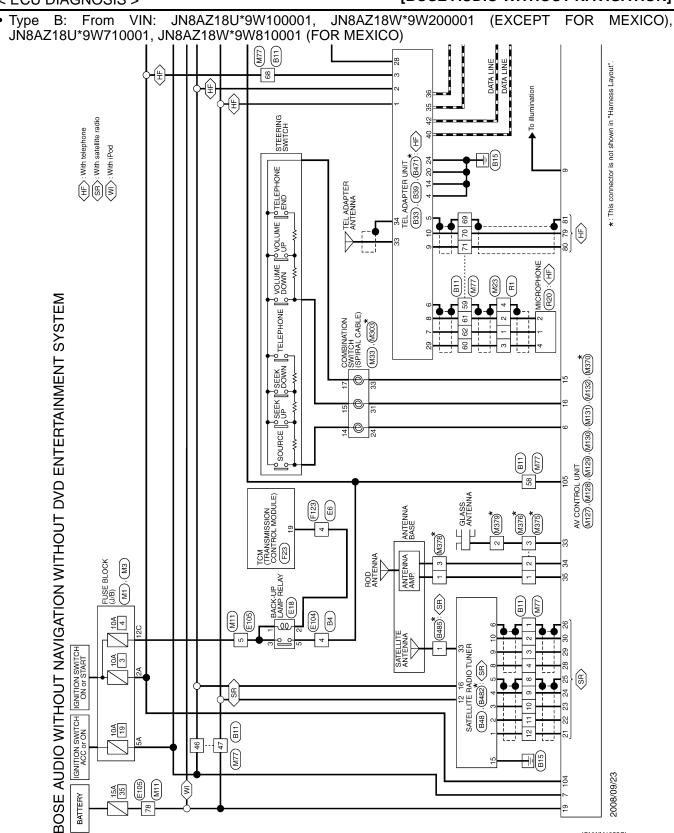
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.
- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)

AV

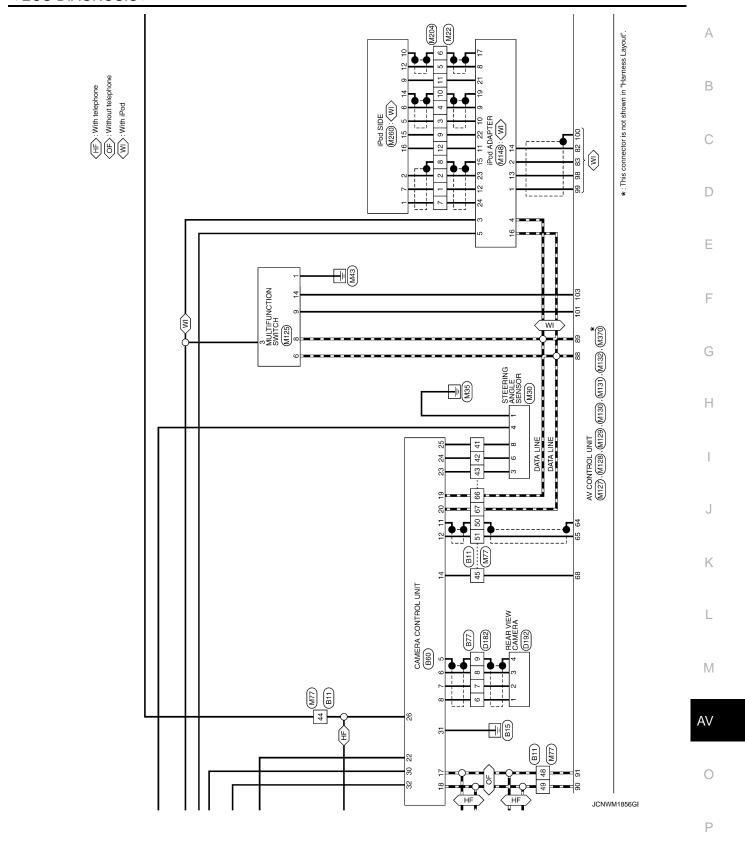
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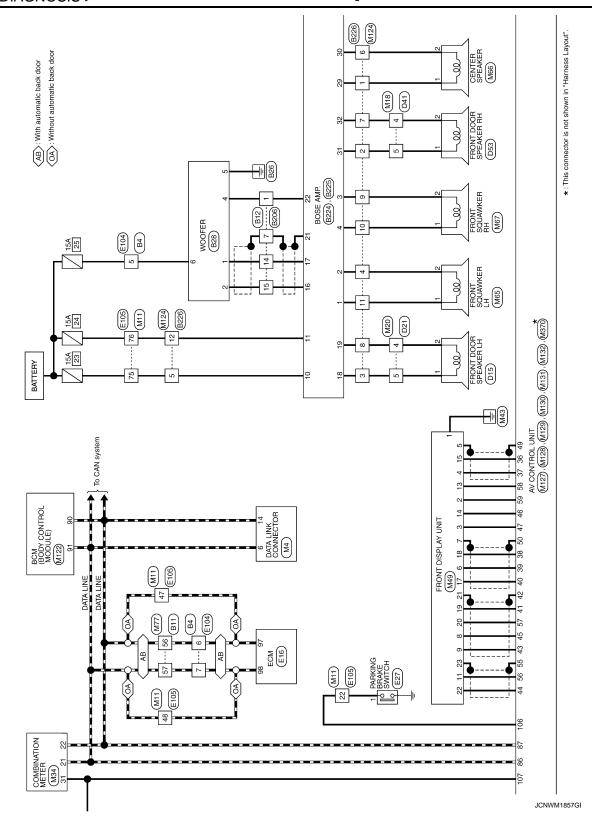
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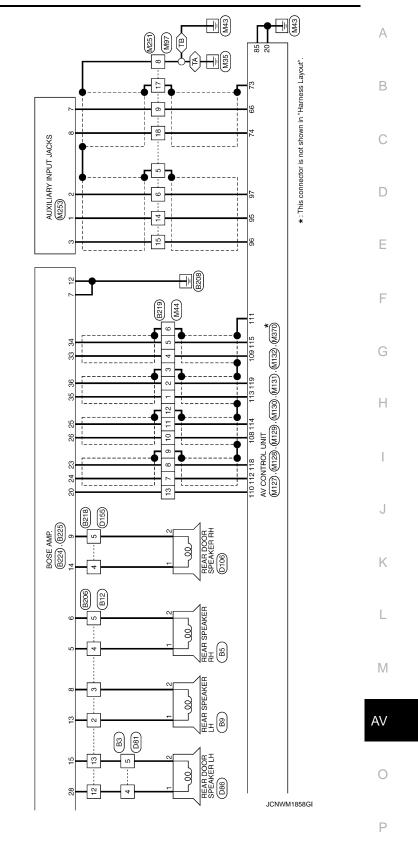
## [BOSE AUDIO WITHOUT NAVIGATION]

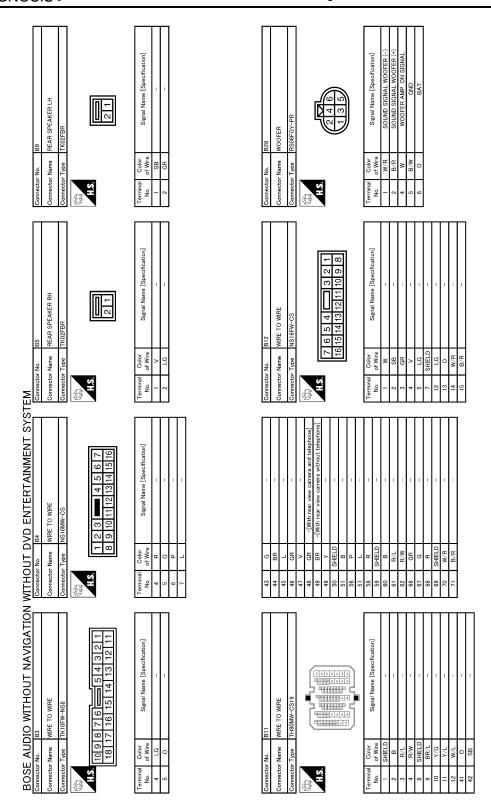




(TA): Type A
(TB): Type B

# [BOSE AUDIO WITHOUT NAVIGATION]

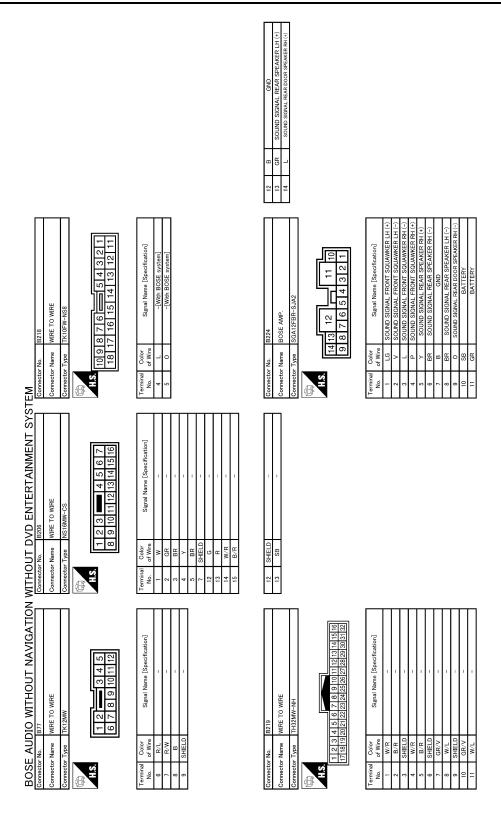




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## [BOSE AUDIO WITHOUT NAVIGATION]

	REVERSE SENSOR SIGNAL 1 SENSOR SIGNAL 2 SENSOR SIGNAL 3 VEHICLE SPEED SIGNAL 3 VEHICLE SPEED SIGNAL 3 VEHICLE SPEED SIGNAL 3 VEHICLE SPEED SIGNAL 3 ACC GND BATTERY	АВ
	22 R C C C C C C C C C C C C C C C C C C	C
CONTROL SIGNAL CONTROL SIGNAL VEHICLE SPEED (8-PULSE) MICROPHONE VCC	TH32FW-NH	E
20 B B B B B B B B B B B B B B B B B B B	Connector No.   B80	G
MITHOUT DVD ENTERTAINMENT SYSTEM   Connector Name   TEL ADAPTER UNIT   Connector Type   TH32FW-NH   TEL ADAPTER UNIT   Connector Type   TH32FW-NH   TEL ADAPTER UNIT   TH32FW-NH   TEL VIOICE SIGNAL (+)   TEL VIOICE SIGNAL	OV	I
MITHOUT DVD ENTER!   Connector No.   B39	8.0 R.0	K
BOSE AUDIO WITHOUT NAVIGATION	SATELLITE RADIO TUNER	L
BOSE AUDIO WITHOU	Connector No.   648	AV
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## [BOSE AUDIO WITHOUT NAVIGATION]

## < ECU DIAGNOSIS >

12 GR -		Connector No. D15 Connector Name SYSTEM) Connector Type NSOZEBR-CS HSOZEBR-CS HAS	Terminal   Color   Signal Name [Spacification]		A B C
EM	Terminal Color No. of Wire  1 V V 2 V 3 W 4 V V 5 SB 6 P P 7 Y Y 10 P 110 P 111 LG 120 Signal Name [Specification]	Connector No. B485 Connector Name ANTERNA BASE (SATELUITE ANTENNA) Connector Type GTT16C-1PP-HU  Connector Type GTT16C-1PP-HU  2	Terminal Color No. Signal Name [Specification] 1 - SATELLITE ANTENNA		E F G
WITHOUT DVD ENTERTAINMENT SYSTEM   26   GRAV   SOUND SIGNAL REAR RH (+)   Con   28   C   SOUND SIGNAL CENTER SPEAKER (+)   29   V   SOUND SIGNAL CENTER SPEAKER (+)   30   P   SOUND SIGNAL CENTER SPEAKER (+)   31   B   SOUND SIGNAL CENTER SPEAKER RH (+)   32   V   SOUND SIGNAL FRONT DOOR SPEAKER RH (+)   CON   34   BLR   SOUND SIGNAL FRONT RH (+)   34   BLR   SOUND SIGNAL FRONT RH (+)   34   BLR   SOUND SIGNAL REONT RH (+)   35   BLR   SOUND SIGNAL REONT RH (+)   36   BLR   SOUND SIGNAL REONT RH (+)   36   BLR   SOUND SIGNAL REONT LH (+)   36   BLR   SOUND SIGNAL REONT LH (+)   37   SOUND SIGNAL REONT LH (+)   SOUND SIGNAL REONT LH (+)   37   SOUND SI		Connector No. B482 Connector Name SATELLITE RADIO TUNER Connector Type FAKRA  #\$3	Terminal   Color   Signal Name [Specification]   No. of Wire   Same   Same		J K
BOSE AUDIO WITHOUT NAVIGATION Cornector No. 8225 Cornector Name 805E AMP. Cornector Type 80A19FBR-30A4	Terminal   Color   Signal Name [Specification]	Connector No. 8471 Connector Name TEL ADAPTER UNIT Connector Type GT16C-15-HU  ##3  ##3  ##3  ##3	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   33	JCNWM1862GI	M AV

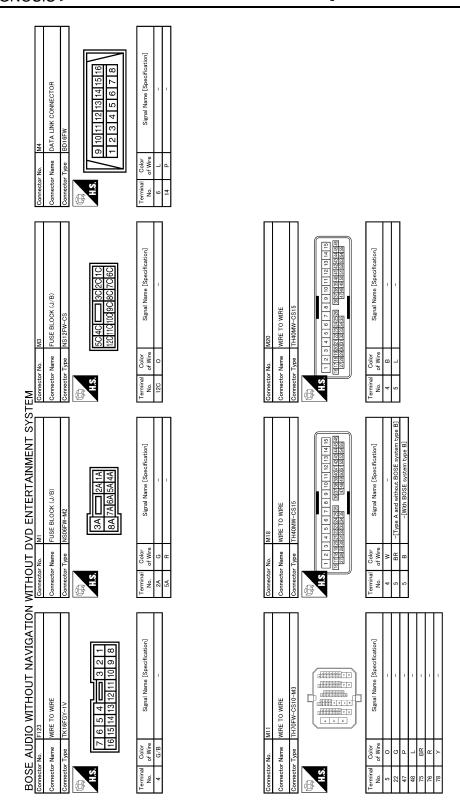
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Corrector No.   D8    Corrector Name   WIRE TO WIRE   Corrector Type   TK10MM-NS8	Terminal Color Nighal Name [Specification] No. of Wire Signal Name [Specification] 4 L 5 W	Connector No. D182 Connector Name WIRE TO WIRE Connector Type TK12FW  H.S. 5 4 3 = 2 1 112 111 10 9 8 7 6	Terminal Color   No. of Wire   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   Signal Name [Specif
Connector No. D53 Connector No. D53 Connector Name FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS  TLS	Terminal   Color   Signal Name [Specification]	Connector No. D155  Connector Type WRE TO WIRE  Connector Type TK10MW-NS8  TLS 1 2 3 4 5 6 7 8 9 10  11 12 13 14 15 16 17 18	Terminal   Color   Signal Name [Specification]   A
MITHOUT DVD ENTERTAINMENT SYSTEM   Cornector No.   D41   Cornector Name   WIRE TO WIRE   Cornector Type   TH40FW-CS15   Co	Terminal   Color   Signal Name   Specification   No. of Wire   Signal Name   Specification   A	Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS H.S.	Terminal   Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]   1   0   -[Type A]     1   L   -[Type B]     2   B/P   -[Type B]     1   1   L
BOSE AUDIO WITHOUT NAVIGATION Gornector No.   D21   Connector Name   WIRE TO WIRE   Connector Type   TH40FW-CS15     TH40FW-	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   4   B/W   -[Type A]   -[Type B]   5   L   -[Type B]   5   W   -[Type B]	Connector No. D86 Connector Name REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NSQZFBR-CS  H.S.	Terminal   Color   Signal Name [Specification]   Of Wire

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## [BOSE AUDIO WITHOUT NAVIGATION]

Connector No.   E18   Connector Name   BACK-LIP LAMP RELAY	Connector No.   F23   Connector Name   TCM (TRANSMISSION CONTROL MODULE)   Connector Type   RH40FB-R28-L-RH   RH40FB-R28-L-RH   RH20FB-R28-R28-R28-R28-R28-R28-R28-R28-R28-R28	A B C
Connector No.   E16   Connector No.   E16   Connector No.   E16   Connector Type   R124FB-R25-L-LH   Connector Type   R124FB-R25-L-LH   R185899991801001101   R189991801001101   R189991801001111   R189991801001101   R189991801001   R189991801001   R189991801001   R189991801   R189991801	Connector No. E105 Connector Name WIRE TO WIRE Connector Type TH70MM-CS10-M3  H.S. Freminal Color Signal Name (Specification) 5 LG 5 LG 75 BR 76 GR 78 V	E F G
WITHOUT DVD ENTERTAINMENT SYSTEM  Connector Name WIRE TO WIRE  Connector Type TKI SM GV-1V  LLS TRIBM GV-1V  Terminal Color Signal Name [Specification]  A R R Terminal Color Signal Name [Specification]	Connector No.   E104   Connector Name   WIRE TO WIRE   Connector Type   NS16FW-CS	J K
BOSE AUDIO WITHOUT NAVIGATION Connector No. D192 Connector Name REAR VIEW CAMERA Connector Type THOMW-NH  Terminal Color Signal Name [Specification]  No. of Wire Signal Name [Specification]  1 CAMERA ON SIGNAL 2 G CAMERA INAGE SIGNAL 2 G CAMERA INAGE SIGNAL 3 B CAMERA INAGE SIGNAL 4 SHIELD SHIELD	Connector No. E27 Connector Name PARKING BRAKE SWITCH Connector Type POIFB-A  H.S.  Terminal Color No. of Wire  Signal Name [Specification]	M AV
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ANGLE SENSOR NH C 3 4 4 C 7 8 4 C 7 8 4 C 7 8	1 1 1			АВ
Connector No. M30 Connector Name STEERING ANGLE SENSOR Connector Type THOSPW-NH  Terminal Color No. of Wire No. of Wire 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 V 11 LG 12 SHELD 13 PP			C
12 3 4 5 6 7 8 10 11 12 13 14 15 16 16 16 16 16 17 16 16 16 16 16 16 16 16 16 16 16 16 16	7r No. M44  2r Type   TH32PW-NH    16 15 14 13 12 11 10 9 18   7 6 5 4 3 12 1    22 31 30 29 29 27 26 25 22 27 21 20 19 18 17	Signal Name [Specification]		E
The control of the co	Connector No. M44 Connector Name WIRE TO WIRE Connector Type TH3ZPW-NH M.S. H.S. [16] 14 [13] 21 [11] [10] 9 [22] 31 [30] 29 [29] 27 [26] 25	Terminal Color No. of Wire No. of Wire Since Shifteld Shi		G
N WITHOUT DVD ENTERTAINMENT SYSTEM    12   R	ON METER 1	Signal Name [Specification] CAN+H CAN+L CAN+L VEHICLE SPEED (8-PULSE)		I J
WITHOUT DVD EN	Connector No.   M34	Terminal Color   Si		K
WIRE NH  NH  (4 3 2 1 1 10 9 8 7 7 10 9 8 7 7 10 9 8 7 7 1 10 9 8 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M33  **TKOBFGY-IV    TRABFGY-IV    24   25   26   31   32   33   34   34   35   34   35   34   35   34   35   35	Signal Name [Specification]  With audio steering switch and selephone]  -[With audio steering switch and telephone]  -[With audio steering switch and telephone]		M
BOSE AUDIO WITHOUT NAVIGATIO   Connector No.   M22	Connector No. M33 Connector Name COMBINATION Connector Type TK08FGY-IV TK18.	Color   Signa   Signa   No.   Order   Signa   Order   Signa   Order   Order and   Order   Or		AV
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Connector No. M66 Connector Name CENTER SPEAKER Connector Type TK02FBR	Terminal   Color   Signal Name [Specification]	Connector No. M97  Connector Name WIRE TO WIRE  Connector Type TH18FW-CS2  1.8  Terminal Of Wire  5 SHELD  6 W
Connector No. M65 Connector Name FRONT SOUAWKER LH Connector Type TK02FBR H.S.	Terminal   Color   Signal Name [Specification]   No	44 V 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
MITHOUT DVD ENTERTAINMENT SYSTEM   14   LG   SIGNAL GAID[Without navigation system]   15   L   Code/SOSIT MAGI SIGNAL[Without navigation system]   17   G   ROB (FRED) SIGNAL   Code   18   V   ROB (B BLUE) SIGNAL[Without navigation system]   18   K   ROB (B BLUE) SIGNAL[Without navigation system]   19   K   ROB (B BLUE) SIGNAL[Without navigation system]   19   K   ROB SYNC   ROB SYNC   CODE   SHELD   SIGNAL SHELD   SH		Connector Name WIRE TO WIRE Connector Type TH80PW-CS19 TH80PW-CS19 TH80PW-CS19 TH80PW-CS19 Terminal Color No. of Wire 1 SHELD 2 B
BOSE AUDIO WITHOUT NAVIGATION To Connector No. M49 Connector Name FRONT DISPLAY UNIT Connector Type Thi24FW-NH  Connector Type Tri24FW-NH  To Tri21110 9 8 7 6 5 4 3 2 1  Table 12 22 22 12 019 18 17 16 15 14 13	Terminal   Color   Signal Mane [Specification]   Color   Mine   Signal Mane [Specification]   1   B   MVERTER VOC[Without navigation system]   3   O   SIGNAL VOC/Without navigation system]   5   SHIELD   SHIELD[Without navigation system]   6   L   Reg (G-SREW) (SIGNAL, Meah-an-signation system]   7   SHIELD   SHIEL	Connector No. M67 Connector Type TROST SOUAWKER RH Connector Type TROSTBR  Terminal Color No. of Wire Signal Name [Specification] 1 BR 2 R[With BOSE system]

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## [BOSE AUDIO WITHOUT NAVIGATION]

MILTE UNCTION SWITCH	47 O SIGMAL VCC 48 SHIELD SHIELD 50 SHIELD SHIELD 55 SHIELD SHIELD 56 R COMM CONTDISP) 57 R INVERTER CAND 58 BR INVERTER CAND 59 Y INVERTER VCC	A B C
11 LG	Cornector No.   M129	E F G
MITHOUT DVD ENTERTAINMENT SYSTEM	Color   Signal Name   Specification   Color   SATELLITE RADIO SOUND SIGNAL LH (+)	H I J K
SOSE AUDIO WITHOUT NAVIGATION V Connector Name RCM (SODY CONTROL MODULE) Connector Type TH40FB-NH  LIMINGTON TO THATE TH THATE	Connector No.   M127   Connector Name   SYSTEM WITHOUT NAVIGATION SYSTEM)   Connector Type   THIBFW-GS2   THIBFW-GS2   THIBFW-GS2   THIBFW-GS2   This man   Color No.   of Wire   Signal Name [Specification]   Octor   No.   of Wire   Signal Name [Specification]   Octor   No.   of Wire   Signal Name [Specification]   Octor   Octor	M AV
		Р

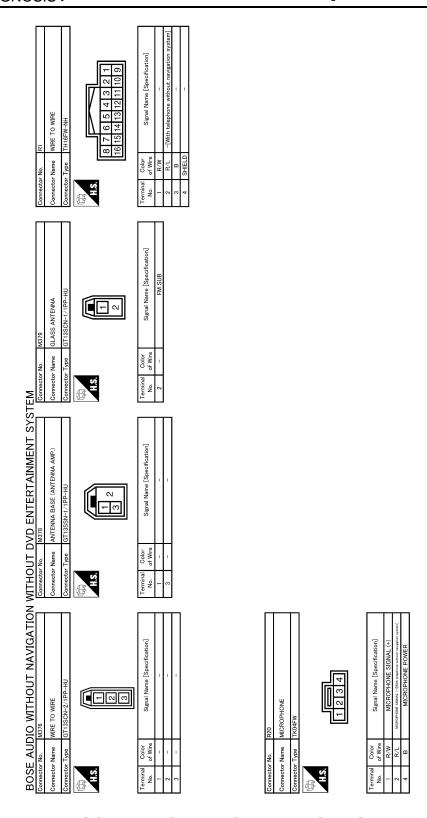
Revision: 2008 October AV-443 2009 Murano

BOSE AUDIO WITHOUT NAVIGATION Connector No. M130 Connector Name AV CONTROL UNIT (WITH BOSE	BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM  Connector No. M130  Connector Name AV CONTROL UNIT (WITH BOSE	91 L 95 R	
SYSTEM WITHOUT NAVIGATION SYSTEM) THISFEW-NH 67 66 64 63 62 61 60 75 74 73 72 71 70 69 68	SYSTEM WITHOUT NAVIGATION SYSTEM	96   B   AUX SOUND SIGNAL LH (+)	
Oolor Signal Name [Specification] SHELD SHELD  W CAMERA IMAGE SIGNAL  Y AUX IMAGE SIGNAL[Without DVD player] P CONNECTION RECIGNITION SHIELD SHIELD SHELD[Without DVD player] B AUX IMAGE GND[Without DVD player] B AUX IMAGE GND[Without DVD player type B]	Terminal   Color   Signal Name (Specification]   No.   of Wire   Signal Name (Specification]   No.   of Wire   TEL VOICE SIGNAL (+)   SIR   SHELD   SHELD   SHELD   SHELD   SHELD   SHELD   SHELD   SHELD   SHELD   SOUND SIGNAL BND Releval   Signal Shelp   Signal Shelp   Signal Shelp	H	
Connector No. M132 Connector Name SystEm WITHOUT NAVIGATION SYSTEM) Connector Type THYEPW-NH	89 L AV COMM (L) 90 G AV COMM (H)  119 R SOUND SIGNAL FRONT LH (~)	Connector No. M148 Connector Name (Pod ADAPTER Connector Type (11/24FW-NH H.S.   11   2   3   4   5   6   7   8   9   10 11 12	SHELD
Sign Soun		14 15 16 17 18 19 20 21 19 20 21 19 20 21 19 20 21 19 20 21 19 20 21 19 20 20 20 20 20 20 20 20 20 20 20 20 20	24 LG   Pod SOUND SIGNAL LH (+)
PHELD   AMHON SIGNAL		3   R   AV COMM (L)	

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## [BOSE AUDIO WITHOUT NAVIGATION]

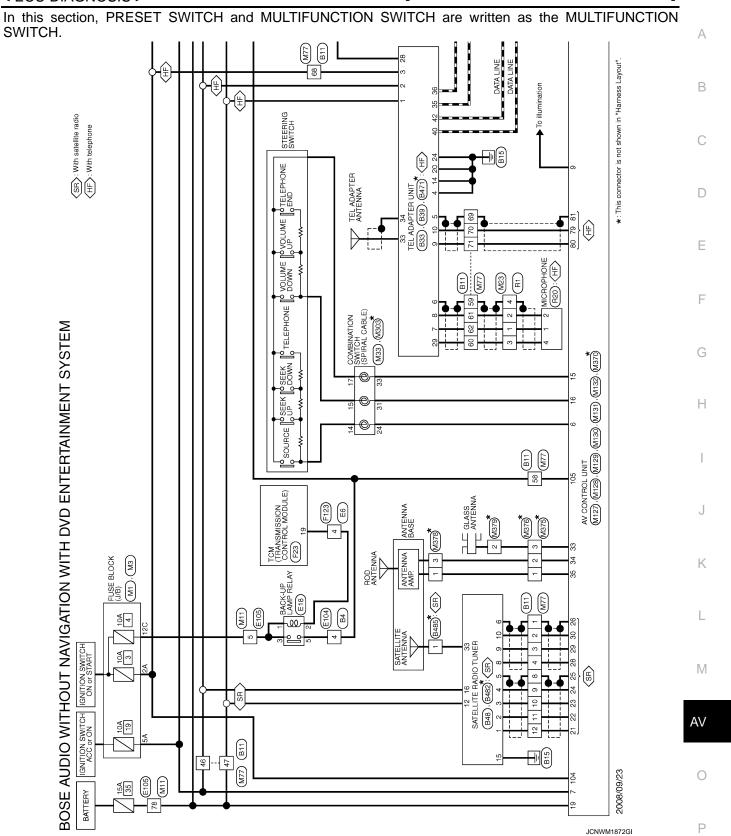
Connector No. M953		Perminal   Color   Signal Name [Specification]	Connector No. M375 Connector Name WIRE TO WIRE Connector Type GT13SH-27/S-HU  M.S. II	Color   Signal Name (Specification)   Color   Signal Name (Specification)   2   -   -		A B C
						Е
	7 8 9 16 17 18	Signal Name [Specification]	MS70 AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) GT135C-2/15-HU  ST	Signal Name [Specification] HM SUB AM-FM MAIN ANTENNA AMP ON SIGNAL		F
No.	1 1 11-121	of Wive of Wive SHELD SH	9 9	Color of Wire		G
STEM	Connector Type Connector Type H.S.	Terminal No. 5 5 6 8 8 9 9 17 11 11 11 11 11 11 11 11 11 11 11 11	Connector No. Connector Name Connector Type H.S.	1 Terminal No. 33 34 34 35		Н
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM			M303 COMBINATION SWITCH (SPIRAL CABLE) TK08FGY  019181716151413	Signal Name [Specification]		I
) ENTER			M303 COMBINATION SWITCH (SPIRAL TKOSFGY	Signal Nan		J
WITHOUT DVI	_		Connector No. M303 Connector Name COMI Connector Type TK08 H.S.	Terminal Color No. of Wire 14 - 15 - 17 - 17		K
GATION		F		1) (+) (+) (+) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1		L
OUT NAVIO	10112	Signal Name [Specification]	4 5 6 12 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	Signal Name [Specification] Pod SOUND SIGNAL, LH (+) Pod SOUND SIGNAL, GND COMM (Pod-NPG4 ADAPTER) COMM (Pod-NAPTER-NPG4) Pod CONNO SIGNAL RH (+) Pod CONNO SIGNAL RH (+) Pod CONNECTION RECOGNITION CHARGE POWER SHIELD ACCESSORY DETECT ACCESSORY DEFECT		M
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BOSE AUI	Connector Name Connector Type H.S.	Color   Colo	Connector No. MZ Connector Name FPC Connector Type IPI LLS LLS LLS LLS LLS LLS LLS LLS LLS LL	Cader   Cade		0
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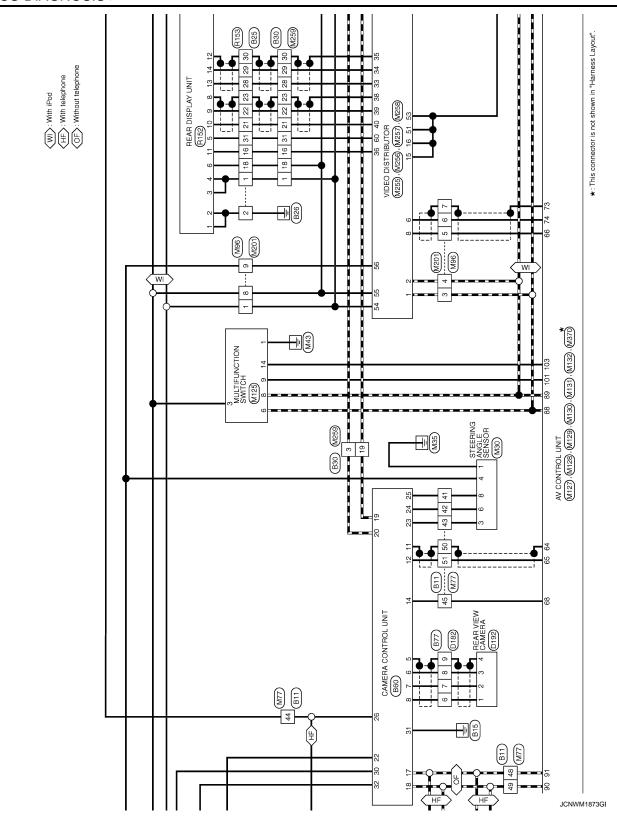


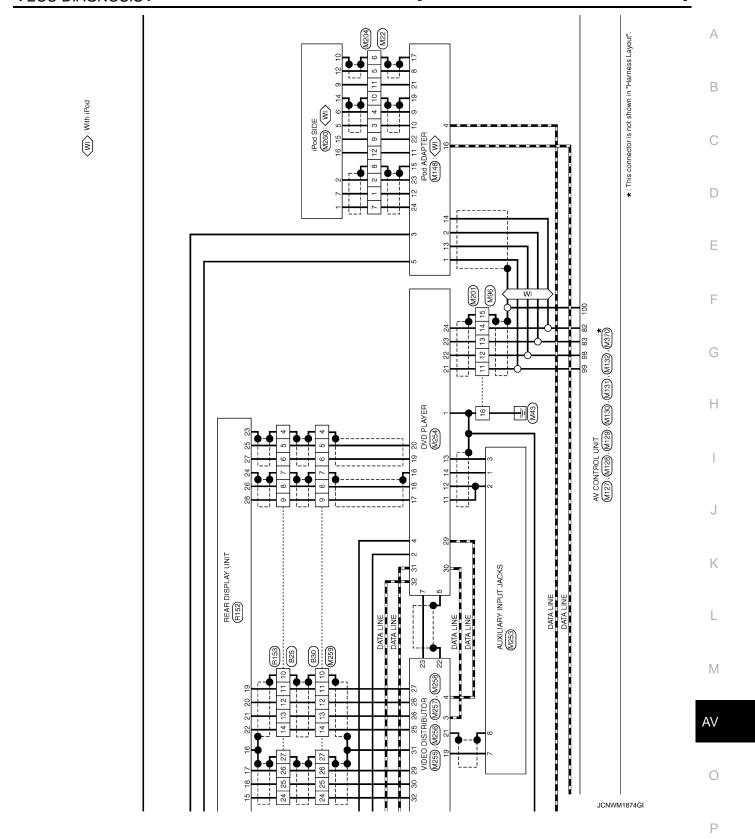
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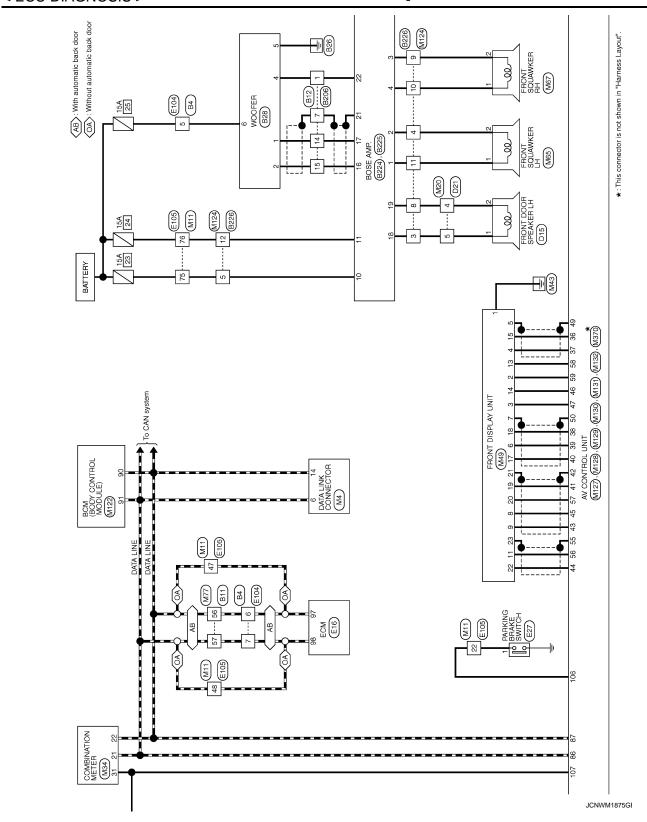
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

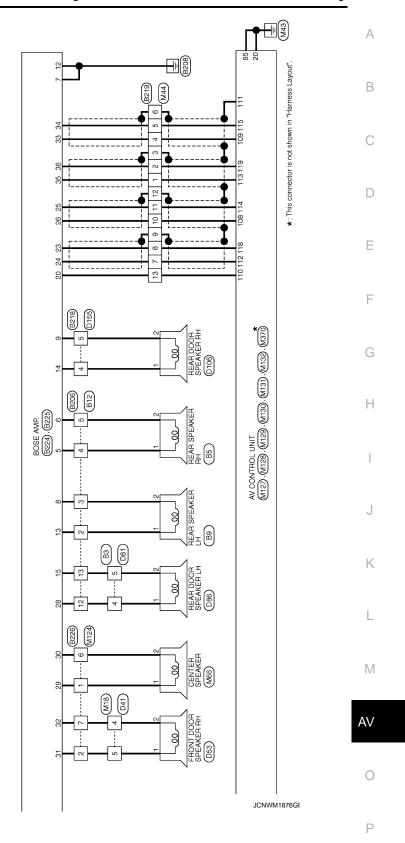
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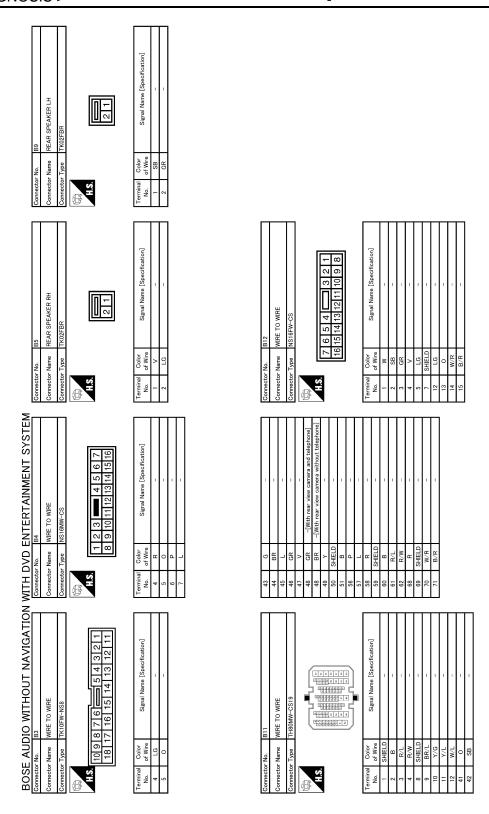












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TEM   Connector No.   828   Connector Name   WOOFER   Connector Type   RSOBFGY-PR	H.S. (135)	Terminal Color   Signal Name [Specification]   1 W.R   SOUND SIGNAL WOOFER (-)   2 B.R   SOUND SIGNAL WOOFER (+)   4 W   WOOFER AMP ON SIGNAL   5 B.PW   GND   BAT   GND   BAT   GND   BAT   GND   BAT   GND   BAT   GND   BAT   GND   G	Connector No. B33 Connector Name TEL ADAPTER UNIT Connector Type TH00FW-NH  H.S. 35 37 39 41 36 38 40 42	Terminal Oolor   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   Sig	
	23 SHELD	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	13 Y/L 16 BR/L 18 V 19 GR 22 W/R 21 B/R 23 SHELD 24 B 25 R/L 26 R/W 27 SHELD 27 SHELD 28 B 28 R/W 29 R/W 20 R/W 20 R/W 20 R/W 20 R/W 21 SH/W 22 SH/W 23 SH/W 24 SH/W 25 SH/W 26 SH/W 27 SH/W	4 M M B B B C C C C C C C C C C C C C C C	
DIO WITHOUT NAVIGATION B25 WIRE TO WIRE THESTMM-NH	4   5   6   7   8   9   10   11   12   13   14   15   16   12   13   14   15   16   12   13   14   15   16   13   14   15   16   13   14   15   16   13   14   15   16   13   14   15   16   15   15   15   15   15   15	Signal Name [Specification]	r Name WIRE TO WIRE  r Type TH32FW-NH    11432FW-NH   114	Signal Name [Specification]	1 1 1
BOSE AUI Connector No. Connector Name	H.S. 1 2 3 4 5 1	Terminal   Color     No. of Wire     1	Connector No. Connector Type Connector Type LS. H.S. 16 15 14 32 31 30	Terminal Color  No. of Wire  1 SB 3 G 4 SHIELD 5 W/R 6 W/R 7 SHIELD 7 SHIELD	Н

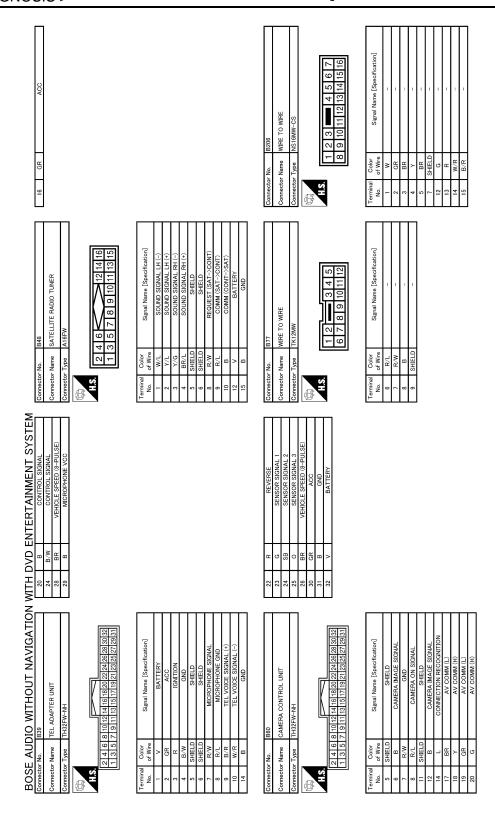
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## [BOSE AUDIO WITHOUT NAVIGATION]

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	SOUND SIGNAL FRAR PH (+) SOUND SIGNAL, ERA DOOR SPEAKER (+) SOUND SIGNAL, CENTER SPEAKER (+) SOUND SIGNAL, CENTER SPEAKER (-) SOUND SIGNAL, FRANT DOOR SPEAKER RH (-) SOUND SIGNAL, FRANT PH (-) SOUND SIGNAL, FRONT RH (-) SOUND SIGNAL, FRONT RH (-) SOUND SIGNAL, FRONT RH (-)	АВ
	28 GR/V SOUND SIGNAL REAS 29 G SOUND SIGNAL CR. 30 P SOUND SIGNAL ROAT 31 BR SOUND SIGNAL ROAT 33 W/R SOUND SIGNAL ROAT 34 B/R SOUND SIGNAL ROAT 35 W/R SOUND SIGNAL 35 W/R SOUND SIGNAL 36 B/R SOUND SIGNAL SOUND SIGNAL SOUND SIGNAL ROAT 36 B/R SOUND SIGNAL SOUND SIG	C
	BOSE AMP.   BOSE AMP.	E
13 SHELD 13 SB 1	Terminal Color Signal N Schulb State    Terminal Color Schu	G
Signal Name [Specification]	GND SOUND SIGNAL REAR SPEAKER LH (*) SOUND SIGNAL REAR DOOR SPEAKER RH (*)	1
MITH DVD ENTERTAINMENT SYSTEM	12 B SOUND SIG	J K
	SGA 12FBR-S.1A2	L
BOSE AUDIO WITHOUT NAVIGATION	B224	AV
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Revision: 2008 October AV-455 2009 Murano

tor No. D15  FRONT DOOR SPEAKER LH (WITH BOSE Connector tor Type NS0ZEBR-CS  LASS  Connector Connector Connector Connector Connector Connector Connector Connector Connector LASS  L	No. D21  Name WIRE TO WIRE  Type ITHOFW-CS15  151 At 131 Z 11 10 9 8 7 6 5 4 3 2 1 1  Section 201 Sect		
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## [BOSE AUDIO WITHOUT NAVIGATION]

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Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NSQZFBR-CS H.S.	Terminal   Color   Signal Name [Specification]   Olor   Color   Colo	Connector No. E6 Connector Name WIRE TO WIRE Connector Type TK (BMGY-1V  M.S. 1 2 3 4 5 6 7  8 9 10 11 12 13 14 15 16	Terminal Color No. of Wire Signal Name [Specification] 4 R		A B C
Connector No. D86 Connector Name REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NSOZFBR-CS H.S.	Terminal Color Signal Name [Spredification] 1 L 2 W -	Connector No. D192 Connector Name REAR VIEW CAMERA Connector Type TTHO4MW-NH  H.S.	Color		E F G
WITH DVD ENTERTAINMENT SYSTEM	Terminal Color No. of Wire Signal Name [Specification] 4 L 5 W -	Connector No. D182 Connector Name WIRE TO WIRE Connector Type ITK12FW  H.S. 5 4 3 7 6 12 11 12 11 110 9 8 7 6	Terminal   Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]		J K
BOSE AUDIO WITHOUT NAVIGATION  Connector No. DE3  Connector Name SYSTEM)  Connector Type NS02FBR-CS  MS02FBR-CS  A1.3.	Terminal   Color   Signal Name [Specification]   No. of Wire   1   BR	Connector No. D155 Connector Type WIRE TO WIRE Connector Type TK10MV-NS9  M.S. T 2 3 4 5 6 7 8 9 10  T 1 2 3 4 5 6 7 8 9 10	Terminal   Color   Signal Name [Specification]   A   O   -[Type A]   A   L   -[Type B]   S   W   -[Type B]	JCNWM1882GI	M AV

Revision: 2008 October AV-457 2009 Murano

BOSE A	E AUD	BOSE AUDIO WITHOUT NAVIGATION	WITH DVD ENTERTAINMENT SYSTEM Connector No.   E18	Connector No. E27	Connector No.   E104
Connect	Connector Name E	ECM	Connector Name BACK-UP LAMP RELAY	Connector Name PARKING BRAKE SWITCH	Connector Name WIRE TO WIRE
Connector Type	П	RH24FB-RZ8-L-LH	Connector Type MS02FL-M2-LC	Connector Type P01FB-A	Connector Type NS16FW-CS
H.S.	_	81 85 89 93 97 101 105 109 82 99 97 101 105 109 82 99 97 101 105 110 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81 10 81	18	H.S.	H.S. 7 6 5 4 3 2 1 16 15 14 13 12 11 10 9 8
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Connector No.	П	E105	Connector No. F23	Connector No. F123	Connector No. M1
Connect	Connector Name V	WIRE TO WIRE	Connector Name TCM (TRANSMISSION CONTROL MODULE)	Connector Name WIRE TO WIRE	Connector Name FUSE BLOCK (J/B)
Connector Type	П	TH70MW-CS10-M3	Connector Type RH40FB-RZ8-L-RH	Connector Type TK16FGY-1V	Connector Type NS06FW-M2
H.S.			(3) 32 33 34 35 36 37 38 39 40 47 48 (1) 12 3 4 15 6 7 18 9 10 41 42	H.S. 7 6 5 4 = 3 2 1 16 15 14 13 12 11 10 9 8	4.5 3A 2A1A 8A 7A6A5A4A
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## [BOSE AUDIO WITHOUT NAVIGATION]

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WIRE TO WIRE THYOFW-CSIG-M3	Signal Name [Specification]	1			F
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	Terminal No. 10. 5 5 22 22 22 22 75 75 75 76 78	2			Н
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BOSE AUDIO WITHOUT NAVIGATION Connector No. M3 Connector Name FUSE BLOCK (J/B) Connector Type NS12FW-CS  SCHOL 3C2C1C  12d11d10d9C 8C 7C 6C	Signal Name [Specification]	Name   WIRE TO WIRE   TH40MW-CS15   TH40MW	Signal Name [Specification]	_	M
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Connector Name STEERING ANGLE SENSOR Connector Type TH08FW-NH	Connector Name COMBINATION SWITCH (SPIRAL CABLE)  Connector Type TK08FGV-1V	Connector Name COMBINATION METER Connector Type   TH40FNP-NIH	
1 2 3 4 5 6 7 8	24 25 26 31 32 33 34	1 2 3 4 5 7 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
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Connector No. M44 Connector Name WIRE TO WIRE	10 V 11 LG 12 SHEID	Connector No. M49 Connector Name FRONT DISPLAY UNIT	14 LG SIGNAL GND[Without navigation system] 15 L COMPOSITE IMAGE SIGNAL[Without ravigation system] 17 G RGR (PREP) SIGNAL
Connector Type TH32FW-NH	Ħ	Connector Type TTH24FW-NH	Y B B R
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Terminal Color Signal Name [Specification]		Terminal Color Signal Name [Specification]	
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5 W -		5 SHIELD SHIELD[Without navigation system] 6 I RGB (GGREEN) SIGNA [Without navigation system]	
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8 R -[Type B]		9 W RUB AREA (15) SIGNAL 11 R COMM (CONT->DISP)	
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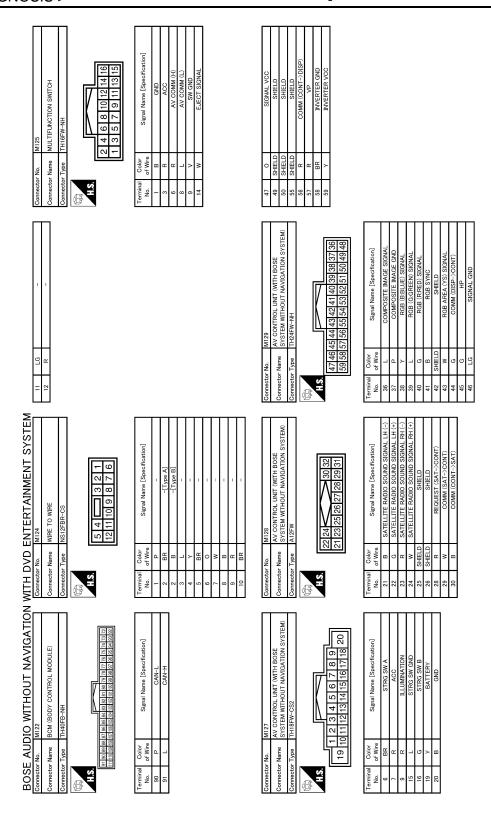
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## [BOSE AUDIO WITHOUT NAVIGATION]

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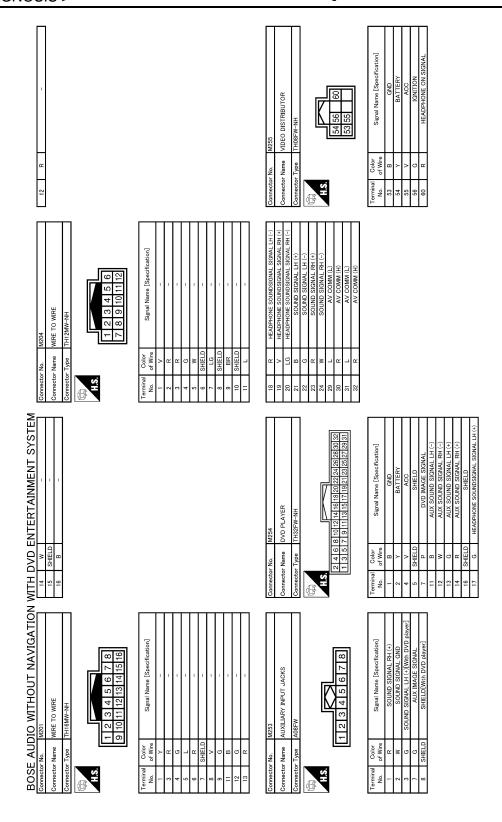
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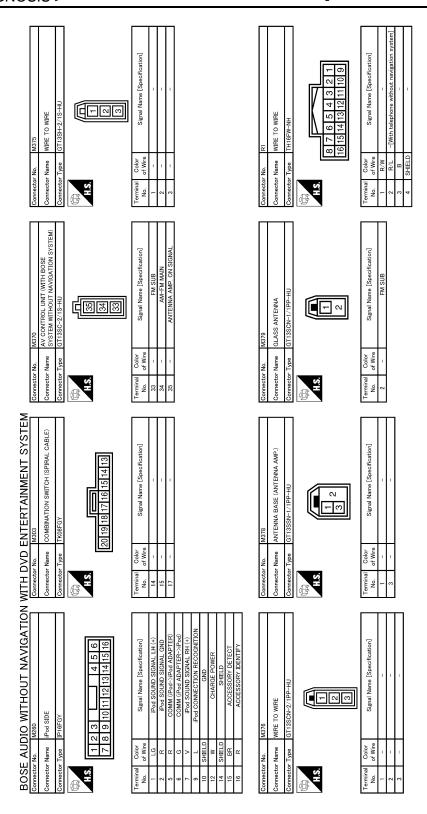
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## [BOSE AUDIO WITHOUT NAVIGATION]

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DISTRIBUTOR W-NH  W-NH  30 32 34 36 38 40  29 31 33 35 37 39  Signal Name [Specification]  RGB (RRED) SIGNAL RGB (GGREN) SIGNAL RGB (GGREN) SIGNAL RGB RREA (YS) SIGNAL COMPOSITE SYNC COMPOSITE NAME SIGNAL COMPOSITE INAGE SIGNAL COMPOSITE INAGE SIGNAL COMPOSITE INAGE SIGNAL SHIELD SHIELD	DVD IMAGE SIGNAL	I
ENT M257 TH16F 25 22 25 27	MI QAQ	J
	D D D D D D D D D D D D D D D D D D D	K
GATION	<u>                                    </u>	L
Signal Name [Specification]  OND	M-NH	M
DIO W	MAZSB 1 1/4/05 0 1 2/10 0 1 3/10	AV
BOSE AL. Connector Name Connector Name Connector Type I.S. Terminal Color No. of Viv. 51 B	Commettor Name   Commettor Type   Comm	0
	JCNWM1890Gf	Р

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JCNWM1891GE

	COMPOSITE SYNC	COMPOSITE IMAGE SIGNAL	RGB AREA (YS) SIGNAL	GND	dΛ	dH	GND BDR	RGB (B:BLUE) SIGNAL	RGB (G:GREEN) SIGNAL	RGB (R:RED) SIGNAL	CHIELD	CHIELD	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)	HEADPHONE SOUNDSIGNAL SIGNAL LH (-)	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)	HEADPHONE SOUNDSIGNAL SIGNAL LH (+)
	9	В	В	SHIELD	Я	М	T/M	5/X	J/Y	BR/L	SHIELD	SHIELD	ΓG	BR	۸	Υ
	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28
_																
YSIEM								F	30 35	2931			-	2		

BOSE AUC Connector No. Connector Name Connector Type	BOSE AUDIO WITHOUT NAVIGATION         WITH DVD ENTERTAINMENT SYSTE           Commettor No.         R20         Commettor No.         R152           Commettor Name         MCROPHONE         Commettor Name         REAR DISPLAY UNIT           Commettor Type         TKO4FW	WITH DVD E	ENTERTAINMENT SYSTE REAR DISPLAY UNIT TH32FW-NH
H.S.	1234	H.S. 1246	4 6 8 1012 14 16 18 20 22 24 26 28 30 32 3 5 7 9 1113 15 17 19 21 23 25 27 28 31

ŏ	Ö		1				
		1234	Signal Name [Specification]	MICROPHONE SIGNAL (+)	MICROPHONE SIGNAL (-:\(\)(With telephone without navigation system)	MICROPHONE POWER	
	П		Color of Wire	R/W	R/L	В	
Connector	Connector	H.S.	Terminal No.	1	2	4	
	Connector Name MICROPHONE GG	MICROPHONE TK04FW	МСКОРНОNE ТКО4FW 1 2 3 4	MCROPHONE TRO4FW  1 2 3 4 Signal Name [Specification]	MICROPHONE TROJEW  1234  Signal Name [Specification]  MICROPHONE SIGNAL (+)	MICROPHONE TYGGHFW  Signal Name [Specification]  MICROPHONE SIGNAL (+)  MICROPHONE SIGNAL (+)  MICROPHONE SIGNAL (1998 neurons)	MCROPHONE TRO4FW  TRO4FW  Signal Name [Specification]  MICROPHONE SIGNAL (+)  WICROPHONE SIGNAL (+)  MICROPHONE SIGNAL (+)  MICROPHONE SIGNAL (+)

Terminal No.	1	2	3	4	
Signal Name [Specification]	MICROPHONE SIGNAL (+)	MICROPHONE SIGNAL (-:{With telephone without navigation system]	MICROPHONE POWER		
Color of Wire	M/N	T/X	8		
minal Io.	_	2	4		

QND	BATTERY	BATTERY	HEADPHONE ON SIGNAL	ACC	SHIELD	COMM (DISP->DIST)	COMM (DIST->DISP)	NOILION	SHIELD		1	Ì	İ	i	1	-	-	-	-	-	-	-	-	-	=
В	Y/R	Y/R	Я	٨/٨	SHIELD	>	ΓC	g	SHIELD		Y/L	BR/L	9	٨/٨	ΓC	۸	SHIELD	В	W	Я	SHIELD	9	Я	SHIELD	œ
2	3	4	5	9	8	6	10	11	12		13	14	16	18	21	22	23	24	25	26	27	28	59	30	31
	В	B Y/R	8 Y/R Y/R	8 Y/R Y/R	8 Y/R Y/R R	Β Υ/R Υ/R R V/Y SHIELD	Y/R Y/R R R/V/Y SHIELD	Y/R Y/R Y/R Y/R V/Y V/Y SHIELD V V	B	B	B   R   K/R   Y/R   Y/R   K/R   K/	N   N   N   N   N   N   N   N   N   N	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8	N   N   N   N   N   N   N   N   N   N	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Y/R Y/R Y/R Y/R Y/R Y/R Y/R Y/Y Y/Y Y/Y	NA   NA   NA   NA   NA   NA   NA   NA	8   8   8   8   8   8   8   8   8   8	N	B	Y/R   Y/R	N	N/R   V/R   V/R	Y/R   Y/R

	Connector No. R153	Connector Name WIRE TO WIRE	Sonnector Type TH32FW-NH		16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 3 2 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3
--	--------------------	-----------------------------	--------------------------	--	--------------------------------------------------------------------------

Signal Name [Specification]	-	-	-	-	-	-	-	-	_	-	-	
Color of Wire	Y/R	В	SHIELD	ΓG	^	SHIELD	BR	Υ	SHIELD	M/L	Y/G	
Terminal No.	1	2	4	2	9	7	8	6	10	11	12	

Α

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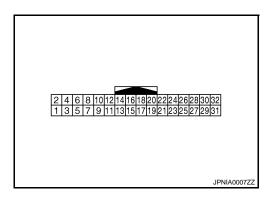
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JCNWM1892GI

## **CAMERA CONTROL UNIT**

Reference Values

**TERMINAL LAYOUT** 



#### PHYSICAL VALUES

Terminal (Wire color)		Description			Condition	Reference value (Approx.)		
+	_	Signal name	Input/ Output	Condition				
5	_	Shield				_		
6 (B)	Ground	Camera image signal	Input	Ignition switch ON	when rear view camera image is displayed.	0. 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
7 (R/W)	Ground	Rear view camera ground	_	Ignition — ON		0 V		
8 (R/L) Groun			Output	Ignition switch ON	R position.	6.0 V		
	Ground	Camera ON signal			Other than R position.	0 V		
11	Ground	Shield (camera image ground	_	Ignition switch ON	_	0 V		
12 (B)	11	Camera image signal	Output	Ignition switch ON	when rear view camera image is displayed.	(V) 0. 4 0 -0. 4 + +40μs SKIB2251J		
14 Group	Ground	Camera-connection recog-	Output	Ignition switch	Connected to camera control unit connector.	0 V		
(L)	Siound	nition signal	Output	ON	Not connected to camera control unit connector.	5.0 V		
17 (BR)	_	AV communication signal (L)	Input/ Output	_	_	_		
18 (Y)	_	AV communication signal (H)	Input/ Output	_	_	_		

< ECU DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
19 (GR)	_	AV communication signal (L)	Input/ Output	_	_	_
20 (G)	_	AV communication signal (H)	Input/ Output	_	_	_
22 (R)	Ground	Reverse signal	Input	Ignition switch	R position.  Other than R position.	12.0 V 0 V
23				ON	Turn the steering to the right.	A: Sensor signal 1 B: Sensor signal 2
(G)	Ground	Sensor signal 1	Input	switch ON	Turn the steering to the left.	(V) 4 2 0 8 SKIB3828E A: Sensor signal 1
24	Ground	Sensor signal 2	Input	Ignition switch	Turn the steering to the right.	B: Sensor signal 2  (V)  4 2 0 4 2 0 SKIB3827E  A: Sensor signal 1 B: Sensor signal 2
(SB)	Ciodid	Control orginal 2	input	ON	Turn the steering to the left.	A: Sensor signal 1 B: Sensor signal 2

#### [BOSE AUDIO WITHOUT NAVIGATION]

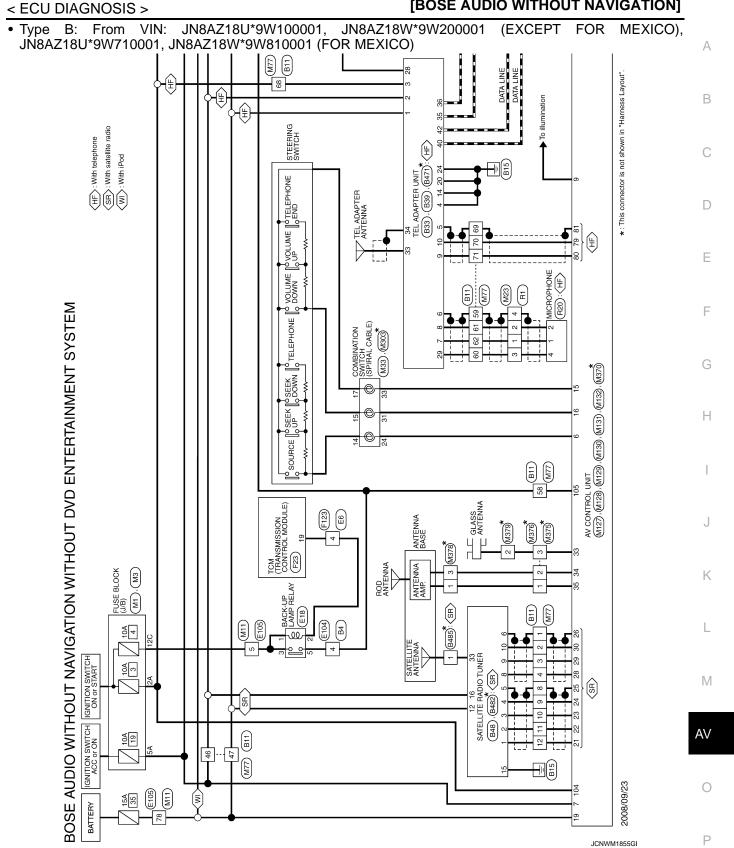
	minal color)	Description		_	Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
25 (O)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position.	A: Sensor signal 3 B: Sensor signal 1
26 (BR)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25 MPH).	NOTE:  Maximum voltage may be 12 V due to specifications (connected units).  (V)  6 4 2 0  ***20ms  SKIA6649J
30 (GR)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
31 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
32 (V)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage

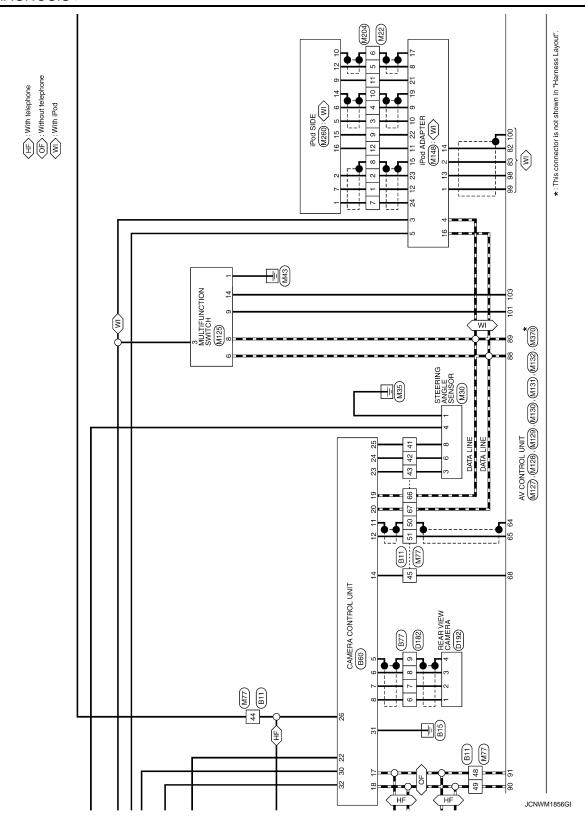
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTER-TAINMENT SYSTEM -

#### NOTE:

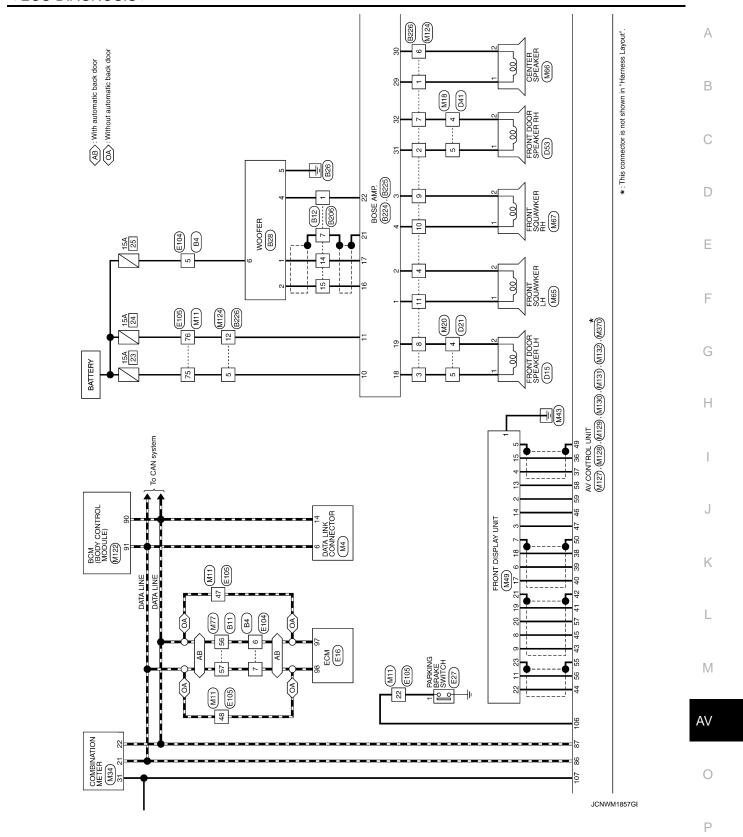
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.
- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)

#### [BOSE AUDIO WITHOUT NAVIGATION]

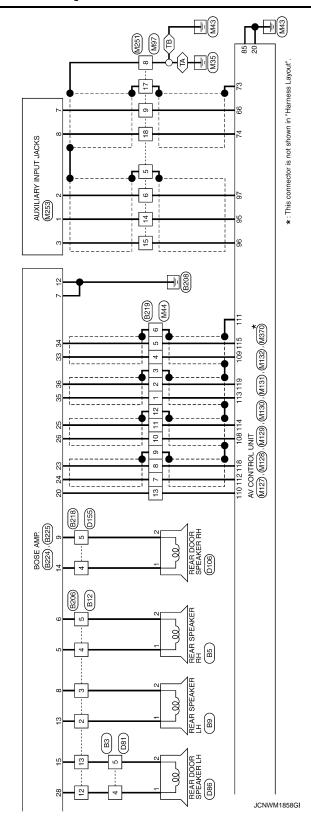




#### [BOSE AUDIO WITHOUT NAVIGATION]







# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

B9 REAR SPEAKER LH TK02FBR	Signal Name [Specification]	RSORFGY-PR Signal Name [Specification] Signal Name [Specification] SOUND SIGNAL WOOFER (+) WOOFER (+) WOOFER (+) BAT	АВ
Connector No. B9 Connector Name REAR SP Connector Type TK02FBR	Color   No. of Wire   1   SB   2   2   GR	Connector No. 828 Connector Name WOOFER Connector Type RS06FGY  No. of Wire  1 W.R. S  2 B.R S  4 W S  6 B.W	C D
	feation)	[Bation]	Е
PEAR SPEAKER RH TKOZFBR	Signal Name [Specification]	B12   WIRE TO WIRE   NSI IGFW-CS   T 6 5 4     3 2 1     T 6 14   13 12   11   10 9 8     Signal Name [Specification]	F
	Color of View		G
Connector No Connector Name Connector Type	Terminal No.	Connector No.   Connector Try	Н
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM   Connector Name   WIRE TO WIRE	Signal Name [Specification]		I
DVD ENTE B4 wire to wire NS16kW-CS	F 97		
WITHOUT Connector Name Connector Type Connector Type	Calor   Calor   No.   Of Wire   No.   Of Wire   Of Wir	44 44 44 44 44 44 44 44 44 44 44 44 44	K
ATION WIT	<u>\$</u> -		L
THOUT NAVIG. WRE ISB	Signal Name [Speoification]	WW-CS19 Signal Name [Specification]	M
DIO WITHOU B3 WIRE TO WIRE TK10FW-NS3 TR 16 15 15	Ш	WWRE TO	AV
BOSE AUC Connector No. Connector Type H.S. 1091	Calor   Calor   Calor	Connector No.   Connector No.   Connector Name   Connector Type   Connec	0
Ш[ŏ] ŏ [ŏ] [ੴ 【	<u> -                                     </u>	[3	
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		22         R         REVERSE           23         G         SENSOR SIGNAL 1           24         SB         SENSOR SIGNAL 2           25         O         SENSOR SIGNAL 3           26         O         SENSOR SIGNAL 3           26         B         VEHICLE SPECIO 6-PULSE)           30         GR         ACC           31         B         GND           32         V         BATTERY	
TEM		Connector No. 860 Connector Type TH32FW-NH  Connector Type TH32FW-NH  H.S.	Terminal   Color   Signal Name [Specification]     S
Connector No.   B33   Connector Name   TEL ADAPTER UNIT   Connector Name   TEL ADAPTER UNIT   Connector Name   TEL ADAPTER UNIT   Connector Type   TH32FW-NH   TH32FW-	Terminal   Color   Signal Name [Specification]   Color   Col	16 GR A0C	
BOSE AUDIO WITHOUT NAVIGATION Connector No. B33 Connector Type THE LADAPTER UNIT Connector Type THOBFW-NH  M.S. 35 37 39 41 36 38 40 42	Dolor   Signal Name [Specification]     No.   Signal Name [Specification]     35	Connector No. 848 Connector Name SATELLITE RADIO TUNER Connector Type A18FW  A18FW  2 4 6 7 12 14 16  1 3 5 7 8 9 10 11 13 15	Perminal   Color   Signal Name (Specification)     1

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[BOSE AUDIO WITHOUT NAVIGATION]

		2			A B C
Cornector No. B218 Connector Name WIRE TO WIRE Connector Type TK10FW-NS8  10 9 8 7 6 5 4 3 2 1  18 17 16 15 14 13 12 11	Terniral   Color   Signal Name [Specification]   Color   4   L   -[With BOSE system]   5   O   -[With BOSE system]	Connector No. B224  Connector Name BOSE AMP.  Connector Type SGA1ZFBR-SJA2  H.S. 14 13 12 11 10  9 8 7 6 5 4 3 2 1	Terminal   Color   Signal Name   Specification   Color   No.   of Wire   SOUND SIGNAL FRONT SOLUWRER H (+)   2   V   SOUND SIGNAL FRONT SOLUWRER RH (+)   4   P   SOUND SIGNAL FRONT SOLUWRER RH (+)   5   V   SOUND SIGNAL REAR SPEAKER RH (+)   6   BR   SOUND SIGNAL REAR SPEAKER RH (+)   6   BR   SOUND SIGNAL REAR SPEAKER RH (+)   6   BR   SOUND SIGNAL REAR SPEAKER RH (-)   9   O SOUND SIGNAL REAR SPEAKER RH (-)   10   SB   SOUND SIGNAL REAR SPEAKER RH (-)   11   GR   SOUND SIGNAL REAR SPEAKER RH (-)   11   GR   SOUND SIGNAL REAR SPEAKER RH (-)   11   GR   BATTERY		E F G
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM   Connector Name   WIRE TO WIRE	Terminal Color No. of Wire 1 WW - 2 GR - 3 BR - 4 Y - 5 SHELD - 13 R - 14 W/R - 15 BR - 15 BR - 16 BR - 17 SHELD - 17 BR - 18 BR - 18 BR - 19 BR - 11 BR R - 12 BR R - 13 BR R - 14 WR R - 15 BR R - 16 BR R - 17 BR R - 18 BR R -	12 SHELD 13 SB			J K
BOSE AUDIO WITHOUT NAVIGATION V Connector No. 877  Connector Name WIRE TO WIRE  Connector Type TK12MW  TI 2 3 4 5  E 7 8 9 10 11 12	Terminal   Color   Signal Name [Specification]   Color   Signal Name [Specification]   Color   RNL   Color	Connector No. B219 Connector Name WIRE TO WIRE Connector Type TH32MW-NH  H.S.	Terminal   Color   Signal Name [Specification]   W/R	JCNWM1861Gi	M AV
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12 GR -		Connector No. D15 Connector Name FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS	Terminal Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]
Connector No.   8226   Connector No.   8226   Connector Name   WIRE TO WIRE   Connector Type   NSIZMBR-CS	Terminal   Color   Signal Mame   Specification]	Connector No. B485 Connector Name ANTERNA BASE (SATELLITE ANTERNA) Connector Type GT18C-1PP-HU  H.S.	Terminal Color   Signal Name [Specification]   No. of Wire   SateLLITE ANTENNA   SATELLITE ANTENNA
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM		Connector Name SATELLITE RADIO TUNER Connector Type FAKRA  H.S.  (33)	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 33 = SATELLITE ANTENNA
BOSE AUDIO WITHOUT NAVIGATION  Connector Na. 8225  Connector Name BOSE AMP.  Connector Type SCA19FBR-36A4  M.S. 37.36533433 23.31302928  27.262524232221201918171615	Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]   16	Connector Na.  Connector Name TEL ADAPTER UNIT Connector Type GT16C-15-HU  H.S.  (34)	Terminal   Color   Signal Name [Specification]   No.   1

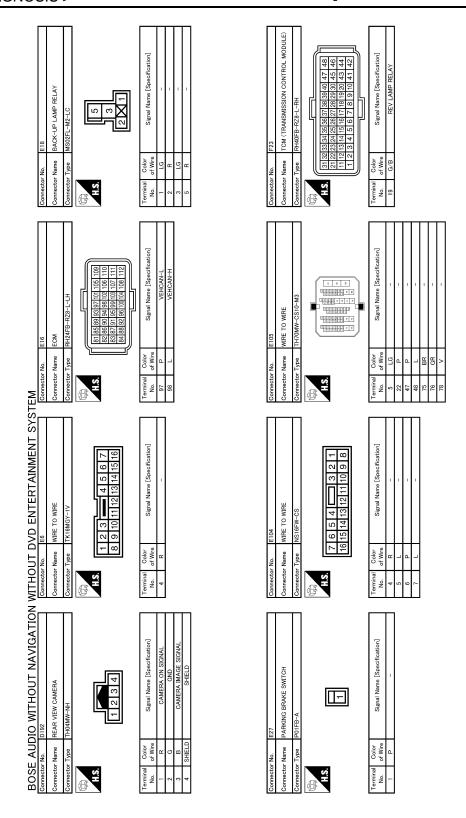
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# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

Connector No. D81  Connector Name WIRE TO WIRE  Connector Type TK:10MW-NS8  L1 2 3 4 5 6 7 8 9 10  11 12 13 14 15 16 17 18	Terminal Color No. of Wire 4 L 5 W	Connector No.         D182           Connector Name         WIRE TO WIRE           Connector Type         TK12PW           IS         5 4 3 2 1           12 11 10 9 8 7 6	Terminal Color Signal Name [Specification] No. or Wire Signal Name [Specification] 6 R		A B C
Connector No. DS3 Connector Name FROWT DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NSOFER-CS HSOFER-CS LAB.	Terminal   Color   Signal Name [Specification]	Connector No. D155 Connector Name WIRE TO WIRE Connector Type TK10MV-NS8  1 2 3 4 5 6 7 8 9 10  11 12 13 14 5 6 7 8 9 10	Terminal   Color   Signal Name [Spacification]   No. of Wire   O		E F G
WITHOUT DVD ENTERTAINMENT SYSTEM Connector Name WIRE TO WIRE Connector Type ITH40FW-CS15  MA  (Sala 13 [2] 11 [10] 11 [2] 11 [10] 12 [2] 11 [10] 12 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [2] 11 [	Terminal   Color   Signal Name [Specification]   No.   4   B/R   -[Type A]   5   W   -[Type B]   5   W   -[Type B]	Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NSOZFBR-CS	Terminal   Color   Signal Name [Specification]   No.   Of Wire   Signal Name [Specification]   1   O		J K
BOSE AUDIO WITHOUT NAVIGATION Connector No. D21 Connector Name WIRE TO WIRE Connector Type ITH40FW-CS15    Connector Type   TH40FW-CS15	Terminal Color   Signal Name [Specification]   No.   Color   Signal Name [Specification]   4   B./W   -[Type A]   5   W   -[Type B]   5   W   -[Type B]	Connector No. D86 Connector Name REAR DOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NSOZFBR-CS H.S.	Terminal Color No. of Wire Signal Name [Specification]	JCNWM1863GI	M AV
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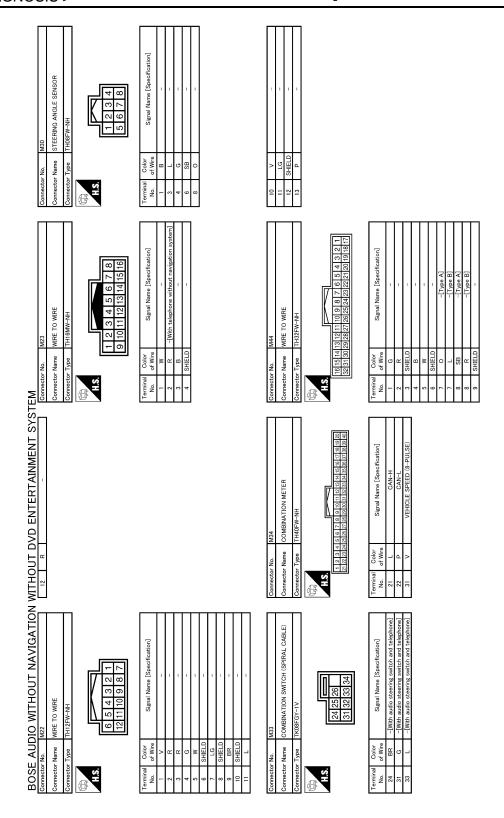
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r No. M4  OATA LINK CONNECTOR  Type BD16FW  12345678	Color Signal Name (Specification) of Wire L L L L L L L L L L L L L L L L L L L		A B C
Connector No. Connector Name Connector Type	Terminal No. 6 6 14		D
20 20 20 20 20 20 20 20 20 20 20 20 20 2	specification]	No.   NA20   NAME   THOMM-CS15	Е
	Signal Name (Specification)		F
M3 FUSE BL NS12FW 5C 4C		No.   MZ0   WIRE TO WIRE   Type   TH40MM-0315   Color   Colo	G
Connector No. Connector Name Connector Type H.S.	No. of Wire 12C O	in a land to the control of the cont	
YSTEM Comm			Н
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DYD ENTERTAINMENT SYSTEM   Connector Name   F123   Connector Name   FUSE BLOCK (J/B)   Connector N	Signal Name [Specification]	No.   M/18	I
VD ENTER MI FUSE BLOCK (J/B) NSOGFW-MZ    3A	Signal	WIRE TO WIRE   TH40MW-CS15   Signal	J
WITHOUT DVI Commercer No.   MI Commercer Name FUs Commercer Type INSI H.S.	Terminal Color No. of Wire 2A C G 5A R	Connector No.   M18	К
			L
HOUT NAVIGA	Signal Name [Specification]	OSIG-M3 Signal Name [Specification]	M
JDIO WITHC F123 F124 F125 TK18FGY-1V TK18FGY-1V  7 6 5 4	io	WIRE TO WIRE THYOPW-CS10-MS Signal Na	AV
BOSE AUD Commetter Name W Commetter Type T	Terminal   Golor   No.   61/8   A   GJ/B	Connector No.   Donnector Name   Vocametor Type   Terminal   Color	0
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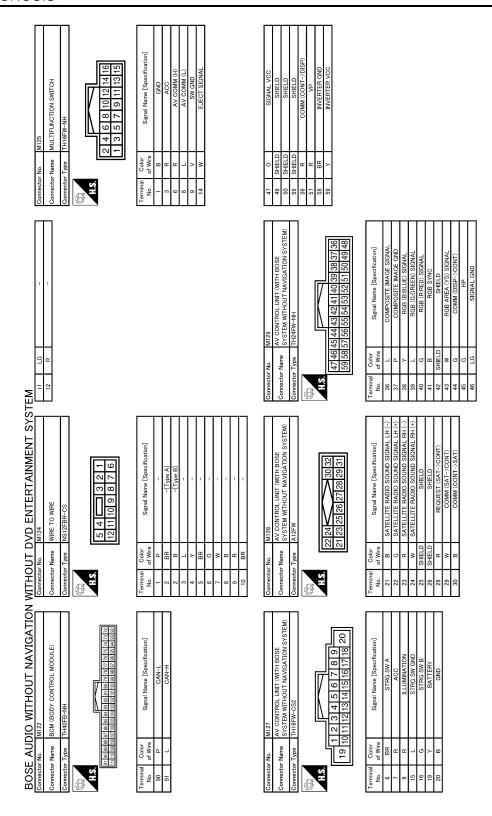
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# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

PEAKER 2 1	Signal Name (Specification)	WIRE TO WIRE THISPAN-CSZ    17   16   5   4   3   2   1   1   1   1   1   1   1   1   1		АВ
Connector No. M66 Connector Name CENTER SPEAKER Connector Type TK02FBR H.S	Terminal   Color   Sign	Mean		C D
	oification] ystem]			Е
M65 FRONT SQUAWKER LH TKQZFBR	Signal Name [Specification] -[With BOSE system] -[With BOSE system]			F
nector No. nector Name nector Type	Terminal Color No. 1 L.G. Y	445		G
VIT SYSTE	[ <del>-</del>   ] ]			Н
BOSE AUDIO WITHOUT NAVIGATION WITHOUT DVD ENTERTAINMENT SYSTEM   Commercion with minimal part   Commercion system   Commerci		RE TO WIRE Signal Name (Specification) Signal Name (Specification)		1
DVD ENT SIGNAL GI COMPOSITE IA RGB (B.BLUE) R RGB (B.BLUE) C C C C C C C C C C C C C C C C C C C		MRE TO D D D D D D D D D D D D D D D D D D		J
WITHOUT D  14 LG  15 L  17 G  18 Y  19 B  20 R  21 SHIELD  22 G  23 SHIELD		Connector No.		K
//GATION	ion] ion system] setion system] system] system] stem tem Al. ion system]	Teo I		L
OUT NAV	Signal Name [Specification] GMD INVERTER VCC[Without navigation system] SIGNAL VCC[Without navigation system] COMPOSITE BANCE GND[Without navigation system] ROB (GGREEN) SIGNAL Without navigation system] HP[Without navigation system] HR] GGREEN SIGNAL Without navigation system] ROB REA REA (YS) SIGNAL COMM (CONT-DISP) INVERTER GND[Without navigation system]	OUAWKER RH  21 Signal Name [Specification]  -[With BOSE system]		M
M49 FRONT DISPLAY UNIT THZ4FW-NH  1098765	Signa NVERTIER VI SIGNAL VOI COMPOSITE IM DI SHIELDIVI DI	FRONT S TKOZFBR		AV
BOSE AUC Connector Na. Connector Name Connector Type H.S. 12 [1]	Continuation   Color	Connector No. Connector Name Connector Type Connector Name Connect		0
			JCNWM1867Gi	Р
				1

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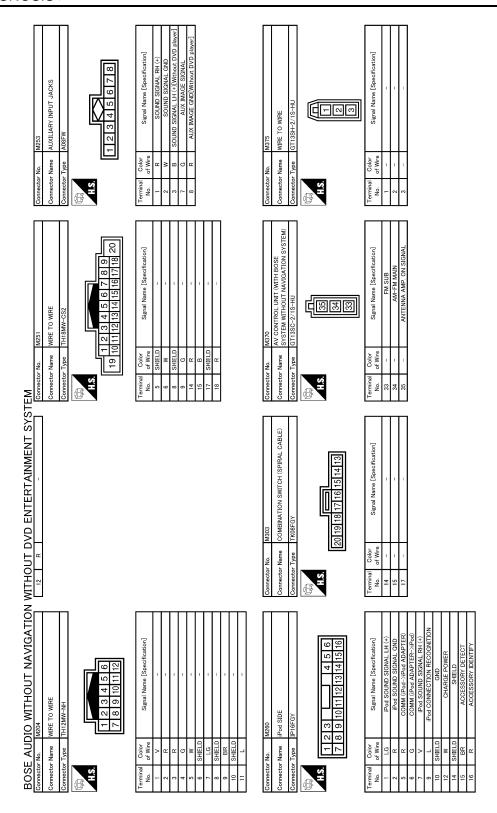
JCNWM1868GE

# [BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

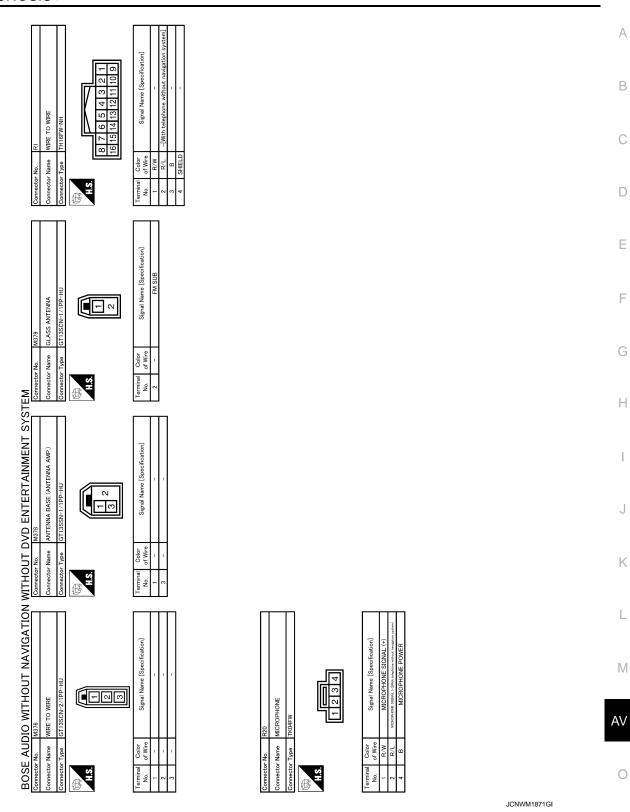
	14 W   Pod SOUND SIGNAL RH (+)     15 SHIELD   SHIELD     16 R			A B C
10	Connector No. MI48  Connector Name Pod ADAPTER  Connector Type III24FW-N4H  I 2 3 4 5 6 7 8 9 10 11 12  I 3 14 15 16 17 18 19 20 21 22 23 24	Terminal   Color   Signal Name [Specification]   1   BR   Page SOUND SIGNAL LH (+)   2   R   Page SOUND SIGNAL LH (+)   3   R   Page SOUND SIGNAL RH (+)   4   L   AV COMM. (L)   5   Y   COMM. (L)   5   Y   COMM. (L)   6   ARCE POWER   9   G   COMM. (Page ADAPTIER)   10   R   COMM. (Page ADAPTIER)   11   R   ACCESSORY IDENTIFY   12   V   Page SOUND SIGNAL RH (+)   13   L   Page SOUND SIGNAL LH (-)   13   L   Page SOUND SIGNAL LH (-)		E F G
Connector No.   M131   Connector Type   TH32FW-NH   TH32FW-NH   TH32FW-NH   TH32FW-NH   Th0.   M142   Connector Type   TH32FW-NH   TFL VOICE SIGNAL (+)   See   S	119 R SOUND SIGNAL FRONT LH (~)			J K
Connector Name	Connector No. M.132 Connector Name System Without NAVIGATION SYSTEM) Connector Type THIZPW-NH  M.S.	Terminal   Color   Signal Name [Specification]   No. of Wire   108   V   SOUND SIGNAL REAR RH (+)   110   B   SOUND SIGNAL REAR RH (+)   111   SHELD   SOUND SIGNAL REAR LH (+)[Type A]   112   C   SOUND SIGNAL REAR LH (+)[Type B]   113   G   SOUND SIGNAL REAR LH (+)[Type B]   114   LG   SOUND SIGNAL REAR RH (-)   115   W   SOUND SIGNAL REAR RH (-)   116   W   SOUND SIGNAL REAR RH (-)   116   W   SOUND SIGNAL REAR LH (-)[Type B]   118   SGUND SIGNAL REAR LH (-)[Type B]   118   SGUND SIGNAL REAR LH (-)[Type B]   118   R   SOUND SIGNAL REAR LH (-)[Type B]		M AV
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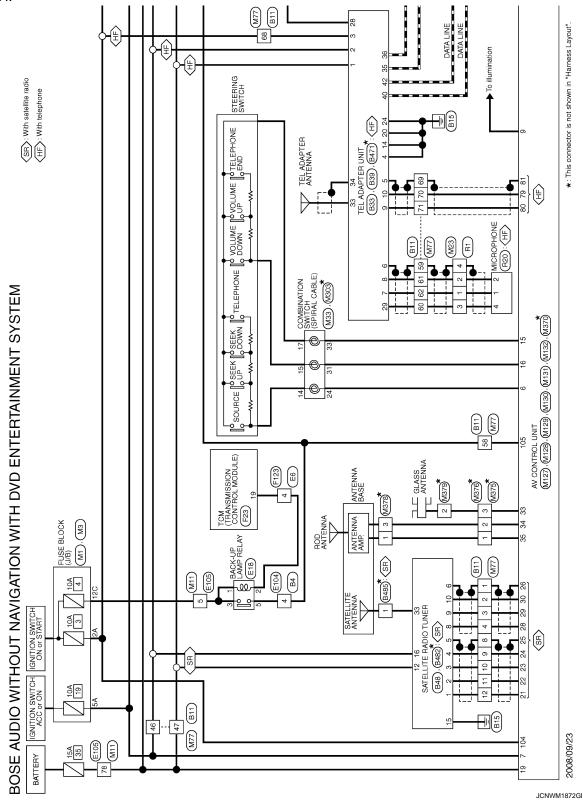
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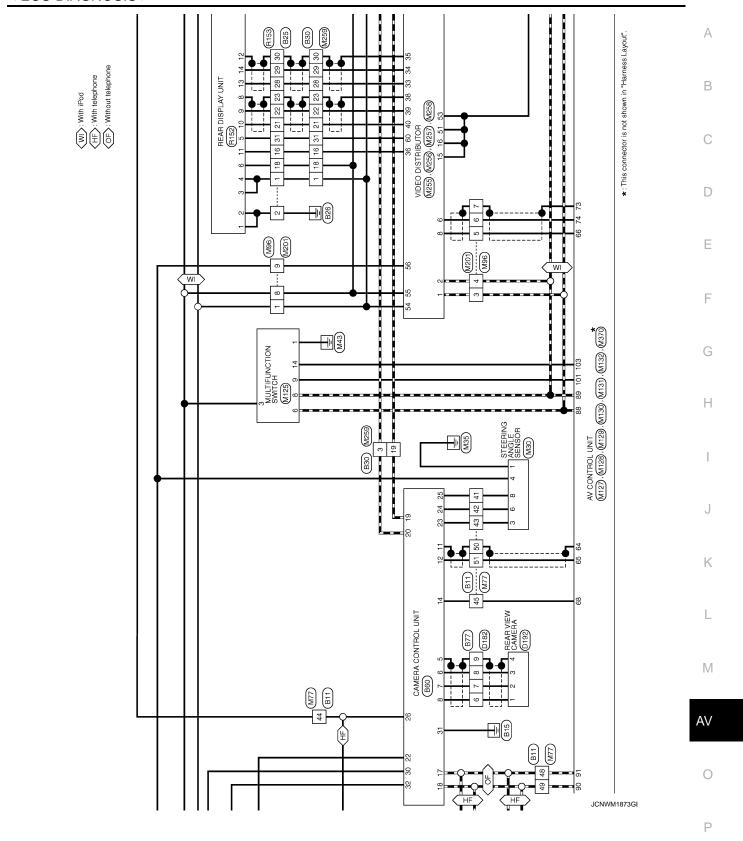
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAIN-MENT SYSTEM -

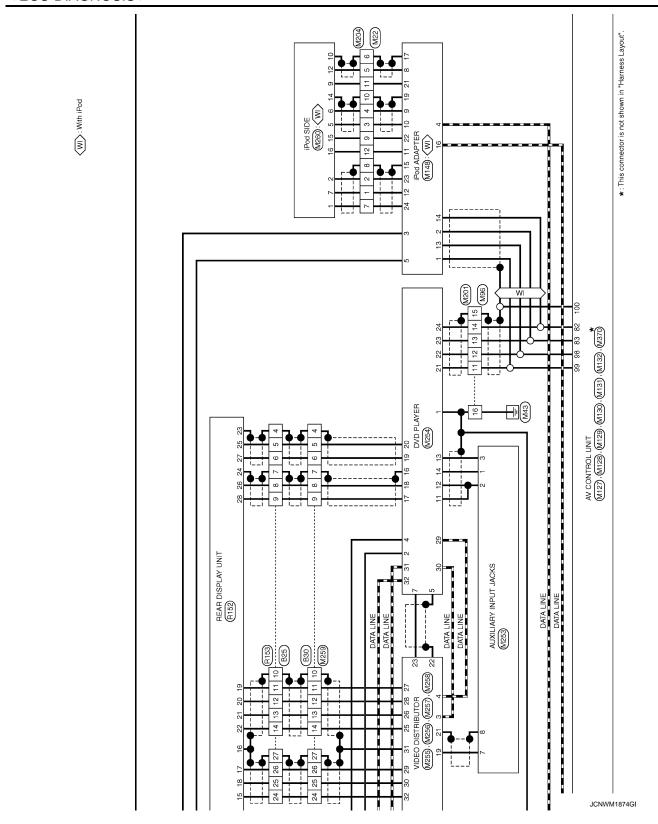
NOTE:

In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.

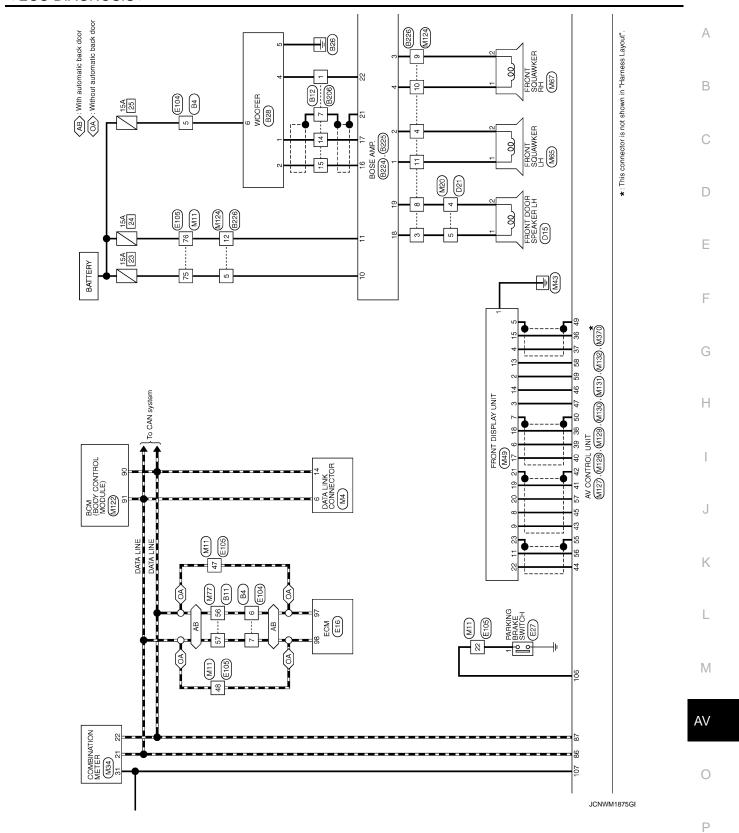


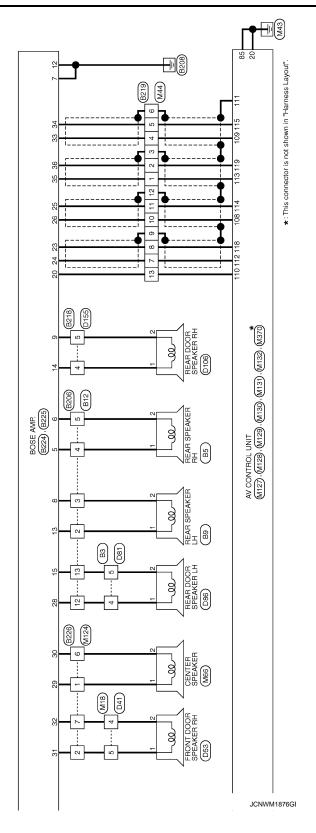
#### [BOSE AUDIO WITHOUT NAVIGATION]





#### [BOSE AUDIO WITHOUT NAVIGATION]





[BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

	fication]			А
SPEAKER LH	Signal Name (Specification)			В
Connector No. 69 Connector Name REAR SPEAKER LH Connector Type TK02FBR	Terminal Color No. of Wire 1 SB 2 GR			C
Com	Ter T			
	recification	9 8 1		Е
BES REAR SPEAKER RH TKUZZYBR	Signal Name [Specification]	B12   WIRE TO WIRE   NISIGNATOR   Signal Name [Specification]   Signal Name [Specification]   Signal Name   Specification]   Signal Name   Specification]   Signal Name   Specification]		F
₂   ₂	Color of Wire			G
Connector No. Connector Name Connector Type	Terminal (0.00)	Connector No.   Connector Name   Connector Name   Connector Type   Conne		Н
₩. TE		[auo]		
MENT SYS	Signal Name [Specification]			I
Connector No.   E4   Connector Name   WIRE   Connector Name   WIRE   Connector Type   NS18MW-CS	Signal Name	-[With rear view camera and telephone] -[With rear view camera without telephone]		J
OVD EN	O O O Wire	C   C   C   C   C   C   C   C   C   C		K
WITH DVD Connector Name Connector Type A.S. H.S.	Terminal No. No. 4 4 5 5 6 6 6 7 7	443 445 446 446 448 448 448 448 448 448 448 448		
NOTES TO THE PERSON OF THE PER				L
NAVIGA 4 3 2 1 3 12 11	oecification]	ecfication]		M
THOUT N WRE ISB 1514   13	Signal Name (Specification)	RE TO WIRE  SEGMIN-CSS 19  Signal Name (Specification)		IVI
DIO WI B3 WIRE TO V TK10FW-N		WMRE TO O O O O O O O O O O O O O O O O O O	A	AV
BOSE AU Connector No. Connector Type 10 9	Color   Colo	Connector Name   Connector Name   Connector Type   Conn		0
파 <u>이 이 이 [윤</u>	<u> -                                     </u>		JCNWM1877GI	
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BOS	E AUI	BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM	WITH	DVD EN	TERTAINMENT SYSTEM		
Connector No.	or No.	B25	13	1/A		Connector No.	B28
		LOWN OF LOWN	14	BR/L	1		000
Connect	Connector Name	WIRE 10 WIRE	16	>	1	Connector Name	WILL OUT
Connect	Connector Type	TH32MW-NH	18	0	1	Connector Type	RS06FGY-PR
ą			21	B/R	1	ą	
彦			22	W/R	1	居	
SH.			23	SHIELD	1	Š	Ę
			24	В	1		A F
	1 2 3	6 7 8 9 10 11 12 13 14	22	R/L	-		
	<u>∞</u>	19[20[21[22[23[24[25[26[27[28[29]30]31]32]	26	R/W	-		
			27	SHIELD	1		)
			28	В	1		
Terminal		Signal Name [Specification]	29	×	1	ъ	Signal Name [Specification]
No.	of Wire		30	SHIELD	_	No. of Wire	
-	SB	-	31	Ь	-	1 W/R	SOUND SIGNAL WOOFER (-)
2	80	1				2 B/R	
4	SHIELD	1				4 W	WOOFER AMP. ON SIGNAL
2	W/R	1				5 B/W	GND
9	I/M					H	BAT
,	SHELD.					$\frac{1}{2}$	
	OF ST						
20	SR/5	,					
6	M/L	1					
10	SHIELD	_					
=	W/L	_					
12	5/X	1					
Connector No.	tor No.	B30	13	Y/L	_	Connector No.	B33
+onno-	Connector Name	WIRE TO WIRE	14	BR/L	_	Connector Name	TEL ADAPTER LINIT
			16	>	1		
Connect	Connector Type	TH32FW-NH	18	0	Î	Connector Type	TH08FW-NH
ſ			19	GR	1	ſ	
ß			21	B/R	1	B	
ŧ			22	W/R	1	É	R
1			23	SHELD	1	5	
	16 15 14	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	24	6	1		35 37 39 41
	32 31 30	29 28 27 26 25 24 23 22 21 20 19 18 17	25	R/I	1		36 38 40 42
			36	W/A	1		=: 0: 00 00
			27	SHIFLD	1		
Termina	Color		3 8	a	1	Terminal Color	
Š		Signal Name [Specification]	g g	3	1		Signal Name [Specification]
-	9		02	CHIELD	1	t	
-   «	3		8 3	SHILLD		+	COMMUNICION (III)
n	9	1	n	ī	1	7	AV COMM (L)
4	SHELD	1				┨	AV COMM (H)
2	W/R	-				42 GR	AV COMM (L)
9	M/L						
7	SHIELD						
∞	GR/V	1					
6	M/L	,					
10	SHIELD	1					
Ξ	M/L	1					
12	7/V						

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# [BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS >

16 GR ACC		Connector No.   5206  Connector Name   WIRE TO WIRE  Connector Type   NS18MW-CS	Terminal   Color   Signal Name (Specification)   No.   Color   No.   Color   Signal Name (Specification)		A B C
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	feation] LH (-) HH (-) RH (-) RH (+) RH (+) ON T) SAT)				Е
FW T	Signal Name (Specification) SOUND SIGNAL LH (+) SOUND SIGNAL LH (+) SOUND SIGNAL RH (+) SOUND SIGNAL RH (+) SOUND SIGNAL RH (+) SHELD SHELD SHELD SHELD COMM (SAT->CONT) COMM (SAT->CONT) COMM (SAT->CONT) COMM (CONT->SAT)	917 WIRE TO WIRE TKI 28MW  1 2	Signal Name (Specification)		F
Connector No. B48 Connector Name SAT Connector Type A18	Terminal Color, No. of Wire 1 W/L 2 W/L 3 Y/L 3 Y/L 5 SHIELD 6 SHIELD 6 SHIELD 6 SHIELD 10 B H/L 12 V 15 SHIELD 10 B H/L 15 SHIELD 10 SHIEL	Connector No. B77 Connector Name WIRR Connector Type TR(1) H.S.	Terminal Color No. of Wer 6 R/U 7 RWW 8 B 8 B 9 SHELD		G H
ENTERTAINMENT SYSTEM CONITROL SIGNAL CONTROL SIGNAL VEHICLE SPEED (8-PULSE) MICROPHONE VCC		RSE SIGNAL 1 SIGNAL 2 SIGNAL 3 SIGNAL 3 C C C C D D			I
NTERTAINMENT SY CONTROL SIGNAL CONTROL SIGNAL VEHICLE SPEED (8-PULSE) MICROPHONE VCC		REVERSE SENSOR SIGNAL 1 SENSOR SIGNAL 2 SENSOR SIGNAL 2 SENSOR SIGNAL 3 VEHICLE SPEED (8-PULSE) ACC GND BATTERY			J
WITH DVD E 20 B B B B B B B B B B B B B B B B B B		22			K
AVIGATION	offication]  Y  N  SIGNAL  E GAND  INAL (+)	IIT 24 56 28 30 32 23 55 27 28 31	effication] SIGNAL SIGNAL SIGNAL (L) (H) (H)		L
AUDIO WITHOUT N  B39  TH. ADAPTER UNIT  YPP TH32FW-NH  4 6 8 1012 14 16 18 20 22 24 18 18 18 18 18 18 18 18 18 18 18 18 18	Signal Name (Specification) BATTERY ACC IGNITION GND SHIELD SHIELD MICROPHONE SIGNAL (-) TEL VOICE SIGNAL (-) TEL VOICE SIGNAL (-) TEL VOICE SIGNAL (-) TEL VOICE SIGNAL (-)	EFRA CONTROL UN EFW-NH    12   16   18   20   22   11   13   15   17   19   22   11   13   15   17   19   22   11   13   15   17   19   22   11   13   15   17   19   22   11   13   15   17   19   22   11   13   15   17   19   22   11   13   15   17   19   22   13   13   13   13   13   13   13	Signal Name (Specification) Signal Name (Specification) SHELD CAMERA MAGE SIGNAL GNUE ON SIGNAL AV COMM (H)		AV
BOSE AUDIO WITHOUT NAVIGATIO Connector No. 839 Connector Name TEL ADAPTER UNIT Connector Type TH32FW-NH  M.S. T 9 11 113 15 17 9 11 113 15 17 19 21 22 22 22 22 23 23 23 23 23 23 23 23 23	No.   Color   No.   O' Wire   Vive	Cornector No. 860 Cornector Name CAM Cornector Type TH3  H.S.  1 3 5 7 9	Color   Color		0
<u></u>				JCNWM1879GI	Р

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		26         GR/V         SOUND SIGNAL REAR RH (           28         G         SOUND SIGNAL REAR BOOR SPEAKER           29         V         SOUND SIGNAL CENTER SPEAK           31         BR         SOUND SIGNAL CENTER SPEAK           31         BR         SOUND SIGNAL FRONT DOOR SPEAKE           32         Y         SOUND SIGNAL FRONT DAY           33         W/R         SOUND SIGNAL FRONT RH           34         B/R         SOUND SIGNAL FRONT RH           35         W/R         SOUND SIGNAL FRONT RH           36         B/R         SOUND SIGNAL FRONT H           36         B/R         SOUND SIGNAL FRONT H	
12 SHELD		Connector No. B225  Connector Name BOSE AMP.  Connector Type SCA19FBR-SGA4  M.S. 37 383 385 341 33	No.   of Wire   Signal Name [Specification]
Corrector No.   R218   R	Terminal   Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]   1   W/R   -	12 B GND 13 GR SOUND SIGNAL REAR SPEAKER LH (+) 14 L SOUND SIGNAL REAR DOOR SPEAKER RH (+)	
BOSE AUDIO WITHOUT NAVIGATION Connector No. R218 Connector Name Wife TO WRE Connector Type TK10FW-NS8  W. 10 9 8 7 6 5 4 3 2 1  18 17 16 15 14 13 12 11	Terminal   Color   Signal Name [Specification]   No.   or Wire	Connector No. B224 Connector Name BOSE AMP. Connector Type SGA1ZFBR-S.AZ  M.S. 1413 12 110  9 8 7 16 5 4 3 2 1	Terminal   Color   Signal Name [Specification]   Color   Signal Name [Specification]   Color   Souln Signal Name [Specification]   Color   Souln Signal Front Soulawkier H (+)   Color   Souln Signal Front Soulawkier H (+)   Color   Soulawkier H (+)   Color   Soulawkier H (+)   Color   Soulawkier H (+)   Color   Colo

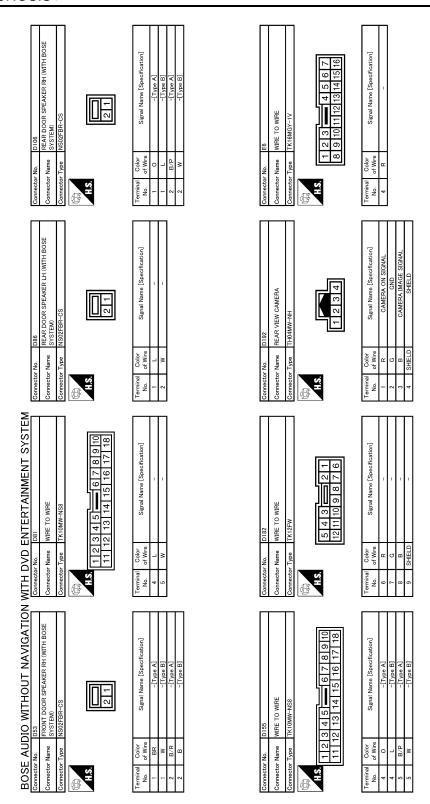
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# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

Satellite radio Tuner Fakra  [33] Signal Name [Specification] Satellite antenna	No.   D41	Signal Name [Specification]  -[Type A] -[Type B] -[Type B] -[Type B]		A B
Connector No. B482 Connector Type FAKRA  Connector Type FAKRA  H.S.  Terminal Color No. of Wire 33	Connector No. D41 Connector Name WIR Connector Type TTH4 LA. 15 12 12 12 12 12 12 12 12 12 12 12 12 12	Terminal   Color   No.   Or Wire   Or Wire   Or Wire   Or Wire   Or Wire   Or Wire   Or   Or   Or   Or   Or   Or   Or		D
S-HU  Signal Name [Specification]  TEL ANTENNA SHIELD		Signal Name (Specification)  -[Type A]  -[Type B]  -[Type B]		Е
E471 TEL ADA GTI6C-1	No.   D21			F
Connector No. Connector Type  Terminal Color No. of Wire No. of Wire 33 - 34 SHIELD	Connector No. Connector Name Connector Type H.S. [5] [4]	Cerminal   Color   No. of Wre   No. of Wre		G
N WITH DVD ENTERTAINMENT SYSTEM	D15 FROMT DOOR SPEAKER LH (WITH BOSE SYSTEM) INSURERR-OS  2 1	Signal Name [Specification]  -[Type A]  -[Type B]  -[Type B]  -[Type B]		I
ENTERTAIN	D15 FRONT DOOR SPEA SYSTEM) NSOZPER-CS			J
WITH DVD	Connector No. Connector Name Connector Type H.S.	Terminal   Color		K
NAVIGATION	INVIGATION SYSTEM)	NYTENNA		L M
BOSE AUDIO WITHOUT NAVIGATIO	B485 AMTENNA BASE GATELLITE ANTENNA) WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) GT160-1PP-HU  2	Signui Namo (Specification) SATELLITE ANTENNA		AV
Connector Name   PEZE	Connector No. B4 or Connector Name or Connector Type Granted Type Gran	Terminal Color No. of Wire		0
			JCNWM1881GI	Р

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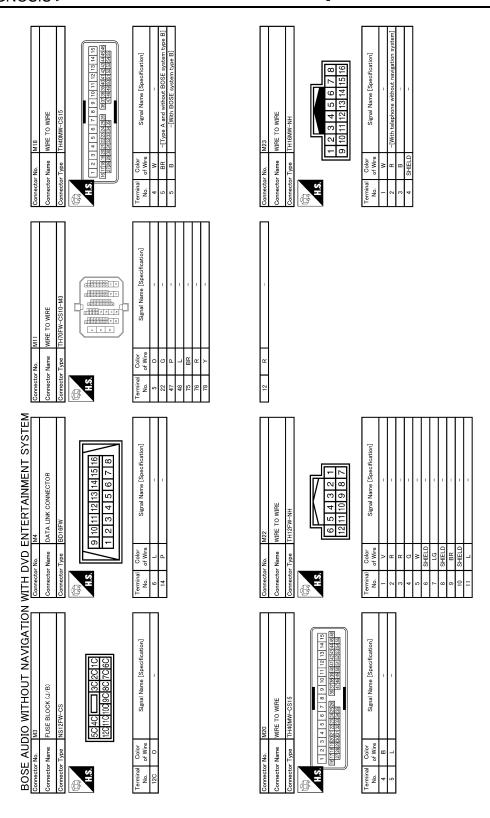


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# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

Connector No.   E104   Connector Name   WIRE TO WIRE   Connector Type   NIS16FW-CS	Cornector No. M1 Connector Name FUSE BLOCK (J/B) Connector Type NS067W-M2 Connector Type NS067W-M2 ALS SA A A A A A A A A A A A A A A A A A A	В
Connector Connector Connector No. No. 7	Commercial	D
offcation	S 1 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Е
PARKING BRAKE SWITCH POIFE-A Signal Name [Specification]		F
Nire of the state	N   N   N   N   N   N   N   N   N   N	G
Connector No. Connector Name Connector Type  H.S. H.S.  Terminal Color No. of Wire 1	Connector No. Connector Type Connector Type Terminal Color No. of Wire A G/W	Н
Connector Name   E18	No. F23  Name TOM (TRANSMISSION CONTROL MODULE)  Type RH40FB-F28-1-RH  [3] 32 33 34 35 36 37 38 39 40 45 46 46 11 12 22 39 42 38 28 39 38 39 40 45 44 47 11 12 12 14 15 16 17 18 19 20 43 44 47 11 12 12 14 15 16 17 18 19 10 41 14 42 11 12 12 14 15 16 17 18 19 10 41 14 42 11 12 12 14 15 16 17 18 19 10 41 14 42 11 12 12 14 15 16 17 18 19 10 41 14 42 11 12 12 14 15 16 17 18 19 10 41 14 42 11 12 12 14 15 16 17 18 19 10 41 14 22 11 12 12 14 15 16 17 18 19 10 41 14 22 11 12 12 14 15 16 17 18 19 10 41 14 22 11 12 12 14 15 16 17 18 19 10 41 14 22 11 12 12 14 15 18 18 18 18 18 18 18 18 18 18 18 18 18	I
EINTERTAINME EINTERNAMENTALLA MSOZFIL-WZ-LC  Signal Name [S	P73 RH40FB-R728-1_RR RH40FB-R728-1_RR R133334558637308 S22455862728 S14155617158 S14155617158 S14155617158	J
Connector No. E18 Connector No. E18 Connector Type MSG. H.S. H.S. Terminal Color To of Wire 1 of Wire 1 2 R 2 R 5 R	Connector No.   F23	K
NOTE TO THE TOTAL		L
BOSE AUDIO WITHOUT NAVIGATION	E TO WIRE  MWW-CSIO-M3  Signal Name [Specification]	М
AUDIO WITH   No.   E16	E   E   E   E   E   E   E   E   E   E	AV
BOSE AU Connector Nume Connector Name Connector Type H.S. H.S.  Terminal Color 97 97 1 Color 98 1 Color	Connector No.   Connector Name   Connector Name   Connector Type   Color No.    0	
		JCNWM1883GI
		P



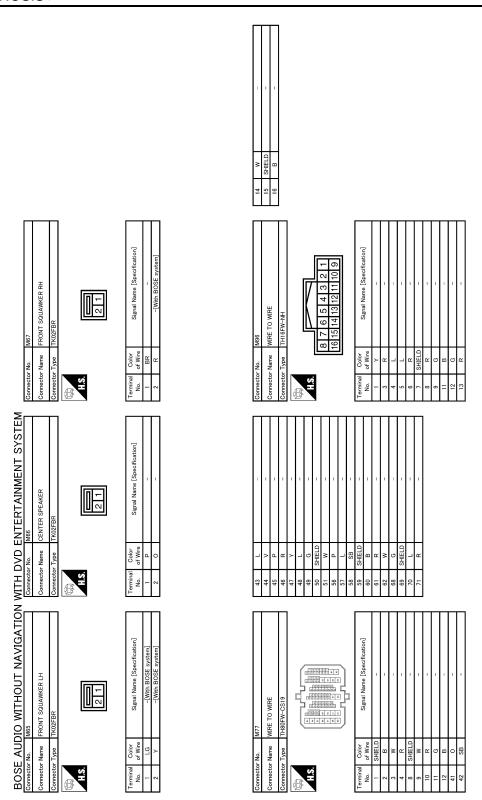
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# [BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

		SIGNAL GND[Without navigation system] COMPOSITE MAKE SIGNAL[Without navigation system] RGB (RRED) SIGNAL RGB (RRED) SIGNAL RGB SYNC VP SHELD COMM (DISP->CONT) SHELD			АВ
		14   LG   SIGNAL GAND     15   L   Cooperate Model   17   G   Cooperate Model   18   Y   Red is BLUE] SMELD   20   R     20   R     21   SHIELD     22   G   COOM    23   SHIELD			C
R1 1000	Signal Name [Specification]  CANH-H CANH-L CANH-L VEHIGLE SPEED (8-PULSE)	TT	Signal Name [Specification]  GND  GND  GND  GND  GND  GNR  GNR  GNR		Е
Connector No. M34 Connector Name COMBINATION METER Connector Type TH40FW-NH  LS.  TERMINE OF THE OF	Color of Wire V P P	Connector No. M49  Connector Name FRONT DISPLAY UNIT  Connector Type TH24FW-NH  12[11]10 9 8 7 6 5 4 3 2 1  24[23]22[21]20[19]18[17]16[15[14]13	Color of Wire B B B SHIELD C G G G G G G G G G G G G G G G G G G		F G
	Terminal No. 21 22 31	Connector No. Connector Name Connector Type H.S. H.2. [12]	Terminal No. 7		Н
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM  Commetor Name STEERING ANGLE SENSOR  Commetor Type THUGSPW-NH   Signal Name (Specification)  [With audio steering switch and telephone]  -(With audio steering switch and telephone)  -(With audio steering switch and telephone)				I	
ENTERTAIN M33 COMBINATION SW TKOBEGY-IV  24 25 26 31 32 33	Signal Ni With audio stee With audio stee With audio stee				J
Commetor No. M33 Commetor No. Commetor Name Co. Commetor Trigo	Terminal Color No. of Wire 24 BR - C 31 G C C C 33 L - C C	10 V 11 LG 12 SHELD 13 P			K
SATION		S   1   1   1   1   1   1   1   1   1	-		L
MOO WITHOUT NAVIG	Signal Name [Specification]	24 22 22 21 20 19	Signal Name [Specification]	_	M
DIO WIT M30 STEERING A TH08FW-NH		or No. M44  or Type TH32FW-NH  Tipe TH32FW-NH  Tipe TH312[11] [0] 9  Tipe Tipe TH32EW-NH			AV
BOSE AU Connector No. Connector Name Connector Type H.S.	Color   Colo	Connector No. Connector Name Connector Type H.S. H.S. 16 15 10	Color   Colo		0
BC Common	<u>                                     </u>		<u> </u>	JCNWM1885GI	
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[BOSE AUDIO WITHOUT NAVIGATION]

#### < ECU DIAGNOSIS >

Connector No. MI25 Connector Name MULTFUNCTION SWITCH Connector Type THISPW-NH  Connector Name (Specification)  Connector Name (Specification)		47   0   SIGNAL VOC     49   SHIELD     56   SHIELD     55   SHIELD     56   R   COMM (CON1DISP)     57   R   INVERTER OND     58   BR   INVERTER VCC     59   Y   INVERTER VCC     50   Y   INVERTE		A B C	
11 FG		Connector No. M129 Connector Name System WITHOUT NAVIGATION SYSTEM) Connector Type TH24FW-NH  M1.  17746 45 44 43 42 41140 39 38 37 36 59 58 57 56 55 54 53 52 51 50 49 48	Terminal   Goldor   Signal Name [Specification]     No.	E F G	
WITH DVD ENTERTAINMENT SYSTEM  Connector No. M124  Connector Type WIRE  Connector Type NSIZEBR-CS  A18.	O	Connector No. M128 Connector Name AV CONTROL UNIT WITH BOSE System WITHOUT NAVIGATION SYSTEM) Connector Type A12FW  A12 24 30 32  [21 23 25 26 27 28 29 31]	Terminal   Color   Signal Name (Specification]   Color   Signal Name (Specification]   Color   SafeLLITE RADIO SOUND SIGNAL LH (+)   Color   Color	J K	
BOSE AUDIO WITHOUT NAVIGATION  Cornector Name BCM (BODY CONTROL MODULE)  Cornector Type TH40FB-NH  Cornector Type TH40FB-NH  TAS  TENTIFIC TATALET  TENTIFIC	Ш	Connector No. M127 Connector Name AV CONTROL UNIT (WITH BOSE Connector Type ITHISPW-GS2  M.S. 11 2 3 4 5 6 7 8 9 1 10 11 12 13 14 15 16 17 18 20	Terminal   Color   Signal Name [Speefication]	L  M  AV  O  JCNWM1887GI	

		14 W iPod SOUND SIGNAL RH (−) 15 SHELD 16 R AV COMM (+) 17 SHELD 21 L BOD SHELD 22 BR ACCESSORY DETECT 23 BR FOOD SIGNAL CND 24 LG iPod SOUND SIGNAL LH (+)	
99 G SOUND SIGNAL LH (-)(With DVD player) 99 B SOUND SIGNAL LH (-)(With DVD player) 101 V SWELD SHELD(With DVD player) 103 W SWELD (-)(With DVD player) 104 V SWELD (-)(WITHON DVD player) 105 SB REVERSE (-)(WITHON DVD player) 106 G SWELD (-)(WITHON DVD player) 107 V SWELD (-)(WITHON DVD player) 108 W SWELD (-)(WITHON DVD player) 109 V SWELD (-)(WITHON DVD player) 100 V SWELD (-)(WITHON DVD player) 101 V SWELD (-)(WITHON DVD player)		Connector No.         M148           Connector Name         Pod ADAPTER           Connector Type         ITH24FW-NH           H.3.         IT   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   20   21   22   32   24   15   16   17   18   19   20   21   22   32   24   24   24   24   24   24	Terminal   Color   Signal Name [Specification]   Orlor   No. of Wire   Fibod SOUND SIGNAL, LH (+)     1
Connector Name   System without navigation system   Connector Name   Connector Na	Terminal   Color   Signal Name [Specification]   No.   Of Wire   No.   Color   Signal Name [Specification]   Signal Name   Signal (+)   Signal (+)	119 R SOUND SIGNAL FRONT LH (~)	
Connector No.   NAVIGATION   NAVIGATION   Connector No.   N. (1971   NAVIGATION SYSTEM)   N.	No. of Wire   Signal Name [Specification]	Connector No. M132  Connector Name System WITHOUT NAVIGATION SYSTEM)  Connector Type ITHISPW-NH  M.S. 114 [15] 118 [17] 118 [19]  [108] 109] 110 [11] 113 [13]	No.   No.

JCNWM1888GI

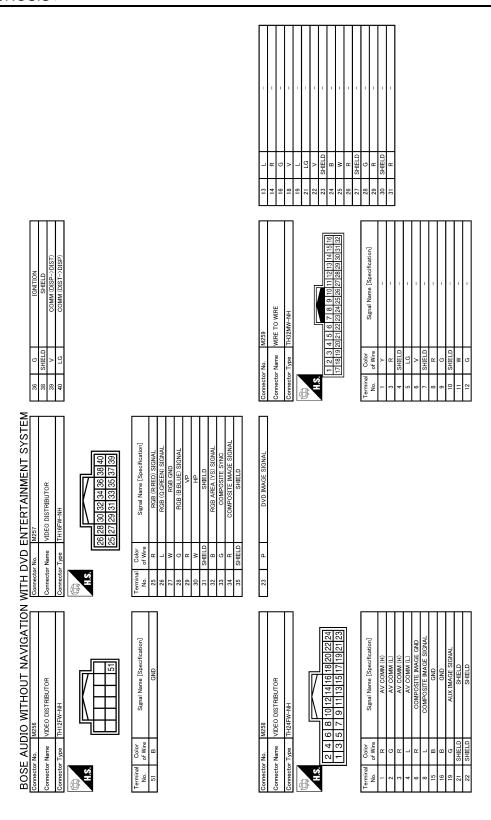
# **CAMERA CONTROL UNIT**

# [BOSE AUDIO WITHOUT NAVIGATION]

## < ECU DIAGNOSIS >

12 R		Connector No. M255  Connector Name VIDEO DISTRIBUTOR  Connector Type THOSFW-NH  (5) 54 56 60  53 55	Color   Signal Name [Specification]		A B C
	Specification)				E
Connector No. M204 Connector Name WIRE TO WIRE Connector Type THI ZMW-NH	1 2 3 4 5 6	R			F G
	Terminal No. No. 1 2 2 2 2 2 2 3 3 3 9 9 9 9 9 9 11 11 11 11 11	18 19 20 21 22 23 23 23 30 31 32			Н
BOSE AUDIO WITHOUT NAVIGATION WITH DVD ENTERTAINMENT SYSTEM    Value		Nome DVD PLAYER  TH22FW-NH    1   1   1   1   1   1   1   1   1	Signal Name [Specification]		J
VITH DVD E		sector lector l	Color   No. in all   Color   No. in all   Color   No. in all   Color   Color		K
IGATION WI	[6	CO O O O O O O O O O O O O O O O O O O			L
HOUT NAVI	(12 13 14 15 16 7 8 12 13 14 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 15 16 16 16 16 16 16 16 16 16 16 16 16 16	PUT JACKS	Signal Name [Specification] SOUND SIGNAL RH (+) SOUND SIGNAL CND SOUND SIGNAL LH (+)(With DVD player] AUX IMAGE SIGNAL SHIELD[With DVD player]		M
DIO WITH M201 WIRE TO WIRE TH16MW-NH	0 1 1 2 1 1 1 2 1 1 1 1 3 1 1 1 1 3 1 1 1 1	AUXILIARY INPUT JACKS AOBFW  1 2 3 4 5 6 7			AV
BOSE AUI	Terminal   Color     No.   Obor     No.   Obor     A	Connector No. Connector Type Connector Type H.S.	Color   Colo		0
				JCNWM1889Gf	D
					Р

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JCNWM1890GI

# **CAMERA CONTROL UNIT**

Connector No. M375 Connector Name WRE TO WRE Connector Type GTT13SH-2/15-HU H.S	No.   Olow   Signal Name [Specification]   No.   Of Wire	Connector No. R1  Connector Name WIRE TO WIRE  Connector Type THISPW-NH  M.S.  R 7 6 5 4 3 2 1  16 15 14 13 12 11 10 9	Color   Color   Signal Name [Specification]   Color   R/W   R/W   R/W   R/W   SHELD   Color   Color		A B C
M370 AV CONTROL UNIT (WITH BOSE SYSTEM) GTT13SC-2/15-HU  GTT3SC-2/15-HU  GTT3SC-2/15-HU  GTT3SC-2/15-HU  GTT3SC-2/15-HU	Signal Name [Spacification] FM SUB AM-FM MAIN ANTENNA AMP. ON SIGNAL		Signal Name [Specification] FM SUB		E
e   e	odlor of Wire	tor No. M379  Ctor Name GLASS ANTENNA  Etc Type GT13SON-1/1PP-H  2	Color of Wire		F G
Connector No. Connector Name Connector Type H.S.	Terminal No. 33 34 35	Connector No. Connector Name Connector Type H.S.	Terminal No.		Н
WITH DVD ENTERTAINMENT SYSTEM Connector No. M303 Connector Type Consellation SWITCH (SPIRAL CABLE) Connector Type TKOSFGY TKOS	Signal Name [Specification]	MUJUB ANTENNA BASE (ANTENNA AMP.) GTIJ3SSN-I/IPP-HU  1 2 2	Signal Name [Specification]		J
WITH DVD ENTER' Connector No. M303 Connector Name COMBINAT Connector Type TKOBFFY ALS. ALS.	Color   No. of Wire   No. of Wire   14   14   17   17   17   17   17   17	Connector No. M378 Connector Name ANTE Connector Type GT13 H.S.	Terminal Color No of Wire 1 1 - 3 3		K
N TION	() (10 N ) (10 N )				L
BOSE AUDIO WITHOUT NAVIGATION  Connector No. M260  Connector Name (Pod SIDE)  Connector Type (Priff)  Connector Type (Priff)  (1 2 3	Signal Name (Specification) Pod SOUND SIGNAL, LH (+) Pod SOUND SIGNAL, GND COMM (Pod->Pod ADAPTER COMM (Pod ADAPTER=>-)Pod Pod SOUND SIGNAL, RH (+) Pod CONNECTION RECOGNITION Pod CONNECTION RECOGNITION SHELD ACCESSORY DETECT ACCESSORY IDENTIFY	M376 WIRE TO WIRE GT138CN-2/IPP-HU	Signal Name [Specification]	j	M
BOSE AUDIO Connector No. MZ80 Connector No. Connector No. Connector Type IP16 M.S. M.S. M.S. M.S. M.S. M.S. M.S. M.S	Octobring of Wire of Wire Color Colo	9 9	of Wire		
BOSE AL Gonnector Nam Connector Type	Terminal No. 1	Connector Nan Connector Typ	Terminal No.	ICNIMMAROACI	0
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G	COMPOSITE SYNC
ď	COMPOSITE IMAGE SIGNAL
В	RGB AREA (YS) SIGNAL
SHIELD	GND
Я	ΛÞ
М	HP
N/L	RGB GND
5/X	RGB (B:BLUE) SIGNAL
T/A	RGB (G:GREEN) SIGNAL
BR/L	RGB (R:RED) SIGNAL
SHIELD	SHIELD
SHIELD	SHIELD
PΠ	HEADPHONE SOUNDSIGNAL SIGNAL RH (-)
BR	HEADPHONE SOUNDSIGNAL SIGNAL LH (-)
^	HEADPHONE SOUNDSIGNAL SIGNAL RH (+)
٨	HEADPHONE SOUNDSIGNAL SIGNAL LH (+)

		OOI NAVIGATION WITH DVD ENTERTAINMENT STO
	Connector No.	R152
	Connector Name	REAR DISPLAY UNIT
	Connector Type	TH32FW-NH
34	H.S. 2 4 6 8 1 3 5 7	4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 3 5 7 9 1113 15 17 19 21 23 25 27 29 31

	Terminal	Color	
	No.	of Wire	olgnal Ivame [opecimication]
	- 1	В	GND
	2	В	GND
	3	Y/R	BATTERY
	4	Y/R	BATTERY
	5	В	HEADPHONE ON SIGNAL
	9	Y/V	ACC
	8	SHIELD	SHIELD
	6	٨	COMM (DISP->DIST)
	10	97	COMM (DIST->DISP)
	11	5	IGNITION
	12	SHIELD	SHIELD

	-	Ī	1	1	1	1	ı	ı	ı	ı	1	1	ī	-	1
	J/K	BR/L	5	٨/٨	57	۸	SHIELD	8	М	В	CHIELD	5	В	<b>GTEINS</b>	ч
	13	14	16	18	21	22	23	24	25	56	27	28	59	30	31
,															

Ter				
Signal Name [Specification]	MICROPHONE SIGNAL (+)	MICROPHONE SIGNAL (-:\With telephone without navigation system)	MICROPHONE POWER	
Color of Wire	W/M	T/B	8	
Terminal No.	1	2	4	

Connector Name W	WIRE TO WIRE TH32FW-NH
16 15 14 11	13 12 11 10 9 8 7 6 5 4 3 2 2 1
32 31 30 2	29 28 27 26 25 24 23 22 21 20 19 18 17

Signal Name [Specification]	-	-	-	-	-	-	-	-	_	-	-	
Color of Wire	Y/R	В	SHIELD	PΠ	۸	SHIELD	BR	γ	SHIELD	M/L	Y/G	
Terminal No.	1	2	4	2	9	7	8	6	10	11	12	

JCNWM1892GI

# SYMPTOM DIAGNOSIS

### MULTI AV SYSTEM SYMPTOMS

Symptom Table

#### INFOID:0000000003457760

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#### **OPERATION**

Symptoms	Check items	Possible malfunction location / Action to take		
	All switches cannot be operated.     "MULTI AV" is displayed on system selection screen when the CONSULT-III is started.	Multifunction switch power supply and ground circuit.     AV communication circuit between AV control unit and multifunction switch.     Perform CONSULT-III self-diagnosis.     Refer to AV-83. "CONSULT-III Function (MULTI AV)".		
Multifunction switch and preset switch operation does not work.	All switches cannot be operated.     "MULTI AV" is not displayed on system selection screen when the CONSULT-III is started.	AV control unit power supply and ground circuit malfunction. Refer to AV-103, "AV CONTROL UNIT : Diagnosis Procedure".		
	Only specified switch cannot be operated.	Multifunction switch or preset switch malfunction.  Replace multifunction switch <u>AV-534</u> , "Exploded View" or preset switch <u>AV-535</u> , "Exploded View".		

#### RELATED TO HANDS-FREE PHONE

#### **Basic Inspection**

 Check that the cellular phone is a corresponding type (Bluetooth[™] correspondence) when the hands-free related malfunction vehicle is in service before performing a diagnosis.

There is a case that malfunction occurs due to the version change of the phone type, etc. even though it is a
corresponding type. Therefore, confirm it by changing the cellular phone to another corresponding type
phone, and check that it operates normally. It is necessary to distinguish whether the cause is the vehicle or
cellular phone.

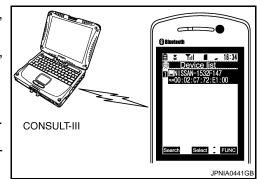
## Simple check for $Bluetooth^{TM}$ communication

- If cellular phone and AV control unit cannot be connected with Bluetooth[™] communication, the following procedure allows the technician to judge which device has a malfunction.
- 1. Turn on the cellular phone, not connecting Bluetooth[™] communication.
- Start CONSULT-III, then start Windows[®].
- 3. Set CONSULT-III near the cellular phone.
- 4. When operating Bluetooth[™] registration by cellular phone, check if CONSULT-III^{*} is displayed on the device name. (If another Bluetooth[™] device is located near the cellular phone, the name of the device will also be displayed.) NOTE:
  - *:Displayed device name is "NISSAN-*****.".
- If no device name is displayed, cellular phone is malfunctioning.
   Repair the cellular phone first, then perform diagnosis.
- If CONSULT-III is displayed on device name, cellular phone is normal. Perform diagnosis as per the following table.

On board self-diagnosis of hands-free phone system

Always perform the on board self-diagnosis at first after completing the basic inspection when the malfunction is detected on the hands-free phone system. Narrow down possible causes using the Diagnosis Chart if there is no malfunction in the on board self-diagnosis.

Trouble diagnosis chart by symptom



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# [BOSE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location	
Does not recognize cellular phone connection. (No connection is displayed on the display at the guide.)	Repeat the registration of cellular phone.	TEL adapter unit malfunction. Refer to AV-547, "Exploded View".	
Hands-free phone cannot be established.	Both the reception and the speech cannot be performed	<ul> <li>Perform CONSULT-III self-diagnosis.     Refer to <u>AV-83, "CONSULT-III Function (MULTI AV)"</u>.</li> <li>No malfunction.     TEL adapter unit malfunction.     Refer to <u>AV-547, "Exploded View"</u>.</li> </ul>	
The other party's voice cannot	The operation of the "	TEL voice signal circuit malfunction between TEL adapter unit and AV control unit.	
be heard by hands-free phone.	The operation of the "w\( \infty \) " switch cannot be performed.	Control signal circuit. Refer to AV-135, "Diagnosis Procedure".	
Originating sound is not heard by the other party with hands-	Sound operation function is normal.	TEL adapter unit. Refer to AV-547, "Exploded View".	
free phone communication.	Sound operation function does not work.	Microphone signal circuit. Refer to AV-133, "Diagnosis Procedure".	

### **RELATED TO CAMERA**

Trouble diagnosis chart by sympton	n			
Symptoms	Check items	Probable malfunction location		
Camera image is not displayed (displayed in black and nothing can be displayed).	For front display unit, AUX image is not displayed.	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-116, "Diagnosis Procedure".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-117, "Diagnosis Procedure".</li> </ul>		
Camera image is not shown. (Vehicle width and possible route line is displayed.)	_	<ul> <li>Camera image signal circuit between camera control unit and rear view camera.</li> <li>Refer to <u>AV-136, "Diagnosis Procedure"</u>.</li> <li>Rear view camera ON signal circuit.</li> <li>Refer to <u>AV-137, "Diagnosis Procedure"</u>.</li> </ul>		
	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".		
	For front display unit, AUX image is normal.	Camera image signal circuit malfunction between camera control unit and AV control unit.  Refer to AV-138. "Diagnosis Procedure".		
Camera image is not displayed. (Only warning message under area is displayed.)	For front display unit, AUX image is not displayed.	<ul> <li>RGB area (YS) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-115, "Diagnosis Procedure".</li> <li>Composite image signal circuits malfunction between AV control unit and front display unit.     Refer to AV-118, "Diagnosis Procedure".</li> </ul>		
	Select "Camera Cont." of Confirmation/ Adjustment mode, Reverse Sensor is not turned ON at "Connection Confirmation".	Reverse signal circuit malfunction (camera control unit).		
Camera image is rolling.	For front display unit, AUX image is also rolling.	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit.     Refer to <u>AV-116, "Diagnosis Procedure"</u>.</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit.     Refer to <u>AV-117, "Diagnosis Procedure"</u>.</li> </ul>		

## < SYMPTOM DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location
Camera image does not switch.	Malfunction of self-diagnosis result is indicated.	Camera-connection recognition signal circuit malfunction between AV control unit and camera control unit. Refer to AV-98, "Diagnosis Procedure".
	Malfunction of self-diagnosis result is not indicated.	Reverse signal circuit malfunction (AV control unit).
Possible route line is indicated abnormally when camera image is displayed.	_	Steering angle sensor signal circuit malfunction. Refer to AV-139, "Diagnosis Procedure".
RELATED TO RGB IMAG	GE (FRONT DISPLAY UNIT)	
Frouble diagnosis chart by sympton		
Symptoms	Check items	Possible malfunction location / Action to take
DOD income in not all access	All RGB images are not shown.     "MULTI AV" is displayed on system selection screen when the CONSULT-III is started.	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".
RGB image is not shown.	All RGB images are not shown.     "MULTI AV" is not displayed on system selection screen when the CONSULT-III is started.	AV control unit power supply and ground circuit malfunction.  Refer to AV-103, "AV CONTROL UNIT: Diagnosis Procedure".
Color of RGB image is not proper.	Light blue (Cyan) tint.	RGB signal (R: red) circuit malfunction between AV control unit and front display unit.  Refer to AV-111, "Diagnosis Procedure".
	Purple (Magenta) tint.	RGB signal (G: green) circuit malfunction between AV control unit and front display unit.  Refer to AV-112, "Diagnosis Procedure".
	Screen looks yellowish.	RGB signal (B: blue) circuit malfunction between AV con trol unit and front display unit.  Refer to AV-113, "Diagnosis Procedure".
RGB screen is rolling.	Front display unit, AUX and DVD image are normal.	RGB synchronizing signal circuit malfunction between AV control unit and front display unit.  Refer to AV-114, "Diagnosis Procedure".
RELATED TO REAR DIS	SPLAY	
Frouble diagnosis chart by sympton	n	
Symptoms	Check items	Possible malfunction location / Action to take
The menu screen is not displayed.	For rear display unit, AUX and DVD image are normal.	<ul> <li>Vertical synchronizing (VP) signal circuit malfunction between video distributor and rear display unit. Refer to AV-126. "Diagnosis Procedure".</li> <li>Horizontal synchronizing (HP) signal circuit malfunction between video distributor and rear display unit. Refer to AV-127. "Diagnosis Procedure".</li> <li>RGB area (YS) signal circuit malfunction between video distributor and rear display unit. Refer to AV-125. "Diagnosis Procedure".</li> </ul>
Color of RGB image (menu display screen) is not proper.	Light blue (Cyan) tint.	RGB signal (R: red) circuit malfunction between video distributor and rear display unit.  Refer to AV-121, "Diagnosis Procedure".
	Purple (Magenta) tint.	RGB signal (G: green) circuit malfunction between video distributor and rear display unit.  Refer to AV-122, "Diagnosis Procedure".
	Screen looks yellowish.	RGB signal (B: blue) circuit malfunction between video distributor and rear display unit.  Refer to AV-123, "Diagnosis Procedure".

### < SYMPTOM DIAGNOSIS >

### [BOSE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Possible malfunction location / Action to take
AUX and DVD image are not displayed.	Front display unit is not displayed.	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".
	Front display unit is normal.	Composite image signal circuit malfunction between video distributor and rear display unit.  Refer to AV-120, "Diagnosis Procedure".
AUX and DVD image are rolling.	Front display unit displayed, AUX and DVD image are not rolling.	Composite synchronizing signal circuit malfunction between video distributor and rear display unit.  Refer to AV-124, "Diagnosis Procedure".
Rear display unit does not open.	_	Perform detected DTC self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".

#### **RELATED TO AUDIO**

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take	
The CD cannot be removed.	_	Disk eject signal circuit.	
There is no Audio sound.	No sound from all speakers.	BOSE amp. power supply and ground circuit. Refer to AV-107, "BOSE AMP.: Diagnosis Procedure"     Amp. ON signal circuit between AV control unit and BOSE amp.	
	No sound from woofer.	<ul> <li>Woofer power supply and ground circuit. Refer to <u>AV-108</u>, "WOOFER: <u>Diagnosis Procedure</u>".</li> <li>Sound signal woofer circuit between BOSE amp. and woofer.</li> <li>Woofer amp. ON signal circuit between BOSE amp. and woofer.</li> </ul>	
	There is no sound from center speaker.	Sound signal center speaker circuit.	
	There is sound from only specific places (RH front, RH rear, LH front and LH rear).	Sound signal circuit of malfunctioning system.	
Satellite radio is not received.	"ANTENNA" is not displayed even when the channel is turned to 0 in Satellite radio mode.	Perform the following inspection procedure.  1. Check antenna base mounting nut for looseness.  NOTE:  Tightening torque: 6.5 N·m (0.66 kg-m, 58 in-lb.)  2. Visually check for satellite radio antenna feeder.  3. Replace the antenna base.  Refer to AV-545, "Exploded View".  4. Replace the satellite radio tuner.  Refer to AV-546, "Exploded View".	
	"ANTENNA" is displayed when the channel is turned to 0 in Satellite radio mode.	<ol> <li>Perform the following inspection procedure.</li> <li>Check the connection between satellite radio tuner and antenna connector.</li> <li>Check the connection between satellite radio anterna and antenna feeder.</li> <li>Check antenna feeder for open circuit.</li> <li>Replace the antenna base.         Refer to AV-545. "Exploded View".     </li> <li>Replace the satellite radio tuner.         Refer to AV-546. "Exploded View".     </li> </ol>	
The sound of satellite radio is not heard.	Other audio sounds are normal.	Satellite radio sound signal circuit between AV control uni and satellite radio tuner.	
It does not change to satellite radio mode.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".	
AM/FM radio is not received.	Other audio sounds are normal.	Antenna amp. ON signal circuit.     Antenna feeder.	

# RELATED TO iPod®

Connect another  $iPod^{\mathbb{R}}$  and check if the symptom is reproduced or not. If the symptom is reproduced, diagnose the vehicle. If no malfunction is detected, replace the iPod harness. **NOTE:** 

## < SYMPTOM DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

It is unable to check connection between  $\mathsf{iPod}^{\texttt{®}}$  and  $\mathsf{iPod}$  harness.

rouble diagnosis chart by sympton Symptoms	Check items		Possible malfunction location / Action to take
The iPod [®] does not produce sound.	Other audio sounds are normal.		<ul> <li>iPod sound signal circuit between AV control unit and iPod adapter.</li> <li>iPod sound signal circuit between iPod[®] and iPod adapter.</li> </ul>
It does not change to iPod mode.	There is malfunction in the self-diagnosis.	CONSULT-III	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".
"iPod is not connected" is dis- played when it comes to iPod mode.	Connected to iPod [®] .		iPod connection recognition signal circuit between iPod $^{\! \otimes}$ and iPod adapter.
iPod [®] cannot charge the battery.	_		iPod battery charge circuit between iPod® and iPod adapter.
The title of music file in the iPod [®] is not indicated.	_		Serial communication circuit between iPod [®] and iPod
Accessing the iPod [®] is unavailable from the vehicle.			adapter.
RELATED TO STEERING  Trouble diagnosis chart by sympton  Sympto	n		Probable malfunction location
None of the steering switch operations work.			ch signal GND circuit. 45, "Diagnosis Procedure".
Only specified switch cannot be operated.		Steering swit	ch. Refer to AV-536, "Exploded View".
"SOURCE", "MENU UP", "MENU DOWN", "		•	ch signal A circuit. 41, "Diagnosis Procedure".
"VOL UP", "VOL DOWN", "A" switches of steering switch are not operational.			ch signal B circuit. 43, "Diagnosis Procedure".
RELATED TO AUXILIAR NOTE: Check that there is no malf	·		YER MODELS)  dy before performing a diagnosis.
rouble diagnosis chart by sympton			
Symptoms	Check items		Probable malfunction location
For front display unit, AUX image is not displayed (Menu display is not displayed, too).	Camera image is not displayed (Also, menu display is not displayed).		<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit.     Refer to <u>AV-116, "Diagnosis Procedure"</u>.</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit.     Refer to <u>AV-117, "Diagnosis Procedure"</u>.</li> </ul>
For front display unit, AUX image is not displayed (Menu displayed)	Camera image is not displayed (Menu display is normal).		<ul> <li>Composite image signal circuits malfunction between AV control unit and front display unit.     Refer to AV-119. "Diagnosis Procedure".</li> <li>RGB area (YS) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-115. "Diagnosis Procedure".</li> </ul>
play is normal).	Camera image is normal.		AUX image signal circuit malfunction between AV control unit and auxiliary input jacks.  Refer to AV-128, "WITHOUT DVD ENTERTAINMENT  SYSTEM: Diagnosis Procedure"

SYSTEM: Diagnosis Procedure".

### < SYMPTOM DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location
For front display unit, AUX image is rolling.	Camera image is rolling.	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-116, "Diagnosis Procedure".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-117, "Diagnosis Procedure".</li> </ul>
There is no AUX sound from speaker on the right or left side.	The sound other than AUX sound is normal.	AUX sound signal circuit malfunction between auxiliary input jacks and AV control unit at the side where there is no sound.

# RELATED TO AUXILIARY INPUT (WITH DVD PLAYER MODELS) **NOTE**:

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

Symptoms	Check items	Probable malfunction location
Front display unit and rear display unit, AUX image is not displayed.	DVD image is not displayed.	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".
For front display unit, AUX image is not displayed (Menu display is normal).	DVD image is normal.	AUX image signal circuit malfunction between auxiliary input jacks and video distributor.  Refer to AV-129, "WITH DVD ENTERTAINMENT SYSTEM: Diagnosis Procedure".
	Camera image is normal.	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)". When detecting no malfunction in those components, the following items are a possible cause.  Composite image signal circuits malfunction between video distributor and AV control unit.  Refer to AV-119, "Diagnosis Procedure".
	DVD and camera images are not displayed (Menu display is normal).	Perform CONSULT-III self-diagnosis. Refer to AV-83.  "CONSULT-III Function (MULTI AV)". When detecting no malfunction in those components, the following items are a possible cause.  • RGB area (YS) signal circuit malfunction between AV control unit and front display unit.  Refer to AV-115, "Diagnosis Procedure".  • Composite image signal circuits malfunction between front display unit and AV control unit.  Refer to AV-118, "Diagnosis Procedure".
For front display unit, AUX image is not displayed (Menu display is not displayed, too).	DVD image is not displayed (Also, menu display is not displayed).	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-116, "Diagnosis Procedure".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-117, "Diagnosis Procedure".</li> </ul>
For front display unit, AUX image is rolling.	DVD image is rolling.	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit.     Refer to <u>AV-116</u>, "<u>Diagnosis Procedure</u>".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit.     Refer to <u>AV-117</u>, "<u>Diagnosis Procedure</u>".</li> </ul>
For rear display unit, AUX image is not displayed (Menu display is normal).	DVD image is not displayed (Menu display is normal).	Composite image signal circuits malfunction between video distributor and rear display unit.  Refer to AV-119, "Diagnosis Procedure".

### < SYMPTOM DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location
At AUX of rear display, menu display is not displayed.	AUX image is normal.	<ul> <li>Vertical synchronizing (VP) signal circuit malfunction between video distributor and rear display unit. Refer to AV-126. "Diagnosis Procedure".</li> <li>Horizontal synchronizing (HP) signal circuit malfunction between video distributor and rear display unit. Refer to AV-127. "Diagnosis Procedure".</li> <li>RGB area (YS) signal circuit malfunction between video distributor and rear display unit. Refer to AV-125. "Diagnosis Procedure".</li> </ul>
For rear display unit, AUX and DVD image are rolling.	Front display unit displayed, AUX and DVD image are not rolling.	Composite synchronizing signal circuit malfunction between video distributor and rear display unit.  Refer to AV-124, "Diagnosis Procedure".
There is no AUX sound.	_	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".
There is no AUX sound from	DVD sound is not normal, neither.	DVD and AUX sound signal circuit malfunction between DVD player and AV control unit at the side where there is no sound.
speaker on the right or left side.	The sound other than AUX sound is normal.	AUX sound signal circuit malfunction between auxiliary input jacks and DVD player at the side where there is no sound.
It does not change to AUX mode.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-83. "CONSULT-III Function (MULTI AV)".
RELATED TO DVD MOD		
rouble diagnosis chart by sympton		Drobable malfunction leastion
Symptoms Front display unit and rear dis-	Check items	Probable malfunction location
play unit, DVD image is not displayed.	AUX image is not displayed.	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".
For front display unit, DVD image is not displayed (Menu display is normal).	Camera image is normal.	Perform CONSULT-III self-diagnosis. Refer to AV-83. "CONSULT-III Function (MULTI AV)". When detecting no malfunction in those components, the following items are a possible cause. Composite image signal circuits malfunction between video distributor and AV control unit. Refer to AV-119, "Diagnosis Procedure".
	Camera image is not displayed (Only warning message under area is displayed).	<ul> <li>Composite image signal circuits malfunction between AV control unit and front display unit.     Refer to AV-118, "Diagnosis Procedure".</li> <li>RGB area (YS) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-115, "Diagnosis Procedure".</li> </ul>
For front display unit, DVD image is not displayed (Menu display is not displayed).	AUX image is not displayed (Menu display is not displayed).	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit. Refer to AV-116. "Diagnosis Procedure".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit. Refer to AV-117. "Diagnosis Procedure".</li> </ul>
For front display, DVD image is rolling.	AUX image is rolling.	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-116, "Diagnosis Procedure".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and front display unit.     Refer to AV-117, "Diagnosis Procedure".</li> </ul>
For rear display, DVD image is not displayed (Menu display is	AUX image is not displayed (Menu display is normal).	Composite image signal circuits malfunction between video distributor and rear display unit.

### < SYMPTOM DIAGNOSIS >

# [BOSE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location
At DVD of rear display unit, menu display is not displayed.	DVD image is normal.	<ul> <li>Vertical synchronizing (VP) signal circuit malfunction between video distributor and rear display unit.          Refer to <u>AV-126</u>, "<u>Diagnosis Procedure</u>".</li> <li>Horizontal synchronizing (HP) signal circuit malfunction between video distributor and rear display unit.          Refer to <u>AV-127</u>, "<u>Diagnosis Procedure</u>".</li> <li>RGB area (YS) signal circuit malfunction between video distributor and rear display unit.          Refer to <u>AV-125</u>, "<u>Diagnosis Procedure</u>".</li> </ul>
For rear display unit, DVD and AUX image are rolling.	Front display unit displayed, DVD and AUX image are not rolling.	Composite synchronizing signal circuit malfunction between video distributor and rear display unit.  Refer to AV-124, "Diagnosis Procedure".
There is no DVD sound.	_	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".
There is no DVD sound from speaker on the right or left side.	AUX sound is not normal, neither.	DVD and AUX sound signal circuit malfunction between DVD player and AV control unit at the side where there is no sound.
It does not change to DVD mode.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-83, "CONSULT-III Function (MULTI AV)".

# RELATED TO REMOTE CONTROL AND HEADPHONE

Symptoms	Check items	Probable malfunction location
Headphone does not work	Change headphones to another set.	They operate normally.  • Battery of headphones.  • Headphones.
		It does not operate normally.  Headphone sound signal circuit malfunction between DVD player and rear display unit.  Headphone ON signal circuit malfunction between video distributor and rear display unit.
Remote control does not work.	Change remote controller to another one.	They operate normally.  • Battery of remote controller.  • Remote controller body.
		It does not operate normally.  Perform CONSULT-III self-diagnosis. Refer to AV-83,  "CONSULT-III Function (MULTI AV)". When detecting no malfunction in those components, the following items are a possible cause.  Rear display unit.

#### NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## NORMAL OPERATING CONDITION

Description INFOID:0000000003486709

#### NOTE:

Vehicle operation information, refer to Owner's Manual.

#### **BASIC OPERATIONS**

Symptom	Possible cause	Possible solution
	The brightness is at the lowest setting.	Adjust the brightness of the display.
No image is displayed.	The system is in the video mode.	Push <b><disc></disc></b> to change the mode.
	The display is turned off.	Push <b><day night=""></day></b> to turn on the display.
The screen is too dim. The movement is slow.	The temperature in the interior of the vehicle is low.	Wait until the interior of the vehicle has warmed up.
Some pixels in the display are darker or brighter than others.	This condition is an inherent characteristic of liquid crystal displays.	This is not a malfunction.
Some menu items cannot be selected.	Some menu items become unavailable while the vehicle is driven.	Park the vehicle in a safe location, and then operate the multi AV system.

#### RELATED TO VOICE RECOGNITION

#### Related to telephone

The system should respond correctly to all voice commands without difficulty. If problems are encountered, try the following solutions.

Where the solutions are listed by number, try each solution in turn, starting with number 1, until the problem is resolves.

Symptom	Solution
System fails to interpret the command correctly.	Ensure that the command is valid.
	2. Ensure that the command is spoken after the tone.
	3. Speak clearly without pausing between words and at level appropriate to the ambient noise level in the vehicle.
	4. Ensure that the ambient noise level is not excessive (for example, windows open or defroster on).  NOTE:  If it is too noisy to use the phone, it is likely that the voice commands will be recognized.
	5. If more than one command was said at a time, try saying the commands separately.
	6. If the system consistently fails to recognize commands, the voice training procedure should be carried out to improve the recognition response for the speaker. See "Speaker adaptation (SA) mode" earlier in this section. Refer to "OWNER'S MANUAL".
The system consistently selects the wrong voicetag	Ensure that the phone book entry name requested matches what was originally stored. This can be confirmed by using the "List Names" command.
	2. Replace one of the names being confused with a new name.

#### RELATED TO AUDIO

- The majority of the audio malfunctions are the result of outside causes (bad CD/cassette, 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 carry the Compact Disc Logo. If not, the disc is not mastered to the "red book" Compact Disc Standard and may not play.

Revision: 2008 October AV-517 2009 Murano

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### NORMAL OPERATING CONDITION

## [BOSE AUDIO WITHOUT NAVIGATION]

Symptom	Cause and Counter measure	
	Check if the CD was inserted correctly.	
	Check if the CD is scratched or dirty.	
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.	
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.	
Cannot play	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.	
	Files with extensions other than ".MP3", ".WMA", ".mp3", or ".wma" cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.	
	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.	
	Check if the finalization process, such as session close and disc close, is done for the disc.	
	Check if the CD is protected by copyright.	
Poor sound quality	Check if the CD is scratched or dirty.	
It takes a relatively long time before the music starts playing.	If there are many folder or file levels on the MP3/WMA CD, or if it is a multisession disc, some time may be required before the music starts playing.	
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.	
Skipping with high bit rate files	Skipping may occur with large quantities if data such as for high bit rate data.	
Move immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ".mp3", or ".wma", or when play is prohibited by copyright protection, the player will skip to the next song.	
The songs do not play back in the desired order.	The playback order is the order in which the files were written by the software, so the files might not play in the desired order.	

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.

#### NOTE:

- 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.

# **PRECAUTION**

### **PRECAUTIONS**

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

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 AIRBAG" and "SEAT BELT" 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 AIRBAG".
- Never 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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

## Precaution for Trouble Diagnosis

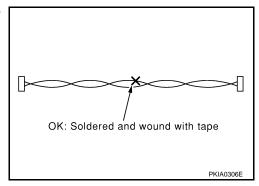
#### AV COMMUNICATION SYSTEM

- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage at 7.0 V or less.
- Turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

# Precaution for Harness Repair

#### AV COMMUNICATION SYSTEM

 Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



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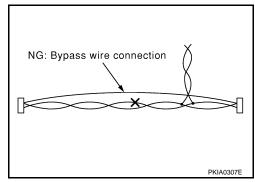
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## **PRECAUTIONS**

## < PRECAUTION >

### [BOSE AUDIO WITHOUT NAVIGATION]

 Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)



## **PREPARATION**

< PREPARATION >

# [BOSE AUDIO WITHOUT NAVIGATION]

# **PREPARATION**

# **PREPARATION**

# **Commercial Service Tools**

Tool name		Description
Power tool	DRICOLOGIE .	Loosening screws
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# **ON-VEHICLE REPAIR**

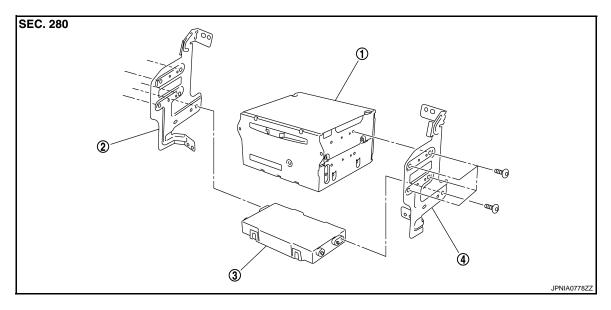
# AV CONTROL UNIT

Exploded View

**REMOVAL** 

Refer to IP-11, "Exploded View".

**DISASSEMBLY** 



1. AV control unit

2. Bracket LH

3. A/C auto amp.

4. Bracket RH

### Removal and Installation

INFOID:0000000003507981

### **REMOVAL**

- 1. Remove cluster lid C. Refer to IP-11, "Exploded View".
- 2. Remove AV control unit with a A/C auto amp. as a single unit from the body.
- 3. Remove bracket screws, and then remove AV control unit.

#### INSTALLATION

# **FRONT DISPLAY UNIT**

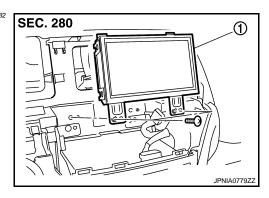
< ON-VEHICLE REPAIR >

[BOSE AUDIO WITHOUT NAVIGATION]

# FRONT DISPLAY UNIT

**Exploded View** 

INFOID:0000000003507982



I. Front display unit

# Removal and Installation

REMOVAL

- 1. Remove center ventilator assembly. Refer to IP-11, "Exploded View".
- 2. Remove display unit with bracket as a single unit.

#### **INSTALLATION**

Install in the reverse order of removal.

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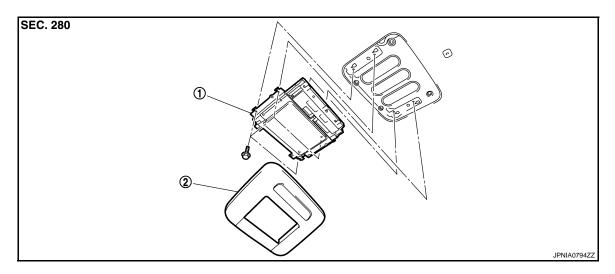
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# **REAR DISPLAY UNIT**

Exploded View

#### **REMOVAL**



1. Rear display unit

2. Rear display cover

### Removal and Installation

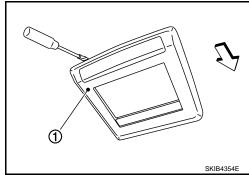
INFOID:0000000003508019

2009 Murano

#### **REMOVAL**

1. Insert cloth-covered driver into gaps between rear display cover (1) and headlining, and remove rear display cover.

Vehicle front



2. Disconnect rear display unit connector, remove rear display unit screws and remove the rear display unit.

#### **INSTALLATION**

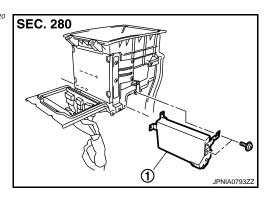
# **VIDEO DISTRIBUTOR**

### [BOSE AUDIO WITHOUT NAVIGATION]

# **VIDEO DISTRIBUTOR**

**Exploded View** 

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. Video distributor

### Removal and Installation

REMOVAL

1. Remove lower console finisher LH and lower console finisher RH. Refer to IP-19, "Exploded View".

2. Disconnect video distributor connector, remove video distributor screws and remove the video distributor.

#### **INSTALLATION**

Install in the reverse order of removal.

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### [BOSE AUDIO WITHOUT NAVIGATION]

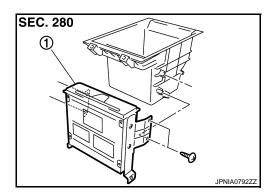
# **DVD PLAYER**

Exploded View

**REMOVAL** 

Refer to IP-19, "Exploded View".

**DISASSEMBLY** 



1. DVD player

### Removal and Installation

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#### **REMOVAL**

- 1. Remove center console assembly. Refer to <a href="IP-19">IP-19</a>, "Exploded View".
- 2. Disconnect DVD player connector, remove DVD player screws and remove the DVD player.

#### **INSTALLATION**

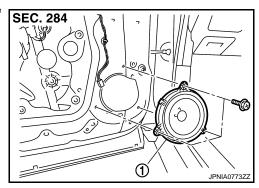
### FRONT DOOR SPEAKER

### [BOSE AUDIO WITHOUT NAVIGATION]

# FRONT DOOR SPEAKER

# **Exploded View**

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. Front door speaker

### Removal and Installation

INFOID:0000000003507985

### **REMOVAL**

- 1. Remove front door finisher. Refer to <a href="INT-11">INT-11</a>, "FRONT DOOR FINISHER: Exploded View".
- Remove front door speaker screws, then disconnect front door speaker connector and remove front door speaker.

#### **INSTALLATION**

Install in the reverse order of removal.

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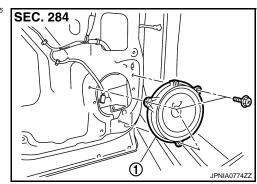
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# **REAR DOOR SPEAKER**

# **Exploded View**

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Rear door speaker

### Removal and Installation

INFOID:0000000003507987

#### **REMOVAL**

- 1. Remove rear door finisher. Refer to <a href="INT-15">INT-15</a>, "REAR DOOR FINISHER: Exploded View".
- Remove rear door speaker screws, then disconnect rear door speaker connector and remove rear door speaker.

#### **INSTALLATION**

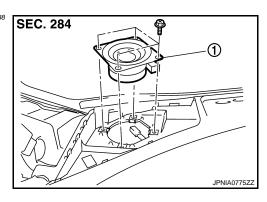
## **FRONT SQUAWKER**

### [BOSE AUDIO WITHOUT NAVIGATION]

# FRONT SQUAWKER

**Exploded View** 

INFOID:0000000003507988



Front squawker

### Removal and Installation

#### **REMOVAL**

- 1. Remove speaker grille. Refer to IP-11, "Exploded View".
- 2. Remove front squawker screws, lift up the front squawker and disconnect front squawker connector. Then remove the front squawker.

#### **INSTALLATION**

Install in the reverse order of removal.

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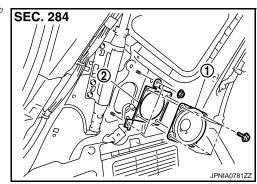
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### [BOSE AUDIO WITHOUT NAVIGATION]

# REAR SPEAKER

# **Exploded View**

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- 1. Rear speaker
- 2. Rear speaker bracket

### Removal and Installation

INFOID:0000000003507991

#### **REMOVAL**

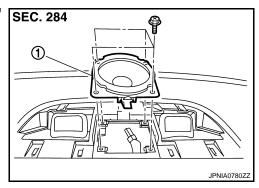
- 1. Remove luggage side finisher upper. Refer to <a href="INT-33">INT-33</a>, "Exploded View".
- Remove rear speaker screws, lift up the rear speaker and disconnect rear speaker connector. Then remove the rear speaker.

#### **INSTALLATION**

# **CENTER SPEAKER**

# **Exploded View**

INFOID:0000000003507993



Center speaker

### Removal and Installation

#### **REMOVAL**

- 1. Remove center speaker grille. Refer to IP-11, "Exploded View".
- Remove center speaker screws, lift up the center speaker and disconnect center speaker connector. Then remove the center speaker.

#### **INSTALLATION**

Install in the reverse order of removal.

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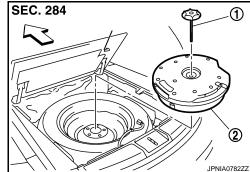
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# [BOSE AUDIO WITHOUT NAVIGATION]

# **WOOFER**

# **Exploded View**





- 1. Clamp
- 2. Woofer

### Removal and Installation

INFOID:0000000003507998

#### **REMOVAL**

- 1. Remove luggage floor finisher center (back). Refer to <a href="INT-33">INT-33</a>, "Exploded View".
- 2. Remove clamp, disconnect woofer connector and remove the woofer.

#### **INSTALLATION**

### [BOSE AUDIO WITHOUT NAVIGATION]

# BOSE AMP.

# **Exploded View**

SEC. 284

: Vehicle front

1. BOSE amp.

### Removal and Installation

**REMOVAL** 

1. Remove luggage floor finisher. Refer to <a href="INT-33">INT-33</a>, "Exploded View".

2. Remove BOSE amp. screws, disconnect BOSE amp. connector and remove the BOSE amp.

#### **INSTALLATION**

Install in the reverse order of removal.

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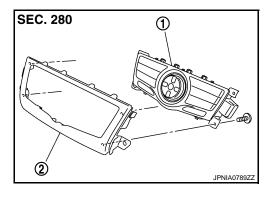
# **MULTIFUNCTION SWITCH**

Exploded View

**REMOVAL** 

Refer to IP-11, "Exploded View".

**DISASSEMBLY** 



- 1. Multifunction switch
- Cluster lid D

### Removal and Installation

INFOID:0000000003508003

#### **REMOVAL**

- 1. Remove cluster lid D. Refer to IP-11, "Exploded View".
- 2. Remove multifunction switch with center ventilator grille as a single unit.
- 3. Remove multifunction switch screws, remove multifunction switch from cluster lid D.

#### **INSTALLATION**

# [BOSE AUDIO WITHOUT NAVIGATION]

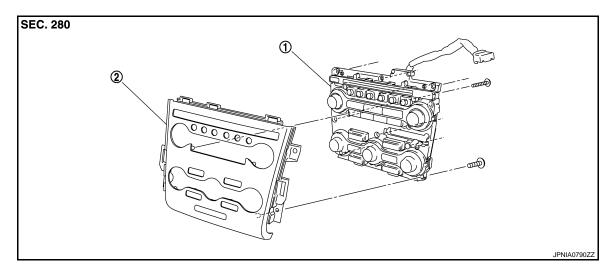
# PRESET SWITCH

Exploded View

**REMOVAL** 

Refer to IP-11, "Exploded View".

**DISASSEMBLY** 



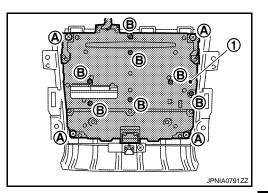
1. Preset switch

2. Cluster lid C

#### Removal and Installation

#### REMOVAL

- 1. Remove cluster lid C. Refer to IP-11, "Exploded View".
- 2. Remove preset switch screws (A),(B), remove preset switch (1) from cluster lid C.



**INSTALLATION** 

Install in the reverse order of removal.

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## **STEERING SWITCH**

< ON-VEHICLE REPAIR >

[BOSE AUDIO WITHOUT NAVIGATION]

# STEERING SWITCH

Exploded View

Refer to ST-15, "Exploded View".

Removal and Installation

**REMOVAL** 

Refer to ST-15, "Removal and Installation".

**INSTALLATION** 

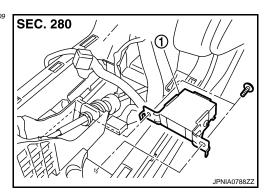
### **IPOD ADAPTER**

### [BOSE AUDIO WITHOUT NAVIGATION]

# **IPOD ADAPTER**

# **Exploded View**

INFOID:0000000003508009



1. iPod adapter

## Removal and Installation

INFOID:0000000003508010

#### **REMOVAL**

- 1. Remove front console pocket assembly. Refer to <a href="IP-19">IP-19</a>, "Exploded View".
- 2. Disconnect iPod adapter connector, remove iPod adapter screws and remove the iPod adapter.

#### **INSTALLATION**

Install in the reverse order of removal.

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## [BOSE AUDIO WITHOUT NAVIGATION]

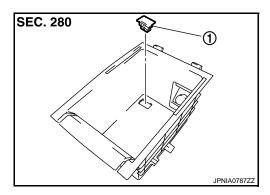
# **IPOD CONNECTOR**

Exploded View

**REMOVAL** 

Refer to IP-19, "Exploded View".

**DISASSEMBLY** 



iPod connector

### Removal and Installation

INFOID:0000000003508012

#### **REMOVAL**

- Remove center console. Refer to <u>IP-19, "Exploded View"</u>.
- 2. Press the pawl from the back of center console to remove iPod connector.

#### **INSTALLATION**

## **AUXILIARY INPUT JACKS**

< ON-VEHICLE REPAIR >

[BOSE AUDIO WITHOUT NAVIGATION]

# **AUXILIARY INPUT JACKS**

**Exploded View** 

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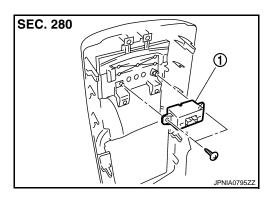
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**REMOVAL** 

Refer to IP-19, "Exploded View".

DISASSEMBLY



1. Auxiliary input jacks

### Removal and Installation

INFOID:0000000003508014 (

#### **REMOVAL**

- 1. Remove console rear finisher. Refer to <a href="IP-19">IP-19</a>, "Exploded View".
- 2. Remove auxiliary input jacks from center console.

#### **INSTALLATION**

Install in the reverse order of removal.

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### [BOSE AUDIO WITHOUT NAVIGATION]

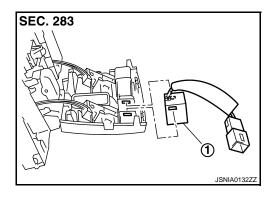
# **MICROPHONE**

Exploded View

**REMOVAL** 

Refer to INL-115, "Exploded View".

**DISASSEMBLY** 



1. Microphone

### Removal and Installation

INFOID:0000000003508016

#### **REMOVAL**

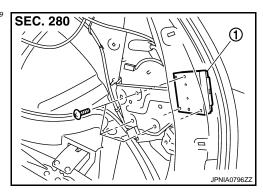
- 1. Remove map lamp. Refer to INL-115, "Exploded View".
- 2. Remove microphone from map lamp.

# **INSTALLATION**

# **CAMERA CONTROL UNIT**

# **Exploded View**

INFOID:0000000003566819



Camera control unit

### Removal and Installation

REMOVAL

- 1. Remove luggage side finisher lower (RH). Refer to INT-33, "Exploded View".
- Remove camera control unit screws, disconnect camera control unit connector and remove the camera control unit.

### **INSTALLATION**

Install in the reverse order of removal.

Adjustment INFOID:000000003566821

### **ADJUSTMENT**

There may be a misalignment of possible route line center position of rear view monitor after removing camera control unit. Therefore, correct neutral position with the following procedure.

- Steer the steering wheel to the leftmost and rightmost ends.
- 2. Drive vehicle at 30 km/h (18.6 MPH) min. speed at least 100 m (328.1 ft).

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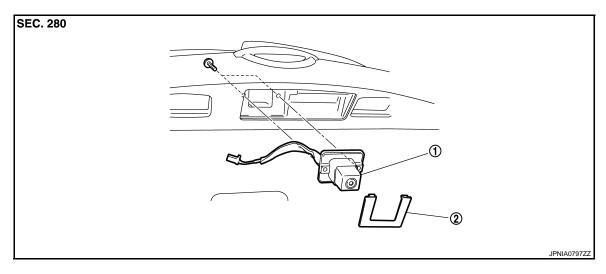
# REAR VIEW CAMERA

Exploded View

**REMOVAL** 

Refer to INT-37, "Exploded View".

DISASSEMBLY



1. Rear view camera

2. Finisher

### Removal and Installation

INFOID:0000000003566823

2009 Murano

### **REMOVAL**

- 1. Remove back door finisher inner. Refer to <a href="INT-37">INT-37</a>, "Exploded View".
- 2. Remove finisher.
- Remove rear view camera screws, disconnect rear view camera connector and remove rear view camera from back door assembly.

#### INSTALLATION

Install in the reverse order of removal.

Adjustment INFOID:000000003566824

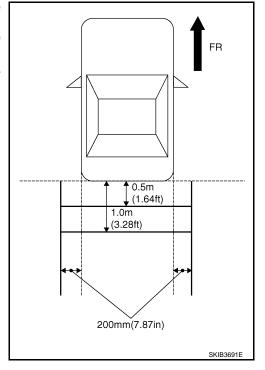
Adjust the guide line position if the guide line position is shifted after installing the rear view camera.

### **REAR VIEW CAMERA**

### < ON-VEHICLE REPAIR >

### [BOSE AUDIO WITHOUT NAVIGATION]

- Draw lines on rearward area of the vehicle passing through the following points: 200 mm (7.87 in) from both sides of the vehicle, and 0.5 m (1.64 ft), 1.0 m (3.28 ft) from the rear end of the bumper.
- Set into "Adjust offset of rear view camera" mode of Confirmation / Adjustment mode.

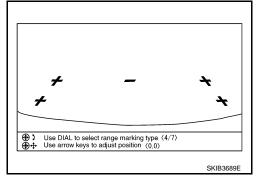


Rotate the center dial, and then select the guiding line pattern so that its angle is aligned with the correction line of the rear of the vehicle.

## Selected pattern : 7

4. Make fine adjustment to the correction line of the rear of the vehicle with up/down/left/right switches so that its position is aligned with the guiding line. Press "OK" switch and record the adjusted guiding line position to the camera control unit.

> Up/Down adjustment range : -20 - 20Left/Right adjustment range : -20 - 20



#### CALITION:

Never operate other function such as pressing BACK while writing index data.

If Confirmation/Adjustment mode does not function in the above procedure, perform one of the following service to adjust the index again.

- Remove battery for five min. Then reconnect battery.
- Remove camera control unit connector for five min. Then reconnect camera control unit connector.

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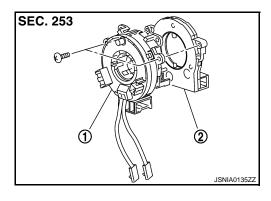
# STEERING ANGLE SENSOR

Exploded View

**REMOVAL** 

Refer to ST-15, "Exploded View".

**DISASSEMBLY** 



- 1. Spiral cable
- 2. Steering angle sensor

# Removal and Installation

INFOID:0000000003566826

### **REMOVAL**

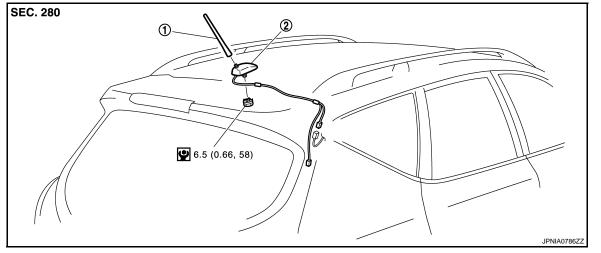
- 1. Remove spiral cable.
- 2. Remove steering angle sensor from spiral cable.

### **INSTALLATION**

Install in the reverse order of removal.

# **ROOF ANTENNA**

# **Exploded View**



1. Rod antenna

2. Antenna bade & satellite radio antenna

Refer to GI-4, "Components" for symbols in the figure.

### Removal and Installation

**REMOVAL** 

- Remove headlining assembly (rear) to secure work space between vehicle and headlining. Refer to <u>INT-25</u>, "NORMAL ROOF: Exploded View" [without sunroof] or <u>INT-29</u>, "SUNROOF: Exploded View" [with sunroof].
- Disconnect AM/FM main connector and satellite radio antenna connector.
- 3. Remove antenna base & satellite radio nut, and then remove antenna base &satellite radio antenna from roof panel.

### **INSTALLATION**

Install in the reverse order of removal.

Antenna base & satellite radio antenna mounting nut

#### **CAUTION:**

When Antenna base & satellite radio antenna mounting nut tightening torque is loose, be careful about tightening torque. Antenna sensitivity becomes poor, and when it is excessive, roof panel may become deformed.

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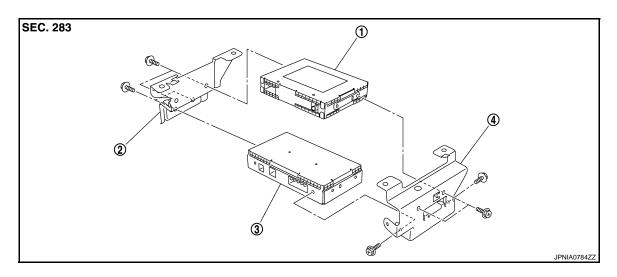
INFOID:0000000003508018

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# SATELLITE RADIO TUNER

Exploded View



- 1. Satellite radio tuner
- 2. Bracket LH

3. TEL adapter unit

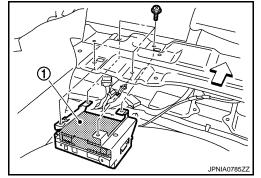
4. Bracket RH

### Removal and Installation

INFOID:0000000003356871

### **REMOVAL**

- Remove luggage floor finisher front. Refer to <u>INT-33, "Exploded View"</u>.
- 2. Remove satellite radio tuner (1) with TEL adapter unit as a single unit from the body.
  - : Vehicle front
- 3. Remove bracket screws, and them remove satellite tuner.

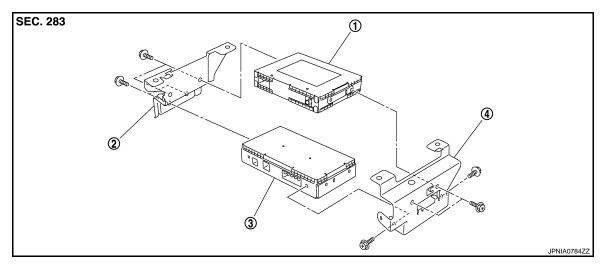


### **INSTALLATION**

Install in the reverse order of removal.

# **TEL ADAPTER UNIT**

# **Exploded View**



- 1. Satellite radio tuner
- 2. Bracket LH

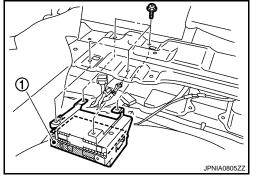
3. TEL adapter unit

4. Bracket RH

### Removal and Installation

### **REMOVAL**

- Remove luggage floor finisher front. Refer to <u>INT-33, "Exploded View"</u>.
- 2. Remove TEL adapter unit (1) with satellite radio tuner as a single unit from the body.
- 3. Remove bracket screws, and them remove TEL adapter unit.



### **INSTALLATION**

Install in the reverse order of removal.

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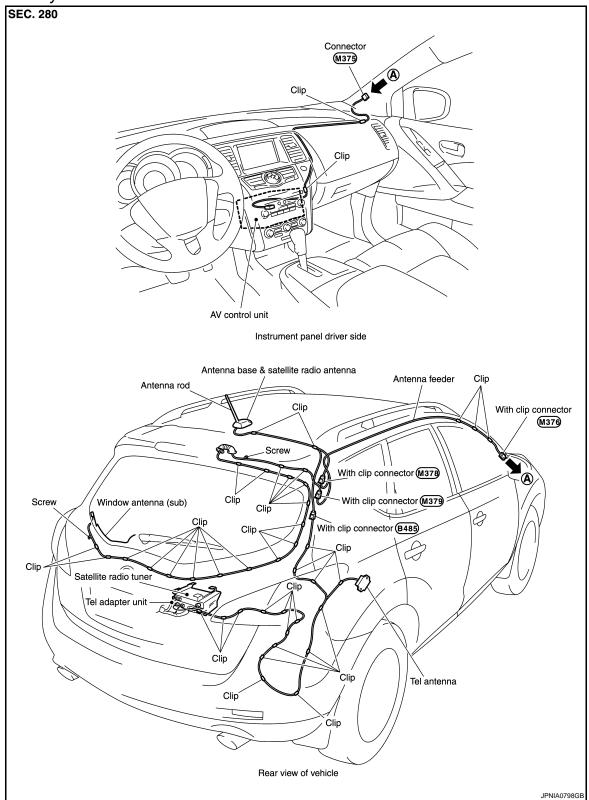
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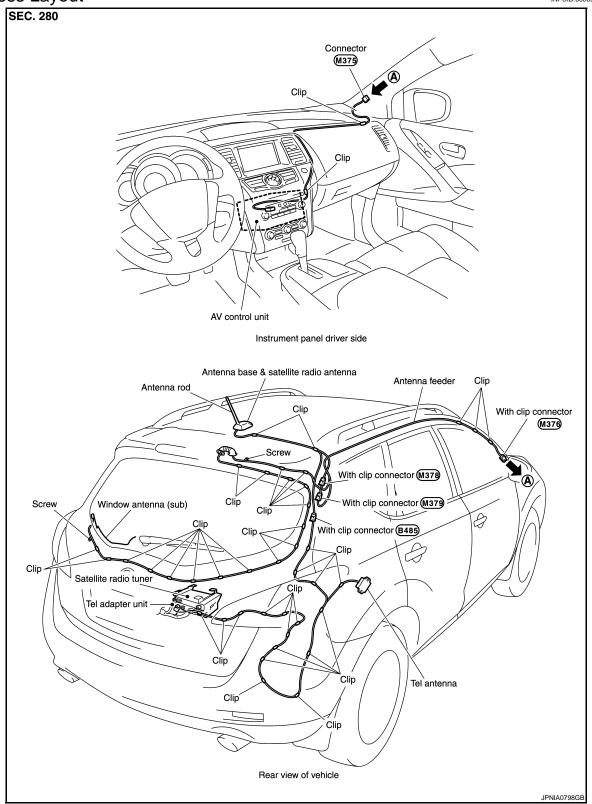
# ANTENNA FEEDER (RADIO)

Harness Layout



# ANTENNA FEEDER (SATELLITE RADIO)

Harness Layout



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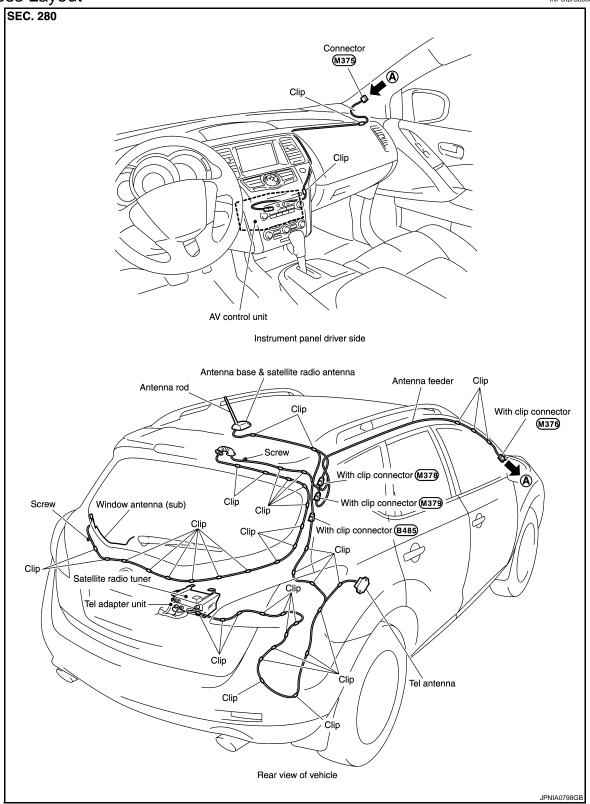
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# ANTENNA FEEDER (TEL)

Harness Layout



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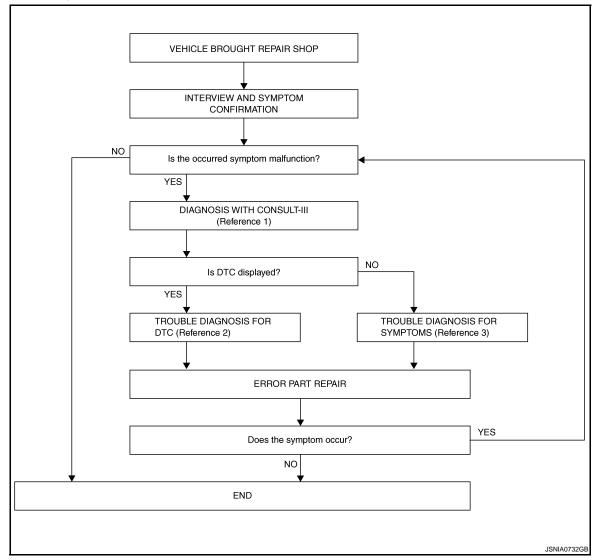
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# **BASIC INSPECTION**

## DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

### **OVERALL SEQUENCE**



- Reference 1... Refer to AV-589, "CONSULT-III Function (MULTI AV)".
- Reference 2··· Refer to <u>AV-670, "DTC Index"</u>.
- Reference 3... Refer to AV-751, "Symptom Table".

### **DETAILED FLOW**

# 1.INTERVIEW AND SYMPTOM CONFIRMATION

Check the malfunction symptoms by performing the following items.

- Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred).
- Check the symptom.

### Is the occurring symptom a malfunction?

YES >> GO TO 2.

Revision: 2008 October

NO >> INSPECTION END

2.DIAGNOSIS WITH CONSULT-III

### DIAGNOSIS AND REPAIR WORK FLOW

### < BASIC INSPECTION >

[BOSE AUDIO WITH NAVIGATION]

Connect CONSULT-III and perform a self-diagnosis for "MULTI AV". Refer to <u>AV-589, "CONSULT-III Function (MULTI AV)"</u>.

#### NOTE:

Skip to step 4 of the diagnosis procedure if "MULTI AV" is not displayed.

2. Check if any DTC is displayed in the self-diagnosis results.

### Is DTC displayed?

YES >> GO TO 3. NO >> GO TO 4.

# 3. TROUBLE DIAGNOSIS FOR DTC

- 1. Check the DTC indicated in the self-diagnosis results.
- Perform the relevant diagnosis referring to the DTC Index. Refer to AV-670, "DTC Index".

>> GO TO 5.

# 4. TROUBLE DIAGNOSIS FOR SYMPTOMS

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to <u>AV-751</u>, "Symptom <u>Table"</u>.

>> GO TO 5.

# 5. ERROR PART REPAIR

- 1. Repair or replace the identified malfunctioning parts.
- 2. Perform a self-diagnosis for "MULTI AV" with CONSULT-III.

#### NOTE:

Erase the stored self-diagnosis results after repairing or replacing the relevant components if any DTC has been indicated in the self-diagnosis results.

3. Check that the symptom does not occur.

### Does the symptom occur?

YES >> GO TO 1.

NO >> INSPECTION END

# **INSPECTION AND ADJUSTMENT**

< BASIC INSPECTION >

>> END

[BOSE AUDIO WITH NAVIGATION]

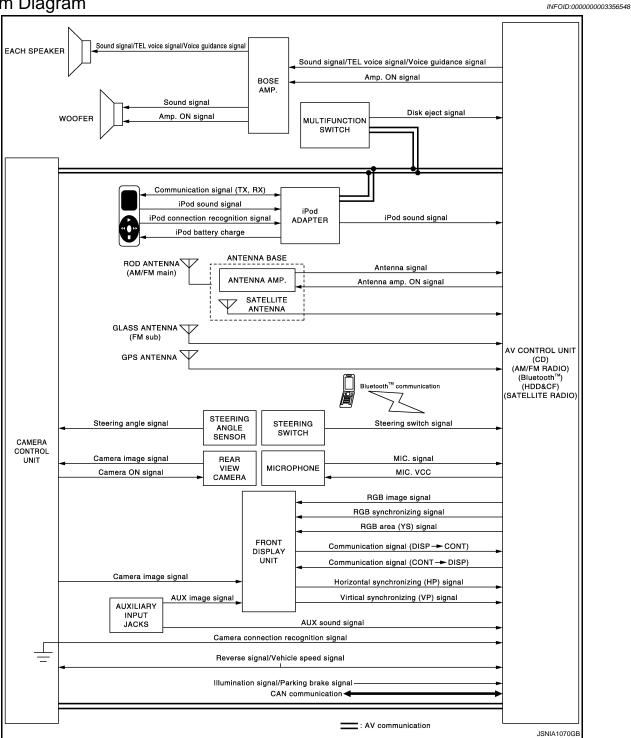
INSPECTION AND ADJUSTMENT	А
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	/\
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description	В
Always correct the center position of the rear view monitor's possible route line after disconnecting the battery negative terminal.	С
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement	D
1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE	
Refer to the following for details.	Е
>> Refer to AV-553, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT: Special Repair Requirement". ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	F
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description	G
When camera control unit is replaced, the center position of rear view monitor possible route line is corrected.  ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement	Н
1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE	-
Refer to the following for details.	ı
>> Refer to AV-553, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION	J
ADJUSTMENT: Special Repair Requirement".  REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUST-MENT	Κ
REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUST-MENT : Description	L
Adjust the center position of the possible route line of the rear view monitor if it is shifted.  REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUST- MENT: Special Repair Requirement	M AV
1.STEERING OPERATION	
Steer the steering wheel to the leftmost and rightmost positions.	0
>> GO TO 2 <b>2.</b> DRIVING	Р
Drive the vehicle straight ahead 100 m (328.1 ft) or more at a speed of 30 km/h (18.6 MPH) or more.	

Revision: 2008 October AV-553 2009 Murano

# **FUNCTION DIAGNOSIS**

# **MULTI AV SYSTEM**

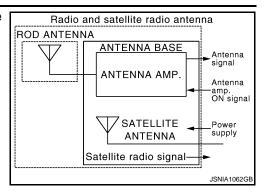
System Diagram



#### NOTE:

- Woofer, illustrated in the above figure, integrates two woofers and a woofer amp.
- In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.

 An antenna base integrated with radio antenna amp, and satellite radio antenna is adopted.



# System Description

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MULTI AV system means that the following systems are integrated.

System name	System explanation
NAVIGATION SYSTEM	AV-560, "System Description"
AUDIO SYSTEM	AV-568, "System Description"
REAR VIEW MONITOR SYSTEM	AV-565, "System Description"
HANDS-FREE PHONE SYSTEM	AV-572, "System Description"
VEHICLE INFORMATION SYSTEM	<ul> <li>Status of audio, climate control system, fuel economy, maintenance and navigation is displayed.</li> <li>AV control unit displays the fuel consumption status while receiving data signal through CAN communication from ECM and combination meter.</li> <li>AV control unit is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> </ul>
AUXILIARY INPUT SYSTEM	Refer to the following "AUXILIARY INPUT SYSTEM".
VOICE RECOGNITION SYSTEM	Refer to the following "VOICE RECOGNITION SYSTEM".
TOUCH PANEL SYSTEM	Refer to the following "TOUCH PANEL SYSTEM".

- AV control unit function by transmitting/receiving data one by one with each unit (slave unit) that configures them completely as a master unit by connecting between units that configure MULTI AV system with two AV communication lines (H, L).
- Two AV communication lines (H, L) adopt a twisted pair line that is resistant to noise.
- AV control unit is connected by CAN communication, and it receives data signal from ECM, combination meter. It computes and displays fuel economy information value with the obtained information. Transmitting/ receiving of data signal is performed by BCM. Also, it transmits the required signal of vehicle setting and receives the response signal.
- AV control unit is connected with front display unit and serial communication, and it transmits the required signal of display and display control and receives the response signal from front display unit.

#### NOTE:

AV control unit can perform CONSULT-III self-operating function and on board self-diagnosis.

- CONSULT-III self diagnosis: Refer to AV-589, "CONSULT-III Function (MULTI AV)".
- On board self diagnosis: Refer to <u>AV-575</u>, "<u>Diagnosis Description</u>".

#### **AUXILIARY INPUT SYSTEM**

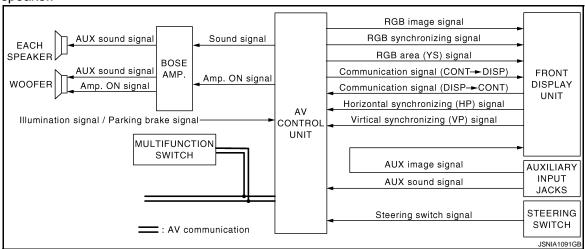
- Image and sound can be output from an external device by connecting a device with auxiliary input jacks.
- Operation can be performed with multifunction switch and steering switch. Multifunction switch transmits operation signal to AV control unit by AV communication.
- The AUX image signal is input from the auxiliary input jacks to the front display unit.

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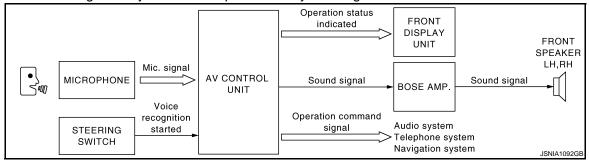
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**AV-555** Revision: 2008 October 2009 Murano The AUX sound signal is input from the auxiliary input jacks to the AV control unit. The AV control unit outputs the AUX sound signal to the BOSE amp. The BOSE amp. outputs the AUX sound signal to woofer and each speaker.

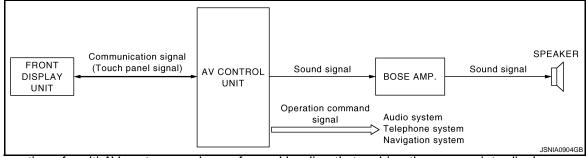


#### VOICE RECOGNITION SYSTEM

- Each operation of multi AV system can be performed by inputting sound in to a microphone.
- Start of sound recognition system can be performed by steering switch.



### **TOUCH PANEL SYSTEM**



Each operation of multi AV system can be performed by directly touching the appropriate display.

# **Component Parts Location**

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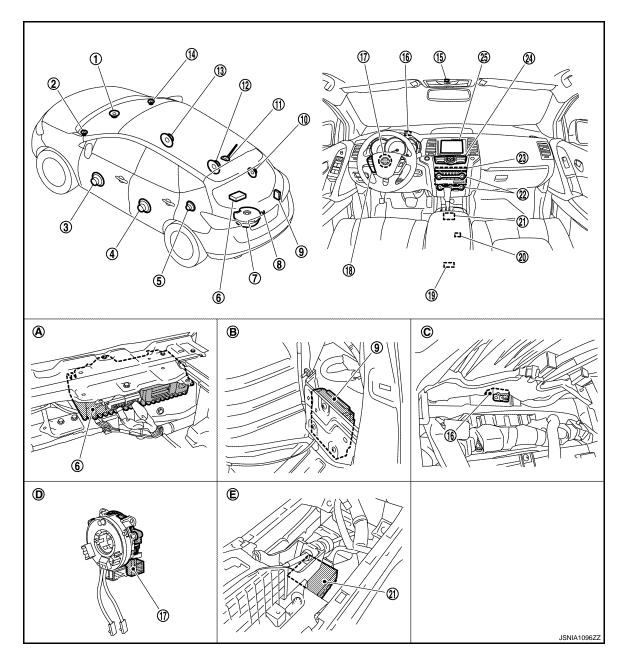
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- Center speaker
- 4. Rear door speaker LH
- Woofer 7.
- 10. Rear speaker RH
- 13. Front door speaker RH
- 16. GPS antenna
- 19. Auxiliary input jacks
- 22. Preset switch
- 25. Front display unit
- Luggage floor finisher is removed condition
- Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. Rear view camera
- Antenna base (antenna amp. and satellite antenna)
- 14. Front squawker RH
- 17. Steering angle sensor
- 20. iPod connector
- 23. AV control unit
- Luggage side finisher lower RH is re-В. moved condition
- Console finisher is removed condition

- Front door speaker LH
- 6. BOSE amp.
- 9. Camera control unit
- 12. Rear door speaker RH
- 15. Microphone
- 18. Steering switch
- 21. iPod adapter
- 24. Multifunction switch
- Combination meter is removed condi-

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**AV-557** Revision: 2008 October 2009 Murano

# [BOSE AUDIO WITH NAVIGATION]

# **Component Description**

INFOID:0000000003356551

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Front display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing). Auxiliary image signal is input from the auxiliary input jack. Camera image signal is input from camera control unit.</li> <li>Synchronize signal (HP, VP) is output to AV control unit.</li> <li>Touch panel function can be operated for each system by touching a display directly.</li> </ul>
BOSE AMP.	<ul> <li>Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to woofer and each speaker.</li> <li>Woofer amp. ON signal is transmitted to woofer.</li> </ul>
WOOFER	<ul> <li>Composed of two woofers and a woofer amp.</li> <li>Inputs power (amp. ON) and sound signal from BOSE amp.</li> <li>Outputs low frequency sound.</li> </ul>
FRONT DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
REAR DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
FRONT SQUAWKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
REAR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
CENTER SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
MULTIFUNCTION SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and auxiliary input operations are integrated.</li> <li>The multifunction switch is connected to the preset switch by wiring harness, and it transmits the operation signal to the preset switch.</li> </ul>
PRESET SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>The preset switch is connected via AV communication, and it transmits the operation signals of the preset switch and multifunction switch.</li> <li>The disk ejection operating signal is performed by wiring harness.</li> </ul>
STEERING SWITCH	<ul> <li>Operations for audio, hands-free phone, audio response and navigation, etc. are possible.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>

# **MULTI AV SYSTEM**

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

Part name	Description
CAMERA CONTROL UNIT	<ul> <li>Camera image signal is input from rear view camera. Camera image signal output to front display unit.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit. It receives the power (camera ON signal) from the camera control unit and operates.
STEERING ANGLE SENSOR	Steering signal necessary for possible route line control is transmitted to camera control unit.
MICROPHONE	<ul> <li>Used for hands-free phone operation and voice recognition.</li> <li>Mic signal is transmitted to AV control unit.</li> <li>The power (Mic. power supply) is supplied from the AV control unit.</li> </ul>
AUXILIARY INPUT JACKS	AUX image signal of auxiliary input is transmitted to front display, and sound signal is transmitted to AV control unit.
GPS ANTENNA	GPS signal is received and transmitted to AV control unit.
ANTENNA BASE	An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.  ANTENNA AMP.  Radio signal received by rod antenna is amplified and transmitted to AV control unit.  Power (antenna amp. ON signal) is supplied from AV control unit.  SATELLITE RADIO ANTENNA  Receives the satellite radio wave and outputs it to the AV control unit.
iPod ADAPTER	<ul> <li>Inputs iPod sound signal from iPod[®], and outputs iPod sound signal to AV control unit.</li> <li>Receiving/transmitting of iPod[®] operation signals are performed as follows:</li> <li>between AV control unit and iPod adapter: AV communication.</li> <li>between iPod[®] and iPod adapter: serial communication.</li> </ul>

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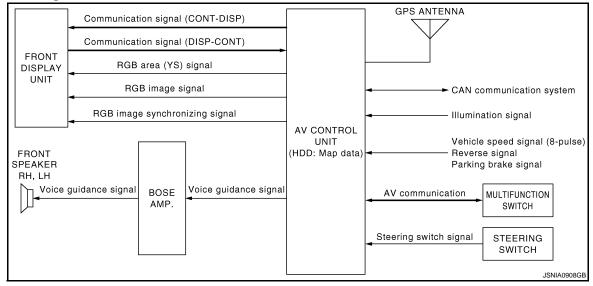
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### NAVIGATION SYSTEM

## System Diagram

INFOID:0000000003356552



# System Description

INFOID:0000000003356553

#### DESCRIPTION

- The AV control unit controls navigation function while GPS tuner has built-in map data, GYRO (angle speed sensor), on the HDD (Hard Disk Drive).
- The AV control unit inputs operation signal with communication signal, through display (touch panel) and multifunction switch and steering switch.
- Guide sound is output to front speaker through BOSE amp. from AV control unit when operating navigation system.
- A vehicle position is calculated with the GYRO (angle speed sensor), vehicle sensor, signal from GPS satellite and map data stored on HDD (Hard Disk Drive), and transmits the map image signal (RGB image, RGB area, RGB image synchronizing) to the front display unit.

#### POSITION DETECTION PRINCIPLE

The navigation system periodically calculates the current vehicle position according to the following three types of signals.

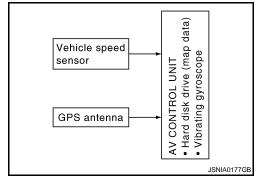
- Travel distance of the vehicle as determined by the vehicle speed sensor
- Vehicle turning angle determined by the gyroscope (angular speed sensor)
- The travel direction of the vehicle determined by the GPS antenna (GPS information)

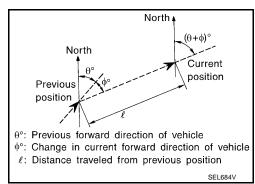
The current position of the vehicle is then identified by comparing the calculated vehicle position with map data, which is stored in the HDD (Hard Disk Drive) (map-matching), and indicated on the screen with a current location mark. More accurate data is used by comparing position detection results from GPS to the map-matching.

The current position is calculated by detecting the travel distance from the previous calculation point, and its direction change.

- Travel distance
  - The travel distance is generated from the vehicle speed sensor input signal. The automatic distance correction function is adopted for preventing a miss-detection of the travel distance because of tire wear etc.
- Travel direction

The gyroscope (angular velocity sensor) and GPS antenna (GPS information) generate the change of the travel direction. Both have advantages and disadvantages as per the following descriptions.





### [BOSE AUDIO WITH NAVIGATION]

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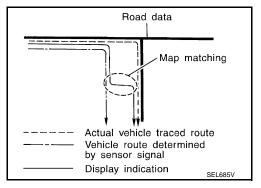
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Туре	Advantage	Disadvantage
Gyroscope (angular velocity sensor)	The turning angle is precisely detected.	Errors are accumulated when driving a long distance without stopping.
GPS antenna (GPS information)	The travel direction (North/South/East/West) is detected.	The travel direction is not precisely detected when driving slowly.

Input signals are prioritized in each situation. However, this order of priority may change in accordance with more detailed travel conditions so that the travel direction is detected more accurately.

#### MAP-MATCHING

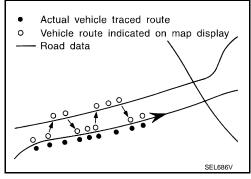
Map-matching repositions the vehicle on the road map when a new location is judged to be more accurate. This is done by comparing the current vehicle position (calculated by the normal position detection method) from the map data stored in the HDD (Hard Disk Drive).



There is a possibility that the vehicle position may not be corrected the when vehicle is driven over a certain distance or time in which GPS information is hard to receive. Manually correct the current location mark on the screen.

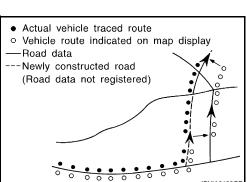
 Map-matching detects, prepares, and prioritizes several alternative routes in addition to the road detected as currently being driven on. Therefore, due to errors in the distance and/or direction, an incorrect road may be prioritized, and the current location mark may be repositioned to the incorrect road.

If two roads are running in parallel, they are of the same priority. Therefore, the current location mark may appear on either of them alternately, depending on maneuvering of the steering wheel and configuration of the road, etc.



- Map-matching does not function correctly when the road on which the vehicle is driving is new, etc. and not recorded in the map data. In addition map-matching does not function correctly when the road pattern stored in the map data and the actual road pattern are different due to repair, etc.
- Therefore, the map-matching function detects other roads as a currently driving road if the road is not in the map, and displays the current location mark on it. Later, the current location mark may be repositioned to the road if the correct road is detected.
- Effective range for comparing the vehicle position and travel direction calculated by the distance and direction with the road data is limited. Therefore, correction by map-matching is not possible when there is an excessive gap between the real-time vehicle position and the position on the map.

GPS (GLOBAL POSITIONING SYSTEM)



**AV-561** Revision: 2008 October 2009 Murano

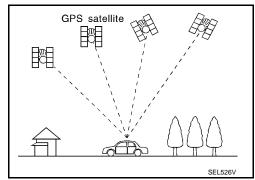
### NAVIGATION SYSTEM

### < FUNCTION DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

GPS (Global Positioning System) is developed for and is controlled by the US Department of Defense. The system utilizes GPS satellites (NAVSTAR), transmitting out radio waves while flying on an orbit around the earth at an altitude of approximately 21,000 km (13,049 mile).

The receiver calculates the travel position in three dimensions (latitude/longitude/altitude) according to the time lag of the radio waves that four or more GPS satellites transmit (three-dimensional positioning). The GPS receiver calculates the travel position in two dimensions (latitude/longitude) with the previous altitude data if the GPS receiver receives only three radio waves (two-dimensional positioning). GPS position correction is not performed while the vehicle is stopped.



Accuracy of GPS will deteriorate under the following conditions:

- In two-dimensional positioning, GPS accuracy will deteriorate when altitude of the vehicle position changes.
- The position of GPS satellite affects GPS detection precision. The position detection may not be precisely performed.
- The position detection is not performed if GPS receiver does not receive radio waves from GPS satellites.
   (Inside a tunnel, parking in a building, under an elevated highway etc.) GPS receiver may not receive radio waves from GPS satellites if any object is placed on the GPS antenna.

#### NOTE:

- The detection result has an error of approximately 10 m (32.81 ft) even with a high-precision three dimensional positioning.
- There may be cases when the accuracy is lowered and radio waves are stopped intentionally because the GPS satellite signal is controlled by the US trace control center.

# **Component Parts Location**

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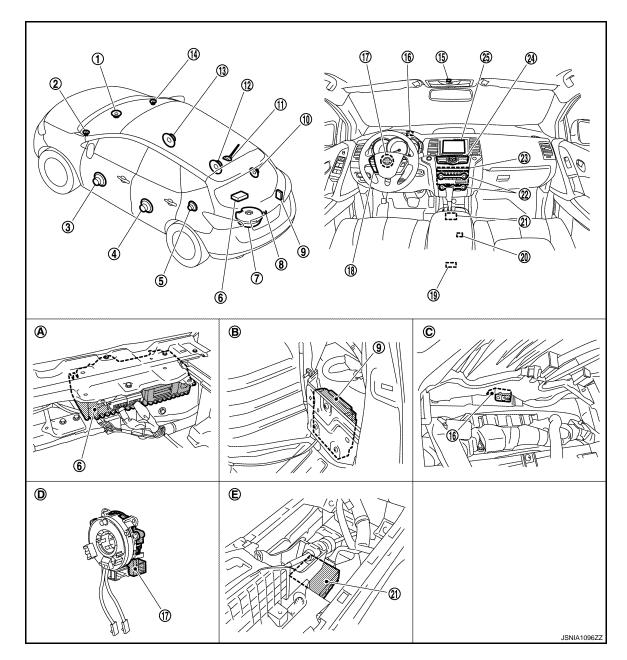
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- Center speaker
- 4. Rear door speaker LH
- 7. Woofer
- 10. Rear speaker RH
- 13. Front door speaker RH
- 16. GPS antenna
- 19. Auxiliary input jacks
- 22. Preset switch
- 25. Front display unit
- A. Luggage floor finisher is removed condition
- D. Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. Rear view camera
- 11. Antenna base (antenna amp. and satellite antenna)
- 14. Front squawker RH
- 17. Steering angle sensor
- 20. iPod connector
- 23. AV control unit

В.

- 3. Front door speaker LH
- 6. BOSE amp.
- 9. Camera control unit
- 12. Rear door speaker RH
- 15. Microphone
- 18. Steering switch
- 21. iPod adapter
- 24. Multifunction switch
- Luggage side finisher lower RH is removed condition
- E. Console finisher is removed condition
- C. Combination meter is removed condition

# **NAVIGATION SYSTEM**

# < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

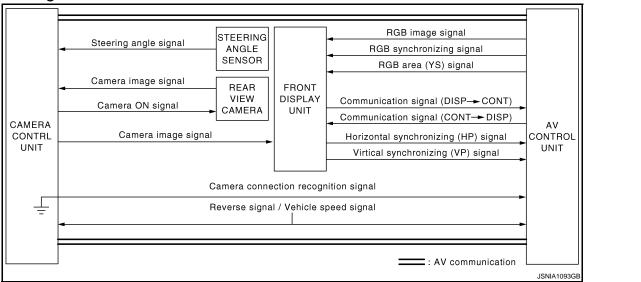
# **Component Description**

INFOID:0000000003356555

Part name	Description
AV CONTROL UNIT	<ul> <li>It is the master unit that controls each operation of the Navigation system.</li> <li>The HDD (Hard Disk Drive) is built in, and the map data is stored in HDD.</li> <li>The RGB signal (map information) is output to the front display unit.</li> <li>The voice guidance signal is output to the BOSE amp.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Map image signal is input from AV control unit, and it is indicated on the display.</li> <li>Each operation of navigation can be performed by the touch panel function.</li> </ul>
BOSE AMP.	Voice guidance signal is input from AV control unit, and it is output to front LH/RH speakers.
FRONT DOOR SPEAKER	Voice mildenes signed from DOCF come is sustaint
FRONT SQUAWKER	Voice guidance signal from BOSE amp. is output.
MULTIFUNCTION SWITCH	<ul> <li>Each operation of navigation can be performed.</li> <li>The multifunction switch is connected to the preset switch by wiring harness, and it transmits the operation signal to the preset switch.</li> </ul>
PRESET SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>The preset switch is connected via AV communication, and it transmits the operation signals of the preset switch and multifunction switch.</li> <li>The disk ejection operating signal is performed by wiring harness.</li> </ul>
STEERING SWITCH	<ul><li>Each operation of navigation, etc. can be performed.</li><li>Switch operating signal is output to AV control unit.</li></ul>
MICROPHONE	<ul> <li>Used for hands-free phone operation and voice recognition.</li> <li>Mic signal is transmitted to AV control unit.</li> <li>Power (Mic VCC) is supplied from AV control unit.</li> </ul>
GPS ANTENNA	GPS signal is received and is output to AV control unit.

# **REAR VIEW MONITOR SYSTEM**

## System Diagram



# System Description

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INFOID:0000000003356556

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### CAMERA IMAGE OPERATION PRINCIPLE

- Power is supplied to rear view camera from camera control unit and outputs camera image signal to camera control unit when selector lever is set to the "R" position and the reverse signal on camera control unit is input.
- Camera control unit synthesizes guide lines and possible route lines with camera image signal from rear view camera, and transmits camera image signal to the front display unit. In this case, since the reverse signal is also input to AV control unit, the AV control unit recognizes that the selector lever is in the "R" position, and it switches communication signal between AV control unit and front display unit, and image that is displayed on the front display unit by RGB image signal with rear view monitor image. In addition, possible route lines are controlled by original sensor signal from steering angle sensor.
- The AV control unit determines whether rear view camera is equipped or not, based on the presence of camera connection recognition signal. It switches to rear view monitor image at the time of reverse signal input when it is equipped.
- Warning message under the rear view monitor display is described by AV control unit.
- AV control unit is connected in communication with camera control unit and front display unit, and it controls operation of rear view monitor system.

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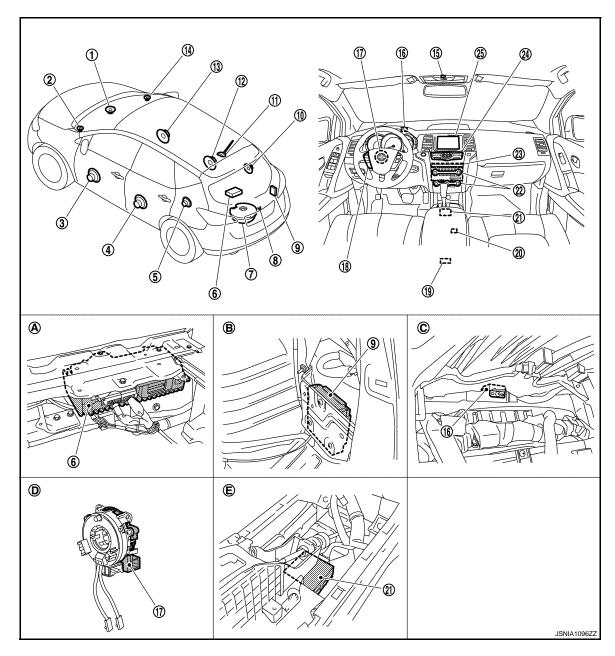
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# **Component Parts Location**

INFOID:0000000003464478



- 1. Center speaker
- 4. Rear door speaker LH
- 7. Woofer
- 10. Rear speaker RH
- 13. Front door speaker RH
- 16. GPS antenna
- 19. Auxiliary input jacks
- 22. Preset switch
- 25. Front display unit
- A. Luggage floor finisher is removed condition
- D. Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. Rear view camera
- 11. Antenna base (antenna amp. and satellite antenna)
- 14. Front squawker RH
- 17. Steering angle sensor
- 20. iPod connector
- 23. AV control unit

- 3. Front door speaker LH
- 6. BOSE amp.
- 9. Camera control unit
- 12. Rear door speaker RH
- 15. Microphone
- 18. Steering switch
- 21. iPod adapter
- 24. Multifunction switch
- B. Luggage side finisher lower RH is removed condition C.
- E. Console finisher is removed condition
- Combination meter is removed condition

# **REAR VIEW MONITOR SYSTEM**

< FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

## **Component Description** INFOID:0000000003356559

Part name	Description
AV CONTROL UNIT	<ul> <li>Image on display is changed to rear view monitor image with serial communication between AV control unit and front display unit.</li> <li>Warning displayed in rear view monitor image is illustrated.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Camera image signal is transmitted from camera control unit, and RGB signal for warning display is transmitted from AV control unit.</li> <li>Rear view monitor image is changed with the communication for AV control unit.</li> </ul>
CAMERA CONTROL UNIT	<ul> <li>Camera image signal is input from rear view camera, and camera image is indicated on the front display unit.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit.
STEERING ANGLE SENSOR	Steering signal necessary for possible route line control is transmitted to camera control unit.

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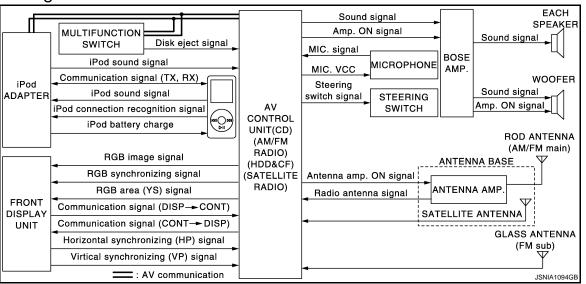
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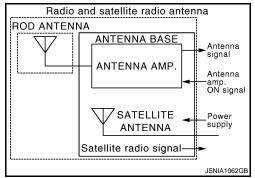
## **AUDIO SYSTEM**

System Diagram



#### NOTE:

- Woofer, illustrated in the above figure, integrates two woofers and a woofer amp.
- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.



# System Description

INFOID:0000000003356561

The audio system is equipped with the following functions. Each function is operated with multifunction switch, preset switch, touch panel, steering switch or audio recognition. Operation status of AUDIO is indicated in the display.

Function
AM/FM radio
Satellite radio
CD
Music Box (Hard Disk Drive)
CF (Compact Flash)
iPod connection
AUX mode

### **FUNCTION DESCRIPTION**

### Operating Signal

Audio system operation can be performed with multifunction switch, preset switch, steering switch, touch panel function or voice recognition function.

### AUDIO SYSTEM

### < FUNCTION DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The disk ejection operating signal is performed by wiring harness.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.
- Refer to AV-555, "System Description" for explanation of voice recognition function and touch panel function.

### Screen Front Display

- Switching of display is performed with serial communication between front display unit and AV control unit.
- The image signal to front display operating condition is performed with RGB image signal, RGB area signal and RGB synchronizing signal.

#### AM/FM Radio Mode

- AM/FM radio tuner is built into AV control unit.
- AM/FM radio wave is received by rod antenna, next it is amplified by antenna amp., and finally it is input to
  AV control unit. The FM sub antenna is installed on the back door window glass and the AV control unit is
  received.
- Audio signal is input to BOSE amp. and BOSE amp. outputs to woofer and each speaker for AV control unit.

#### Satellite Radio Mode

- · Satellite radio tuner is built into AV control unit.
- Audio wave (satellite radio) is received by antenna base (satellite antenna), and it is input to AV control unit.
  AV control unit outputs audio signal to BOSE amp. The signal is also outputted from BOSE amp. to both
  woofer and each speaker.

#### CD Mode

- CD function is built into AV control unit.
- AV control unit outputs audio signal to BOSE amp. and BOSE amp. outputs to woofer and each speaker when CD is inserted to AV control unit.

#### Music Box Mode

- Music CD data is stored on HDD that is built into AV control unit, and it can be played.
- AV control unit outputs music (audio signal) that is stored on HDD to BOSE amp., and BOSE amp. outputs to woofer and each speaker.

#### CF Mode

- AV control unit has built in CF replay function.
- Music (audio signal) that is stored in CF outputs to BOSE amp., and BOSE amp. outputs to woofer and each speaker when CF is inserted into AV control unit.

#### iPod Connection

- Connect iPod[®] and iPod adapter with wire harness and iPod adapter input iPod sound signal from iPod[®]. When iPod mode is selected, iPod adapter outputs iPod sound signal to AV control unit. AV control unit output sound signal to BOSE amp., and BOSE amp. output sound signal to woofer and each speaker.
- Receiving/transmitting of iPod[®] operation signals are performed as follows:
- between AV control unit and iPod adapter: AV communication.
- between iPod® and iPod adapter: serial communication.
- The iPod® connection status can be recognized if iPod adapter receives iPod connection recognition signal.
- The iPod adapter can charge iPod[®].

#### **AUX Mode**

Refer to AV-555, "System Description".

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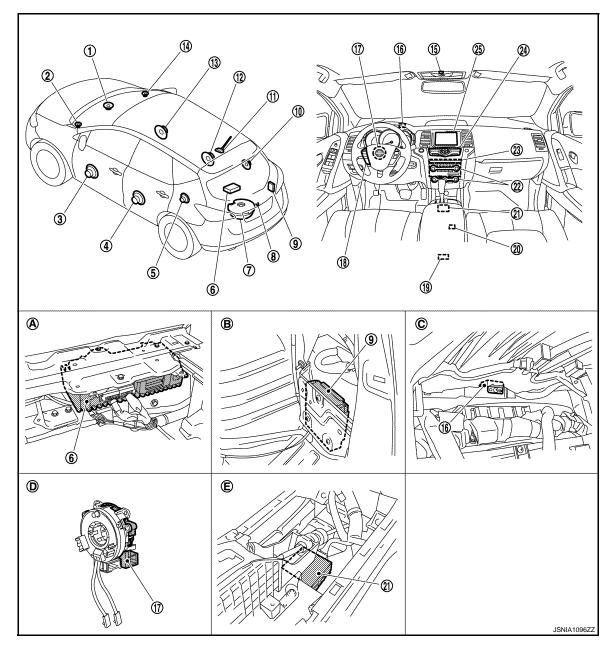
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Revision: 2008 October AV-569 2009 Murano

# **Component Parts Location**

INFOID:0000000003464479



- 1. Center speaker
- 4. Rear door speaker LH
- 7. Woofer
- 10. Rear speaker RH
- 13. Front door speaker RH
- 16. GPS antenna
- 19. Auxiliary input jacks
- 22. Preset switch
- 25. Front display unit
- A. Luggage floor finisher is removed condition
- D. Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. Rear view camera
- 11. Antenna base (antenna amp. and satellite antenna)
- 14. Front squawker RH
- 17. Steering angle sensor
- 20. iPod connector
- 23. AV control unit

- 3. Front door speaker LH
- 6. BOSE amp.
- 9. Camera control unit
- 12. Rear door speaker RH
- 15. Microphone
- 18. Steering switch
- 21. iPod adapter
- 24. Multifunction switch
- B. Luggage side finisher lower RH is removed condition C.
- E. Console finisher is removed condition
- Combination meter is removed condition

# **AUDIO SYSTEM**

# < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

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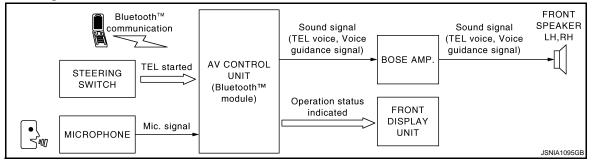
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Part name	Description
AV CONTROL UNIT	<ul> <li>Receiving function of AM/FM/satellite radio, replaying function of CD, replaying/saving function of music box (HDD), replaying function of CF and voice recognition function are integrated.</li> <li>BOSE amp. ON signal and sound signal are transmitted to BOSE amp.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Front display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal (audio operation condition) is input from AV control unit.</li> <li>Touch panel function can be operated for each system by touching the display directly.</li> </ul>
BOSE AMP.	<ul> <li>Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to woofer and each speaker.</li> <li>Woofer amp. ON signal is transmitted to woofer.</li> </ul>
WOOFER	<ul> <li>Composed of two woofers and a woofer amp.</li> <li>Inputs power (amp. ON) and sound signal from BOSE amp.</li> <li>Outputs low frequency sound.</li> </ul>
FRONT DOOR SPEAKER	Outputs sound signal from BOSE amp.     Outputs sound (mid and low range).
REAR DOOR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (mid and low range).</li></ul>
FRONT SQUAWKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
REAR SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
CENTER SPEAKER	<ul><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>
MULTIFUNCTION SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and auxiliary input operations are integrated.</li> <li>The multifunction switch is connected to the preset switch by wiring harness, and it transmits the operation signal to the preset switch.</li> </ul>
PRESET SWITCH	<ul> <li>Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>The preset switch is connected via AV communication, and it transmits the operation signals of the preset switch and multifunction switch.</li> <li>The disk ejection operating signal is performed by wiring harness.</li> </ul>
STEERING SWITCH	<ul> <li>Operations for audio, hands-free phone, audio response and navigation, etc. are possible.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
MICROPHONE	<ul> <li>Used for hands-free phone operation and voice recognition.</li> <li>Mic signal is transmitted to AV control unit.</li> <li>The power (Mic. power supply) is supplied from the AV control unit.</li> </ul>
ANTENNA BASE	An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.  ANTENNA AMP.  Radio signal received by rod antenna is amplified and transmitted to AV control unit.  Power (antenna amp. ON signal) is supplied from AV control unit.  SATELLITE RADIO ANTENNA  Receives the satellite radio wave and outputs it to the AV control unit.
iPod ADAPTER	<ul> <li>Inputs iPod sound signal from iPod[®], and outputs iPod sound signal to AV control unit.</li> <li>Receiving/transmitting of iPod[®] operation signals are performed as follows:         <ul> <li>between AV control unit and iPod adapter: AV communication.</li> <li>between iPod[®] and iPod adapter: serial communication.</li> </ul> </li> </ul>

# HANDS-FREE PHONE SYSTEM

## System Diagram

INFOID:0000000003451235



# System Description

INFOID:0000000003451236

- AV control unit includes hands-free phone function.
- Hands-free communication can be operated by connecting using Bluetooth[™] communication with cellular phone.
- Operation is performed by steering switch, and operating condition is indicated on front display.
- Guide sound that is heard during operation is input from AV control unit to BOSE amp., and is output from front speaker.

#### WHEN A CALL IS ORIGINATED

Spoken voice sound output from the microphone (MIC. signal) is input to AV control unit. AV control unit outputs to cellular phone with Bluetooth  TM  communication as a TEL voice signal. Vocal sound is then heard at the other party.

### WHEN RECEIVING A CALL

Vocal sound is input to own cellular phone from the other party. TEL voice signal is output to front speaker, and the signal is input to BOSE amp. via AV control unit by establishing Bluetooth $^{\text{TM}}$  communication from cellular phone.

# **Component Parts Location**

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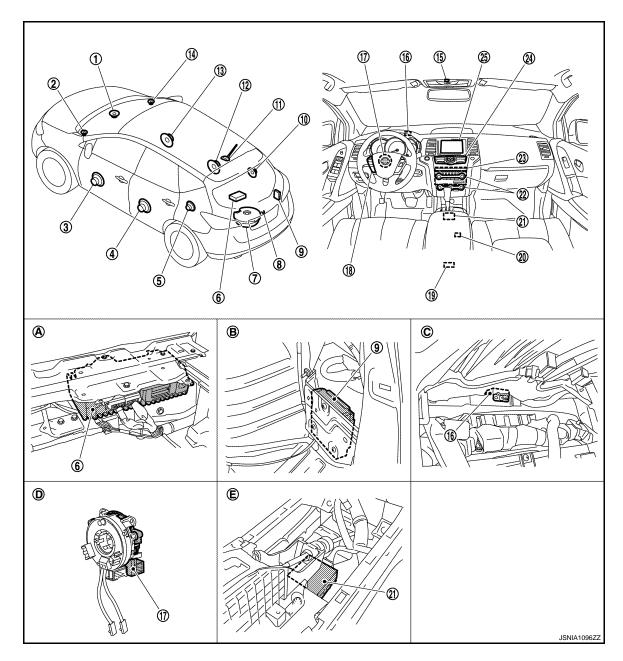
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- Center speaker
- 4. Rear door speaker LH
- Woofer 7.
- 10. Rear speaker RH
- 13. Front door speaker RH
- 16. GPS antenna
- 19. Auxiliary input jacks
- 22. Preset switch
- 25. Front display unit
- Luggage floor finisher is removed condition
- Spiral cable part

- 2. Front squawker LH
- 5. Rear speaker LH
- 8. Rear view camera
- Antenna base (antenna amp. and satellite antenna)
- 14. Front squawker RH
- 17. Steering angle sensor
- 23. AV control unit
- 20. iPod connector
- Luggage side finisher lower RH is re-В. moved condition
- E. Console finisher is removed condition

- Front door speaker LH
- 6. BOSE amp.
- 9. Camera control unit
- 12. Rear door speaker RH
- 15. Microphone
- 18. Steering switch
- 21. iPod adapter
- 24. Multifunction switch
- Combination meter is removed condi-

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**AV-573** Revision: 2008 October 2009 Murano

# HANDS-FREE PHONE SYSTEM

< FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

# **Component Description**

INFOID:0000000003451238

Part name	Description
AV CONTROL UNIT	<ul> <li>It includes the TEL adapter and Bluetooth[™] function.</li> <li>It outputs the TEL voice signal and voice guidance sound signal to the BOSE amp.</li> </ul>
FRONT DISPLAY UNIT	<ul> <li>Display image is controlled by the serial communication from AV control unit.</li> <li>Inputs RGB image signal (RGB, RGB area and RGB synchronizing) from AV control unit and displays the status of hands free phone system.</li> </ul>
BOSE AMP.	Inputs TEL voice signal or voice guidance signal from AV control unit and outputs it to front speaker.
FRONT DOOR SPEAKER	Outputs the TEL voice signal or voice guidance signal from BOSE amp.
PRESET SWITCH	<ul> <li>Adjust the sound when using TEL.</li> <li>The operation signal is transmitted to the AV control unit via AV communication.</li> </ul>
STEERING SWITCH	<ul> <li>The hands free-phone system can be operated.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
MICROPHONE	<ul> <li>Uses when operating the hands-free phone.</li> <li>Outputs Mic. signal (TEL voice signal) to the AV control unit.</li> <li>The power (Mic. power supply) is supplied from the AV control unit.</li> </ul>

## **DIAGNOSIS SYSTEM (AV CONTROL UNIT)**

< FUNCTION DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

# **Diagnosis Description**

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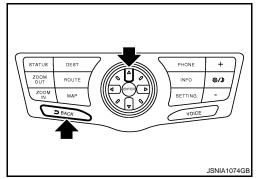
### MULTIFUNCTION SWITCH AND PRESET SWITCH SELF-DIAGNOSIS FUNCTION

The ON/OFF operation (continuity) of each switch in the multifunction switch and preset switch can be checked.

Self-diagnosis Mode

- Press the "BACK" switch and the "
   " switch of the 8-direction switches within 10 seconds after turning the ignition switch from OFF to ACC and hold them for 3 seconds or more. Then the buzzer sounds, all indicators of the preset switch illuminate, and the self-diagnosis mode starts.
- The continuity of each switch at the ON position can be checked by pressing the switch. The buzzer sounds if the switch is normal.
   NOTE:

The disk eject switch cannot be checked.



Finishing Self-diagnosis Mode

Self-diagnosis mode is canceled when turning the ignition switch OFF.

### MULTI AV SYSTEM ON BOARD DIAGNOSIS FUNCTION

- The AV control unit diagnosis function starts up with multifunction switch operation and the AV control unit performs a diagnosis for each unit in the system during the on board diagnosis.
- Perform a CONSULT-III diagnosis if the on board diagnosis does not start, e.g., the screen does not display
  anything, the multifunction switch does not function, etc.

#### ON BOARD DIAGNOSIS

#### Description

- The trouble diagnosis function has a self-diagnosis mode for conducting trouble diagnosis automatically and a confirmation/adjustment mode for operating manually.
- The self-diagnosis mode performs diagnoses on the AV control unit, connections between system components as well as connections between AV control unit and GPS antenna and between AV control unit and satellite radio antenna. Then it displays the diagnosis results on the display.
- The confirmation/adjustment mode allows the technician to check, modify or adjust the vehicle signals and set values, as well as to monitor the system error records and system communication status. The checking, modifying or adjusting generally require human intervention and judgment (the system cannot automatically).

### On Board Diagnosis Item

Mode	Description
Self-Diagnosis	AV control unit diagnosis     Diagnoses the connections across system components, between AV control unit and GPS antenna and between AV control unit and satellite radio antenna.

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Revision: 2008 October AV-575 2009 Murano

# **DIAGNOSIS SYSTEM (AV CONTROL UNIT)**

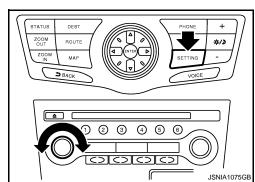
### [BOSE AUDIO WITH NAVIGATION]

Mode			Description
Confirmation/ Adjustment	Display Diagnosis		The following check functions are available: color tone check by color bar display, light and shade check by gray scale display and touch panel calibration response check.
	Vehicle Signals		Diagnosis of signals can be performed for vehicle speed, parking brake, lights, ignition switch, and reverse.
	Speaker Test		The connection of a speaker can be confirmed by test tone.
	Climate Control*		Not used.
	Navigation	Steering Angle Adjustment	When there is a difference between the actual turning angle and the vehicle mark turning angle, it can be adjusted.
		Speed Calibration	When there is a difference between the current location mark and the actual location, it can be adjusted.
		XM SAT Subscription Status	The XM NavTraffic subscription status can be checked.
	Error History		The system malfunction and the frequency when occurring in the past are displayed. When the malfunctioning item is selected, the time and place that the selected malfunction last occurred are displayed.
	Vehicle CAN Diagnosis		The transmitting/receiving of CAN communication can be monitored.
	AV COMM Diagnosis		The communication condition of each unit of MULTI AV system can be monitored.
	Handsfree Phone		The received volume adjustment of hands-free phone, microphone speaker check, and erase memory can be performed.
	Camera Cont.		The signal connected to camera control unit can be checked and the guiding line position that overlaps rear view camera image can be adjusted.
	Bluetooth		The passkey and the device name can be checked and changed.
	SAT	Change Channel	Any necessary channels required to receive traffic information from the satellite radio system can be set.
		Change Application ID	Any application ID'-s required to receive traffic information from the satellite radio system can be set.
		Diag	Not used.
	Delete Unit Connection Log		Erase the connection history of unit and error history.
	Initialize Settings		Initializes the AV control unit memory.

### NOTE:

### STARTING PROCEDURE

- 1. Start the engine.
- 2. Turn the audio system OFF.
- 3. While pressing the "SETTING" button, turn the volume control dial clockwise or counterclockwise for 40 clicks or more. (When the self-diagnosis mode is started, a short beep will be heard.)
  - Shifting from current screen to previous screen is performed by pressing the "BACK" button.



^{*:} On-board self-diagnosis is not supported. Only CONSULT-III is supported.

#### < FUNCTION DIAGNOSIS >

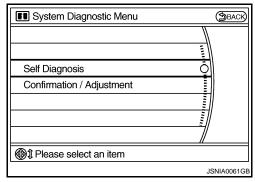
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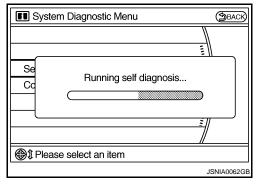
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The trouble diagnosis initial screen is displayed, and then the items of "Self Diagnosis" and "Confirmation/Adjustment" can be selected.



#### SELF-DIAGNOSIS MODE

- Start the self-diagnosis function and select "Self Diagnosis".
- Self-diagnosis subdivision screen is displayed, and the selfdiagnosis mode starts.
- The bar graph visible on the center of the self-diagnosis subdivision screen indicates progress of the trouble diagnosis.

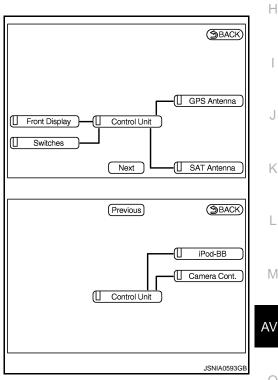


Diagnosis results are displayed after the self-diagnosis is completed. The unit names and the connection lines are color-coded according to the diagnostic results.

Diagnosis results	Unit	Con- nection line
Normal	Green	Green
<b>Connection malfunction</b>	Gray	Yellow
Unit malfunction Note	Red	Green

#### NOTE:

- · Only the control unit (AV control unit) is displayed in red.
- The number of units that is displayed on the on board self-diagnosis display according to equipment.
- · Replace AV control unit if "Self-Diagnosis did not run because of a control unit malfunction" is indicated. The symptom is AV control unit internal error. Refer to AV-764, "Exploded View".
- If multiple errors occur at the same time for a single unit, the screen switch colors are determined according to the following order of priority: red > gray.



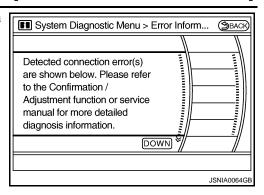
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#### < FUNCTION DIAGNOSIS >

#### [BOSE AUDIO WITH NAVIGATION]

- The comments of the self-diagnosis results can be viewed with a component in the diagnosis result screen.



#### **SELF-DIAGNOSIS RESULTS**

- The self-diagnosis mode allows the technician to diagnose the connection in the communication line between AV control unit and each unit and the internal operation of the AV control unit.
- Because the start condition of diagnosis function is a switch operation, the on board diagnosis function cannot be started up if any malfunction is detected in the communication circuit between AV control unit and multifunction switch.
- Check the applicable display at the following table, and then repair the malfunctioning parts.

#### Self-diagnosis Result Chart

Diagnosis results	Detection logic	Possible malfunction location / Action to take
Previous    Sat Antenna     Front Display   Control Unit     Switches   Sat Antenna     Frevious   Sat	Malfunction is detected in AV control unit power supply and ground circuits.	Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.

## < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

Diagnosis results	Detection logic	Possible malfunction location / Action to take	А
Previous  BACK    iPod-BB     Camera Cont.    Control Unit     Syliao596GB	Malfunction is detected in camera- connection recognition signal circuit.	Camera connection recognition signal circuit.	B C
GPS Antenna  GPS Antenna  Switches  Next SAT Antenna  I: Gray SNIA0597GB	GPS antenna connection malfunction is detected.	GPS antenna.	E F G
GPS Antenna    GPS Antenna   SAT Antenna   Gray	Satellite radio antenna connection malfunction is detected.	<ul> <li>Satellite radio antenna feeder.</li> <li>Antenna base.</li> </ul>	J K

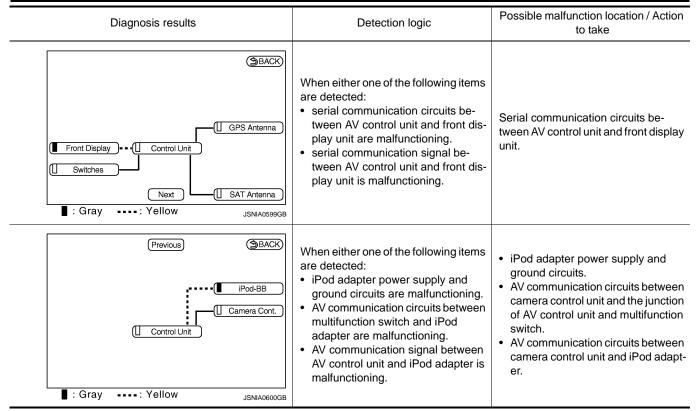
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#### [BOSE AUDIO WITH NAVIGATION]

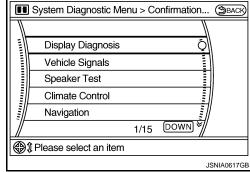


#### NOTE:

The number of units that is displayed on the on board self-diagnosis display according to equipment.

#### CONFIRMATION/ADJUSTMENT MODE

- Start the diagnosis function and select "Confirmation/Adjustment". The confirmation/adjustment mode indicates where each item can be checked or adjusted.
- 2. Select each switch on the "Confirmation/Adjustment Mode" screen to display the relevant trouble diagnosis screen. Press the "BACK" switch to return to the initial Confirmation/Adjustment Mode screen.



#### < FUNCTION DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

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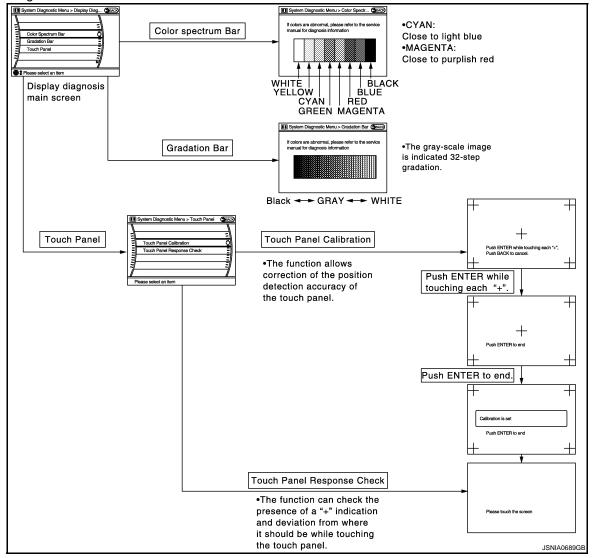
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#### Display Diagnosis



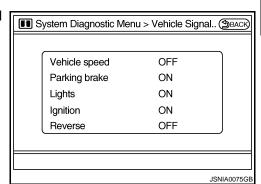
The tint of the color bar indication is as per the following list if RGB signal error is detected.

R (red) signal error : Light blue (Cyan) tint G (green) signal error : Purple (Magenta) tint

B (blue) signal error : Yellow tint

### Vehicle Signals

A comparison check can be made of each actual vehicle signal and the signals recognized by the system.



### < FUNCTION DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

Diagnosis item	Display	Vehicle status	Remarks	
Vehicle speed	ON	Vehicle speed > 0 km/h (0 MPH)		
verlicie speed	OFF	Vehicle speed = 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal	
Darking broke	ON	Parking brake is applied.	Changes in indication may be delayed. This is normal.	
Parking brake	OFF	Parking brake is released.		
Lights	ON	Light switch ON		
	OFF	Light switch OFF	_	
Ignition	ON	Ignition switch ON		
Igrillion	OFF	Ignition switch in the ACC position	_	
Reverse	ON	Shift the selector lever to the "R" position	Changes in indication may be delayed. This is normal.	
	OFF	Shift the selector lever to a position other than the "R" position	Onanges in indication may be delayed. This is notifial.	

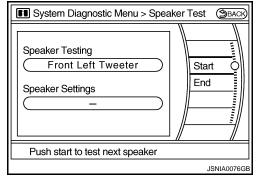
#### Speaker Test

Select "SPEAKER DIAGNOSIS" to display the Speaker Diagnosis screen. Press "START and NEXT" to generate a test tone in a speaker. Press "Start" to generate a test tone in the next speaker. Press "End" to stop the test tones.

#### NOTE:

The frequency of test tone emitted from each speaker is as follows.

Tweeter : 3 kHz
Front speaker : 300 Hz
Rear speaker : 1 kHz



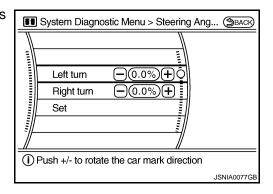
#### Climate Control

On-board self-diagnosis is not supported. Only CONSULT-III is supported. Refer to <u>HAC-157</u>, "CONSULT-III Function" [with 7 inch display].

#### Navigation

#### STEERING ANGLE ADJUSTMENT

The steering angle output value detected with the gyroscope is adjusted.

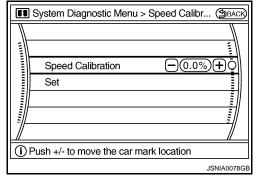


#### **SPEED CALIBRATION**

### < FUNCTION DIAGNOSIS >

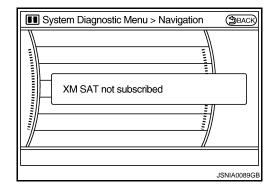
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During normal driving, distance error caused by tire wear and tire pressure change is automatically adjusted for by the automatic distance correction function. This function, on the other hand, is for immediate adjustment, in cases such as driving with tire chain fitted on tires.



#### XM SAT SUBSCRIPTION STATUS

The XM NavTraffic subscription status can be checked.



#### Error History

The self-diagnosis results are judged depending on whether any error occurs from when "Self-diagnosis" is selected until the self-diagnosis results are displayed.

However, the diagnosis results are judged normal if an error has occurred before the ignition switch is turned ON and then no error has occurred until the self-diagnosis start. Check the "Error Record" to detect any error that may have occurred before the self-diagnosis start because of this situation.

The error record displays the time and place of the most recent occurrence of that error. However, take note of the following points.

- If there is a malfunction with the GPS antenna circuit board in the AV control unit, the correct date and time of occurrence may not be able to be displayed.
- Place of the error occurrence is represented by the position of the current location mark at the time the error occurred. If the current location mark has deviated from the correct position, then the place of the error occurrence cannot be correctly located.
- The frequency of occurrence is displayed in a count up manner. The actual count up method differs depending on the error item.

#### Count up method A

- The counter resets to 0 if an error occurs when IGN switch is turned ON. The counter increases by 1 if the condition is normal at a next IGN ON cycle.
- The counter upper limit is 39. Any counts exceeding 39 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

#### Count up method B

- The counter increases by 1 if an error occurs when IGN switched is ON. The counter will not decrease even if the status is normal at the next IGN ON cycle.
- The counter upper limit is 50. Any counts exceeding 50 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

Display type of occur- rence frequency	Error history display item	
Count up method A	CAN communication line, control unit (CAN), AV communication line, control unit (AV communication)	
Count up method B	Other than the above	

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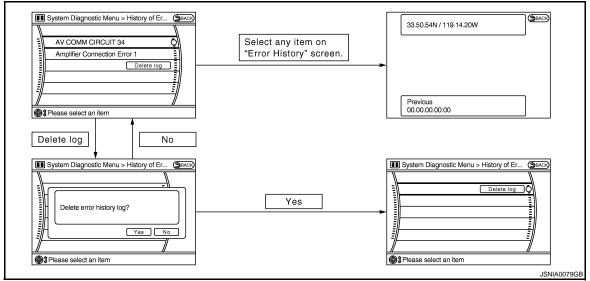
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## [BOSE AUDIO WITH NAVIGATION]



Error item

Some error items may be displayed simultaneously according to the cause. If some error items are displayed simultaneously, the detection of the cause can be performed by the combination of display items

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results.  Refer to AV-589, "CONSULT-III Function (MULTI AV)".
CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	
CONTROL UNIT (AV)	AV communication circuit initial diagnosis malfunction is detected.	
FLASH-ROM Error Of Control Unit		
Connection Of Gyro		
XM SERIAL COMM Error		
CAN Controller Memory Error		Replace the AV control unit.
Bluetooth Module Connection Error		
HDD CONN Error	AV control unit malfunction is detected.	
HDD READ Error	Av control unit mailunction is detected.	
HDD WRITE Error		
HDD COMM Error		
HDD ACCESS Error		
DSP CONN Error		
DSP COMM Error		
Internal Communication Error	Malfunction is detected in AV control unit power supply and ground circuits.	Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.
GPS Communication Error		An intermittent error caused by strong radio
GPS ROM Error		interference may be detected unless a symptom (GPS reception error, etc.) oc-
GPS RAM Error	GPS malfunction is detected.	curs.
GPS RTC Error		Replace the AV control unit if the malfunction occurs constantly.

### < FUNCTION DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
Front Display Connection Error	When either one of the following items are detected:  • front display unit power supply and ground circuits are malfunctioning.  • serial communication circuits between AV control unit and front display unit are malfunctioning.  • serial communication signal between AV control unit and front display unit is malfunctioning.	<ul> <li>Front display unit power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and display unit.</li> </ul>
GPS Antenna Error	GPS antenna connection malfunction is detected.	GPS antenna.
Camera Control Unit Connection Error	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.
XM Antenna Connection Error	Satellite radio antenna connection malfunction is detected.	<ul><li>Satellite radio antenna feeder.</li><li>Antenna base.</li></ul>
AV COMM CIRCUIT     Internal Communication Error	Malfunction is detected in AV control unit power supply and ground circuits.	Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.
AV COMM CIRCUIT     Switches Connection Error	When either one of the following items are detected:  multifunction switch power supply and ground circuits are malfunctioning.  AV communication circuits between AV control unit and multifunction switch are malfunctioning.  AV communication signal between AV control unit and multifunction switch is malfunctioning.	<ul> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuits between AV control unit and multifunction switch.</li> </ul>
<ul> <li>AV COMM CIRCUIT</li> <li>Rearview Camera Connection Error</li> </ul>	When either one of the following items are detected:  camera control unit power supply and ground circuits are malfunctioning.  AV communication circuits between multifunction switch and camera control unit is malfunctioning.  AV communication signal between AV control unit and camera control unit is malfunctioning.	<ul> <li>Camera control unit power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch and camera control unit.</li> </ul>
AV COMM CIRCUIT     iPod Connection Error	When either one of the following items are detected:  • iPod adapter power supply and ground circuits are malfunctioning.  • AV communication circuits between multifunction switch and iPod adapter are malfunctioning.  • AV communication signal between AV control unit and iPod adapter is malfunctioning.	<ul> <li>iPod adapter power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch unit and iPod adapter.</li> </ul>
AV COMM CIRCUIT     Rearview Camera Connection Error     iPod Connection Error	Malfunction is detected in AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.	AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.

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#### < FUNCTION DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
AV COMM CIRCUIT     Switches Connection Error     Rearview Camera Connection Error     iPod Connection Error	Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.	AV communication circuits between AV control unit and the junction of camera control unit and multifunction switch.
<ul> <li>AV COMM CIRCUIT</li> <li>Internal Communication Error</li> <li>Switches Connection Error</li> <li>Rearview Camera Connection Error</li> <li>iPod Connection Error*</li> </ul>	Malfunction is detected in AV communication circuits.	Check and repair the short circuit in AV communication circuits.

#### NOTE:

#### Vehicle CAN Diagnosis

- CAN communication status and error counter is displayed.
- The error counter displays "OK" if any malfunction was not detected in the past and displays "0" if a malfunction is detected. It increases by 1 if the status is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- The error counter is erased if "Reset" is pressed.

Items	Display (Current)	Malfunction counter (Past)
Tx (HVAC)	OK / UNKWN	OK / 0 – 39
Rx (ECM)	OK / UNKWN	OK / 0 – 39
Rx (Cluster)	OK / UNKWN	OK / 0 – 39
Rx (BCM)	OK / UNKWN	OK / 0 – 39
Rx (HVAC)	OK / UNKWN	OK / 0 – 39
Rx (USM)	OK / UNKWN	OK / 0 – 39

#### System Diagnostic Menu > Vehicle CAN... Signal Status Count Tx(HVAC) OK OK Rx(ECM) OK OK Rx(Cluster) OK OK Reset Rx(BCM) OK OK Rx(HVAC) OK OK Rx(USM) OK JSNIA0080GE

#### **AV COMM Diagnosis**

- Displays the communication status between AV control unit (master unit) and each unit.
- The error counter displays "OK" if any malfunction was not detected in the past and displays "0" if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- The error counter is erased if "Reset" is pressed.

Items	Status (Current)	Counter (Past)
C Tx(ITM-PrimarySW)	OK / UNKWN	OK / 0 – 39
C Rx(PrimarySW-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(STRG SW-ITM)	OK / UNKWN	OK / 0 – 39
C Rx (Audio-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(Amp–ITM)	OK / UNKWN	OK / 0 – 39
C Rx(RearCamera–ITM)	OK / UNKWN	OK / 0 – 39
C Rx(XM–ITM)	OK / UNKWN	OK / 0 – 39
C Rx(iPod–ITM)	OK / UNKWN	OK / 0 – 39
C Rx(Amp–Audio)	_	_
C Rx(iPod–Audio)	OK / UNKWN	OK / 0 – 39
C Tx(Audio–ITM)	OK / UNKWN	OK / 0 – 39

#### NOTE:

• Any units with "—" displayed have no history of vehicle connection.

System Diagnos	stic Menu	ı > AV C	OMM Di (SBACK)
Signal C Tx(ITM-PrimarySW) C Rx(PrimarySW-ITM) C Rx(STRG SW-ITM) C Rx(Audio-ITM) C Rx(Amp-ITM) C Rx(RearCamera-ITM) C Rx(XM-ITM)	Status OK OK OK OK OK OK OK OK OK	Count. OK OK OK OK OK OK OK OK	Checking Reset Res
			JSNIA0081GB

^{*:} Non-equipped item is not displayed.

#### < FUNCTION DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

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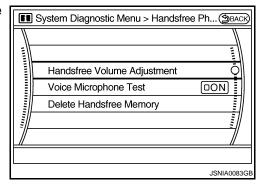
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- "Audio" and "Amp" indicate the same status because "Amp" indicates the status of the amplifier integrated in the AV control unit.
- "STRG SW", "Amp""XM" indicate the same status as "Audio".

#### Hands-Free Phone

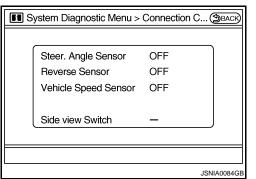
The hands-free phone reception volume adjustment, microphone and speaker test, and memory erase functions are also available.



#### Camera Cont.

The two functions of "Connection Confirmation" and "Adjust Offset of Rear View Camera" are available. CONNECTION CONFIRMATION

The steering angle sensor, reverse signal and vehicle speed sensor can be inspected.



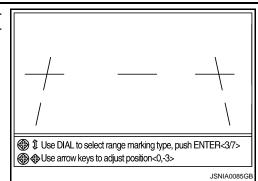
Diagnosis item	Display	Vehicle status
	ON	When steering the vehicle with ignition switch ON (remains ON until connection mode is stopped when it is turned ON)
Steer. Angle Sensor	OFF	Ignition switch at ACC     No steering with ignition switch ON
	_	Malfunction detected in camera connection recognition signal
	ON	Selector lever is in "R" with ignition switch ON.
	OFF	<ul> <li>Ignition switch at ACC</li> <li>Selector lever is in position other than "R" with ignition switch ON.</li> </ul>
	_	Malfunction detected in camera-connection recognition signal
	ON	Vehicle speed is more than 0 km/h (0 MPH) with ignition switch ON
Vehicle Speed Sensor O	OFF	Ignition switch at ACC     Vehicle speed is 0 km/h (0 MPH) with ignition switch ON
	_	Malfunction detected in camera connection recognition signal
Side view Switch	_	Not used

ADJUST OFFSET OF REAR VIEW CAMERA

### < FUNCTION DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

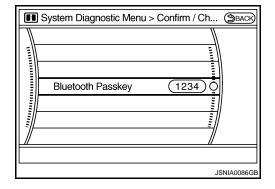
Use this mode to adjust the guide line display position of the rearview monitor if necessary after removing the rear view monitor camera.



#### Bluetooth

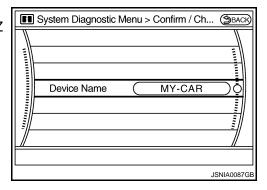
Confirm / Change Passkey

- The Bluetooth passkey can be confirmed and changed.
- The passkey can be changed by four digits within 0 to 9.



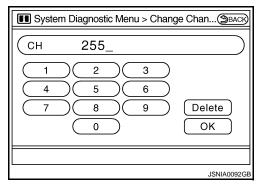
#### Confirm / Change Device Name

- The Bluetooth device name be confirmed and changed.
- The device name can be changed by sixteen digits from A to Z (small characters can be used) and "-" (hyphens).



#### SAT

- Change Channel
- Any necessary channels required to receive traffic information from the satellite radio system can be set.



### < FUNCTION DIAGNOSIS >

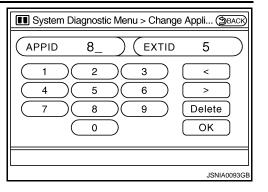
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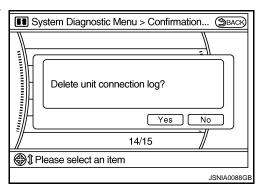
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- Change Application ID
- Any application ID'-s required to receive traffic information from the satellite radio system can be set.



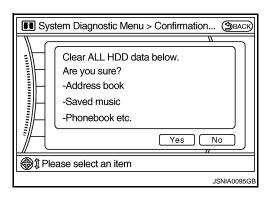
### Delete Unit Connection Log

Deletes any unit connection records and error records from the AV control unit memory. (Clear the records of the unit that has been removed.)



Initialize Settings

Deletes data stored in HDD.



INFOID:0000000003356565

# CONSULT-III Function (MULTI AV)

#### **CONSULT-III FUNCTIONS**

CONSULT-III performs the following functions via the communication with the AV control unit.

Diagnosis mode	Description
Ecu Identification	The part number of AV control unit can be checked.
Self Diagnostic Result  Performs a diagnosis on the AV control unit and a connection diagnosis for the circuit of the MULTI AV system, and displays the current and past malfunctions	
Data Monitor	The diagnosis of vehicle signal that is input to the AV control unit can be performed.

#### AV COMMUNICATION

When "AV communication" of "CAN Diag Support Monitor" is selected, the following function will be performed.

AV communication	AV&NAVI C/U	Displays the communication status from AV control unit to each unit as well as the error counter.
	AUDIO	Displays the AV control unit communication status and the error counter.

#### **ECU IDENTIFICATION**

The part number of AV control unit is displayed.

### < FUNCTION DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

#### **SELF DIAGNOSIS RESULT**

- In CONSULT-III self-diagnosis, self-diagnosis results and error history are displayed collectively.
  A current malfunction indicates "crnt". a past malfunction indicates "past".
- The timing is displayed as "0" if any of the error codes [U1000], [U1010], [U1300] and [U1310] is detected. the counter increases by 1 if the status is normal at the next ignition switch on cycle.

#### Self-diagnosis Results Display Item

Error item	Description	Possible malfunction factor/Action to take	
CAN COMM CIRCUIT [U1000]	CAN communication malfunction is detected.	Refer to AV-593, "Diagnosis Procedure".	
CONTROL UNIT (CAN) [U1010]	CAN initial diagnosis malfunction is detected.		
CONTROL UNIT (AV) [U1310]	AV communication circuit initial diagnosis malfunction is detected.		
Control Unit FLASH-ROM [U1200]			
Gyro NO CONN [U1201]			
CAN CONT [U1216]			
BLUETOOTH CONN [U1217]			
HDD CONN [U1218]		Replace the AV control unit.	
HDD READ [U1219]	AV control unit malfunction is detected.		
XM SERIAL COMM [U1220]	Av control unit manunction is detected.		
HDD WRITE [U121A]			
HDD COMM [U121B]			
HDD ACCESS [U121C]			
DSP CONN [U121D]			
DSP COMM [U121E]			
INTERNAL COMM [U121F]	Malfunction is detected in AV control unit power supply and ground circuits.	Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.	
GPS COMM [U1204]		An intermittent error caused by strong radio interference may be detected unless a symptom (GPS reception error, etc.) occurs.  Replace the AV control unit if the malfunction occurs constantly.	
GPS ROM [U1205]			
GPS RAM [U1206]	GPS malfunction is detected.		
GPS RTC [U1207]			
FRONT DISP CONN [U1243]	<ul> <li>When either one of the following items are detected:</li> <li>• front display unit power supply and ground circuits are malfunctioning.</li> <li>• serial communication circuits between AV control unit and front display unit are malfunctioning.</li> <li>• serial communication signal between AV control unit and front display unit is malfunctioning.</li> </ul>	<ul> <li>Front display unit power supply and ground circuits.</li> <li>Serial communication circuits between AV control unit and display unit.</li> </ul>	
GPS ANTENNA CONN [U1244]	GPS antenna connection malfunction is detected.	GPS antenna.	
CAMERA CONT CONN [U1250]	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.	
XM ANTENNA CONN [U1258]	Satellite radio antenna connection malfunction is detected.	Satellite radio antenna feeder.     Antenna base.	

### < FUNCTION DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
AV COMM CIRCUIT [U1300]     INTERNAL COMM [U121F]	Malfunction is detected in AV control unit power supply and ground circuits.	Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.
AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]	When either one of the following items are detected:  multifunction switch power supply and ground circuits are malfunctioning.  AV communication circuits between AV control unit and multifunction switch are malfunctioning.  AV communication signal between AV control unit and multifunction switch is malfunctioning.	<ul> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuits between AV control unit and multifunction switch.</li> </ul>
AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]	<ul> <li>When either one of the following items are detected:</li> <li>camera control unit power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between multifunction switch and camera control unit is malfunctioning.</li> <li>AV communication signal between AV control unit and camera control unit is malfunctioning.</li> </ul>	<ul> <li>Camera control unit power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch and camera control unit.</li> </ul>
AV COMM CIRCUIT [U1300]     IPod CONN [U1254]	When either one of the following items are detected:  iPod adapter power supply and ground circuits are malfunctioning.  AV communication circuits between multifunction switch and iPod adapter are malfunctioning.  AV communication signal between AV control unit and iPod adapter is malfunctioning.	<ul> <li>iPod adapter power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch unit and iPod adapter.</li> </ul>
<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>IPod CONN [U1254]*</li> </ul>	Malfunction is detected in AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.	AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.
<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>IPod CONN [U1254][*]</li> </ul>	Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.	AV communication circuits between AV control unit and the junction of camera control unit and multifunction switch.
<ul> <li>AV COMM CIRCUIT [U1300]</li> <li>INTERNAL COMM [U121F]</li> <li>SWITCH CONN [U1240]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>IPod CONN [U1254]*</li> </ul>	Malfunction is detected in AV communication circuits.	Check and repair the short circuit in AV communication circuits.

#### NOTE:

#### DATA MONITOR

#### All Signals

- Displays the status of the following vehicle signals inputted into the AV control unit.
- For each signal, the actual signal can be compared with the status recognized on the system.

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^{*:} Non-equipped item is not displayed.

### < FUNCTION DIAGNOSIS >

## [BOSE AUDIO WITH NAVIGATION]

Display Item	Display	Vehicle status	Remarks	
VILICI, CDD CIC	On	Vehicle speed >0 km/h (0 MPH)	Changes in indication may be delayed. This is	
VHCL SPD SIG	Off	Vehicle speed =0 km/h (0 MPH)		
DIVD CIO	On	Parking brake is applied.	normal.	
PKB SIG	Off	Parking brake is released.		
III I I I I I I I I I I I I I I I I I	On	Block the light beam from the auto light optical sensor when the light SW is ON.		
ILLUM SIG	Off	Expose the auto light optical sensor to light when the light SW is OFF or ON.	_	
IGN SIG	On	Ignition switch ON		
	Off	Ignition switch in the ACC position		
REV SIG	On	Selector lever in the "R" position	Changes in indication may be deleved. This is	
	Off	Selector lever in any position other than the "R" position	Changes in indication may be delayed. This normal.	

#### Selection From Menu

allows the technician to select which vehicle signals should be displayed and displays the status of the selected vehicle signals.

Item to be selected	Description
VHCL SPD SIG	
PKB SIG	. "
ILLUM SIG	The same as when "ALL SIGNALS" is selected.
IGN SIG	
REV SIG	

#### **U1000 CAN COMM CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# **COMPONENT DIAGNOSIS**

## U1000 CAN COMM CIRCUIT

**Description** 

CAN (Controller Area Network) is a serial communication line for real-time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independently). In CAN communication, control units are connected with 2 communication lines (CAN-H, CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to LAN-25, "CAN Communication Signal Chart".

DTC Logic

#### DTC DETECTION LOGIC

DTC	Display contents of CON- SULT-III	Diagnostic item is detected when	Probable malfunction location
U1000	CAN COMM CIRCUIT	AV control unit is not transmitting or receiving CAN communication signal for 2 seconds or more.	CAN communication system.

# Diagnosis Procedure

1.PERFORM SELF-DIAGNOSTIC

- 1. Turn ignition switch ON and wait for 2 seconds or more.
- 2. Check "Self Diagnostic Result" of "MULTI AV".

#### Is "CAN COMM CIRCUIT" displayed?

YES >> Refer to "LAN system". Refer to LAN-16, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI section. Refer to GI-40. "Intermittent Incident".

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# **U1010 CONTROL UNIT (CAN)**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# U1010 CONTROL UNIT (CAN)

Description INFOID:000000003356569

Initial diagnosis of AV control unit.

DTC Logic

#### DTC DETECTION LOGIC

DTC	Display contents of CON- SULT-III	Diagnostic item is detected when	Probable malfunction location
U1010	CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	AV control unit.

# Diagnosis Procedure

INFOID:0000000003356571

# 1. REPLACE AV CONTROL UNIT

When DTC U1010 is detected, replace AV control unit.

>> INSPECTION END

### **U1310 AV CONTROL UNIT**

### [BOSE AUDIO WITH NAVIGATION]

# U1310 AV CONTROL UNIT

Description INFOID:0000000003356572

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1310	CONTROL UNIT (AV) [U1310]	An initial diagnosis error is detected in AV communication circuit.	Replace AV control unit.

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# **U1200 AV CONTROL UNIT**

Description INFOID:000000003356574

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1200	Cont Unit FLASH-ROM [U1200]	An internal malfunction is detected in AV control unit (FLASH-ROM).	Replace AV control unit.

### **U1201 AV CONTROL UNIT**

## [BOSE AUDIO WITH NAVIGATION]

# **U1201 AV CONTROL UNIT**

Description INFOID:000000003356576

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1201	GYRO NO CONN [U1201]	Internal malfunction of AV control unit (gyrocompass disconnection) is detected.	Replace AV control unit.

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## [BOSE AUDIO WITH NAVIGATION]

# **U1216 AV CONTROL UNIT**

Description INFOID:000000003356578

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description	
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>	

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1216	CAN CONT [U1216]	Internal malfunction of AV control unit (CAN controller) is detected.	Replace AV control unit.

### **U1217 AV CONTROL UNIT**

## [BOSE AUDIO WITH NAVIGATION]

# **U1217 AV CONTROL UNIT**

Description INFOID:0000000003356580

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1217	BLUETOOTH MODULE CONN [U1217]	Internal malfunction of AV control unit (Bluetooth module connection malfunction) is detected.	Replace AV control unit.

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### [BOSE AUDIO WITH NAVIGATION]

# **U1218 AV CONTROL UNIT**

Description INFOID:00000000033565682

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description	
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>	

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1218	HDD-CONN [U1218]	Internal malfunction of AV control unit (HDD connection malfunction) is detected.	Replace AV control unit.

### **U1219 AV CONTROL UNIT**

### [BOSE AUDIO WITH NAVIGATION]

# **U1219 AV CONTROL UNIT**

Description INFOID:000000003356584

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth[™] function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1219	HDD-READ [U1219]	Internal malfunction of AV control unit (HDD read malfunction) is detected.	Replace AV control unit.

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# **U1220 AV CONTROL UNIT**

# **U1220 AV CONTROL UNIT**

Description INFOID:000000003356586

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description	
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>	

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1220	XM SERIAL COMM [U1220]	Internal malfunction of AV control unit (satellite radio tuner communication error) is detected.	Replace AV control unit.

### **U121A AV CONTROL UNIT**

### [BOSE AUDIO WITH NAVIGATION]

# **U121A AV CONTROL UNIT**

Description INFOID:0000000003356588

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121A	HDD-WRITE [U121A]	Internal malfunction of AV control unit (HDD write malfunction) is detected.	Replace AV control unit.

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# **U121B AV CONTROL UNIT**

### [BOSE AUDIO WITH NAVIGATION]

# **U121B AV CONTROL UNIT**

Description INFOID:000000003356590

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121B	HDD-COMM [U121B]	Internal malfunction of AV control unit (HDD communication error) is detected.	Replace AV control unit.

### **U121C AV CONTROL UNIT**

### [BOSE AUDIO WITH NAVIGATION]

# **U121C AV CONTROL UNIT**

Description INFOID:0000000003356592

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121C	HDD-ACCESS [U121C]	Internal malfunction of AV control unit (HDD access error) is detected.	Replace AV control unit.

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# **U121D AV CONTROL UNIT**

Description INFOID:000000003356594

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description	
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>	

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121D	DSP CONN [U121D]	Internal malfunction of AV control unit (DSP connection error) is detected.	Replace AV control unit.

### **U121E AV CONTROL UNIT**

### [BOSE AUDIO WITH NAVIGATION]

# **U121E AV CONTROL UNIT**

Description INFOID:0000000003356596

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth[™] function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121E	DSP COMM [U121E]	Internal malfunction of AV control unit (DSP communication error) is detected.	Replace AV control unit.

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## **U121F AV CONTROL UNIT**

Description INFOID:000000003356598

Replace the AV control unit if this DTC is displayed. Refer to AV-764, "Exploded View".

Part name	Description	
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM, A/C auto amp. and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>	

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121F	INTERNAL COMM [U121F]	Internal malfunction of AV control unit (internal communication error) is detected.	AV control unit power supply and ground circuit.

# Diagnosis Procedure

INFOID:0000000003356600

# 1. CHECK AV CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check AV control unit power supply and ground circuit. Refer to <u>AV-619</u>, "AV CONTROL UNIT : <u>Diagnosis</u> Procedure".

### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Repair or replace malfunctioning parts.

#### [BOSE AUDIO WITH NAVIGATION]

### **U1204 GPS**

Description INFOID:0000000003356601

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to AV-764. "Exploded View".

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

**DTC** Logic INFOID:0000000003356602

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1204	GPS CONN [U1204]	Internal malfunction of AV control unit (GPS malfunction) is detected.	An intermittent error caused by strong radio interference may be detected unless a symptom (GPS reception error, etc.) occurs.  Replace the AV control unit if the malfunction occurs constantly.

# Diagnosis Procedure

# 1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again. 2.
- Check that the DTC is detected again.

#### Is any DTC detected?

YES >> Replace AV control unit.

NO >> The intermittent malfunction caused by strong radio interference can be detected.

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**AV-609** Revision: 2008 October 2009 Murano

### **U1205 GPS**

Description INFOID:000000003556528

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to <a href="AV-764">AV-764</a>, <a href="Exploded View"</a>.

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1205	GPS ROM [U1205]	Internal malfunction of AV control unit (GPS malfunction) is detected.	An intermittent error caused by strong radio interference may be detected unless a symptom (GPS reception error, etc.) occurs.  Replace the AV control unit if the malfunction occurs constantly.

# Diagnosis Procedure

INFOID:0000000003356606

# 1. PERFORM THE SELF-DIAGNOSIS

- 1. Delete the self-diagnosis results. Turn ignition switch OFF.
- 2. Turn ignition switch ON. Perform the self-diagnosis again.
- 3. Check that the DTC is detected again.

#### Is any DTC detected?

YES >> Replace AV control unit.

NO >> The intermittent malfunction caused by strong radio interference can be detected.

#### [BOSE AUDIO WITH NAVIGATION]

### **U1206 GPS**

Description INFOID:0000000003556529

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to AV-764. "Exploded View".

Part name	Description	
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>	

**DTC** Logic INFOID:0000000003356608

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1206	GPS RAM [U1206]	Internal malfunction of AV control unit (GPS malfunction) is detected.	An intermittent error caused by strong radio interference may be detected unless a symptom (GPS reception error, etc.) occurs.  Replace the AV control unit if the malfunction occurs constantly.

# Diagnosis Procedure

# 1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again. 2.
- Check that the DTC is detected again.

### Is any DTC detected?

YES >> Replace AV control unit.

NO >> The intermittent malfunction caused by strong radio interference can be detected.

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**AV-611** Revision: 2008 October 2009 Murano

### **U1207 GPS**

Description INFOID:0000000003556530

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to <a href="AV-764">AV-764</a>, <a href="Exploded View"</a>.

Part name	Description
AV CONTROL UNIT	<ul> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM and combination meter via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> <li>It includes the TEL adapter and Bluetooth function.</li> </ul>

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1207	GPS RTC [U1207]	Internal malfunction of AV control unit (GPS malfunction) is detected.	An intermittent error caused by strong radio interference may be detected unless a symptom (GPS reception error, etc.) occurs.  Replace the AV control unit if the malfunction occurs constantly.

# Diagnosis Procedure

INFOID:0000000003356612

# 1.PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- 2. Turn ignition switch ON. Perform the self-diagnosis again.
- 3. Check that the DTC is detected again.

#### Is any DTC detected?

YES >> Replace AV control unit.

NO >> The intermittent malfunction caused by strong radio interference can be detected.

### [BOSE AUDIO WITH NAVIGATION]

## U1243 DISPLAY UNIT

Description INFOID:000000003356613

Part name	Description	
FRONT DISPLAY UNIT	<ul> <li>Front display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing). Auxiliary image signal is input from the auxiliary input jack. Camera image signal is input from camera control unit.</li> <li>Synchronize signal (HP, VP) is output to AV control unit.</li> <li>Touch panel function can be operated for each system by touching a display directly.</li> </ul>	

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1243	FRONT DISP CONN [U1243]	When either one of the following items are detected:  serial communication circuits between AV control unit and front display unit are malfunctioning.  serial communication signal between AV control unit and front display unit is malfunctioning.	<ul> <li>Front display unit power supply and ground circuits.</li> <li>Serial communication circuits be- tween AV control unit and display unit.</li> </ul>

# Diagnosis Procedure

1. CHECK FRONT DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check front display unit power supply and ground circuit. Refer to <u>AV-619, "FRONT DISPLAY UNIT: Diagnosis Procedure"</u>.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

# 2.check continuity communication circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector	Terminals	Connector Terminals		Continuity
M49	11	M146	70	Existed
10149	22		71	LXISIEU

4. Check continuity between front display unit harness connector and ground.

Front display unit		Front display unit	
Connector	Terminals	Ground —	Continuity
M49	11		Not existed
	22		Not existed

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

### ${f 3.}$ CHECK COMMUNICATION SIGNAL

Connect front display unit connector and AV control unit connector.

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### **U1243 DISPLAY UNIT**

# [BOSE AUDIO WITH NAVIGATION]

2009 Murano

- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector terminal and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal
Connector	Terminal			
M49	11	Ground	When adjusting display bright ness.	(V) 6 4 2 0 ++1ms PKIB5039J

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

# 4. CHECK COMMUNICATION SIGNAL

Check signal between display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal	
Connector	Terminal	Condition		2.9.101	
M49	22	Ground	When adjusting display bright ness.	(V) 6 4 2 0 → 1ms PKIB5039J	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front display unit.

### **U1244 GPS ANTENNA**

### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

# U1244 GPS ANTENNA

**Description** 

Part name	Description
GPS ANTENNA	GPS signal is received and transmitted to AV control unit.

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1244	GPS ANTENNA CONN [U1244]	GPS antenna connection malfunction is detected.	GPS antenna disconnection.

# Diagnosis Procedure

# 1.GPS ANTENNA CHECK

Visually check GPS antenna and antenna feeder.

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

# 2. CHECK AV CONTROL UNIT VOLTAGE

- 1. Disconnect GPS antenna connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit terminal and ground.

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AV control unit		(–)	Voltage (Approx.)
Connector	Terminal		,
M380	110	Ground	5.0 V

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace AV control unit.

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### **U1250 CAMERA CONTROL UNIT**

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[BOSE AUDIO WITH NAVIGATION]

# U1250 CAMERA CONTROL UNIT

Description INFOID:0000000003356619

Part name	Description	
CAMERA CONTROL UNIT	<ul> <li>Camera image signal is input from rear view camera, and camera image is indicated on the display.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>	

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1250	CAMERA CONT. CONN [U1250]	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.

# Diagnosis Procedure

INFOID:0000000003356621

# 1. CHECK CAMERA-CONNECTION RECOGNITION SIGNAL CIRCUIT

- 1. Disconnect AV control unit connector and camera control unit connector.
- 2. Check continuity between AV control unit harness connector and camera control unit harness connector.

AV control unit		Camera control unit		Continuity
Connector	Terminal	Connector Terminal		Continuity
M145	40	B60	14	Existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector and ground.

(+)			Voltage
AV control unit		(-)	(Approx.)
Connector	Terminal	, ,	, , , ,
M145	40	Ground	5.0 V

### Is the inspection result normal?

YES >> Replace camera control unit.

NO >> Replace AV control unit.

### **U1258 SATELLITE RADIO ANTENNA**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# U1258 SATELLITE RADIO ANTENNA

Description INFOID:000000003356622

Part name	Description
SATELLITE RADIO ANTENNA	Satellite radio waves are received and transmitted to AV control unit.

DTC Logic

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1258	XM ANTENNA CONN [U1258]	Satellite radio antenna connection malfunction is detected.	<ul><li>Satellite radio antenna feeder.</li><li>Satellite radio antenna.</li></ul>

# Diagnosis Procedure

1. SATELLITE RADIO ANTENNA CHECK

Visually check satellite radio antenna and antenna feeder.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

# 2. CHECK AV CONTROL UNIT VOLTAGE

- 1. Disconnect satellite radio antenna connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit terminal and ground.

(+)			Valtaria
AV control unit		(-)	Voltage (Approx.)
Connector	Terminal	,	,
M372	108	Ground	5.0 V

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace AV control unit.

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Revision: 2008 October AV-617 2009 Murano

# U1300 AV COMM CIRCUIT

Description INFOID:000000003356625

U1300 is indicated when malfunction occurs in communication signal of multi AV system. Indicated simultaneously, without fail, with the malfunction of control units connected to AV control unit with communication line. Determine the possible malfunction cause from the table below.

#### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display contents of CONSULT-III	Description	Possible malfunction factor/Action to take
U1300 U121F	AV COMM CIRCUIT [U1300]     INTERNAL COMM [U121F]	Malfunction is detected in AV control unit power supply and ground circuits.	Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.
U1300 U1240	AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]	<ul> <li>When either one of the following items are detected:</li> <li>multifunction switch power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between AV control unit and multifunction switch are malfunctioning.</li> <li>AV communication signal between AV control unit and multifunction switch is malfunctioning.</li> </ul>	<ul> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuits between AV control unit and multifunction switch.</li> </ul>
U1300 U1252	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]	<ul> <li>When either one of the following items are detected:</li> <li>camera control unit power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between multifunction and camera control unit are malfunctioning.</li> <li>AV communication signal between AV control unit and camera control unit is malfunctioning.</li> </ul>	<ul> <li>Camera control unit power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch and camera control unit.</li> </ul>
U1300 U1254	AV COMM CIRCUIT [U1300]     IPod CONN [U1254]	<ul> <li>When either one of the following items are detected:</li> <li>iPod adapter power supply and ground circuits are malfunctioning.</li> <li>AV communication circuits between multifunction switch and iPod adapter are malfunctioning.</li> <li>AV communication signal between AV control unit and iPod adapter is malfunctioning.</li> </ul>	<ul> <li>iPod adapter power supply and ground circuits.</li> <li>AV communication circuits between multifunction switch unit and iPod adapter.</li> </ul>
U1300 U1252 U1254 [*]	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]     IPOd CONN [U1254] [*]	Malfunction is detected in AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.	AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.
U1300 U1240 U1252 U1254*	AV COMM CIRCUIT [U1300] SWITCH CONN [U1240] REAR CAMERA LAN CONN [U1252] IPOD CONN [U1254]	Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.	AV communication circuits between AV control unit and the junction of camera control unit and multifunction switch.
U1300 U121F U1240 U1252 U1254*	AV COMM CIRCUIT [U1300] INTERNAL COMM [U121F] SWITCH CONN [U1240] REAR CAMERA LAN CONN [U1252] IPOD CONN [U1254]*	Malfunction is detected in AV communication circuits.	Check and repair the short circuit in AV communication circuits.

#### NOTE:

^{*:} Non-equipped item is not displayed.

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# POWER SUPPLY AND GROUND CIRCUIT AV CONTROL UNIT

INFOID:0000000003356626

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AV CONTROL UNIT: Diagnosis Procedure

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19
Ignition switch ON or START	3

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
	M144	19		
Battery power supply	M145	22	OFF	Battery voltage
		24		
ACC power supply	M144	7	ACC	Pattory voltage
	M145	25	ACC	Battery voltage
Ignition signal	M145	35	ON	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 3.

>> Check harness between AV control unit and fuse. NO

# 3. CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect AV control unit connectors.
- Check continuity between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M145	21	OFF	Existed
Ground	WITTO	23	OIT	LAISICU

#### Is the inspection result normal?

>> INSPECTION END YES

>> Repair harness or connector.

### FRONT DISPLAY UNIT

# FRONT DISPLAY UNIT: Diagnosis Procedure

# 1.CHECK FUSE

### Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

**AV-619** Revision: 2008 October 2009 Murano

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# RIS > [BOSE AUDIO WITH NAVIGATION]

### < COMPONENT DIAGNOSIS > Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M49	2	OFF	Battery voltage
ACC power supply	IVI49	3	ACC	Dattery Voltage

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between Display unit and fuse.

# 3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect display unit connector.
- 3. Check continuity between display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M49	1	OFF	Existed
Ground	IVITO	13	Oll	LAISICG

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

### MULTIFUNCTION SWITCH

# MULTIFUNCTION SWITCH: Diagnosis Procedure

INFOID:0000000003356628

# 1. CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Ignition switch ACC or ON	19

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
ACC power supply	M125	3	ACC	Battery voltage

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between multifunction switch and fuse.

# 3.CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect multifunction switch connector.
- 3. Check continuity between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M125	1	OFF	Existed

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

CAMERA CONTROL UNIT

# CAMERA CONTROL UNIT: Diagnosis Procedure

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1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B60	32	OFF	Battery voltage
ACC power supply	B00	30	ACC	Dattery voltage

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between camera control unit and fuse.

# 3.CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect camera control unit connector.
- 3. Check continuity between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B60	31	OFF	Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

BOSE AMP.

INFOID:0000000003356630

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# **BOSE AMP.**: Diagnosis Procedure

### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	23, 24

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between BOSE amp. harness connector and ground.

#### < COMPONENT DIAGNOSIS >

#### [BOSE AUDIO WITH NAVIGATION]

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply B224	B224	10	OFF	Battery voltage
	11	OII	Dattery Voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between BOSE amp. and fuse.

# 3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BOSE amp. connector.
- 3. Check continuity between BOSE amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B224	7	OFF	Existed
Ground	D224	12	OH	LXISIEU

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

WOOFER

# WOOFER: Diagnosis Procedure

INFOID:0000000003356631

# 1. CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	25

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between woofer amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B28	6	OFF	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between woofer amp. and fuse.

# 3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect woofer amp. connector.
- 3. Check continuity between woofer amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B28	5	OFF	Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

#### iPod ADAPTER

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# iPod ADAPTER: Diagnosis Procedure

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# 1. CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	19

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate the cause of malfunction before installing new fuse.

# 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between iPod adapter harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M148	5	OFF	Pattory voltage
ACC power supply	WI140	3	ACC	Battery voltage

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Check harness between iPod adapter and fuse.

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# RGB (R: RED) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# RGB (R: RED) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

**Description** 

Transmit the image displayed with AV control unit with RGB signal to the front display unit.

### Diagnosis Procedure

INFOID:0000000003356634

# 1. CHECK CONTINUITY RGB (R: RED) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	17	M146	61	Existed

4. Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	17		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB (R: RED) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

	+) splay unit	(–)	Condition	Signal
Connector	Terminal			
M49	17	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0 + 40μs JSNIA1029ZZ

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

# RGB (G: GREEN) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# RGB (G: GREEN) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

**Description** 

Transmit the image displayed with AV control unit with RGB signal to the front display unit.

# Diagnosis Procedure

# INFOID:0000000003356636

# 1. CHECK CONTINUITY RGB (G: GREEN) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front dis	Front display unit		trol unit	Continuity
Connector	Terminal	Connector Terminal		Continuity
M49	6	M146	62	Existed

4. Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	6		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB (G: GREEN) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

(-	+)			
Front dis	splay unit	(–)	Condition	Signal
Connector	Terminal			
M49	6	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0 • • 40μs JSNIA1030ZZ

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

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# RGB (B: BLUE) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# RGB (B: BLUE) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DIS-PLAY UNIT)

**Description** 

Transmit the image displayed with AV control unit with RGB signal to the front display unit.

### Diagnosis Procedure

INFOID:0000000003356638

# 1. CHECK CONTINUITY RGB (B: BLUE) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector	Terminal	Connector Terminal		Continuity
M49	18	M146	63	Existed

Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	18		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB (B: BLUE) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

	+) splay unit	(-)	Condition	Signal
Connector	Terminal			
M49	18	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0  ••40µs JSNIA1031ZZ

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

### **RGB SYNCHRONIZING SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

### RGB SYNCHRONIZING SIGNAL CIRCUIT

**Description** 

Transmit the RGB synchronizing signal to the front display unit so as to synchronize the RGB image displayed with AV control unit.

# Diagnosis Procedure

#### INFOID:0000000003356640

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# 1. CHECK CONTINUITY RGB SYNCHRONIZING SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front dis	Front display unit		trol unit	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	19	M146	65	Existed

4. Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	19		Not existed

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB SYNCHRONIZING SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal	
Connector	Terminal				
M49	19	Ground	_	(V) 0.4 0 + 20 \(\mu\)SPNIA0461GB	

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

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# RGB AREA (YS) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DISPLAY UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# RGB AREA (YS) SIGNAL CIRCUIT (AV CONTROL UNIT TO FRONT DIS-PLAY UNIT)

Description INFOID:000000003356641

Transmits the display area of RGB image displayed by AV control unit with RGB area (YS) signal to front display unit.

### Diagnosis Procedure

INFOID:0000000003356642

# 1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- 3. Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	9	M146	67	Existed

4. Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	9		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK RGB AREA (YS) SIGNAL

- 1. Connect front display unit connector and AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal	
Connector Terminal				Olyman .	
			When RGB image is displayed.	Approx. 5.0 V	
M49	9	Ground	When AUX image is displayed.	(V) 6 4 2 0 → → 200 \(mu\) s	

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace AV control unit.

### HP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT) [BOSE AUDIO WITH NAVIGATION]

< COMPONENT DIAGNOSIS >

# HP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT)

Description INFOID:0000000003356643

In composite image (AUX image, camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from front display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

# Diagnosis Procedure

# 1.check continuity horizontal synchronizing (hp) signal circuit

- Turn ignition switch OFF.
- 2. Disconnect front display unit connector and AV control unit connector.
- Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV cor	trol unit	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	8	M146	68	Existed

Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	8		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

- Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		( )	Condition	Signal	
FIOREUS	spiay uriit	(–)	Condition	Signal	
Connector	Terminal				
M49	8	Ground	_	(V) 4 0 → 20 µs SKIB3603E	

#### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace front display unit.

**AV-629** Revision: 2008 October 2009 Murano

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### **VP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT)** [BOSE AUDIO WITH NAVIGATION]

< COMPONENT DIAGNOSIS >

# VP SIGNAL CIRCUIT (FRONT DISPLAY UNIT TO AV CONTROL UNIT)

Description INFOID:0000000003356645

In composite image (AUX image, camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from front display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:0000000003356646

# 1.check continuity vertical synchronizing (VP) signal circuit

- Turn ignition switch OFF.
- Disconnect front display unit connector and AV control unit connector.
- Check continuity between front display unit harness connector and AV control unit harness connector.

Front display unit		AV con	trol unit	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M49	20	M146	69	Existed

Check continuity between front display unit harness connector and ground.

Front display unit			Continuity
Connector	Terminal	Ground	Continuity
M49	20		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

- Connect front display unit connector and AV control unit connector.
- Turn ignition switch ON.
- Check signal between front display unit harness connector and ground using an oscilloscope.

(+) Front display unit		(-)	Condition	Signal	
Connector	Terminal				
M49	20	Ground	_	(V) 4 0 → 4 ms SKIB3598E	

#### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace front display unit.

### **AUX IMAGE SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

### **AUX IMAGE SIGNAL CIRCUIT**

Description INFOID:0000000003356647

Transmits the image signal of external device from auxiliary input jacks to front display unit.

# Diagnosis Procedure

#### INFOID:0000000003356648

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# 1. CHECK CONTINUITY AUX IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect auxiliary input jacks connector and front display unit connector.
- 3. Check continuity between auxiliary input jacks harness connector and front display unit harness connector.

Auxiliary input jacks		Front display unit		Continuity
Connector	Terminals	Connector	Terminals	Continuity
M253	7	M49	15	Existed
IVIZOS	8	10149	5	Existed

4. Check continuity between front display unit harness connector and ground.

Front dis	splay unit		Continuity
Connector	Terminal	Ground	Continuity
M49	15		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK AUX IMAGE SIGNAL

- 1. Connect auxiliary input jacks connector and front display unit connector.
- 2. Turn ignition switch ON.
- 3. Check signal between AV control unit harness connector using an oscilloscope.

(	(+) (-)				
Front dis	Front display unit Front display unit		Condition	Signal	
Connector	Terminal	Connector	Terminal		
M49	15	M49	5	When AUX image is displayed.	(V) 0. 4 0 -0. 4 → 40µs SKIB2251J

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Check that there is no malfunction in the external device.

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Revision: 2008 October AV-631 2009 Murano

### **DISK EJECT SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# DISK EJECT SIGNAL CIRCUIT

**Description** 

The disk eject signal is output to AV control unit when the disk eject switch of preset switch is pressed.

## Diagnosis Procedure

#### INFOID:0000000003356652

# 1. CHECK CONTINUITY CD EJECT SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect multifunction switch connector and AV control unit connector.
- 3. Check continuity between multifunction switch harness connector and AV control unit harness connector.

Multifunc	tion switch	AV con	trol unit	Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M125	14	M147	85	Existed	

4. Check continuity between multifunction switch harness connector and ground.

Multifunc	tion switch		Continuity
Connector	Terminal	Ground	Continuity
M125	14		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# $2.\mathsf{CHECK}$ AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector terminal 85 and ground.

(+) AV control unit		(-)	Voltage (Approx.)	
Connector	Terminal		, , ,	
M147	85	Ground	5.0 V	

#### Is the inspection result normal?

YES >> Replace preset switch.

NO >> Replace AV control unit.

### MICROPHONE SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

### MICROPHONE SIGNAL CIRCUIT

Description

Supply power from AV control unit to microphone. The microphone transmits the sound/voice to the AV control unit.

# Diagnosis Procedure

# 1. CHECK CONTINUITY BETWEEN AV CONTROL UNIT AND MICROPHONE CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect AV control unit connector and microphone connector.
- 3. Check continuity between AV control unit harness connector and microphone harness connector.

AV control unit		Microphone		Continuity
Connector	Terminals	Connector	Terminals	Continuity
	26		4	
M145	27	R20	2	Existed
	28		1	

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

AV cor	ntrol unit		Continuity
Connector	Terminals	Ground –	Continuity
M145	26		Not existed
IVI 143	28		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VOLTAGE MICROPHONE VCC

- 1. Connect AV control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector.

(	+)	(	<b>–</b> )	
AV control unit		AV control unit		Voltage (Approx.)
Connector	Terminal	Connector	Terminal	,
M145	26	M145	27	5.0 V

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace AV control unit.

# 3. CHECK MICROPHONE SIGNAL

- 1. Connect microphone connector.
- 2. Check signal between AV control unit harness connector using an oscilloscope.

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INFOID:0000000003356654

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Revision: 2008 October AV-633 2009 Murano

# **MICROPHONE SIGNAL CIRCUIT**

### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

	(+) (-) AV control unit AV control unit		Condition	Signal	
Connector	Terminal	Connector	Terminal		
M145	28	M145	27	Give a voice	(V) 2. 5 2. 0 1. 5 0. 5 0

### Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace microphone.

# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

Description

- Camera control unit outputs camera ON signal to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the front display unit.

### Diagnosis Procedure

INFOID:0000000003356656

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# 1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and rear view camera connector.
- 3. Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera d	control unit	Rear vie	w camera	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B60	6	D192	3	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera o	control unit		Continuity
Connector	Terminal	Ground	Continuity
B60	6		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2. CHECK CAMERA IMAGE SIGNAL

- 1. Connect camera control unit connector and rear view camera connector.
- 2. Turn ignition switch ON.
- 3. Check signal between camera control unit harness connector and ground using an oscilloscope.

(+) Camera control unit		(-)	Condition	Signal
Connector	Terminal			
B60	6	Ground	Shift the selector lever to "R" position.	(V) 0. 4 0 -0. 4 -40μs

#### Is the inspection result normal?

YES >> Replace camera control unit.

NO >> Replace rear view camera.

### **CAMERA ON SIGNAL CIRCUIT**

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

### CAMERA ON SIGNAL CIRCUIT

**Description** 

Camera control unit outputs camera ON signal to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.

• The camera control unit that inputs the camera image signal transmits the camera image signal to the front display unit.

### **Diagnosis Procedure**

INFOID:0000000003356658

# 1. CHECK CONTINUITY CAMERA ON SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and rear view camera connector.
- Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera o	control unit	Rear vie	w camera	Continuity	
Connector	Connector Terminal		Terminal	Continuity	
B60	8	D192	1	Existed	

4. Check continuity between camera control unit harness connector and ground.

Camera o	control unit		Continuity
Connector	Terminal	Ground	Continuity
B60	8		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VOLTAGE CAMERA ON SIGNAL

- 1. Connect camera control unit connector and rear view camera connector.
- 2. Turn ignition switch ON.
- 3. Check signal between camera control unit harness connector and ground.

(+) Camera control unit		(–)	Condition	Voltage (Approx.)
Connector	Terminal			( + + +
B60	8	Ground	Shift the selector lever to "R" position.	6.0 V

### Is the inspection result normal?

YES >> Replace rear view camera.

NO >> Replace camera control unit.

### CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO FRONT DIS-PLAY UNIT)

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO FRONT DISPLAY UNIT)

Description INFOID:0000000003356659

- Camera control unit outputs camera ON signal to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the front display unit.

### Diagnosis Procedure

# INFOID:0000000003356660

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# 1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and front display unit connector.
- Check continuity between camera control unit harness connector and front display unit harness connector.

Camera control unit		Front display unit		Continuity
Connector	Terminals	Connector Terminals		Continuity
B60	12	M49	12	Existed
D00	11	10149	14	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera o	control unit		Continuity
Connector	Terminal	Ground	Continuity
B60	12		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK CAMERA IMAGE SIGNAL

- Connect camera control unit connector and front display unit connector.
- 2. Turn ignition switch ON.
- Check signal between camera control unit harness connector and ground using an oscilloscope.

(+) Camera control unit		(-)	Condition	Signal
Connector	Terminal			
B60	12	Ground	Shift the selector lever to "R" position.	(V) 0. 4 0 -0. 4 -40µs

#### Is the inspection result normal?

YES >> Replace front display unit.

NO >> Replace camera control unit.

Revision: 2008 October AV-637 2009 Murano

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### STEERING ANGLE SENSOR SIGNAL CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< COMPONENT DIAGNOSIS >

## STEERING ANGLE SENSOR SIGNAL CIRCUIT

Description INFOID:0000000003566413

• Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.

- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

### Diagnosis Procedure

INFOID:0000000003566414

# 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect camera control unit connector and steering angle sensor connector.
- 3. Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector Terminals		Continuity
	23		3	
B60	24	M30	6	Existed
	25		8	

4. Check continuity between camera control unit harness connector and ground.

Camera	control unit		Continuity
Connector	Terminals		Continuity
	23	Ground	
B60	24		Not existed
	25		

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK VOLTAGE CAMERA CONTROL UNIT

- Connect camera control unit connector.
- 2. Turn ignition switch ON.
- Check voltage between camera control unit harness connector and ground.

(	+)		5 /	
Camera	control unit	(–)	Reference value (Approx.)	
Connector	Terminals		( ) '	
	23			
B60	24	Ground	5.0 V	
	25			

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

# 3.CHECK STEERING ANGLE SENSOR SIGNAL

- 1. Turn ignition switch OFF.
- 2. Connect steering angle sensor connector.

# STEERING ANGLE SENSOR SIGNAL CIRCUIT

### < COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

3. Turn ignition switch ON.

4. Check signal between camera control unit harness connector and ground.

(+)				
Camera c	Camera control unit		Condition	Reference value
Connector	Terminals			
	23, 24	Ground	Turn the steering to the right	A: Sensor signal 1 B: Sensor signal 2
B60	20, 24	23, 24 Giodila	Turn the steering to the left	(V) 4 2 0 4 2 0 SKIB3828E A: Sensor signal 1
				B: Sensor signal 2
	25	Ground	Turn the steering around the neutral position	A: Sensor signal 3 B: Sensor signal 1

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.

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### STEERING SWITCH SIGNAL A CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# STEERING SWITCH SIGNAL A CIRCUIT

**Description** 

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:0000000003356666

# 1. CHECK STEERING SWITCH SIGNAL A CIRCUIT

- 1. Disconnect AV control unit connector and spiral cable connector.
- 2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV cor	AV control unit Spiral cable		Continuity	
Connector	Terminal	Connector Terminal		Continuity
M144	6	M33	24	Existed

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

AV control unit			Continuity
Connector	Terminal	Ground	Continuity
M144	6		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK SPIRAL CABLE

Check spiral cable.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# 3.CHECK AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector and spiral cable connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector.

(+)		(–)		\
AV cor	trol unit	AV control unit		Voltage (Approx.)
Connector	Terminal	Connector Terminal		( ) ,
M144	6	M144	15	5.0 V

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

### 4. CHECK STEERING SWITCH

- Turn ignition switch OFF.
- Check steering switch. Refer to <u>AV-641, "Component Inspection"</u>.

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

# STEERING SWITCH SIGNAL A CIRCUIT

### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

INFOID:0000000003356667

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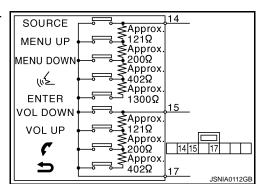
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# **Component Inspection**

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.



#### Standard

	Stoorin	g switch			
Con- nector	Termi- nal	Con- nector	Termi- nal	Condition	Resistance $\Omega$
				ENTER switch ON	1983 – 2063
				w≨ switch ON	709 – 737
	14		17	MENU DOWN switch ON	315 – 327
M303		M303		MENU UP switch ON	119 – 123
				SOURCE switch ON	0
				switch ON	709 – 737
	15			switch ON	315 – 327
	.0			VOL UP switch ON	119 – 123
				VOL DOWN switch ON	0

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### STEERING SWITCH SIGNAL B CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# STEERING SWITCH SIGNAL B CIRCUIT

**Description** 

Transmits the steering switch signal to AV control unit.

## Diagnosis Procedure

INFOID:0000000003356669

# 1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

- 1. Disconnect AV control unit connector and spiral cable connector.
- 2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV cor	ntrol unit	Spira	cable	Continuity	
Connector	Terminal	Connector	Terminal		
M144	16	M33	31	Existed	

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

AV cor	trol unit		Continuity	
Connector	Terminal	Ground	Continuity	
M144	16		Not existed	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK SPIRAL CABLE

Check spiral cable.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# 3.CHECK AV CONTROL UNIT VOLTAGE

- 1. Connect AV control unit connector and spiral cable connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between AV control unit harness connector.

(	+)	(	-)	\
AV cor	ntrol unit	AV cor	trol unit	Voltage (Approx.)
Connector	Terminal	Connector Terminal		( ) ,
M144	16	M144 15		5.0 V

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

### 4. CHECK STEERING SWITCH

- Turn ignition switch OFF.
- Check steering switch. Refer to <u>AV-643, "Component Inspection"</u>.

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

# STEERING SWITCH SIGNAL B CIRCUIT

### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

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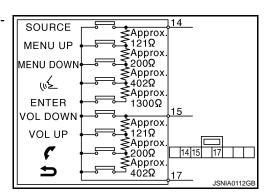
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# Component Inspection

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.



#### Standard

	Steerin	g switch			Desistance
Con- nector	Termi- nal	Con- nector	Termi- nal	Condition	Resistance Ω
				ENTER switch ON	1983 – 2063
				"≨ switch ON	709 – 737
	14		17	MENU DOWN switch ON	315 – 327
M303		M303		MENU UP switch ON	119 – 123
				SOURCE switch ON	0
	15			switch ON	709 – 737
				switch ON	315 – 327
	.0			VOL UP switch ON	119 – 123
				VOL DOWN switch ON	0

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### STEERING SWITCH SIGNAL GND CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

# STEERING SWITCH SIGNAL GND CIRCUIT

Description INFOID:0000000003356671

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:0000000003356672

# 1. CHECK STEERING SWITCH SIGNAL GND CIRCUIT

- 1. Disconnect AV control unit connector and spiral cable connector.
- 2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV cor	ntrol unit	Spira	l cable	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M144	15	M33	33	Existed	

3. Connect AV control unit connector.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

# 2.CHECK SPIRAL CABLE

Check spiral cable.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

# CHECK GROUND CIRCUIT

- 1. Connect AV control unit connector.
- 2. Check continuity between AV control unit harness connector and ground.

AV con	trol unit		Continuity	
Connector	Terminal	Ground	Continuity	
M144	15		Existed	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

### CHECK STEERING SWITCH

- 1. Turn ignition switch OFF.
- 2. Check steering switch. Refer to AV-645, "Component Inspection".

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

## STEERING SWITCH SIGNAL GND CIRCUIT

### < COMPONENT DIAGNOSIS >

### [BOSE AUDIO WITH NAVIGATION]

INFOID:0000000003470189

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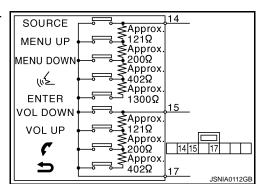
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# Component Inspection

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.



#### Standard

	Steering switch				Resistance
Con- nector	Termi- nal	Con- nector	Termi- nal	Condition	Ω
TIECTOI	Hai	Hector	Hai		
				ENTER switch ON	1983 – 2063
				ພ≨ switch ON	709 – 737
	14			MENU DOWN switch ON	315 – 327
M303		M303	17	MENU UP switch ON	119 – 123
				SOURCE switch ON	0
		switch ON	709 – 737		
	15			switch ON	315 – 327
				VOL UP switch ON	119 – 123
				VOL DOWN switch ON	0

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# **ECU DIAGNOSIS**

# **AV CONTROL UNIT**

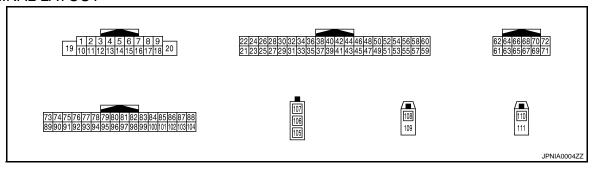
Reference Values

### VALUES ON THE DIAGNOSIS TOOL

#### CONSULT-III MONITOR ITEM

Monitor Item		Condition	Value/Status
VHCL SPD SIG	Ignition switch	Vehicle speed > 0 km/h (0 MPH)	On
VHCL SPD SIG	ON	Vehicle speed = 0 km/h (0 MPH)	Off
DVD CIC	Ignition switch	Parking brake is applied.	On
PKB SIG	ON	Parking brake is released.	Off
ILLUM SIG	Ignition switch	Light switch ON	On
	ON	Light switch OFF	Off
IGN SIG	Ignition switch ON	_	On
	Ignition switch ACC	_	Off
REV SIG	Ignition switch	Selector lever in R position	On
	ON	Selector lever in any position other than R	Off

# **TERMINAL LAYOUT**



### PHYSICAL VALUES

	minal e color)	Description		Condition		Reference value
+	_	Signal name Input/ Output		Condition		(Approx.)
1 (P)	Ground	Amp. ON signal	Output	Ignition switch ON	_	12.0 V
2 (G)	3 (R)	Sound signal front LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E

# **AV CONTROL UNIT**

# [BOSE AUDIO WITH NAVIGATION]

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	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output	33.4		(Approx.)
4 (O)*1 (L)*2	5 (SB)*1 (R)*2	Sound signal rear LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
					Keep pressing SOURCE switch.	0 V
					Keep pressing MENU UP switch.	1.0 V
6 (BR)	15 (L)	Steering switch signal A	Input	Ignition switch	Keep pressing MENU DOWN switch.	2.0 V
( )	,			ON	Keep pressing √ switch.	3.0 V
					Keep pressing ENTER switch.	4.0 V
					Except for above.	5.0 V
7 (R)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
9	Cround	Illumination aignal	Innut	OFF	Lighting switch is OFF.	0 V
(R)	Ground	Illumination signal	Input		Lighting switch is ON.	12.0 V
10	_	Shield	_		_	_
11 (B)	12 (W)	Sound signal front RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
13 (V)	14 (LG)	Sound signal rear RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
15 (L)	Ground	Steering switch signal GND	_	Ignition switch ON	_	0 V
					Keep pressing VOL DOWN switch.	0 V
16	15	Stooring quitch sizes D		Ignition	Keep pressing VOL UP switch.	1.0 V
(G)	(L)	Steering switch signal B	Input	switch ON	Keep pressing  switch.	2.0 V
					Keep pressing <b>S</b> switch.	3.0 V
				Except for above.	5.0 V	

# [BOSE AUDIO WITH NAVIGATION]

	minal e color)	Description			Condition	Reference value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	
21 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
22 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	
23 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
24 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	
25 (R)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage	
26 (B)	27	Microphone VCC	Output	Ignition switch ON	_	5.0 V	
27	Ground	Shield (Microphone ground)	_	Ignition switch ON	_	0 V	
28 (W)	27	Microphone signal	Input	Ignition switch ON	Make a sound with your voice	(V) 2.5 2.0 1.5 1.0 0.5 0 + 2ms	
35 (G)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage	
36 (G)	Ground	Parking brake signal	Input	Ignition switch ON	Parking brake ON. Parking brake OFF.	0 V 5.0 V	
37 (SB)	Ground	Reverse signal	Input	Ignition switch ON	R position.  Other than R position.	12.0 V 0 V	
38 (V)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25MPH).	NOTE:  Maximum voltage may be 12 V due to specifications (connected units).	

## **AV CONTROL UNIT**

### < ECU DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
40	Ground	Camera-connection recog-	Input	Ignition switch	Connected to camera control unit connector.	0 V
(P)	Giodila	nition signal	iliput	ON	Not connected to camera control unit connector.	5.0 V
42 (B)	Ground	Control signal 2	Input	Ignition switch ON	_	0 V
43 (B)	Ground	Control signal 3	Input	Ignition switch ON	_	0 V
48 (G)	_	AV communication signal (H)	Input/ Output	_	_	_
49 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
50 (R)	_	AV communication signal (H)	Input/ Output	_	_	_
51 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
52 (L)	_	CAN-H	Input/ Output	_	_	_
53 (P)	_	CAN-L	Input/ Output	_	_	_
61 (G)	Ground	RGB image signal (R: red)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0 → 40μs JSNIA1029ZZ
62 (R)	Ground	RGB image signal (G: green)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0 → 40μs JSNIA1030ZZ
63 (W)	Ground	RGB image signal (B: blue)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0 → 40µs
64	_	Shield	_	_	_	JSNIA1031ZZ

# [BOSE AUDIO WITH NAVIGATION]

	JAGNO					
Term (Wire o		Description			Condition	Reference value
+	-	Signal name	Input/ Output			(Approx.)
65 (B)	Ground	RGB synchronizing signal	Output	Ignition switch ON	_	(V) 0.4 0 → 20 µs JPNIA0461GB
66	_	Shield	_	_	_	_
					When RGB image is displayed.	5.0 V
67 (W)	Ground	RGB area (YS) signal	Output	Ignition switch ON	When rear view camera image is displayed.	(V) 6 4 2 0 + + 200μs PKIB4948J
68 (B)	Ground	Horizontal synchronizing (HP) signal	Input	Ignition switch ON	_	(V) 4 0 ++20µs SKIB3601E
69 (R)	Ground	Vertical synchronizing (VP) signal	Input	Ignition switch ON	_	(V) 4 0 •••4ms SKIB3598E
70 (R)	Ground	Communication signal (CONT→DISP)	Output	Ignition switch ON	When adjusting display brightness.	(V) 4 2 0 +
71 (G)	Ground	Communication signal (DISP→CONT)	Input	Ignition switch ON	When adjusting display brightness.	(V) 6 4 2 0
						PKIB5039J

## **AV CONTROL UNIT**

## [BOSE AUDIO WITH NAVIGATION]

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	minal color)	Description			Condition	Reference value
+	-	Signal name	Input/ Output		Condition	(Approx.)
79 (BR)	95 (L)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
80 (R)	96 (W)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
81	_	Shield	_	_	_	_
85	Ground	Eject signal	Input		Pressing the eject switch.	0 V
(W)	0.00				Except for above.	5.0 V
86	_	Shield	_	_	_	_
87 (B)	88 (W)	AUX sound signal LH	Input	Ignition switch ON	When AUX mode is selected.	(V) 1 0 -1 → 2ms SKIB3609E
102 (V)	Ground	SW ground	_	Ignition switch ON	_	0 V
103 (R)	88 (W)	AUX sound signal RH	Input	Ignition switch ON	When AUX mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
105	_	FM sub	Input		_	_
106	_	AM-FM main	Input	_	_	_
107	Ground	Antenna amp. ON signal	Output	Ignition switch ON	_	12.0 V
108	Ground	Satellite antenna signal	Input	Ignition switch ON	Not connected to satellite antenna connector.	5.0 V
109	_	Shield	_	_	_	_
110	Ground	GPS antenna signal	Input	Ignition switch ON	Not connected to GPS antenna connector.	5.0 V
111	_	Shield	_	_	_	_

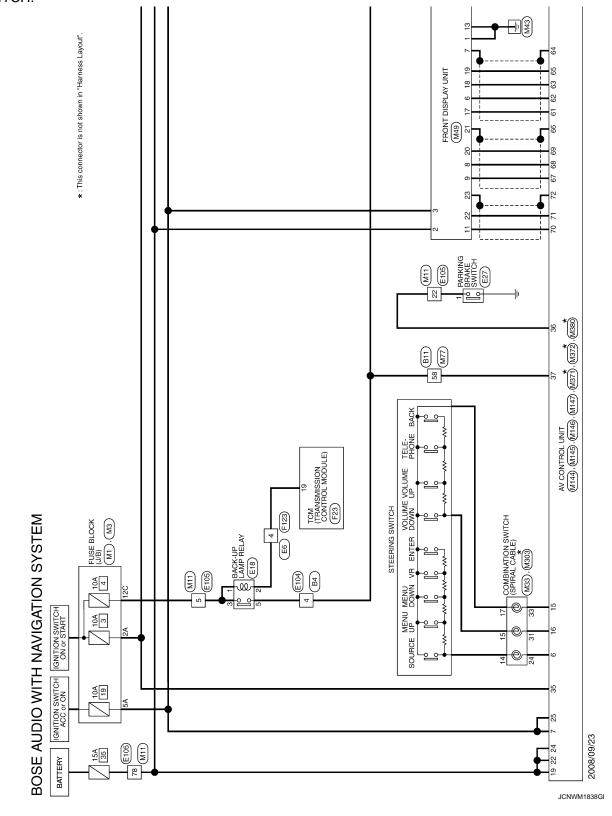
- *1: Type A
- *2: Type B

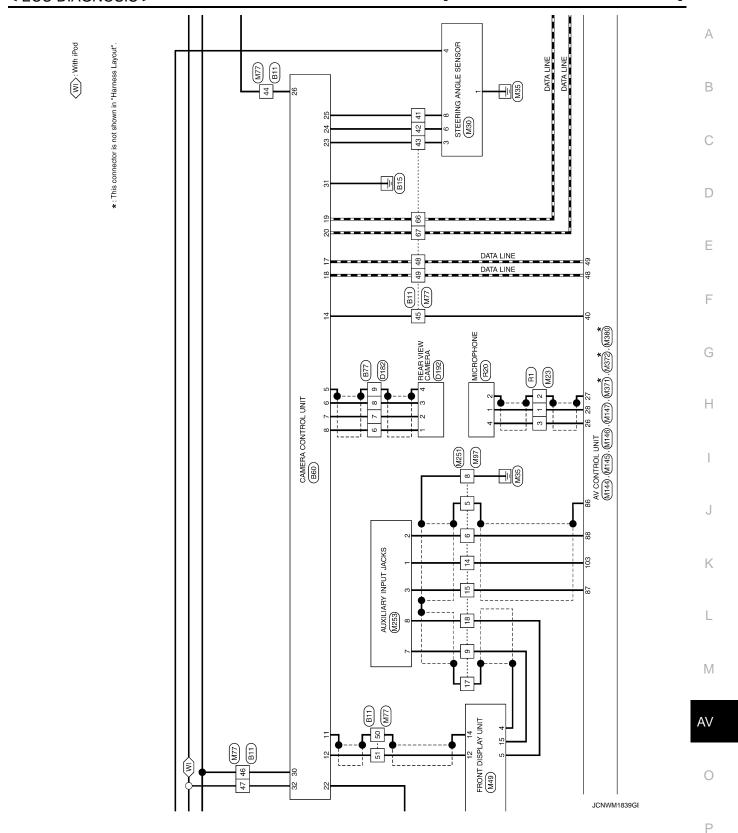
# Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

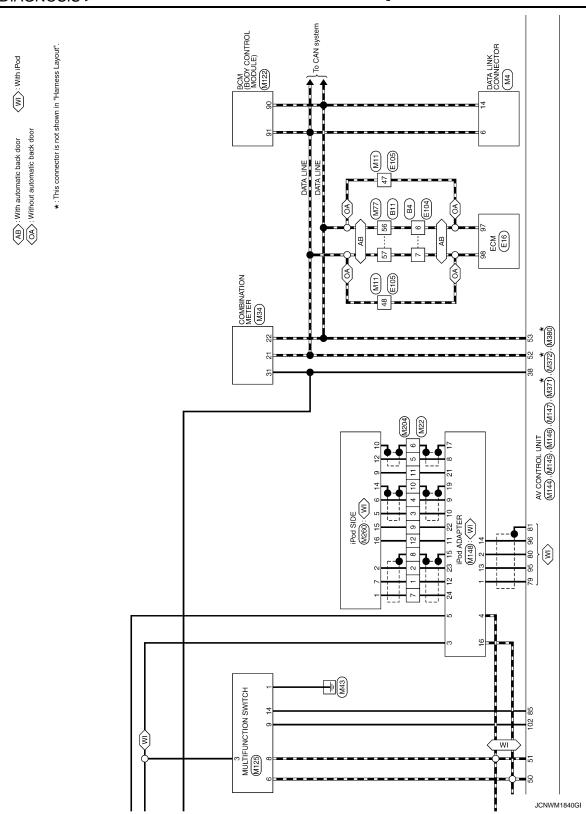
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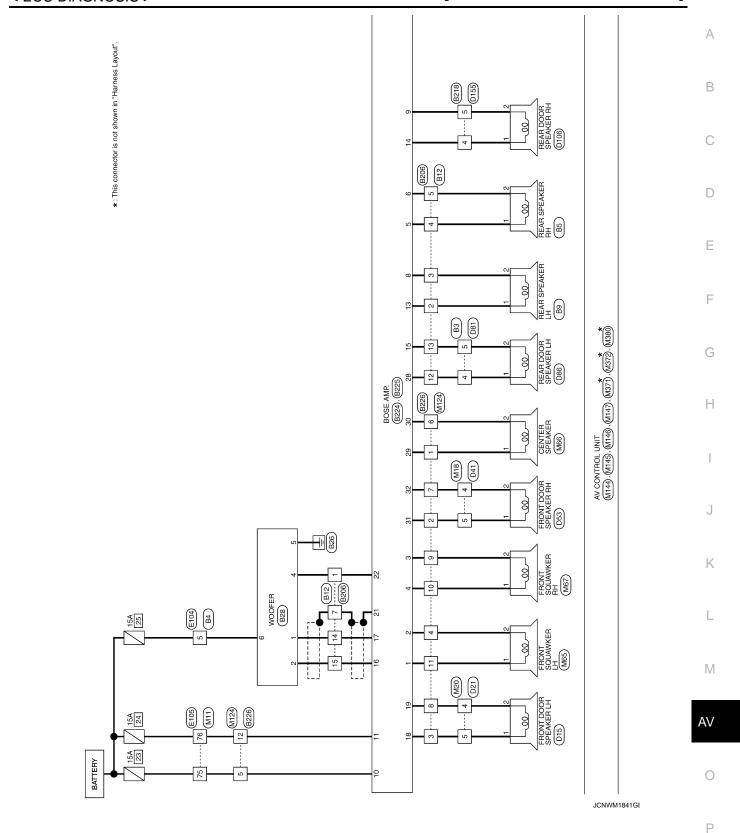
#### NOTE:

In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH

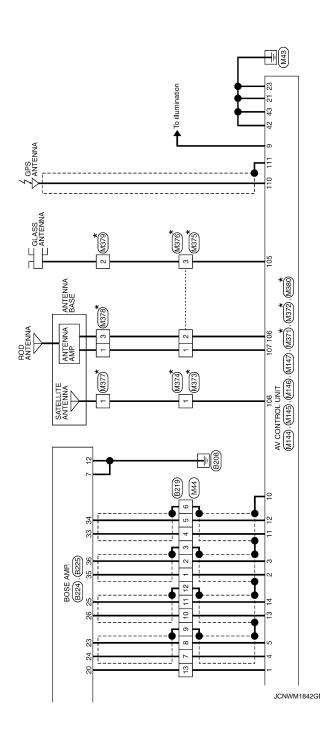








⋆: This connector is not shown in "Harness Layout



## [BOSE AUDIO WITH NAVIGATION]

Connector No. B9 Connector Name REAR SPEAKER LH Connector Type TK02FBR  H.S	Color   Signal Name [Specification]	Signal Name	A B C
Connector No. B5 Connector Name REAR SPEAKER RH Connector Type TK02FBR  H.S.	Color   No. of Wire   Signal Name [Specification]   1	Signal Name   Signal Name   Specification   Signal Name   Specif	E F G
STEM   Connector No.   B4   Connector Name   WIRE TO WIRE   Connector Type   NS18MW-CS	Terminal   Color   Signal Name [Specification]   Color   No.   Color	56 P	J K
BOSE AUDIO WITH NAVIGATION SYS  Connector Name WIRE TO WIRE  Connector Type   TKIOFW-NSS    10   9   7   6   6   11   12   11   11   11   11	Terminal Color No. of Wire Signal Name [Specification] 4 LG 5 0 -	Connector No.   B11	M AV O

Connector No. 8206 Connector Name WIRE TO WIRE Connector Type NS 16MW-CS  H.S. 1 2 3 4 5 6 7  8 9 10 11 12 13 14 15 16	Terminal   Color   Signal Name [Specification]   Color   No.   Color   No.   Color   Color		
Connector No. 877 Connector Name WIRE TO WIRE Connector Type TK12MW  H.S. 1 2 3 4 5 6 7 8 9 10 11112	Terminal   Color   Signal Nane [Specification]   Color   No.   of Wire   Signal Nane [Specification]   R.V.   -	12 SHELD	
STEM   REVERSE     22		Connector Name WIRE TO WIRE  Connector Th32MM-NH  (A.S.   1   2   3   4   5   6   7   8   9   10   11   21   31   15   15   15   15   15   15   1	Terminal Color No. of Wire 1 W/R - 2 B/R 2 SHIELD - 5 B/R 6 SHIELD - 7 GR/V - 7 GR/V - 8 W/L 10 GR/V - 11 W/L 11 W/L
BOSE AUDIO WITH NAVIGATION SYSTEM   Connector No    B80   22   22   23   24   25   24   25   25   25   25   25	Terminal   Color   Signal Name [Specification]	Connector No. 8218 Connector Name WIRE TO WIRE Connector Type ITK10FW-NS8  M.A. 10 9 8 7 6 5 4 3 2 1 1 18 17 16 15 14 13 12 11	Terminal Color   Signal Name (Specification)

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## [BOSE AUDIO WITH NAVIGATION]

26   GR/V   SOUND SIGNAL REAR RH (*)     28   G   SOUND SIGNAL CENTER SEAKER (*)     30   P   SOUND SIGNAL CENTER SEAKER (*)     31   BR   SOUND SIGNAL CENTER SEAKER (*)     32   Y   SOUND SIGNAL CENTER SEAKER (*)     33   W/R   SOUND SIGNAL FRONT RH (*)     34   W/R   SOUND SIGNAL FRONT RH (*)     35   W/R   SOUND SIGNAL FRONT RH (*)     36   W/R   SOUND SIGNAL FRONT RH (*)     37   W/R   SOUND SIGNAL FRONT RH (*)     38   W/R   SOUND SIGNAL FRONT LH (*)     39   W/R   SOUND SIGNAL FRONT LH (*)     30   W/R   SOUND SIGNAL FRONT LH (*)     30   W/R   SOUND SIGNAL FRONT LH (*)     31   W/R   SOUND SIGNAL FRONT LH (*)     32   W/R   SOUND SIGNAL FRONT LH (*)     33   W/R   SOUND SIGNAL FRONT LH (*)     44   B/W   T/Type B      55   W   T/Type B      55   W   T/Type B      56   W   T/Type B      57   W   T/Type B      58   W   T/Type B      59   W   T/Type B      50   W   T/Type B	A B C
Connector No.   8225	E F G
STEM  12 GR SOUND SIGNAL REAR SPEAKER LH (+)  14 L SOUND SIGNAL REAR DOOR SPEAKER RH (-)  12 GR ———————————————————————————————————	J K
BOSE AUDIO WITH NAVIGATION SYSTEMS	M AV

BOSE AUDIO WITH NAVIGATION SYS Connector No.   1041	STEM D53	Connector No.   D81	Connector No. 1086
Connector Type TH40FW-CS15	Connector Type NS02FBR-CS	Connector Type TK10MW-NS8	Connector Type NS0ZFBR-CS
1.5   14   13   12   11   10   9   6   7   6   5   4   9   2   1	HS Z	HS 12345 678910 1112 1314 1516 17 18	II.
Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   4 B/R   -[Type A]   5 W   -[Type B]   -[Type B]   5 W   -[Type B]	Terminal No.         Color         Signal Name [Specification]           1         BR         -[Type A]           1         W         -[Type B]           2         B/R         -[Type B]           2         B         -[Type B]	Terminal   Color   Signal Name [Specification]   A   L   -   -	Terminal   Color   Signal Name [Specification]   No. of Wire   L   L   2   W   -
П	$\Box$	П	
Connector Name   SYSTEM) Connector Type   NSQZFBR-CS	Connector Name WIRE TO WIRE  Connector Type TK10MW-NS8	Connector Name WIRE TO WIRE Connector Type TK12FW	Connector Name REAR VIEW CAMERA Connector Type TH04MW-NH
H3.	H8 12 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	H.S. 5 4 3 2 1 1211110 9 8 7 6	1.5
or re Signal N	or re Signal Na	inal C	or Si.
		7 G = -	1 R CAMERA ON SIGNAL 2 G GND
2 B/P -[Type A] 2 W -[Type B]	5 B/P -[Type A] 5 W -[Type B]	8 B 8	3 B CAMERA IMAGE SIGNAL 4 SHIELD SHIELD

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## [BOSE AUDIO WITH NAVIGATION]

BRAKE SWITCH	-1V 4	А
Connector No. E27 Connector Type POIFB-A  Connector Type POIFB-A  Terminal Color No. of Wire Signal Name (Spr	Connector No.   F123	C
NZ-LC  M2-LC  Signal Name [Specification]	728 TOM (TRANSMISSION CONTROL MODULE) RH40FB-R28-1-RH S3 34 35 38 37 38 39 44 44 S1 4 5 6 7 18 9 10 41 42 Signal Name (Specification) REV LAMP RELAY	E
Connector No.   E18	Connector No.   F23	G
Little Control	Specification]	H
E 18 P1724FB- 0 P1824FB- 0 P1824F	No. E103  Name WRE TO  Type TH70MW  Color  C	J
IGATION SYSTEM Connecto Connec		L
DIO WITH NAV    E6	E104  WIRE TO WIRE  NS16FW-CS  7 6 5 4	AV
BOSE AU Gomester Name Commeter Type Commeter Type No. of With A R	Connector No.  Connector Type Connector Type H.S.  H.S.  Terminal Color No. of Wing 5 F P 6 P 7 L	O JCNWM1847Gi

Revision: 2008 October AV-661 2009 Murano

Connector No. MII Connector Name WIRE TO WIRE Connector Type ITH70FW-CS10-M3 H.S.	Terminal   Color   Signal Name [Specification]	12 R	
Connector No. M4  Connector Name DATA LINK CONNECTOR  Connector Type BD16FW  H.S.  (9 10 11 12 13 14 15 16 7 18)	Terminal Color No. of Wire Signal Name [Specification] 6 L - 14 P -	Connector No. M22 Connector Name WIRE TO WIRE Connector Type THIZEW-NH  H.S. 654321  121110987	Terminal Color No. 1 Color No.
Cornector No.   M3   Connector No.   M3   Connector No.   M3   Connector Type   NS12FW-CS	Terminal Color   Signal Name [Specification]   12C   O   -	Connector No.   M20	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   4   B     -
BOSE AUDIO WITH NAVIGATION SYSTEM	Terminal Color Nigeral Name (Specification)  2A G	Cornector Name   WIRE TO WIRE	Terminal   Color   Signal Name [Specification]   A   4   4   4   4   5   BR   -[Type A and without BOSE system type B]   5   B   E   -[With BOSE system type B]

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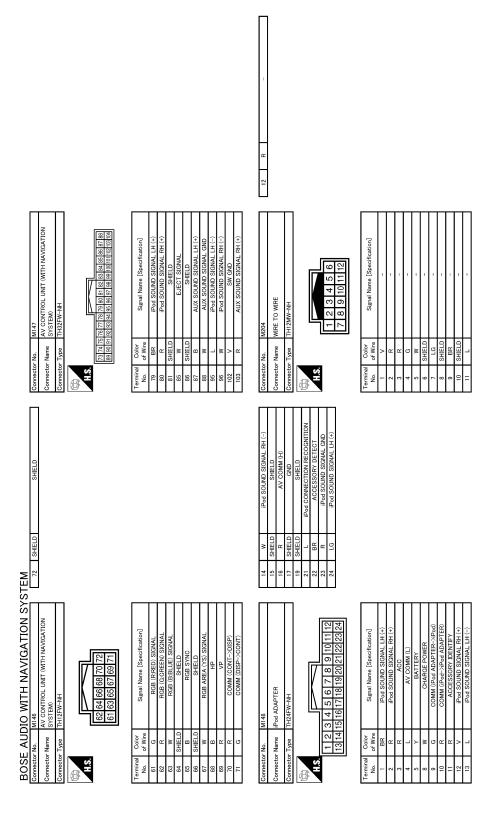
NH IN METER IN THE REPORT OF T	Signal Name (Specification) CAN+H CAN+H CAN+L CA	CAND/With navigation system]  ALIX MAGE SIGNALL/With navigation system]  ROB (RRED) SIGNAL  ROB (RRED) SIGNAL  ROB (SHELD)  VP  VP  VP  SHELD  COMM (DISP->CONT)  SHELD	АВ
Connector No. M34  Connector Name COMBINATION METER  Connector Type TH40FW-NH  H.S.  T12 3 4 5 6 7 8 9 01 11 23 5 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Terminal   Color   Signal Na   Na   Color   Signal Na   Signal N	13   B   GWD    14   SHIELD   SHIELD   15   SHIELD   16   SHIELD   17   SHIELD   18   SHIELD   18   SHIELD   19   SHIELD   20   SHIELD   22   SHIELD   23   SHIELD   23   SHIELD   24   SHIELD   25   SHIELD   25   SHIELD   26   SHIELD   26   SHIELD   26   SHIELD   26   SHIELD   27   SHIELD   28   SHIELD   29   SHIELD   20	C D
M33 COMBINATION SWITCH (SPIRAL CABLE) TK08FGY-1V  24 25 26 31 32 33 34	Signal Name [Specification]  -[With audio steering switch and telephone] -[With audio steering switch and telephone] -[With audio steering switch and telephone]	FRONT DISPLAY UNIT   TH2AFW-NH	E F
Connector No. M33 Connector Name COMBINATIC Connector Type TKOSFGG-1V H.S. 24 22 31 33	Terminal   Color   Si	Connector Name   FRONT DISPLAY UNIT   Connector Name   FRONT DISPLAY UNIT   Connector Type   THZ4FW-NH   THZ4FW-	G H
M30 STEERING ANGLE SENSOR THOSFW-NH  1 2 3 4 5 6 7 8	Signal Name [Specification]		I
STEM Connector No. Connector Name Connector Type	Terminal Color No. of Wire 1	10 × × 11 13 × 11 10 × × 11 10 × × 11 10 × × 11 10 × × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 × 11 10 ×	K
≿ITTI	Signal Name [Specification] [With telephone and navigation system]	NH	M
BOSE AUDIO WITH NAVIGATION  Connector Name WIRE TO WIRE  Connector Type THISHW-NH  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Terminal   Color   Si	M44   Connector Name   WIRE TO	AV
		JCNWM1849GI	Р

Revision: 2008 October AV-663 2009 Murano

		Connector No. M122 Connector Name BCM (BODY CONTROL MODULE) Connector Type TH40FB-NH  M.S.  Thomselve in the section of the se	Terminal   Color   Signal Mane [Specification]   No.   of Wire   90   P   CAN-H   91   L   CAN-H
Connector No. M67 Connector Name FRONT SOUAWKER RH Connector Type TK02FBR	Terminal   Color   Signal Name [Specification]   No.     BR	Connector No. M97 Connector Name WIPE TO WIPE Connector Type THISPW-CS2  M.S. THISPW-CS2  20 18 17 16 15 14 13 12 11 10 19	Terminal   Color   Signal Name [Specification]   Color   No. of Wire   Signal Name [Specification]   Color
STEM Cornector No. M66 Cornector Name CENTER SPEAKER Cornector Type TK02FBR	Terminal   Color   Signal Name [Specification]   No.   1   P   2   O   -	56 P	
BOSE AUDIO WITH NAVIGATION SYSTEM Connector Name FRONT SQUAWKER LH Connector Type TROZEBR	Ocion   Signal Mame [Specification]   Ocion   Ocion	Connector No. M77  Connector Nume WIRE TO WIRE  THE	Octobra of Wire SB SB SB Y A Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
BOSE AUDIO W Connector No. M65 Connector Name FRONT: Connector Type TROZEB	<u> </u>	or No. M7	October SB SB O O OCTOBER SB CO TOBER SB CO OCTOBER SB COCTOBER

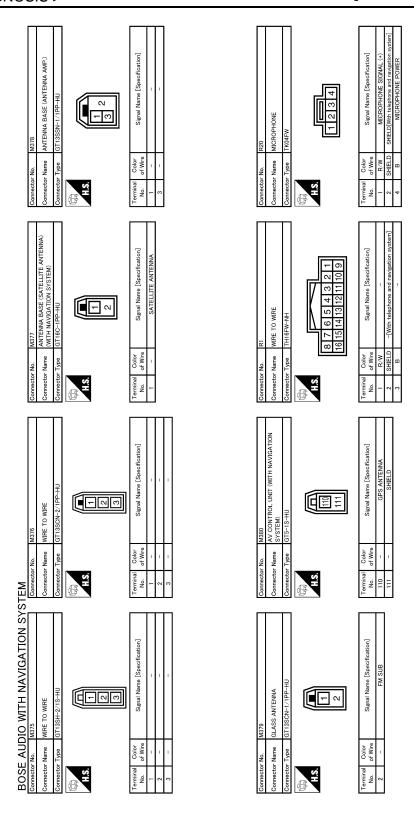
JCNWM1850GI

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	VEHICLE SPEED (8-PULSE CONNECTION RECOGNITIO CONTROL SIGNAL AV COMM (1) CANHI CANHI CANHI	В
		С
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MULTIFUNCTION SWITCH THIFFW-NH  2 4 6 8 10 12 14 16 1 3 5 7 9 11 13 15 Signal Name [Specification] Signal Name [Specification] AV COMM (L) AV COMM (L) AV COMM (L) AV COMM (L) SW CMD AV COMM (L) AV COMM (L) SW CMD EJECT SIGNAL	NH N	F
No. Color of Wire	Name	G
Connecto Con	Connecto   Connecto	Н
	SOUND SIGNAL FRONT RH (+) SOUND SIGNAL REAR RH (+) SOUND SIGNAL REAR RH (-) STRG SW GN STRG SW B BATTERY	I
	SOUND SIGN SOUND SIGN SOUND SIGN SOUND SIGN SITR SITR	J
STEM 12 12 12 12 12 12 12 12 12 12 12 12 12	1 2 2 2 2 2 3 2 3 2 3 3 3 3 3 3 3 3 3 3	K
>	20 2 (Type 8] (Type 8] (Type 8] (Type 8] (Type 8]	L
Someter No.   MI24   MI24   MI24   MI24   MI24   MI24   MI27   MI24   MI27	MI 44	M
MIZA WINE TO WITE WINE TO WINE WINE WINE TO		AV
BOSE AUI	Connector Name Connector Type  19 11  Terminal Color No. of Wire  1	0
	JCNWM1851Gt	Р



JCNWM1852GI

Connector No.         M303           Connector Name         COMBINATION SWITCH (SPIRAL CABLE)           Connector Type         TK08FGY           H.S.         [2019]18]17]16]15]14]13	Terminal   Color   Signal Name   Specification   No.   of Wire   14	Connector No. M374 Connector Name WIRE TO WIRE Connector Type GTI6C-IPP-HU HS  Terminal Color Signal Name [Specification] 1		A B C
Connector No. M260 Connector Name   Pod SIDE Connector Type   P16FGY    1 2 3	Color	Connector Name WIRE TO WIRE Connector Type GT16C-IPP-HU  Connector Type GT16C-IPP-HU  Terminal Color Signal Name [Specification]  1		E F G
Corrector No. M253 Corrector Name AUXILIARY INPUT JACKS Corrector Type A08FW  H.S.  T   2   3   4   5   6   7   8	Terminal   Color   Signal Name [Specification]	Connector No. M372 Connector Name SySTEM) Connector Type FAKRA  H.S. [108] Terminal Color Signal Name [Specification] 108 - SATELLITE ANTENNA		J K
BOSE AUDIO WITH NAVIGATION SYSTEM  Connector No. M251  Connector Name Wife TO Wife  Connector Type ITH18MW-CS2  Connector Type   Terminal Color Nun. of Wire Signal Name [Specification]  S. SHELD	Connector Name AV CONTROL UNIT (WITH NAVIGATION SYSTEM) Connector Type GTT135C-2/1S-HU  Terminal Color Signal Name [Specification]  Terminal Color Signal Name [Specification]  Terminal Color Signal Name [Specification]  To AM-FM MAIN  107 - AM-FM MAIN  107 - AM-FM AMP. ON SIGNAL	JCNWM1853Gi	M AV	



JCNWM1854GI

### Fail-Safe

INFOID:0000000003457763

When the ambiance temperature becomes extremely low or extremely high, or when HDD is malfunctioning, AV control unit displays the message and limits the AV control unit function.

#### **FAIL-SAFE CONDITIONS**

- When the ambiance temperature is -20°C (-4°F) or lower, or when it is 70°C (158°F) or higher
- when HDD is malfunctioning

### [BOSE AUDIO WITH NAVIGATION]

Display

The messages displayed on fail-safe conditions are as shown below:

HDD system is experiencing problems due to extreme high temperature.

Normal operation will resume when temperature drops.

Driver

Passenger

75°F

JPNIA0414GB

Fail-safe mode	Display (display of the fail-safe condition)
When HDD temperature is low	HDD system is experiencing problems due to extreme low temperature.  Normal operation will resume when temperature rises.
When HDD temperature is high	HDD system is experiencing problems due to extreme high temperature.  Normal operation will resume when temperature drops.
When HDD is malfunctioning	HDD system is not functioning. Please contact your dealer for assistance.

#### **DESCRIPTION OF CONTROLS**

Function		When Fail-safe Function is activated			
Operation		Only multifunction switch (preset switch) can be operated.			
Air conditioner	Display	<ul> <li>LED of multifunction switch (preset switch) illuminates.</li> <li>Aimed temperature, blow angle, and flow rate are displayed in simplified mode.</li> </ul>			
Audio	Operation	Only ON/OFF and volume control operations by multifunction switch (preset switch) are possible.			
Audio	Display	No display ("Fail-safe mode" is displayed.)			
Camera		Image tone cannot be controlled.			
Camera	Display	Cannot be superimposed. (warning display, tone control display)			
Hands-free phone Operation		Cannot be operated.			
Navigation Operation		Cannot be operated.			
Self diagnosis		The display in simplified mode of fail-safe condition			
CONSULT-III dia	agnosis	Cannot be operated.			

**Ability Operation Mode** 

There is an ability operation mode for Fail-safes due to low or high ambiance temperature.

If HDD data can be read, fail-safe is shown, then normal displays are displayed only for functions which can be operated.

#### RELEASE CONDITIONS OF FAIL-SAFE

Fail-safe is released on the following conditions and normal mode is restored.

When the temperature of HDD is low or high.

If the ambient temperature becomes out of the fail-safe conditional range, normal mode is restored.

When HDD is malfunctioning.

If the malfunction disappears, normal mode is restored.

#### NOTE:

- If fail-safe mode due to HDD malfunction is seen continuously, replace AV control unit.
- If fail-safe mode due to HDD malfunction is seen temporarily, check the "Error History" of Confirmation/ Adjustment mode. If this is normal, then continue the normal operation, observing the function. (It might be a temporary malfunction of HDD.)

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DTC Index

### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display item	Refer to
U1000	CAN COMM CIRCUIT [U1000]	AV-593, "Diagnosis Procedure"
U1010	CONTROL UNIT (CAN) [1010]	AV-594, "Diagnosis Procedure"
U1310	CONTROL UNIT (AV) [U1310]	AV-595, "DTC Logic"
U1200	Control Unit FLASH-ROM [1200]	AV-596, "DTC Logic"
U1201	Gyro NO CONN [1201]	AV-597, "DTC Logic"
U1216	CAN CONT [U1216]	AV-598, "DTC Logic"
U1217	BLUETOOTH CONN [U1217]	AV-599, "DTC Logic"
U1218	HDD CONN [U1218]	AV-600, "DTC Logic"
U1219	HDD READ [U1219]	AV-601, "DTC Logic"
U1220	XM SERIAL COMM [U1220]	AV-602, "DTC Logic"
U121A	HDD WRITE [U121A]	AV-603, "DTC Logic"
U121B	HDD COMM [U121B]	AV-604, "DTC Logic"
U121C	HDD ACCESS [U121C]	AV-605, "DTC Logic"
U121D	DSP CONN [U121D]	AV-606, "DTC Logic"
U121E	DSP COMM [U121E]	AV-607, "DTC Logic"
U121F	INTERNAL COMM [U121F]	AV-608, "DTC Logic"
U1204	GPS COMM [U1204]	AV-609, "DTC Logic"
U1205	GPS ROM [U1204]	
		AV-644 "DTC Logic"
U1206	GPS RAM [U1206]	AV-611, "DTC Logic"
U1207	GPS RTC [U1207]	AV-612, "DTC Logic"
U1243	FRONT DISP CONN [U1243]	AV-613, "DTC Logic"
U1244	GPS ANTENNA CONN [U1244]	AV-615, "DTC Logic"
U1250	CAMERA CONT. CONN [U1250]	AV-616, "DTC Logic"
U1258	XM ANTENNA CONN [U1258]	AV-617, "DTC Logic"
U1300 U121F	AV COMM CIRCUIT [U1300]     INTERNAL COMM [U121F]	AV-618, "Description"
U1300 U1240	AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]	AV-618, "Description"
U1300 U1252	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]	AV-618, "Description"
U1300 U1254	AV COMM CIRCUIT [U1300]     IPOD CONN [U1254]	AV-618, "Description"
U1300 U1252 U1254 [*]	AV COMM CIRCUIT [U1300]     REAR CAMERA LAN CONN [U1252]     IPOD CONN [U1254]*	AV-618, "Description"
U1300 U1240 U1252 U1254*	AV COMM CIRCUIT [U1300]     SWITCH CONN [U1240]     REAR CAMERA LAN CONN [U1252]     IPOD CONN [U1254]*	AV-618, "Description"
U1300 U121F U1240 U1252 U1254*	AV COMM CIRCUIT [U1300] INTERNAL COMM [U121F] SWITCH CONN [U1240] REAR CAMERA LAN CONN [U1252] IPOD CONN [U1254]	AV-618, "Description"

NOTE:

## **AV CONTROL UNIT**

< ECU DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

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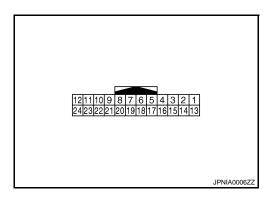
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Reference Values

**TERMINAL LAYOUT** 



### PHYSICAL VALUES

	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
1 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
3 (R)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
4	_	Shield	_	_	_	_
5 (B)	Ground	AUX image ground	_	Ignition switch ON	_	0 V
6 (R)	Ground	RGB image signal (G: green)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0 • • 40μs JSNIA1030ZZ
7	_	Shield	_	_	_	_
8 (B)	Ground	Horizontal synchronizing (HP) signal	Output	Ignition switch ON	_	(V) 4 0 → 20µs SKIB3601E

## [BOSE AUDIO WITH NAVIGATION]

	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
					When RGB image is displayed.	5.0 V
9 (W)	Ground	RGB area (YS) signal	Input	Ignition switch ON	When rear view camera image is displayed.	(V) 6 4 2 0 • • • • 200 \( \mu\) s PKIB4948J
11 (R)	Ground	Communication signal (CONT→DISP)	Input	Ignition switch ON	When adjusting display brightness.	(V) 6 4 2 0 ••••1ms
12 (W)	14	Camera image signal	Input	Ignition switch ON	When rear view camera image is displayed.	(V) 0. 4 0 -0. 4 -0. 4 -0. 4 -0. 4 -0. 4 -0. 4
13 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
14	Ground	Shield (camera image ground	_	Ignition switch ON	_	0 V
15 (Y)	5	AUX image signal	Input	Ignition switch ON	When AUX image is displayed.	0. 4 0 -0. 4 -0. 4 -0. 4 -0. 5 -0. 4
17 (G)	Ground	RGB image signal (R: red)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0 → 40µs JSNIA1029ZZ

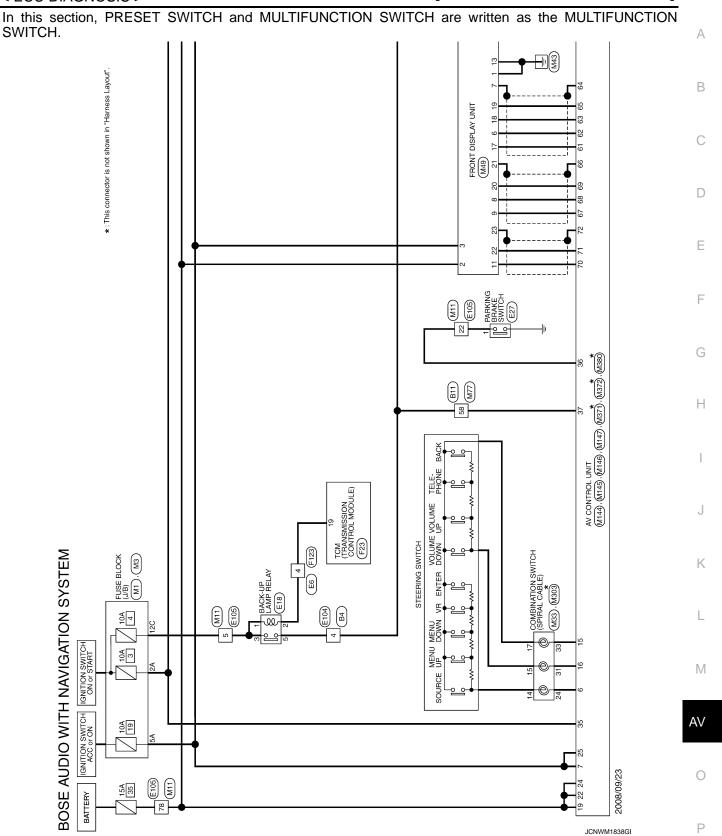
### < ECU DIAGNOSIS >

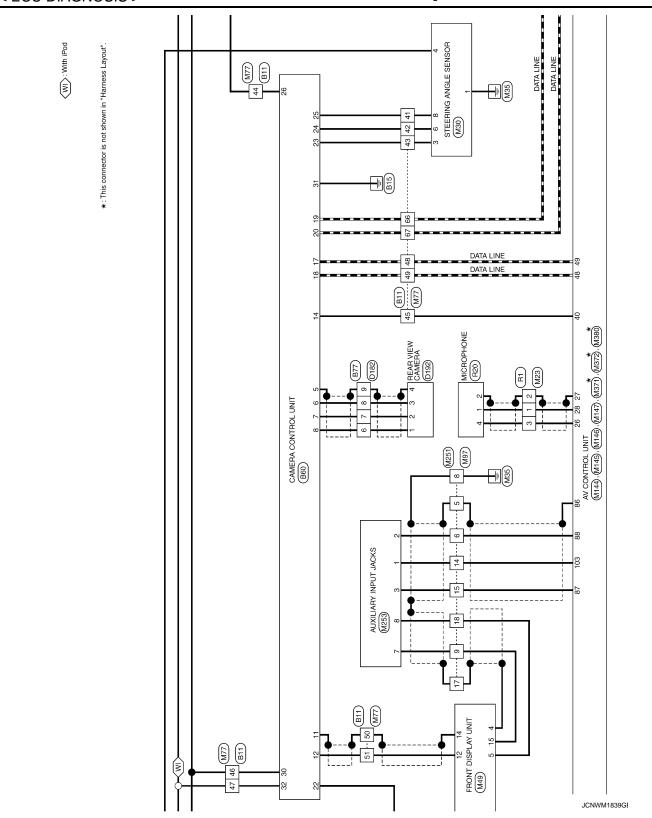
	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
18 (W)	Ground	RGB image signal (B: blue)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	(V) 0.8 0.4 0   → 40µs  JSNIA1031ZZ
19 (B)	Ground	RGB synchronizing signal	Input	Ignition switch ON	_	(V) 0.4 0 → +20 µs JPNIA0461GB
20 (R)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch ON	_	(V) 4 0 → 44ms SKIB3598E
21	_	Shield	_	_	_	_
22 (G)	Ground	Communication signal (DISP→CONT)	Output	Ignition switch ON	When adjusting display brightness.	(V) 6 4 2 0 + 1ms PKIBS039J
23	_	Shield	_	_	_	_

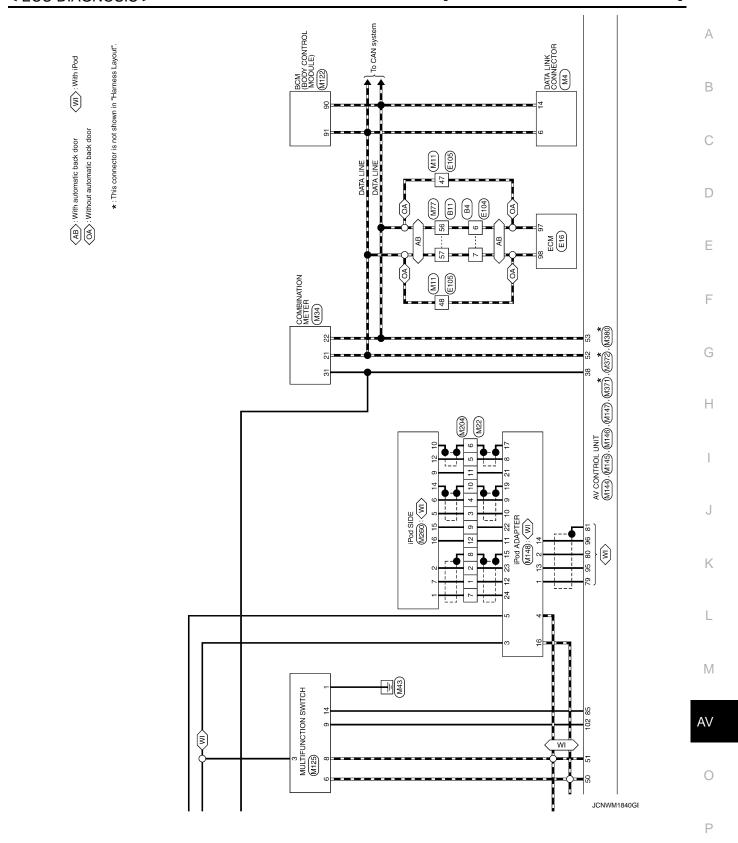
Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

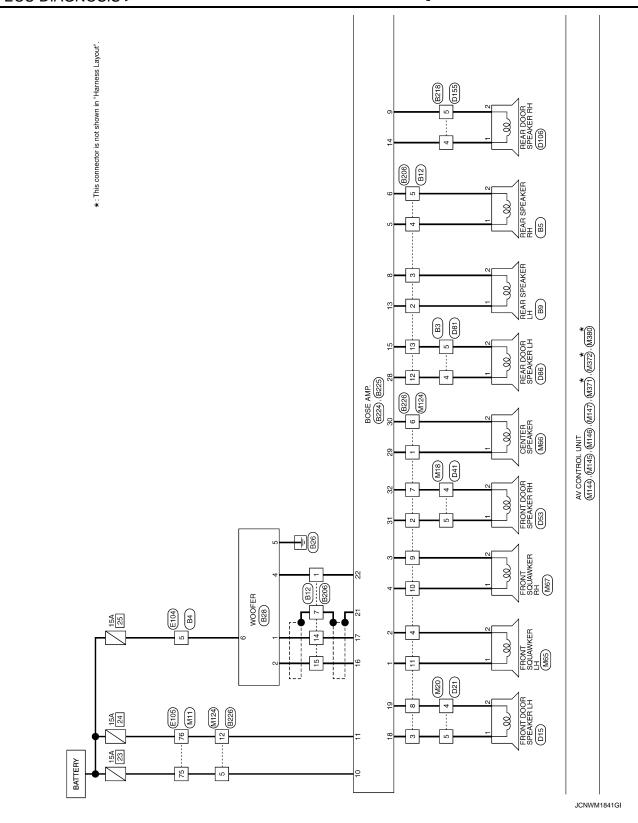
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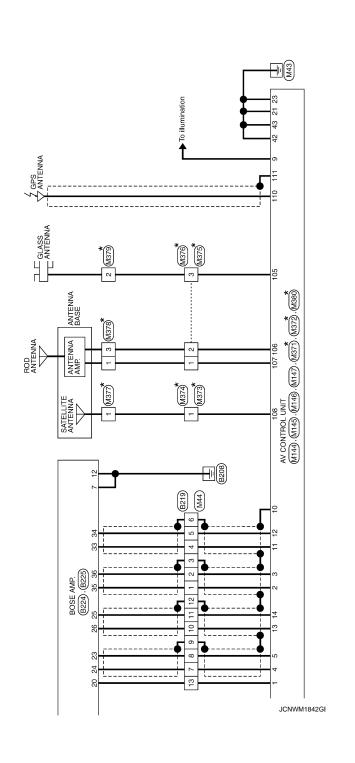
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★: This connector is not shown in "Harness Layou



**AV-679** 2009 Murano

BOSE	UDIO WITH NAVIGATION SY	STEM		
Connector No.	No. B3	Connector No. B4	Connector No. B5	Connector No. B9
Connector Name	Name WIRE TO WIRE	Connector Name WIRE TO WIRE	Connector Name REAR SPEAKER RH	Connector Name REAR SPEAKER LH
Connector Type	Type TK10FW-NS8	Connector Type NS16MW-CS	Connector Type TK02FBR	Connector Type TK02FBR
E		Œ	唇	修
H.S.	10007	H.S. (1919)	HS	HS
<u></u> -	3 17 16 15 14 13 12	10 11 12 13 14	2 1	21
		-	-	-
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4 10	- 0	x 0	2 LG -	2 GR -
		۵.	┨	ł
		7 L =		
Connector No.	No. B11	- d 99	Connector No.   B12	Connector No. B28
Connector Name	Name WIRE TO WIRE	57 L – – 58 R	Connector Name WIRE TO WIRE	Connector Name WOOFER
Connector Type	Type TH80MW-CS19	GR	Connector Type NS16FW-CS	Connector Type RS06FGY-PR
E C		- 5 L9		
H.S.			Si	HS.
	S S S S S S S S S S S S S S S S S S S		16 15 14 13 12 11 10 9 8	(2 4 6)
			2	
Terminal	Color Signal Name [Specification]		Terminal   Color   Signal Name [Specification]   No of Wire   Signal Name [Specification]	Terminal Color Signal Name [Specification]
t	- 0		1	W/R
42	SB -		Н	B/R
\$ 43	9 G		3 GR	4 W WOOFER AMP. ON SIGNAL
\$				* 0
46	GR -		S	-
47	$\dashv$		TC TC	
48	BR -[With rear view camera without telephone]		13 0 = 14 W/P	
T	SHIELD -		B/R	
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WW-CS 3	Signal Name (Specification)				В
Connector No. B206 Connector Name WIRE Connector Type INSTIT	Color   No. of Wire				C
					Е
WIRE TO WIRE TKIZAM  1 2	Signal Name (Specification)				F
Connector No. 877 Connector Name WIRE TO Connector Type TKIZMW M.S. 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	No. of Wire 6 P.V. 7 P.VW 8 B 9 SHELD	12 SHELD 13 SB			G
8 8 8 4	<u>                                     </u>				Н
REVERSE SENSOR SIGNAL 1 SENSOR SIGNAL 2 SENSOR SIGNAL 2 SENSOR SIGNAL 2 VEHICLE SPEED (6-PULSE) ACC GND BATTERY		or No. B219  or Type TH32MM-NH  1 2 3 4 5 6 7 8 9 10 111213 44 1516  1 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	Signal Name [Specification]		I
SENS SENS SENS SENS SENS VEHICLE		WIRE TO WIRE TH32MW-NH	Signal Na		J
STEM  23		Connector No. B Connector Name W Connector Type 11  1 2 3 4  1 1 2 3 4	Terninal Color No. of Wire  2 B/RR 2 B/RR 3 SHIELD 5 SHIELD 7 GRV V 8 W/L 9 SHIELD 10 SHIELD 11 W/L		K
δΠ Π					L
BOSE AUDIO WITH NAVIGATION  Connector No. B80  CAMERA CONTROL UNIT  THASTPH-NH  THASTPH-NH  TAS.  E 4 6 8 1:012 1416 1822 22486 28 3032  T 3 5 7 9 1113 1817 1921 2235 2728 3032	Signal Name (Specification) SHELD CAMERA IMAGE SIGNAL GNO CAMERA ON SIGNAL COMMETA IMAGE SIGNAL COMNECTION RECOGNITION AV COMM (L) AV COMM (L) AV COMM (L) AV COMM (L) AV COMM (H)	5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Signal Name [Specification] -[With BOSE system] -[With BOSE system]		M
AUDIO WITH NA  leane   860  CAMERA CONTROL  ype   TH32FW-NH    16   8   10   12   14   16   18   18   17   18   18   17   18   18	Sig	B218 WIRE TO WIRE TKIOFW-NS8 8 7 6 6 6 7 16 15 1			AV
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Revision: 2008 October AV-681 2009 Murano

28   GR/V   SOUND SIGNAL REAR PH (+)     28   G   SOUND SIGNAL REAR DOOR SPEAKER II (+)     29   V   SOUND SIGNAL CENTER SPEAKER (+)     30   P   SOUND SIGNAL CENTER SPEAKER (+)     31   B   SOUND SIGNAL FRONT DOOR SPEAKER PH (+)     32   Y   SOUND SIGNAL FRONT DOOR SPEAKER PH (+)     33   W/R   SOUND SIGNAL FRONT RH (+)     34   B/R   SOUND SIGNAL FRONT RH (+)     35   W/R   SOUND SIGNAL FRONT RH (+)     36   B/R   SOUND SIGNAL FRONT RH (+)		Connector No.   D21	Terminal   Color   Signal Name (Specification)   No. of Wire   A   B / W   -[Type A]   S   L   Chype B]   5   L   Chype B]   5   W   -[Type B]   5   W   -[Type B]
Connector No. B225 Connector Name B0SE AMP. Connector Type SCA19FBR-SGA4  M.S. 37 36.55 34.33   32.3130.22 28  27 26 25 24 29 22 21 20 19 18 17 16 15	Terminal   Color   Signal Name [Specification]     15	Connector No. D15 Connector Name FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS H302FBR-CS H3.	Terminal   Color   Signal Name [Specification]
12   B   GND   G		12 GR	
BOSE AUDIO WITH NAVIGATION SYSTEM Generator No. B224 1 1 1 10	Color   Signal Name [Specification]   Color   Signal Name [Specification]   LG   SOUND SIGNAL FRONT SQUAWKER LH (+)   2	Size	Terminal   Color   No. of Wire   Signal Name [Specification]

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Connector No. D86 Connector Name REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS0ZFBR-CS	Terminal Color No. of Wire  1 L 2 W	Connector No. D192 Connector Name REAR VIEW CAMERA Connector Type TH04MW-NH H.S.	No.   Color   Signal Name [Specification]		A B C
MIRE TO WIRE  TKIOMW-NSB  3 4 5 6 7 8 9 10  2 13 14 15 16 17 18	Signal Name [Specification]	D182 WIRE TO WIRE TKI2PW  5 4 3 2 1 12 11 10 9 8 7 6	Signal Name [Specification]		E
Connector No. Connector Name Connector Type	tion] Terminal Color No. 10 Wire 4 L L 5 W	Connector No Connector Name Connector Type  110  18	tion] Terminal Color No. of Wire 6 R R R R R R R R R R R R R R R R R R		G H
Connector Name SySTEM) Connector Type NSQZFBR-CS  CHARLE SYSTEM) Connector Type NSQZFBR-CS	Signal Name   Specification   No.   Oolor   Signal Name   Specification   No.   Oolor   Oolo	Connector No. D155  Connector Name WIRE TO WIRE  Connector Type TK10MW-NS8  T   2   3   4   5   6   7   8   5   11   12   13   14   15   16   17   16   17   18   18   18   18   18   18   18	No.   Color   Signal Name [Specification]   No.   Color   Signal Name [Specification]   A   L   -[Type A]   5   W   -[Type A]   5   W   -[Type B]		J
F		Conr			L
BOSE AUDIO WITH NAVIGATION SYS  Connector No. D41  Connector Name WRE TO WRE  Connector Type TH40FW-CS15  TH5 14 18 12 11 10 9 8 7 6 5 4 9 2 1  TH5 TH5 12 11 10 9 8 7 6 5 4 9 2 1  TH5	Color   Signal Name [Specification]	N No. D106  REAR DOOR SPEAKER RH (WITH BOSE NY TEM)  NSOZEBR-CS  Type  2 1	Color   Signal Name [Specification]   O		M
BOSE AU Connector Name Connector Type 15 14 15 14	Terminal No. A 4 4 4 4 5 5 5	Connector No. Connector Name Connector Type H.S.	Terminal No.		0
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BOSE AUDIO WITH NAVIGATION SYSTEM	STEM Connector No.	r No. E16		Connector No.	E18	Connector No. E27	
Connector Name         WIRE TO WIRE           Connector Type         TK16MGY-1V	Connector Name		ECM RH24FB-RZ8-L-LH	Connector Name Connector Type	BACK-UP LAMP RELAY MS02FL-M2-LC	Connector Name PARKING BRAKE SWITCH Connector Type P01FB-A	
H.S. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	H.S.		22 88 93 97 101 105 109 22 88 90 94 98 100 100 110 83 87 91 95 99 100 101 111 84 88 92 66 100 101 100 112	E S.		H.S.	
Terminal   Color   Signal Name [Spacification]	Terminal No. 97 98 98	Odor of Wire	Signal Name [Specification] VEHGAN-L VEHGAN-H	Terminal Color   No. of Wie-	Signal Name [Specification]	Terminal Color Signal Name [Specification]	[S]
Gonnector No. E104 Gonnector Name WIRE TO WIRE Gonnector Type NS16FW-GS	Connector No. Connector Name		E105 WIRE TO WIRE TH70MW-CS10-M3	Connector No. Connector Name Connector Type	F23 TCM (TRANSMISSION CONTROL MODULE) RH40FB-RZ8-L-RH	Connector No. F123 Connector Name WIRE TO WIRE Connector Type TK16FGY-1V	
7     6     5     4     3     2     1       16     15     14     13     12     11     10     9     8	H.S.			H.S. 21222 21222 21222 1122 1122 1122	22 33 34 58 58 77 38 39 440 47 48 22 23 24 45 56 67 72 82 89 90 45 46 46 22 31 41 56 17 18 19 22 43 44 22 31 41 56 17 18 19 10 41 42	H.S. 7 6 5 4 3 2 1 16 15 14 13 12 11 10 9 8	
Terminal   Color   Signal Name [Specification]   No.	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal Color No. of Wire	Signal Name [Specification]	Terminal Color Signal Name [Specification]	on]
ω -	5	97 17	1 1	19 G/B	REV LAMP RELAY	4 G/B –	
-	47	. a	1				
	48	٦	1				
	75	BR GR	1 1				
	28	5 >					

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## FRONT DISPLAY UNIT

tion]		А
WIRE CSIO-M3 CSIO-M3 Signal Name (Specification)		В
WIRE TO THYOFW.	α	С
Connector No.   Connector Name   Connector Type   Color   Co	22	D
7 8 7 8 Pecification]	oeification)	Е
( CONNECTO	MIRE TO WIRE THI 2FW-NH  [6 5 4 3 2 1 1 12 11 10 9 8 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	F
No.  Name Type  Color  Color  P  P	Name   Miles	G
Connector Connec	Commetto Com	Н
CS  CS  (3)  (3)  (3)  (3)  (3)  (4)  (5)  (5)  (6)  (7)  (7)  (8)  (9)  (9)  (1)  (1)  (1)  (1)  (1)  (2)	No   M20   Willer TO WIRE   Type   TH40MW-CS15   Willer TO WIRE   Type   TH40MW-CS15   Willer TO WIRE   William   Willer TO WIRE   William   Willia	I
SE BL.	MAZO   WITHER TO WITHER TO WITHER TO WITHER TO STISE   STIPE	J
STEM Connector No. M3 Connector Name FU Connector Type NS HS.  Terminal Color No. of Wire 12C 0	Connector No. M. Connector Name M. Connector Type II	К
	m type B	L
OCK (J/B)  WZ  WZ  ZA 1A  ZA 54 54 4A  Signal Name (Specification)	MB   WRE   TO WRE   H400MW-CSI	M
MI FUSE BL NSOGFW-		AV
BOSE AUIC Connector No. Connector Type Connector Type ILS Color No. Color No. Color SA R G SA R G SA R R	Connector No. Connector Name Connector Type Connect	0
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BOSE AUDIO WITH NAVIGATION SYS Connector No.   M23	STEM Connector No. M30	Connector No. M33	Connector No.   M34
Connector Name WIRE TO WIRE	Connector Name STEERING ANGLE SENSOR	Connector Name COMBINATION SWITCH (SPIRAL CABLE)	Connector Name COMBINATION METER
Connector Type TH16MW-NH	Connector Type TH08FW-NH	Connector Type TK08FGY-1V	Connector Type   TH40FW-NH
1.2 3 4 5 6 7 8 9 10111213141516	1.8 5 6 7 8 4	1.8. 2.4.25.26 31.32.33.34	1.S. 1. S.
Terminal   Color   Signal Name [Specification]	Terminal   Color   Signal Name [Specification]   Color   Signal Name [Specification]	Terminal Color Signal Name [Speeification]  No. of Wire 24 BR - [With audio steering switch and telephone] 31 G - [With audio steering switch and telephone] 33 L - [With audio steering switch and telephone]	Terminal   Color   Signal Mane [Specification]
Connector Name WIRE TO WIRE	11 CAHED	Connector Name FRONT DISPLAY UNIT	13 B GNUJWith navigation system] 14 SHIELD SHIELD[With navigation system] 15 Y AIT IMAGE SIGNAL [With navigation svetem]
Connector Type TH32FW-NH	П	Connector Type TH24FW-NH	. ჟ
<b>E</b>		<b>E</b>	W RGB (B:BLUE) SIGNA B RGF
48.		/	20 R VP
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17		12 11 10 9 8 7 6 5 4 3 2 1 24 23 23 22 22 1 20 13 21 15 15 14 13	G COMM
			23 SMELD SMELD
Terminal Golor Signal Name [Specification]		Terminal Golor Signal Name [Specification]	
П		В	
2 R -		2 Y BATTERY[With navigation system]	
В		SHIELD	
T		+	
7 0 -[Type A]		7 SHIELD SHIELD	
H		${\mathbb H}$	
8 SB -[Type A] 8 R -[Type B]		9 W RGB AREA (YS) SIGNAL 11 R COMM (CONT->DISP)	
SHIELD		± ×	

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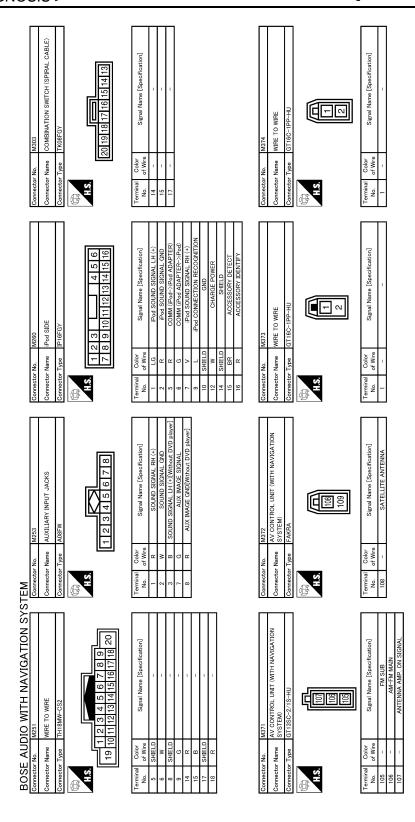
		ation]	А
		M122   Connector Name   BCM (BODY CONTROL MODULE)	В
		MM 122   BCM (BO)   BCM (BCM (BO)   BCM (BCM (BO)   BCM (BCM (BO)   BCM (BCM (BCM (BCM (BCM (BCM (BCM (BCM	С
		Connector No. Connector Name Connector Type Connector Name Connect	D
	Signal Name [Specification] [With BOSE system]	NIPERW-CS2  THISPA-CS2  TI 16 15 14 13 12 11 10 19  Signal Name [Specification]	Е
M67 FRONT SOLAWKER BH TK02FBR	Signal Name [Specificati	WIRE TO WIRE THIBFW-CS2 THIBFW-CS2 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 14 13 17 16 15 16 16 16 16 16 16 16 16 16 16 16 16 16	F
or No.	Color BR R	No.	G
Connecto Connecto Connecto A. A	Terminal No. 2 2 2	Terminal	Н
	Signal Name [Specification]		I
M66 CENTER SPEAKER TK02FBR	Signal Nam		J
tor No.	Terminal Color No. of Wire 2 O O	S S S S S S S S S S S S S S S S S S S	K
SYSTEM Connection of the conne			L
BOSE AUDIO WITH NAVIGATION  Journedon Name FRONT SOULWIKER LH  Journedon Type TROZEBR  ALS.  H.S.	Signal Name [Specification] -[With BOSE system] -[With BOSE system]	WIRE CS19 Signal Name (Specification)	M
UDIO WITH NAV		WIRE TO THROUGH THE TEST STATES TO THE THROUGH THE TEST STATES THE THROUGH THE THROUGH THE TEST STATES THE TEST STATES THE THROUGH THE THROUGH THE TEST STATES THE THROUGH THE TEST STATES THE TEST STATES THE TEST STATES THE THROUGH THE TEST STATES THE THROUGH THE TEST STATES THE TEST STATES THE TEST STATES THE THROUGH THE TEST STATES THE TES	AV
BOSE AL Connector No. Connector Type Connector Type H.S.	Terminal Color No. of Wire 1 LG 2 Y	Connector No.   M   Connector No.   M   Connector Name   W   Connector Type   T   T   T   T   T   T   T   T   T	0
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		38    V   VEHIOLE SPEED (6-PULSE)     40	
Connector No. M125 Connector Name MULTIFUNCTION SWITCH Connector Type THISTW-NH  LIS  2 4 6 8 10 12 14 16 1 3 5 7 9 11 13 15	Terminal   Color   Signal Name [Specification]   Of Wire   Signal Name [Specification]   Of Discourse   Of Di	Connector No. M145 Connector Name SySTEM) Connector Type TH40FW-NH    Connector Type   TH40FW-NH    Connector Type   TH40FW-NH    Connector Type   TH40FW-NH	Terminal   Color   Signal Name [Specification]     21
SYSTEM  12 16		11   B   SOUND SIGNAL FRONT RH (+)   12   W   SOUND SIGNAL FRONT RH (-)   13   V   SOUND SIGNAL FRAR RH (-)   14   LG   SOUND SIGNAL FAR RH (-)   15   L   STRE SW GND   16   G   STRE SW GND   19   Y   BATTERY	
BOSE AUDIO WITH NAVIGATION SYS  Connector No. M124  Connector Name WIRE TO WIRE  Connector Type NSIZER-CS  ALS. 5 4	Terminal Color No. of Wire 1 0 P	Connector No. M144 Connector Name System) Connector Type THIBPW-CS2  M. Connector Type THIBPW-CS2  M.S. THIBPW-CS2	Terminal   Color   Signal Name [Specification]   Color   Col

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SHELD  Pod SOUND SIGNAL RH (+)  RHELD  AV COMM (+)  AV COMM (+)  AV COMM (+)  Bod SOUND SIGNAL LH (+)  Pod SOUND SIGNAL LH (+)  Pod SOUND SIGNAL LH (+)	I
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Connector Name   Connector Name   Connector Name   Connector Type   Connector Name   Conn	0
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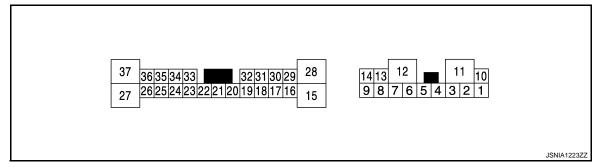
## FRONT DISPLAY UNIT

Connector No. M378 Connector Name ANTENNA BASE (ANTENNA AMP.) Connector Type GT13SSN-1/1PP-HU  Connector Type GT13SSN-1/1PP-HU  Terminal Color Signal Name (Specification)  1	Connector No. R20 Connector Type MICROPHONE TRO4FW Terminal Color Signal Name [Specification] Terminal Color Signal Name [Specification] The No. MICROPHONE SIGNAL (+) The No. MICROPHONE	В
Connector No. Connector Type Connector Type H.S. H.S.  1 - 1 3 1	Connector No. Connector Typ Connector Typ Terminal Co No. Terminal	D
EM)  TITE ANTENNA)  EM)  Orification]  NTENNA	2 1 10 9 precification]	Е
M377 ANTENNA BASE (SATELLITE ANTENNA) (WITH NAVIGATION SYSTEM) (GT16C-IPP-HU  Z  Signal Name [Specification]  SATELLITE ANTENNA	13 12 11 11 11 11 11 11 11 11 11 11 11 11	F
		G
Connector No.  Connector Name Connector Type H.S.  H.S.  Terminal Color No. of Wire	Connector Nor Connector Type Connect	Н
WIRE N-2/1PP-HIU Signal Name [Specification]	M380 AV CONTROL UNIT (WITH NAVIGATION SYSTEM) GT5-15-HU  T11 Signal Name [Specification]  GPS ANTENNA SHIELD	I J
Connector Name WIRE TO WIRE Connector Type GTITISSON-2711 CONNECTO		K
Connecto Con	Connector No. Connector Typ Connector Typ Terminal Co. No. 110 Of V.	L
Connector No.   M375   Connector No.   M375   Connector No.   M375   Connector No.   M375   Connector No.	NTENNA I-1/IPP-HU  Signal Name (Specification)  FM SUB	М
DIO WITH N M375 WIRE TO WIRE GTI3SH-2/15-HU	M379 GLASS A GT13SCP	AV
BOSE AUIC Connector Name Connector Type  Terminal Color 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Connector No. Connector Name Connector Type Connector Type (1.5. (1.5.  Connector Type Connector Type (1.5.  2 c -	0
<u> </u>	<u> </u>	JCNWM1854GI
		P

# BOSE AMP.

Reference Values

## TERMINAL LAYOUT



#### PHYSICAL VALUES

	minal color)	Description		Condition		Reference value
+	_	Signal name	Input/ Output			(Approx.)
1 (LG)	2 (V)	Sound signal front squawk- er LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
4 (P)	3 (L)	Sound signal front squawker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
5 (Y)	6 (BR)	Sound signal rear speaker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
7 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
10 (SB)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
11 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
12 (B)	Ground	Ground	_	Ignition switch ON	_	0 V

## **BOSE AMP.**

# [BOSE AUDIO WITH NAVIGATION]

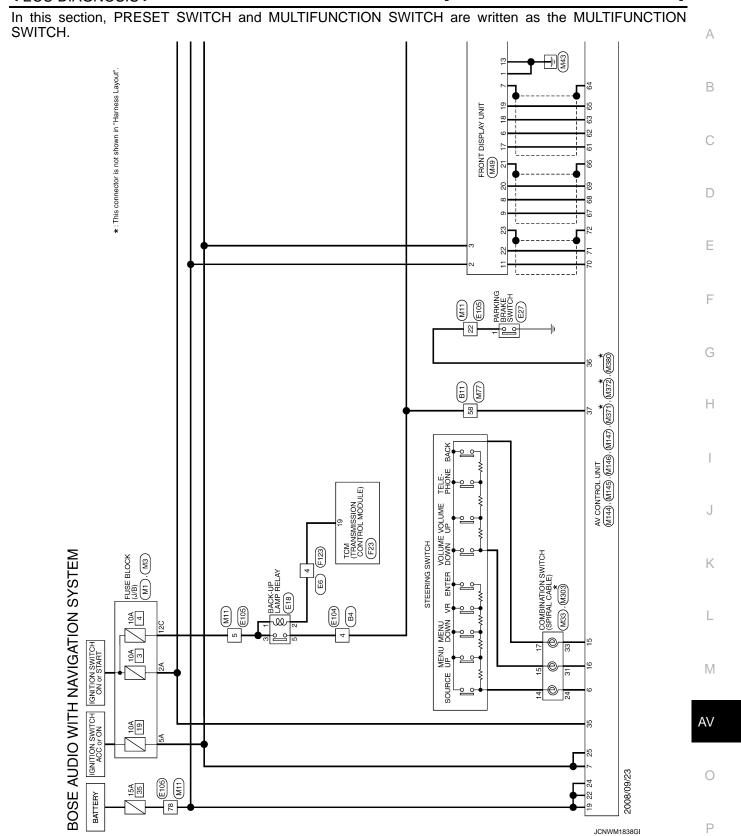
	minal e color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
13 (GR)	8 (BR)	Sound signal rear speaker LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
14 (L)	9 (O)	Sound signal rear door speaker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKiB3609E
16 (B/R)	17 (W/R)	Sound signal woofer	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 → 2ms SKIB3609E
18 (W)	19 (B)	Sound signal front door speaker LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 → 2ms SKiB3609E
20 (SB)	Ground	Amp. ON signal	Input	Ignition switch ACC	_	12.0 V
21	_	Shield	_	_	_	_
22 (W)	Ground	Woofer Amp. ON signal	Output	Ignition switch ACC	_	12.0 V
24 (GR/V)	23 (W/L)	Sound signal rear LH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E

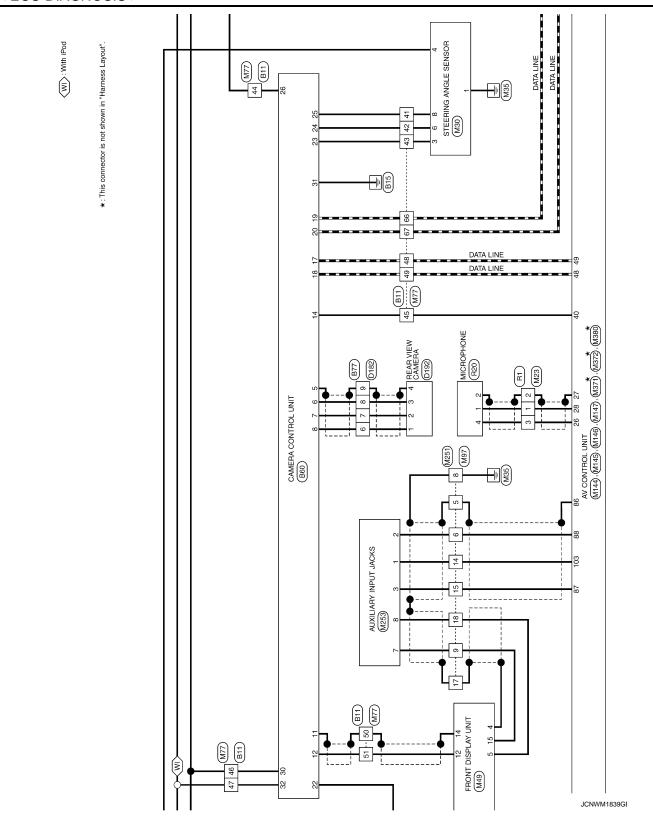
	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
26 (GR/V)	25 (W/L)	Sound signal rear RH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
28 (G)	15 (R)	Sound signal rear door speaker LH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
29 (V)	30 (P)	Sound signal center speaker	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
31 (BR)	32 (Y)	Sound signal front door speaker RH	Output	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
33 (W/R)	34 (B/R)	Sound signal front RH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E
35 (W/R)	36 (B/R)	Sound signal front LH	Input	Ignition switch ON	Sound output.	(V) 1 0 -1 + 2ms SKIB3609E

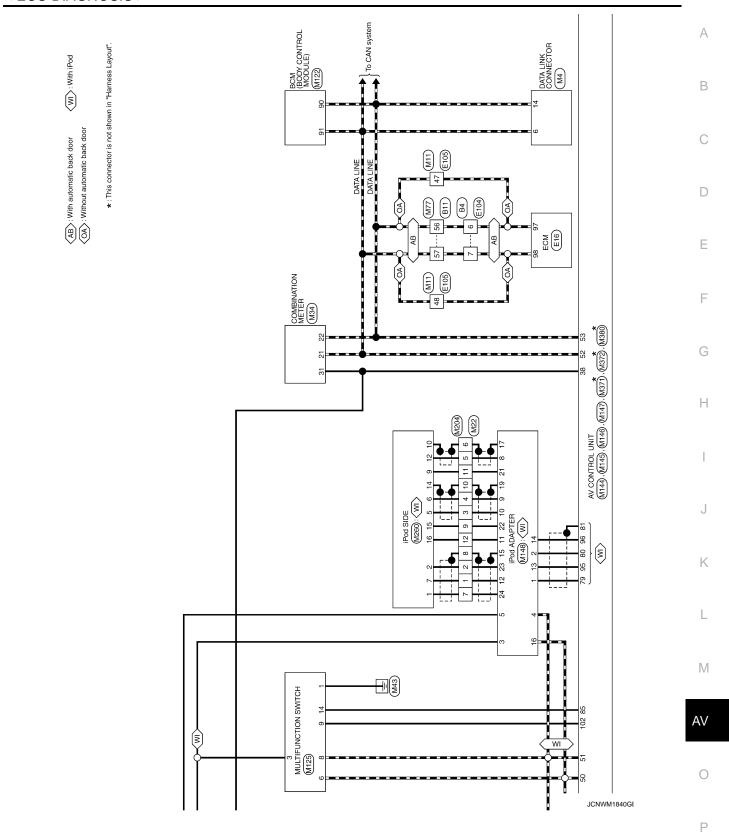
Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

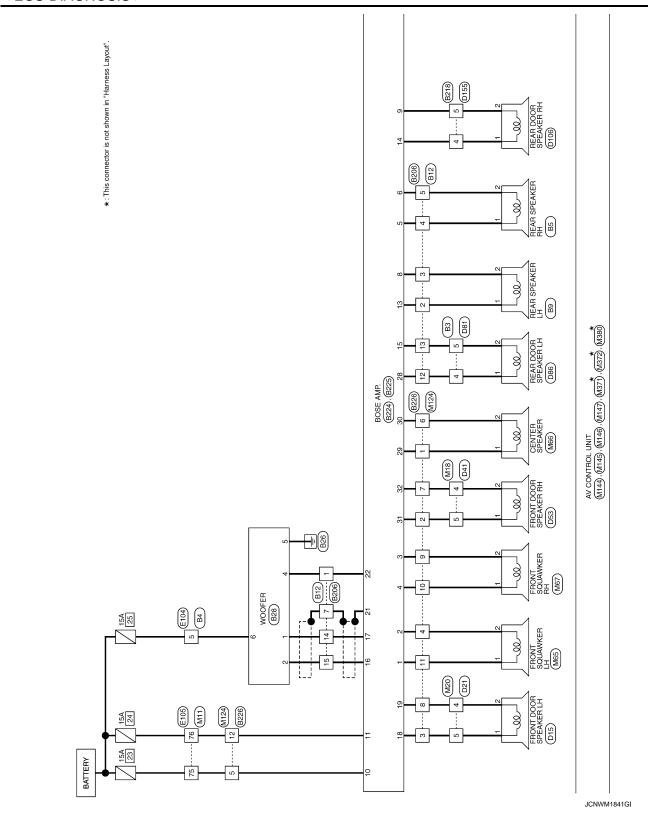
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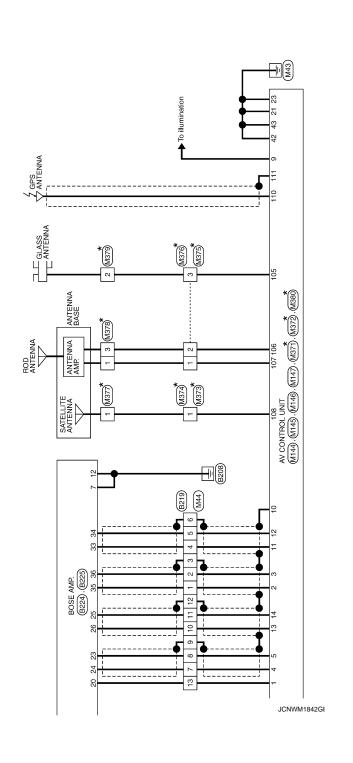








*: This connector is not shown in "Harness Layout".



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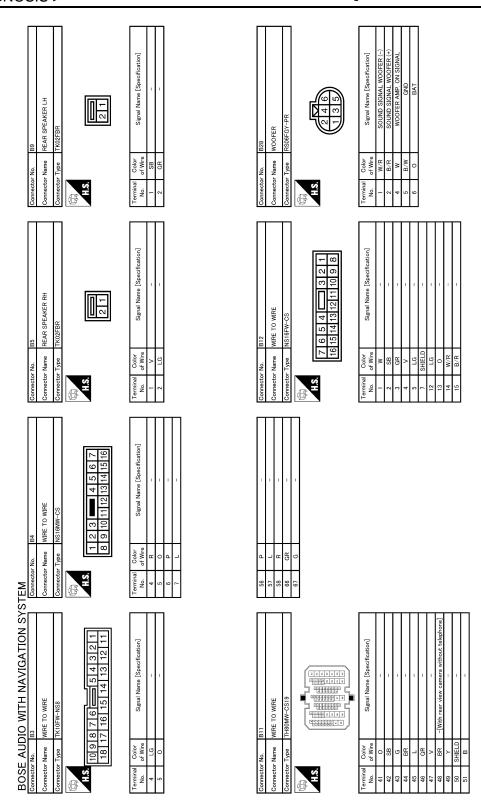
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6 7 15 16	ification)				А
Connector No. B206 Connector Name WIRE TO WIRE Connector Type NIS16MW-CS  1 2 3 4 5 6 10 11 12 13 14 1	Terminal   Golor   Signal Name (Specification)				B C D
					Е
3 4 5 10 11 12	Signal Name [Specification]				F
Connector No. 877  Connector Name WIRE TO WIRE Connector Type TK12MW  M.S. 1 2 6 7 8 6	inal Color of Wire R/U R/W	12 SHIELD 13 SB			G
Connecto Connecto Connecto H.S.	Terminal No. 6 7 7 9 9	13			Н
REVERSE SENSOR SIGNAL 1 SENSOR SIGNAL 2 SENSOR SIGNAL 2 SENSOR SIGNAL 3 VEHICLE SPEED (8-PULSE) GND GND BATTERY		9 10 11   21 3 14   15   16   25   25   27   28   28   30   31   32	Signal Name [Specification]		I
SEN SEN SEN VEHIOLE		NIRE NH NH	Signal N		J
STEM  22 23 24 28 26 26 26 26 26 26 26 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28		Connector No. 8219 Connector Name WIRE TO V Connector Type TH32MM- H.S. 12 3 4 5 6 1718 19 20 21 22 2	Terminal Color No. of Wire  1 W/R 2 B/R 3 SHIELD 4 W/R 5 B/R 7 GR/V 8 W/R 10 GR/V 11 GR/V		K
S N S N S N S N S N S N S N S N S N S N					L
BOSE AUDIO WITH NAVIGATION SY   Sometor No.   860   Sametor Name   CAMERA CONTROL UNIT   Connector Type   TH32FW-NH	Signal Name [Specification] SHELD CAMERA IMAGE SIGNAL GND CAMERA IMAGE SIGNAL ONNECTION RECOGNITION AV COMM (L)	NRS NSS See 5 4 3 2 1	Signal Name [Specification] -[With BOSE system] -[With BOSE system]		M
E AUDIO WIT or Name CAMERA CC or Type TH32PW-NY		No. R218 Nume WIRE TO WIRE Type TK10FW-NS3  10 9 8 7 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6			AV
Connector Name Connector Name Connector Type RAS	Color   Color   Color	Connector No. Connector Name Connector Type H.S. 10 9	Color of Wire		0
Conne	Terminal No. 5 6 6 7 7 11 11 11 11 11 11 11 11 11 11 11 11	Conne	Terminal No. 5 5	JCNWM1844GI	
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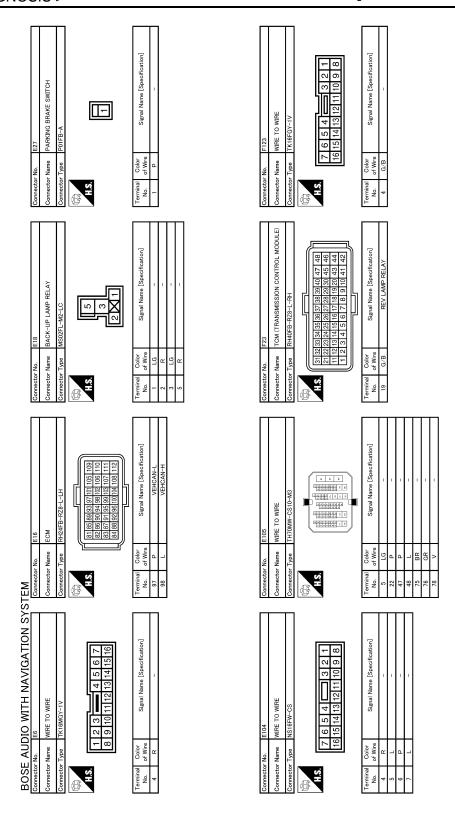
26   GR-V   SOUND SIGNAL REAR RH (+)		Connector No.   D21	Terminal   Color   Signal Name [Specification]   No. of Wire   4   B/W   -[Type A]   5   L   -[Type B]   5   W   -[Type B]   5   W   -[Type B]
Connector No. 8225  Connector Name BOSE AMP.  Connector Type SCA19FBR-SGA4  LS 37 36 555 34 33 3 32 22 22 22 22 22 22 22 22 22 22 2	Terminal   Color   Signal Name [Specification]	Connector Name FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS  LL STEM) Connector Type NS02FBR-CS  LL STEM)  LL STEM   Terminal   Codior   Signal Name [Specification]	
STEM  12 B GIND SIGNAL REAR SPEAKER LH (+)  13 GR SOUND SIGNAL REAR DOOR SPEAKER RH (+)  14 L SOUND SIGNAL REAR DOOR SPEAKER RH (+)		12 GR -	
BOSE AUDIO WITH NAVIGATION SYS  Commetter Name BOSE AMP.  Commetter Type SCATZFBR-SJAZ  H.S.  (1413 12 1110  B 8 7 6 5 4 3 2 11	Terminal   Color   Signal Name [Specification]     1	Somestor No.   12.86   Connector Name   WIRE TO WIRE	Terminal   Color   Signal Name [Specification]   No. of Wire

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# [BOSE AUDIO WITH NAVIGATION]

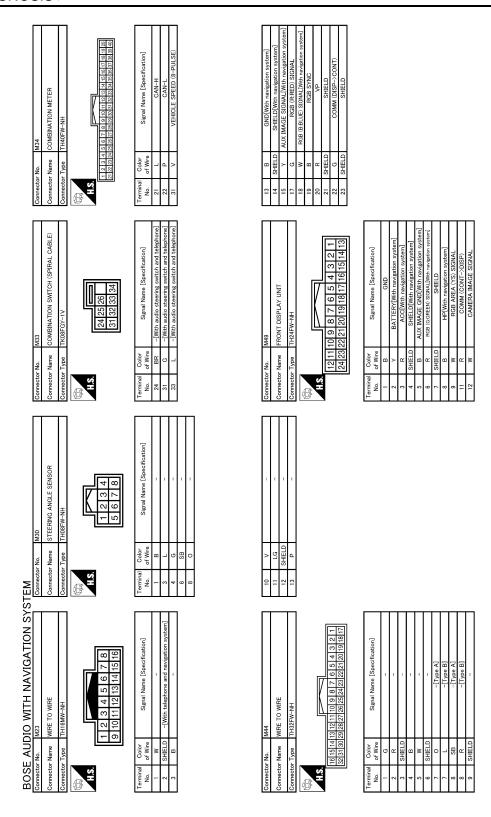
Connector No. D86 Connector Name REAR DOOR SPEAKER LH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS H.S.	Terminal   Color   No. of Wire   Signal Nane [Specification]   1   1   2   2   W   -	Connector No. D182 Connector Name REAR VIEW CAMERA Connector Type ITHOMW-NH H.S.	Terminal   Color   Signal Name [Specification]     1	A B C
Connector No. D81  Connector Name WIRE TO WIRE  Connector Type TK10MW-NS8  MS. 1 2 3 4 5 6 7 8 9 10  11 12 13 14 5 6 7 8 9 10	Terminal   Color   Signal Name [Specification]   4	Connector No. D182  Connector Type WIRE TO WIRE  Connector Type TK12FW  M.S. 5 4 3 2 1  12 11 10 9 8 7 6	Terminal   Color   Signal Name   Specification	E F G
Gornector Na.  Connector Name SYSTEM Connector Type NS02FBR-CS H.S.	Terminal Color   Signal Name [Specification]   No.   Signal Name [Specification]   1   BR	Oomector No. D155 Connector Type ITK10MW-NS8  M.S. 1 2 3 4 5 6 7 8 9 10  11 12 13 14 15 16 17 18	Terminal   Color   Signal Name (Specification)   A   O   -[Type A]   A   O   -[Type B]   S   B / P   -[Type B]   S   W   -[Type B]   C   Type B]   C   Typ	J K
BOSE AUDIO WITH NAVIGATION SYS	Terminal   Golor   Signal Name [Specification]     No.	Connector No. D106 Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM) Connector Type NS02FBR-CS	Terminal   Color   Signal Name [Specification]   No.   of Wire     O     Tippe A]     1   0	AV O JCNWM1846GI

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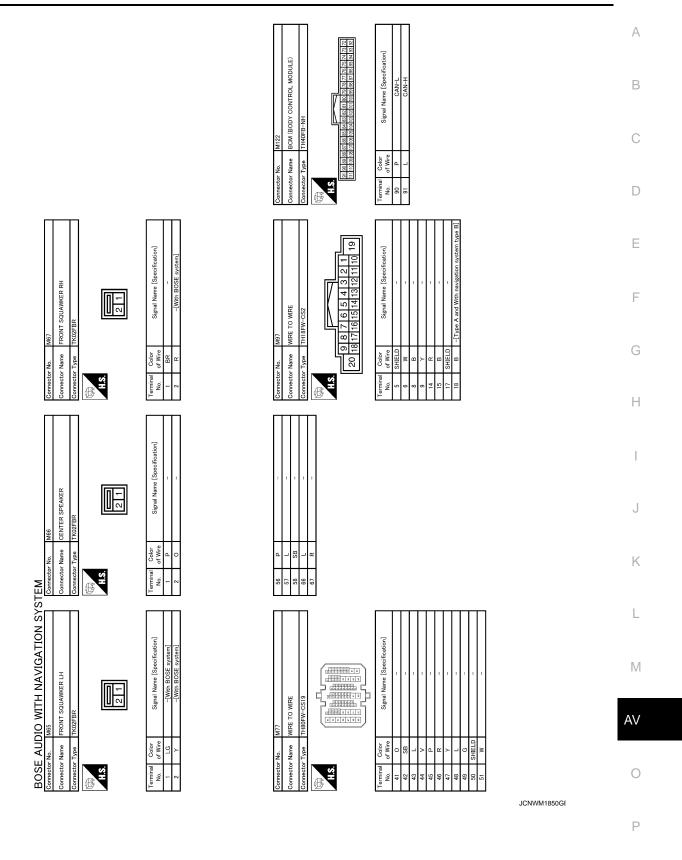


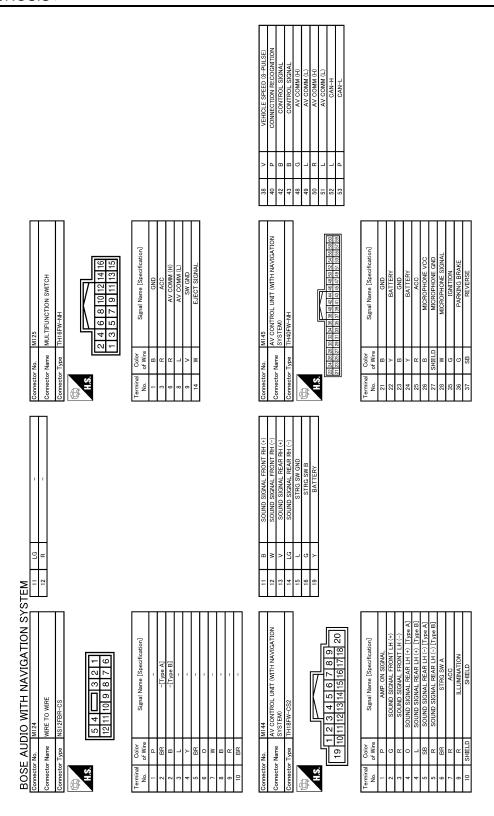
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[eo]		А
SSIG-M3 CSIG-M3 Signal Name [Specification]		В
WIRE TO TH70FW	α	С
Connector No. Connector Name Connector Type  1.5.  1.5.  1.6.  1.7.  1.8.  1.8.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9.  1.9	22	D
7 8 7 8 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Decification]	Е
MA BD16FW BD16FW  9 10 11 12 13 14 15 16  1 2 3 4 5 6 7 8  Signal Name [Specification]	WIRE TO WIRE  THIZFW-NH  (6 5 4 3 2 1 1 12 11 11 0 9 8 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	F
No.  I Name  Color of Wire	Name	G
Connecto Con	Oomesto Connecto Connecto Terminal No. 1 2 2 3 4 4 4 4 6 6 10 10 11	Н
CS C	No.   M20	I
M3  FUSE BLOCK (J.R)  NSI ZPW-CS  5C4C 30 2C 1C  12C 11G 10G 9C BC 7C 6C  Signal Name (Specif	Name   WIRE TO WIRE	J
Connector Name   Connector Type   Connec	Connector No.   A Connector No.   A Connector No.   A Connector Type   Terminal Color No.   A Color	K
S NO T	In type BJ	L
OOK (J/B) MZ MZ MZ MZ AGA 5A 4A AGA 5A 5A 5A 5A 5A AGA 5A 5A 5A 5A 5A AGA 5A 5A 5A 5A AGA 5A 5A 5A 5A 5A 5A 5A AGA 5A 5A 5A 5A 5A 5A AGA 5A 5A 5A 5A 5A 5A 5A 5A AGA 5A AGA 5A	MR   MRE   TO WIRE   H-40MW-CS15   MRE	M
DIO W		AV
BOSE AUC Gonnector No. Connector Type Connector Type Terminal Color No. SA G Wire SA R	Corrector No. Corrector Name Corrector Name Corrector Type No. 1 2 3 1 2 3 1 2 3 1 3 1 3 1 3 1 3 1 3 1	0
	JCNWM1848GI	Р



JCNWM1849GI

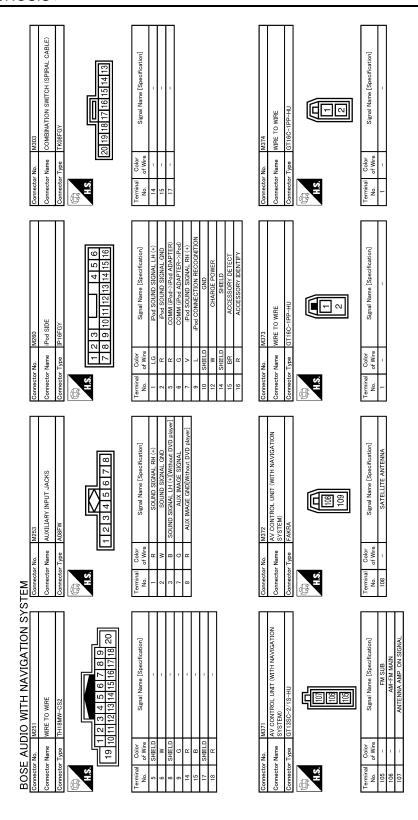




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		А
1		В
α		С
2	-	D
NAVIGATION  NAVIGATION    In   In   In   In   In   In   In   I	ilication)	Е
DL UNIT (WITH WITH WITH WITH WITH WITH WITH WITH	Signal Name (Specification)	F
8		G
Connector No.   Connector Name   Connector Name   Connector Name   Connector Type   Connector Name   Conne	Commercer Name   Commercer Name   Commercer Name   Commercer Name   Color	Н
SHELD SIGNAL RH (-)	AV COMM (+)  AV COMM (+)  AN COMM (+)  SHELD  SHELD  SHELD  ACCOUNT SHOWL (W)  Pod COUND SIGNAL (W)  Pod SOUND SIGNAL (H (+)	I
IN CHINOS Podi	NO ON   NO O	J
П		K
ON SYSTEM TON TON TON TON TON TON TON TON TON TON		L
MI	10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  11  10  10	M
M146	150 d 151	ΑV
Connector Name	Connector Name Connector Type  Connector Type  Connector Type  Connector Type  1 2 R R 2 R R 3 R R R R 8 R W W R 8 R W W R 110 R R R R	0
	JCNWM1852GI	Р

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JCNWM1853GE

Cornector No. M378 Connector Name ANTENNA BASE (ANTENNA AMP.) Connector Type GT13SSN-1/IPP-HU  Connector Type GT13SSN-1/IPP-HU  The Connector Type Signal Name [Specification]  No. of Wire  3	Connector Name   RZ0	В
Connector No. Connector Typ. Connector Typ. M.S. H.S. I of I	Connector Connector Terminal No. 1 2 4 4	D
M377 ANTENNA BASE (SATELLITE ANTENNA) (WITH NAVIGATION SYSTEM) (STIGG-IPP-HU  Signal Name [Specification]  SATELLITE ANTENNA	IRE TO WIRE	Е
A BASE (SATELLITE ANTEN MGATION SYSTEM) PP-HU  SATELLITE ANTENNA	RI   WIRE TO WIRE   THISPW-NH	F
		G
Connector No. Connector Name Connector Type  Terminal Color No.  of Wire  1	Connector No.  Connector Name Connector Type Connector No. Con	
		Н
[neoffication]	H NAVIGATION  Recification  D  D	1
WIRE TO WIRE GT13SCN-2/IPP-HU  Signal Name [Specification]	M380 AV CONTROL UNIT (WITH NAVIGATION SYSTEM) GT5-1S-HU [11] Signal Name [Specification] Signal Name [Specification]	J
Note of the second of the seco	olor Mire	K
STEM Connector No. Connector Type Connector Type Reminal Color No. O'Wir	Connector No. Connector Name Connector Type Terminal Color No. 110 - 111 111	
Š NO	[-	L
WIRE 2/15-HU Signal Name [Specification]	NTENNA  -1/TPP-HU  2  Signal Name [Specification]  FM SUB	M
BOSE AUDIO WITH NAVIGATION SY Connector Nane WIFE TO WIFE Connector Type GTISSH-2/1S-HU  Connector Type GTISSH-2/1S-HU  This  Terminal Color  No. of Wire  Signal Name [Specification]  1	GTISSCN-1/IPP-HU  Signal Name	
AUDIO V No. M375 Name WIRE TI Type GTI3SIS Color	Nire e	AV
BOSE AU Connector No. Connector Name Connector Type Connector Type No. Of Wire 1 1 2 2 3 - 3 - 3 - 1  Color No. Of Wire 1  Color No. Of	Connector No. Connector Name Connector Type Connector No. Color Wire Color	0
		JCNWM1854GI
		Г

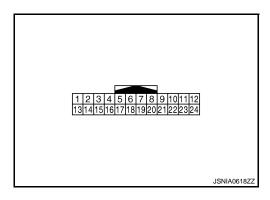
# [BOSE AUDIO WITH NAVIGATION]

# **IPOD ADAPTER**

Reference Values

INFOID:000000003457769

**TERMINAL LAYOUT** 



#### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value
+	_	Signal name	Input/ Output	Condition		(Approx.)
1 (BR)	13 (L)	iPod sound signal LH	Output	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
2 (R)	14 (W)	iPod sound signal RH	Output	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 + 2ms SKIB3609E
3 (R)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
4 (L)	_	AV communication signal (L)	Input/ Output	_	_	_
5 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
8 (W)	Ground	iPod battery charge	Output	Ignition switch ON	Connected to iPod [®] .	12.0 V

## **IPOD ADAPTER**

# [BOSE AUDIO WITH NAVIGATION]

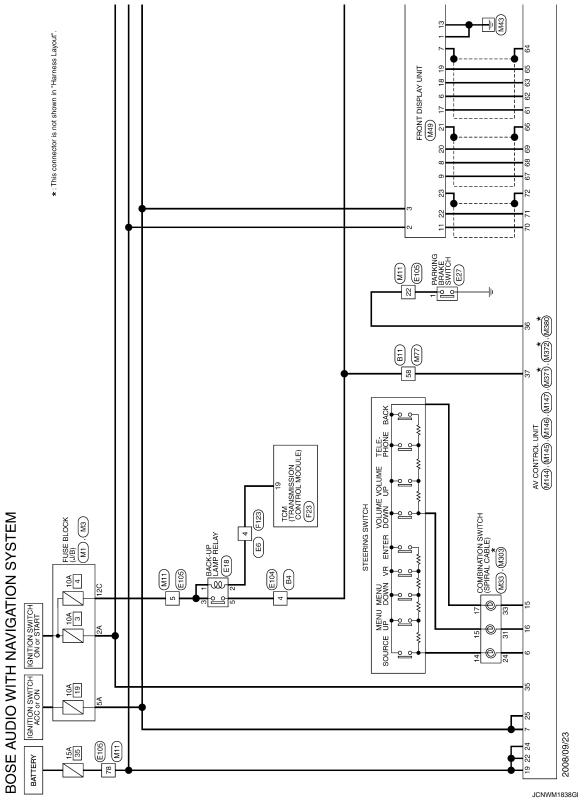
	Terminal Description		0		Reference value	
+	_	Signal name	Input/ Output		Condition	(Approx.)
9 (G)	Ground	Communication signal (iPod adapter→iPod [®] )	Output	Ignition switch ON	The wave pattern is displayed just after iPod connection.	NOTE:  After the wave pattern display, the value continues Approx 3.3 V
10 (R)	Ground	Communication signal (iPod [®] →iPod adapter)	Input	Ignition switch ON	Connected to iPod [®] .	(V) 3 2 1 0 +-2ms JPNIA0462GB
11 (R)	Ground	ACCESSORY-IDENTIFY	_	Ignition switch ON	Connected to iPod [®] .	0 V
12 (V)	23 (R)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 → 2ms SKIB3609E
15	_	Shield	_	_	_	_
16 (R)	_	AV communication signal (H)	Input/ Output	_	_	_
17	Ground	Ground	_	Ignition switch ON	_	0 V
19	_	Shield	_	_	_	_
21 (L)	Ground	iPod connection recognition signal	Input	Ignition switch ON	Not connected to iPod [®] .  Connected to iPod [®] .	4.0 V 0 V
22 (BR)	Ground	ACCESSORY-DETECT	_	Ignition switch ON	Connected to iPod [®] .	0 V
24 (LG)	23 (R)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is selected.	(V) 1 0 -1 → +2ms SKIB3609E

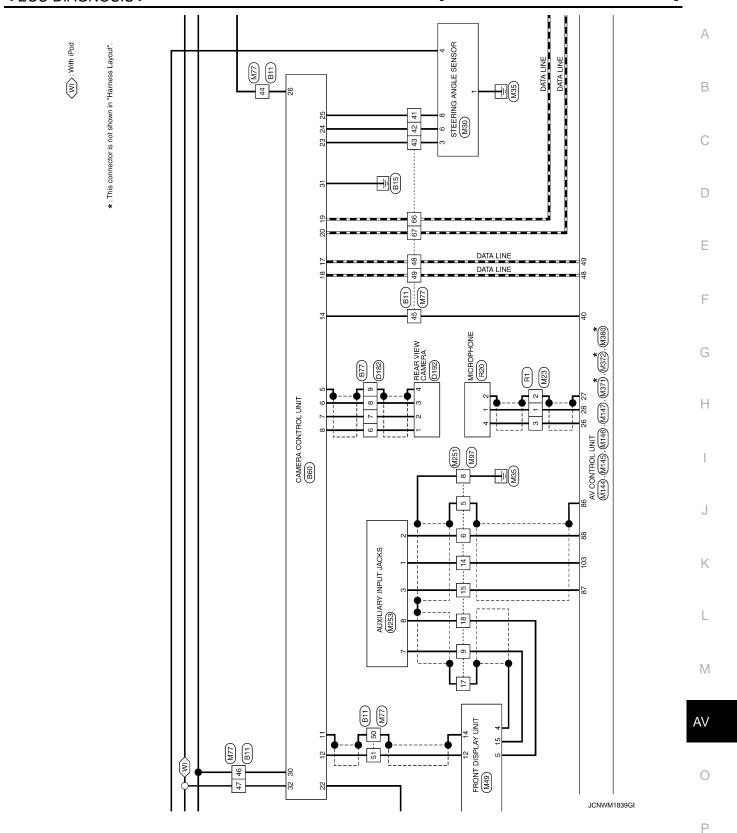
Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

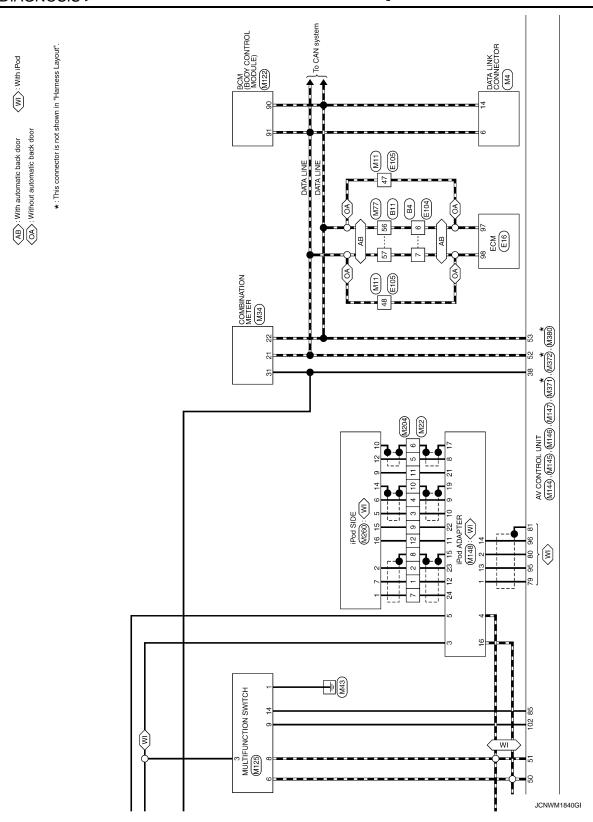
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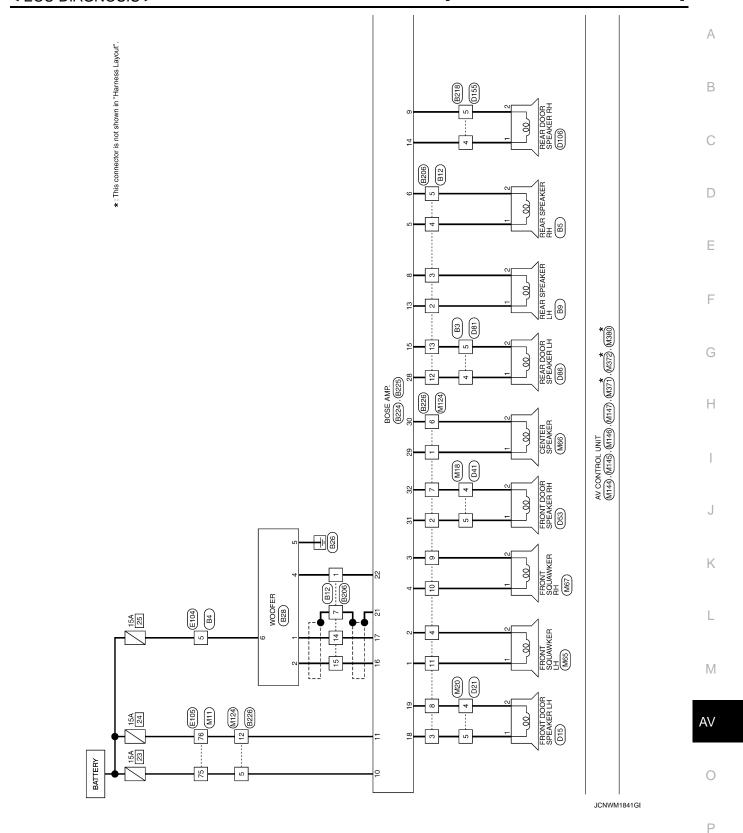
#### NOTE

In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.

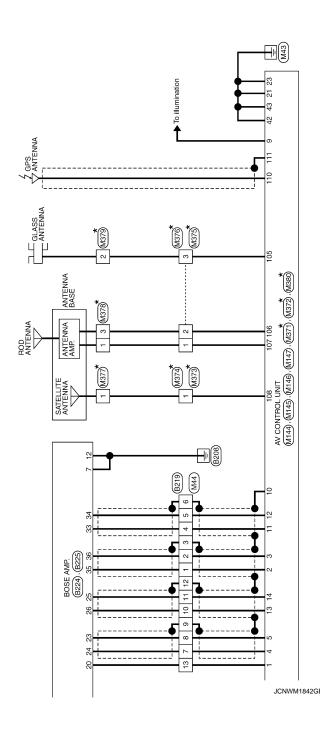




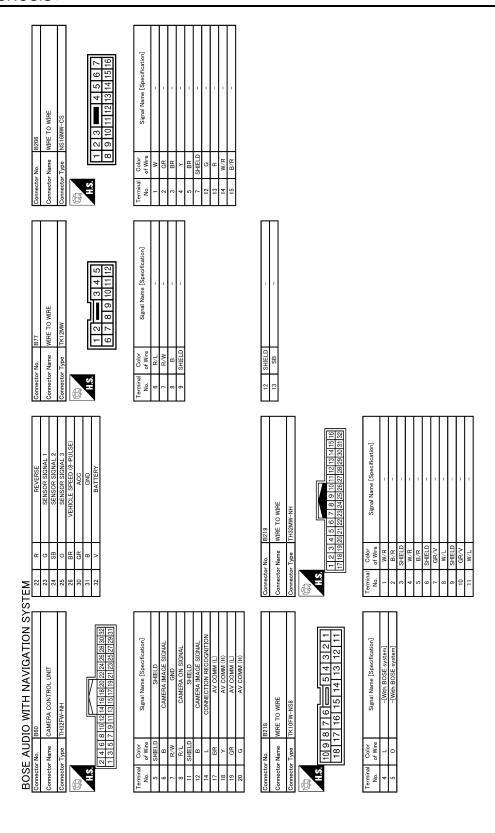




*: This connector is not shown in "Harness Layout'



B9 REAR SPEAKER LH TWOZFBR	Or Signal Name (Specification)	PE28	A B C
Connector No. Connector Name Connector Type H.S.	Terminal Color No. of Wire 1 SB 2 GR	Connector No. Connector No. Connector Type Connector Type No. of Wire 1 2 B.RR 2 B.RR 5 B.WR 5 B.RR 6 O	D
	Specification]	3 2 1 10 9 8	Е
BS REAR SPEAKER RH TKOZEBR	Signal Name [Specification]	Signal Name [Specification]	F
r No. r Type	nal Color Color LG	Name Name Name Name Name Name Name Name	G
Connectc Connect Connect Connect H S.	Terminal No.	Commercial   Com	Н
4 5 6 7 13 14 15 16	Signal Name [Specification]		I
NSI 6MM-CS NSI 6MM-CS 2 3 6 6 10 11 12	Signal N		J
STEM Gomester Name Oomester Type  H.S.  1	Terminal   Color   No.   No.   Older   No.   Older	56 677 677 678 677 678 677 678 678 678 67	K
		[ephone]	L
AUDIO WITH NAVIGATION SY  Lo. B3  Bane WRE TO WIRE  TK10FW-NSB  0 9 8 7 6 6 7 3 2 1  18 17 16 15 14 13 12 11	Signal Name [Specification]	WW-CS19 WW-CS19 Signal Name [Specification]	M
IDIO WITH  BIS  WIRE TO WIRE  TK10FW-NSS  18 7 6 6		118 811 118 00 WME TO 1-10 Whith	AV
BOSE AUL Connector Name Connector Type	Ceminal   Color   No.   of Wire   Color   Co	Connector Name   Connector Name   Connector Name   Connector Name   Connector Type   Conn	0
		JUNYVIII 1043G!	Р

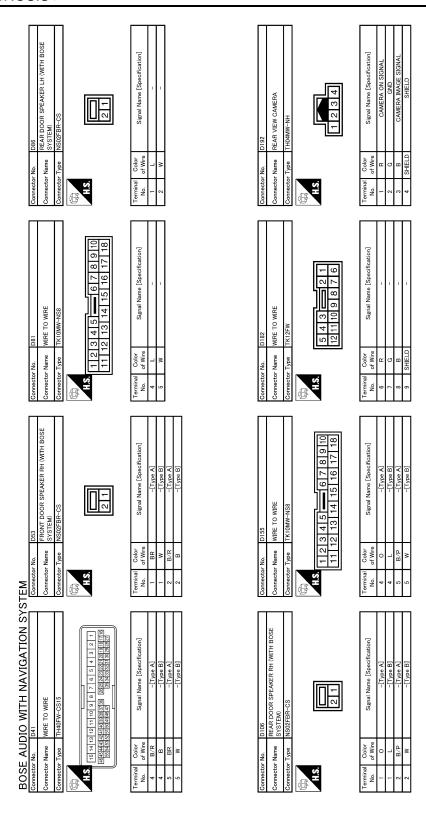


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# [BOSE AUDIO WITH NAVIGATION]

26   GR/V   SOUND SIGNAL FEAR RH (+)     28   G   SOUND SIGNAL CENTER SPEAKER (+)     30   P   SOUND SIGNAL CENTER SPEAKER (+)     31   JR   SOUND SIGNAL CENTER SPEAKER (+)     32   Y   SOUND SIGNAL FRONT DORS PEAKER RH (-)     33   W/R   SOUND SIGNAL FRONT RH (-)     34   B/R   SOUND SIGNAL FRONT RH (-)     35   W/R   SOUND SIGNAL FRONT RH (-)     36   W/R   SOUND SIGNAL FRONT RH (-)     37   W/R   SOUND SIGNAL FRONT RH (-)     38   W/R   SOUND SIGNAL FRONT RH (-)     39   W/R   SOUND SIGNAL FRONT LH (-)     30   W/R   SOUND SIGNAL FRONT LH (-)     31   W/R   SOUND SIGNAL FRONT LH (-)     32   W/R   SOUND SIGNAL FRONT LH (-)     33   W/R   SOUND SIGNAL FRONT LH (-)     34   B/R   SOUND SIGNAL FRONT LH (-)     35   W/R   SOUND SIGNAL FRONT LH (-)     36   W/R   SOUND SIGNAL FRONT LH (-)     37   W/R   SOUND SIGNAL FRONT LH (-)     38   W/R   SOUND SIGNAL FRONT LH (-)     4   B/W   -[Type B]     5   W   -[Type B]     5   W   -[Type B]     5   W   -[Type B]     5   W   -[Type B]     6   W/W   -[Type B]     7   CType B]     8   W/W   -[Type B]     9   W/W   -[Type B]     1   W/W   -[Type B]     1   W/W   -[Type B]     2   W/W   -[Type B]     3   W/W   -[Type B]     4   B/W   -[Type B]     5   W/W   -[Type B]     6   W/W   -[Type B]     7   W/W   -[Type B]     8   W/W   -[Type B]     9   W/W   -[Type B]     1   W/W   -[Type B]     1   W/W   -[Type B]     1   W/W   -[Type B]     2   W/W   -[Type B]     3   W/W   -[Type B]     4   B/W   -[Type B]     5   W/W   -[Type B]     6   W/W   -[Type B]     7   W/W   -[Type B]     8   W/W   -[Type B]     9   W/W   -[Type B]	A B C
Connector No.   B225	E F G
12 GR SOUND SIGNAL FRAN SPEAKER BH (+)  14 L SOUND SIGNAL FRAN DOOR SPEAKER BH (+)  16 GR - SOUND SIGNAL FRAN DOOR SPEAKER BH (+)	J K
SOSE AUDIO WITH NAVIGATION SYS   Commector Name   SOSE AMP.	M AV

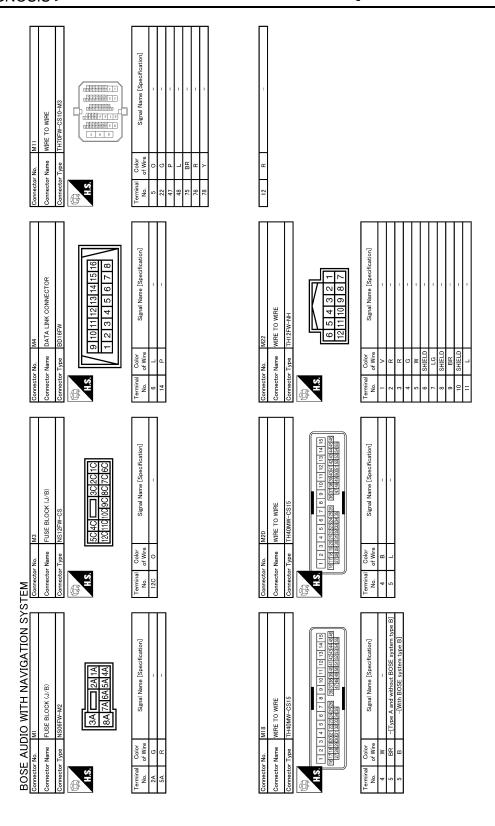
Revision: 2008 October AV-721 2009 Murano



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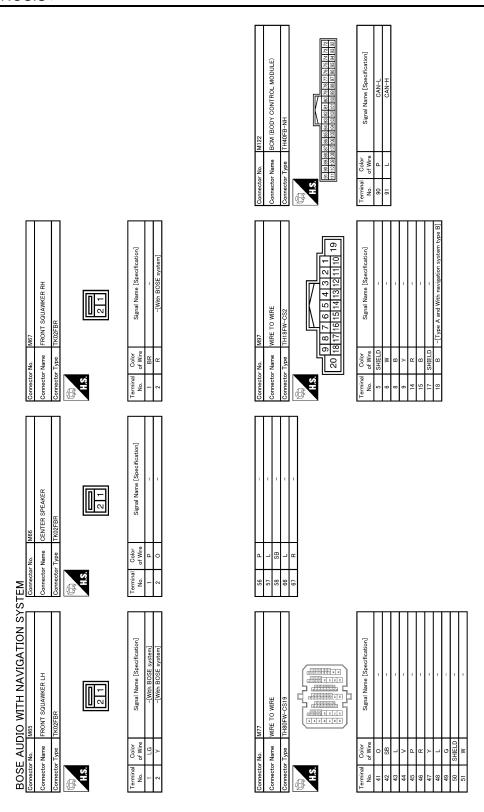
[loo		А
PARKING BRAKE SWITCH POIFB-A  Signal Name [Specification]	-IVV -IVV -IVV -IVV -IVV -IVV -IVV -IVV	В
E27 PARKING POIFB-A	16   5   1   1   1   1   1   1   1   1   1	С
Connector No. Connector Name Connector Type H.S. H.S. I erminal Color No. of Wir	Connector Name Connector Type H.S. H.S.  Terminal Oolor A  O Wife   D	
offcation)	ITROL MODULE)   17 48   11 42   11 42   11 42   12   12   12	Е
BACK-UP LAMP FELAY MSGZFL-M2-LC  Signal Name [Specification]	F23   The Control Module   Total (The Control Module   T	F
r No. Color of Wire LG R R R	A View B B B B B B B B B B B B B B B B B B B	G
Commercial Commercial Commercial No. 1.0. 1.0. 1.0. 1.0. 1.0. 1.0. 1.0. 1.	Commetter Na Commetter Typ	Н
RZ8-L-LH  RZ8-L-LH    100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   10	CSIG-M3  CSIG-M3  Signal Name (Specification)	1
E16 RH24FB-R28-L-LH RH24FB-R28-L-LH S1 BS B8 B9 B7 Ini 106 11 S2 B6 20 B4 B8 IN2 106 107 S1 B7 B5 B9 IN2 106 11 S1 B7	FLOS WIRE TO WIRE TH70MW-CSIG-M3 Signal Namo [S	J
S. S. Color Type	Connector No.   E   Connector Name   W.   Connector Type   T   Color   No.   O'Wire   S   Color   No.   O'Wire	K
NO S NO		L
BOSE AUDIO WITH NAVIGATION SYSTEM Connector No.   E6   Connector Name   WIRE TO WIRE   Connector Type   TKI 8MGY-TV   Connector Type   Connector Type   TKI 8MGY-TV   Connector Type   TKI 8MGY-TV   Connector Type	WIRE CS A 13 2 1 13 12 11 10 9 8  Signal Name [Specification]	М
FB   FB   FB   FB   FB   FB   FB   FB	NS16FW- NS16FW- 15 14 14	AV
BOSE AUC Connector No. Connector Type  List  H.S.  Terminal Color No. of Wire  4 R	Connector No. Connector Name Connector Type H.S. H.S.  Terminal Color No. of Wire 6 P 7 L	0
		JCNWM1847GI

Revision: 2008 October AV-723 2009 Murano



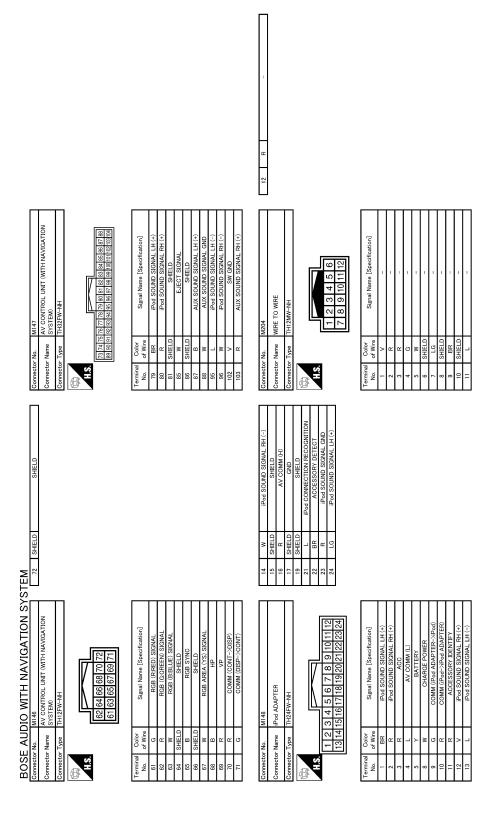
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METER	Signal Name [Specification]  CAN-H  CAN-L  CAN-L  CAN-L  VEHICLE SPEED (8-PULSE)	GND/With navigation system]  SHELD With navigation system]  AUX MAGE SIGNAL/With navigation system]  RGB (RRED) SIGNAL/With navigation system]  RGB (RRED) SIGNAL/With navigation system]  RGB SWC  VP  VP  SHELD  SHIELD  SHIELD	A B
Connector No. M34 Connector Name COMBINATION METER Connector Type TH40FW-NH  H.S.   1   2   4   5   6   7   8   9   9   1   1   2   1   2   1   2   1   2   1   2   1   2   1   2   1   2   1   2   1   2   1   2   2	Terminal Oolor   Signal	13   B GND V   14 SHELD SHELD    15 Y AUX MAGE SI   17 G B RGBLED    18 W RGB (BBLED    20 R R G GBLED    21 SHELD    22 SHELD    23 SHELD	C
M33 COMBINATION SWITCH (SPIRAL CABLE) TKG8FGY-IV  24 25 26 31 32 33 34	Signal Name [Specification]  -[With audio steering switch and stelphone] -[With audio steering switch and stelphone]	M49	E F
Connector No. M33 Connector Name COMBINATIC Connector Type TKOBFCGY-1V H.S. 242 242 313	Color   Color   Signature   Color   Signature   Color   Signature   Color   Signature   Color   Colo	Connector No.   M49	G H
M30 STEERING ANGLE SENSOR THOSPW-NH 1 2 3 4 5 6 7 8	Signal Name [Specification]		I
STEM Commettor No. Commettor Name Commettor Type M.S. H.S.	Terminal Color No. of Wire 1 B B B B B B B B B B B B B B B B B B	10	K
BOSE AUDIO WITH NAVIGATION SY  Connector No. M23  Connector Name Wife TO WIFE  Connector Type THISIM-NH  M3. THISIM-NH  M4.8. THISIM-NH  THISIM	Signal Name [Specification]	NWRE  -NH  10 9 8 7 6 5 4 3 2 1 1  26 25 24 23 22 [21 20 19 18 17]	М
BOSE AUDIO WITH Connector No. M23 Connector Name WIRE TO WIRE Connector THIBMW-NH MS. T   2 3 4	Terminal   Color   No.   of Wire	Connector No.   M44	AV
		JUNVMT849GI	Р



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	VEHICLE SPEED (8-PULSE) COMPTOR RECOGNITION CONTROL SIGNAL CONTROL SIGNAL AV COMM (4) AV COMM (1) AV COMM (1) AV COMM (1) AV COMM (1) CAN-L CAN-L	A B
	V   VEHOLE S	С
	38 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	D
CH 14 16 13 15 15 15 15 15 15 15 15 15 15 15 15 15	H NAVIGATION H HAVIGATION  SEE SEGUE	Е
125 HI FEW-NH HI 6FW-NH HI 6FW-NH RI 6 8 10 12 Right 1	M145 AV CONTROL UNIT (WITH NAVIGATION TH40FW-NH TH40FW-NH Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] MICROPHONE VCC MICROPHONE VCC MICROPHONE SINAL IGNITION PARKING BRAKE REVERSE	F
No Name   Color   No Name   No Nam	No. No. Name Name Name Name Name Name Name Name	G
Connecto Con	Connector   Conn	Н
	SOUND SIGNAL FRONT RH (+) SOUND SIGNAL FEAR RH (+) SOUND SIGNAL FEAR RH (+) SOUND SIGNAL FEAR RH (+) STRG SW GND STRG SW GND STRG SW B BATTERY	ı
	IS GINDOS IS GIN	J
STEM LG TI L	D	K
<u></u>	ATION  AT	L
MINITERING   MINITERING	14    5    6    7    8    9    9    9    9    9    9	M
MI24 WHE TO WHE NSIZEBR-CS SEPA SEPA	MI144	AV
Connector Name   Connector Name   Connector Type   Color   C	Connector No.   Connector No.   Connector No.   Connector No.   Connector Type   Connecto	0
		Р

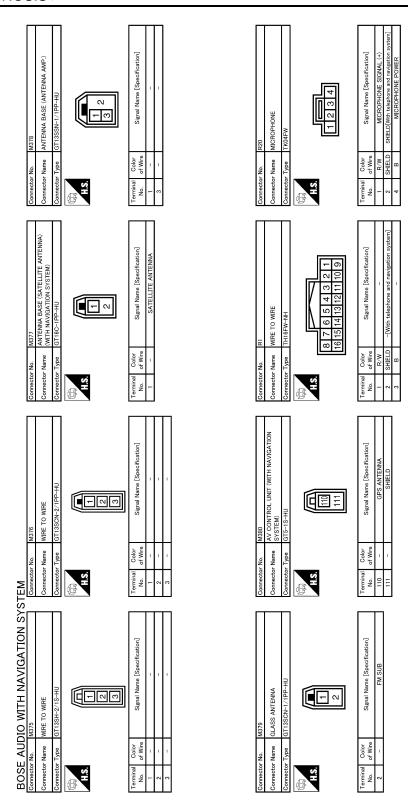


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# [BOSE AUDIO WITH NAVIGATION]

M303 COMBINATION SWITCH (SPIRAL CABLE) TK08FGY  01918 1716 151413	Signal Name [Specification]	WIRE PP-HU Signal Name [Specification]		АВ
Connector No. M303 Connector Name COMBINATION Connector Type TK08FGY  H.S.	Terminal   Color   No.   Of Wire   Sign     14   -     15   -     17   -     17     17     17     17     17     17     17       17	Connector No. M074 Connector Name WIRE TO WIRE Connector Type GT166C-1PP-HI  H.S.  Terminal Color No. of Wire  1		C D
4 5 6	Signal Name [Specification] IPod SOUND SIGNAL LH (+) IPod SOUND SIGNAL LH (+) IPod SOUND SIGNAL LH (+) IPOD SIGNAL LH (+) IPOD SIGNAL RH (+) IPOD	WIRE PP-HU Signal Name [Specification]		E F
Connector No. M260 Connector Name Prof SIDE Connector Type IP16FGY  A.S. 1 2 3	Terminal Color No. 1 (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (100) (10	Connector No. M373 Connector Name WIRE TO WIRE Connector Type GT16C-1PP-HI  Terminal Color No. of Wire Signal		G
PUT JACKS	Signal Name [Speerfication] SOUND SIGNAL RH (+) SOUND SIGNAL GND SOUND SIGNAL GND SOUND SIGNAL GND AUX IMAGE SIGNAL AUX IMAGE SIGNAL AUX IMAGE CND[Without DVD player]	M372 AV CONTROL UNIT (WITH NAVIGATION SYSTEM) FAKRA  109 Signal Name [Specification] SATELLITE ANTENNA		I
Connector No. MZ53 Connector Name AUXILIARY INPUT JACKS Connector Type AOBFW  M.S.  (1 2 3 4 5 6 7	No. of Wire   Signature   Si	Connector No. M072  Connector Name SySTEM)  Connector Type FAKRA  H.S.  H.S.  Terminal Color Sign  No. of Wire Sign		J K
NAVIGATION SYS	Signal Name [Specification]	M371 AV CONTROL UNIT (WITH NAVIGATION SYSTEM) GT135C-2/1S-HU  GT135C-2/1S-HU  Signal Name [Spee/fication] FM SUB FM SUB  FM SUB  AMFINNA AMP. ON SIGNAL		L M
BOSE AUDIO WITH NAVIGATION SY Connector No. M251 Connector Name WIFE TO WIFE Connector Type THIBMW-CS2  WAS A STATE OF THIS WAY CS2   No. of Wire   Signal     No. of Wire   Signal     S SHELD     S	rector No.  Tector No.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.  1.5.		AV	
四[8] 8 [8] [ <b>5</b> 【	<u>                                      </u>	Common Term	JCNWM1853Gł	Р

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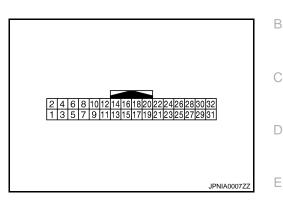
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# **CAMERA CONTROL UNIT**

Reference Values

**TERMINAL LAYOUT** 



#### PHYSICAL VALUES

	minal color)	Description			O and distant	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
5	_	Shield	_	_	_	_
6 (B)	Ground	Camera image signal	Input	Ignition switch ON	when rear view camera image is displayed.	(V) 0. 4 0 -0. 4 -0. 4 SKIB2251J
7 (R/W)	Ground	Rear view camera ground	_	Ignition switch ON	_	0 V
8				Ignition	R position.	6.0 V
(R/L)	Ground	Camera ON signal	Output	switch ON	Other than R position.	0 V
11	Ground	Shield (camera image ground	_	Ignition switch ON	_	0 V
12 (B)	11	Camera image signal	Output	Ignition switch ON	when rear view camera image is displayed.	(V) 0. 4 0 -0. 4 -0. 4 -0. 4 -0. 4 -0. 4 -0. 4
14	Ground	Camera-connection recog-	Output	Ignition switch	Connected to camera control unit connector.	0 V
(L)	2.34114	nition signal	- Carpat	ON	Not connected to camera control unit connector.	5.0 V
17 (BR)	_	AV communication signal (L)	Input/ Output	_	_	
18 (Y)	_	AV communication signal (H)	Input/ Output	_	_	_

# [BOSE AUDIO WITH NAVIGATION]

	Di/ (Ol (C					
	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
19 (GR)	_	AV communication signal (L)	Input/ Output	_	_	_
20 (G)	_	AV communication signal (H)	Input/ Output	_	_	_
22	Ground	Reverse signal	Input	Ignition switch	R position.	12.0 V
(R)	Giodila	Keverse signal	IIIput	ON	Other than R position.	0 V
23	Ground	Sensor signal 1	Input	Ignition switch	Turn the steering to the right.	A: Sensor signal 1 B: Sensor signal 2
(G)	Ciodila	Consol signal 1	iiiput	ON	Turn the steering to the left.	(V) 4 2 0 8 SKIB3828E A: Sensor signal 1 B: Sensor signal 2
24	Ground	Sensor signal 2	Input	Ignition switch	Turn the steering to the right.	A: Sensor signal 1 B: Sensor signal 2
(SB)	Ground	Sensor signal 2	input	SWITCH ON	Turn the steering to the left.	A: Sensor signal 1 B: Sensor signal 2

### < ECU DIAGNOSIS >

# [BOSE AUDIO WITH NAVIGATION]

	minal color)	Description			Condition	Reference value
+	_	Signal name	Input/ Output		Condition	(Approx.)
25 (O)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position.	A: Sensor signal 3 B: Sensor signal 1
26 (BR)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25 MPH).	NOTE:  Maximum voltage may be 12 V due to specifications (connected units).  (V) 6 4 2 0 ***20ms SKIA6649J
30 (GR)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
31 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
32 (V)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage

Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

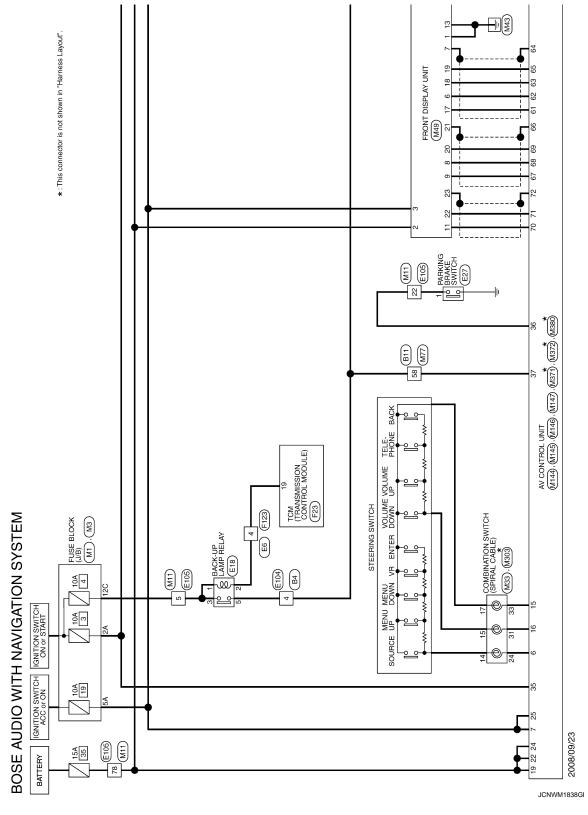
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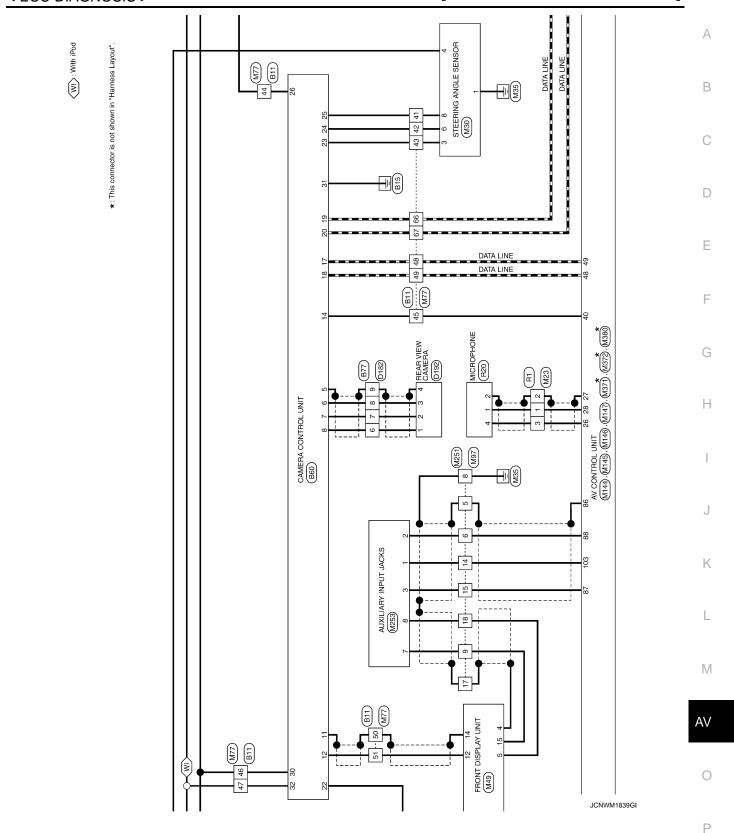
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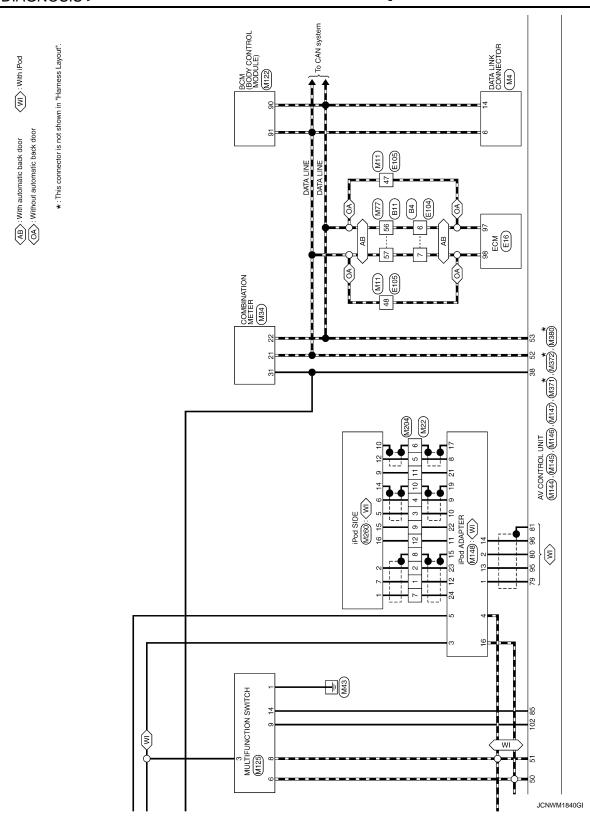
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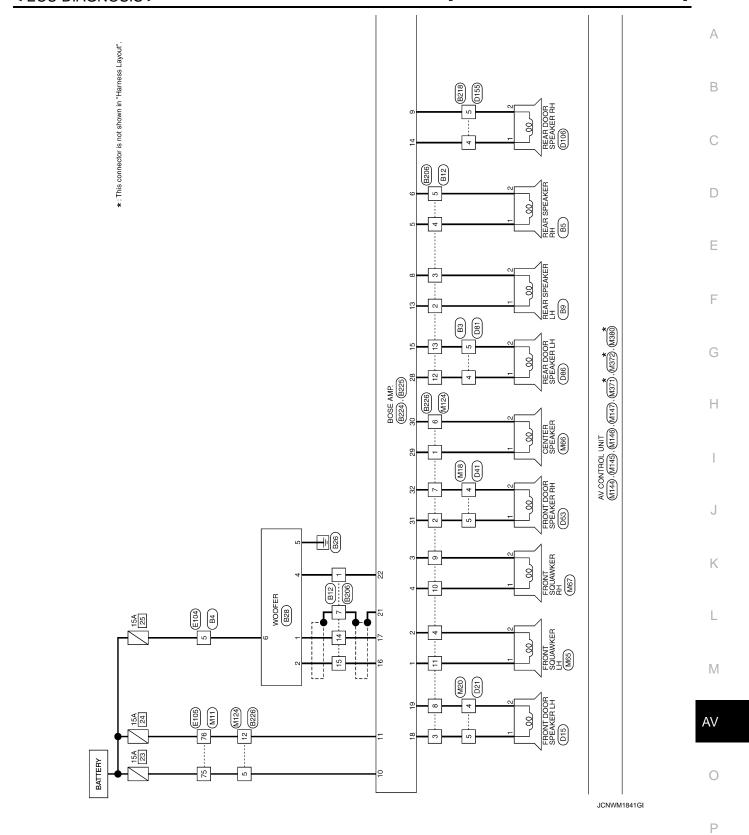
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In this section, PRESET SWITCH and MULTIFUNCTION SWITCH are written as the MULTIFUNCTION SWITCH.

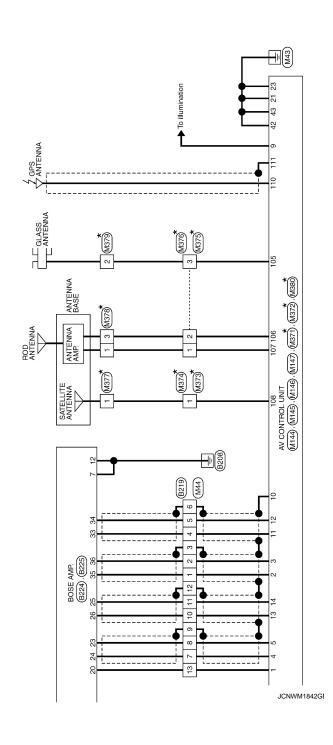








★: This connector is not shown in "Harness Layout'



# [BOSE AUDIO WITH NAVIGATION]

< ECU DIAGNOSIS >

Connector No. B9 Connector Name REAR SPEAKER LH Connector Type TK02FBR	Terminal   Color   Signal Name   Specification	Connector No.   E28   Connector Name   WOOFER	A B C
Connector No. BS Connector Name REAR SPEAKER RH Connector Type TK02FBR H.S.	Terminal   Color   Signal Name [Specification]   No.	Connector No.   B12   Connector Name   WIRE TO WIRE	E F G
STEM   Connector No.   B4   Connector Name   WIRE TO WIRE   Connector Type   NS16MW-CS	Terminal   Color   Signal Name [Specification]   4   6   6   P   -   -	5.6 P	J
BOSE AUDIO WITH NAVIGATION SYS    Connector No.   B3   Connector Name   WIRE TO WIRE	Terminal   Color   Signal Name [Specification]   No. of Wire   Specification]   4   LG   -	Cornector No.   Bit   Cornector Name   WIRE TO WIRE   Cornector Name   WIRE TO WIRE   Cornector Type   TH800M-CS19   Cornector Type   Cornector	M AV
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Connector No. B206 Connector Name WIRE TO WIRE Connector Type INS16MW-CS	Terminal Coolor No. of Wire Signal Name [Specification]  1 W		
Connector No. B77 Connector Name WIRE TO WIRE  Connector Type TK12MW  H.S. 1 2 3 4 5 6 7 8 9 10 11112	Terminal   Color   Signal Name [Specification]   Color   Signal Name [Specification]   Color   Signal Name [Specification]   Color	12 SHELD 13 SB	
STEM		Connector No. 8219 Connector Type ITH32MM-NH  (12   3   4   5   7   8   9   0111 213   1415   6   17   8   19   023   24   25   28   27   28   29   30   31   32	Terminal   Color   Signal Name (Specification)   No. of Wire   Signal Name (Specification)   No. of Wire   Signal Name (Specification)   Signal Name (Specification)   Signal Name   Specification   Signal Name   Specification   Signal Name   Specification   Shifting   Shift
BOSE AUDIO WITH NAVIGATION SYSTEM   Connector No.   BB0   22   22   22   23   24   24   24   24	Terminal   Color   Signal Name [Specification]   Color   Signal Name [Specification]   Signal Name [Specification]   Signal Name [Specification]   Signal Name [Specification]   Signal Name [Signal Name [Signal Name]   Signal	Connector No. 8218 Connector Name WIRE TO WIRE Connector Type TK10FW-NS8  H.S. 10 9 8 7 6 5 4 3 2 1 1 18 17 16 15 14 13 12 11	Terminal   Color   Signal Name [Specification]   Oolor   Ool

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# [BOSE AUDIO WITH NAVIGATION]

< ECU DIAGNOSIS >

26   GR/V   SOUND SIGNAL REAR RH (+)		Cornector Name   WIRE TO WIRE	No.   Color   Signal Name [Specification]   No.   Color		A B C
B225 BOSE AMP. SCA19FBR-SGA4 SSS 34 33	Color  R SOUND SIGNAL PEAR DOOR SPEAKER LH (-)  B SOUND SIGNAL WOOFER (-)  W R SOUND SIGNAL WOOFER (-)  W SOUND SIGNAL WOOFER (-)  W SOUND SIGNAL FRONT DOOR SPEAKER LH (-)  SB SOUND SIGNAL BROOFER (-)  SHELD  W WOOFER AMP. ON SIGNAL  W/L SOUND SIGNAL REAR LH (-)  SHELD  W WOOFER AMP. ON SIGNAL  SHELD  W/L SOUND SIGNAL REAR LH (-)  GRAV SOUND SIGNAL REAR LH (-)	DIS PRONT DOOR SPEAKER LH (WITH BOSE SYSTEM) NSOZEBR-CS 2 1	Color Signal Name [Specification]  L		E F
	Terminal of Control	Gennector Nane Connector Nane Connector Type H.S.	Terminal Of State of		H I J
BOSE AUDIO WITH NAVIGATION SYSTEM Connector No. 8224 Connector Name GOSE AMP.  Connector Type SGA12FBR-SJA2  M.S. 1413 12 11 10  H.S. 1413 12 11 10	Odwing  Coffwer  Common Signal Name [Specification]  Common Signal Hame [Specification]  V SOUND SIGNAL FRONT SQUAWRER HI (-)  V SOUND SIGNAL FRONT SQUAWRER HI (-)  P SOUND SIGNAL FRONT SQUAWRER RH (-)  P SOUND SIGNAL REAR SPEAKER RH (-)  BR SOUND SIGNAL REAR SPEAKER RH (-)  BR SOUND SIGNAL REAR SPEAKER RH (-)  BR SOUND SIGNAL REAR SPEAKER HI (-)  COMPONIONAL REAR DOOR SPEAKER HI (-)  SCUIND SIGNAL REAR BOOR SPEAKER HI (-)  COMPONIONAL REAR DOOR SPEAKER HI (-)	8226  NS 2MBR-CS  NS 2MBR-CS  1 2 3	Color   Signal Name [Specification]   Color		M AV
BOSE AL Connector Name Connector Type (M.S. (1.5)	Terminal No. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Connector Name Connector Type H.S.	Terminal No. 1 No.	JCNWM1845GI	O

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BOSE AUDIO WITH NAVIGATION SYSTEM	STEM	D   DO4	D00
Connector Name WIRE TO WIRE	Connector Name SYSTEM)	e e	ne
Connector Type TH40FW-CS15	Connector Type NS02FBR-CS	Connector Type TK10MW-NS8	Connector Type NS02FBR-CS
H.S. 151 151 151 151 151 151 151 151 151 15	H.S.		H.S.
	21	4 15 1	][2]
Terminal   Color   Signal Name [Specification]   No.   of Wire	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]
B/R B		5 W	1 L = = = = = = = = = = = = = = = = = =
5 BR -[Type A] 5 W -[Type B]	2 B/R -[Type A] 2 B -[Type B]		
Connector No. D106	Connector No. D155	Connector No. D182	Connector No. D192
Connector Name REAR DOOR SPEAKER RH (WITH BOSE SYSTEM)	Connector Name WIRE TO WIRE	Connector Name WIRE TO WIRE	Connector Name REAR VIEW CAMERA
Connector Type NS02FBR-CS	Connector Type TK10MW-NS8	Connector Type   TK12FW	Connector Type TH04MW-NH
E H.S.		֓֟֟֝֟֟֝֟֟֝֟֝֟֟֝֟֟֝֟֟֟ ֓֓֞֓֞֓֞֓֓֞֩֞֩֞֓֓֞֞֓֓֓֞֩֞֞֩֓֓֓֓֞֩֞֩֩֞֩֞֩֩֞֩	H.S.
	11213415 — 67 8910 1112131415 16 17 18	2 4 3 <u>2 1</u> 1211109876	1234
Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]
1 0 -[Type A]	4 0 -[Type A]		1 R CAMERA ON SIGNAL
2 B/P -[Twe A]	5 B/P -[Two A]	2 α - α	3 B CAMERA IMAGE SIGNAL
	t	SHIELD	SHIELD

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# [BOSE AUDIO WITH NAVIGATION]

BRAKE SMITCH	11V WIRE 11V 11V 11V 11V 11V 11V 11V 11V 11V 11	АВ
Connector No. E27 Connector Name PARKING BRAKE SWITCH Connector Type POIFB-A  Connector Type POIFB-A  Terminal Color Signal Name [Spr No. of Wire Signal Name [Spr 1 PP	Cornector No.   F123	C
MZ-LC  MZ-LC  Signal Name [Specification]	PE23 TCM (TRANSMISSION CONTROL MODULE) PP RHAPE-R28-L-RH TCM (12 20 41 55 50 57 58 59 40 47 48 11 12 12 14 15 16 17 18 19 10 41 14 2 T1 2 3 4 5 16 17 18 19 10 41 14 2 T1 2 3 4 5 16 17 18 19 10 41 14 2 T1 2 3 4 5 16 17 18 19 10 41 14 2 TCM Were REV LAMP RELAY	E
Connector No.   E18   Connector Name   BACK-UP LAMP RELAY   Connector Type   MS02FL-M2-LC     Signal Name   Sign	Cornector No.   F23	G H
E 16  RH24FB-RZ8-L-LH  RH24FB-RZ8-L-LH  61 85 89 97 101 105 109  82 86 90 94 96 102 106 110  83 87 91 95 90 100 111  R4 88 92 96 100 100 112  Signal Name [Specification]  VEHCAN-L  VEHCAN-L	E TO WIRE  WWW-CSIG-M3  Signal Name [Specification]	J
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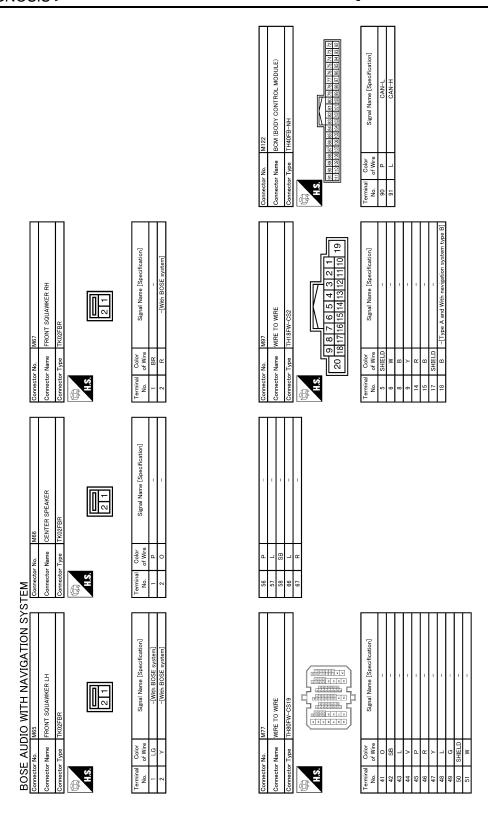
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STEM Connector No. M3	Connector Name FUSE BLOCK (J/B)	Connector Type NS12FW-CS	5040 3020 1C 1201101009080 7060	Terminal   Color   Signal Name [Specification]   12C   O	Connector No.   M20	Terminal Color No. of Wire Signal Name [Specification] 4 B
BOSE AUDIO WITH NAVIGATION SYS	Connector Name FUSE BLOCK (J/B)	Connector Type   NS06FW-MZ		Terminal   Color   Signal Name [Specification]   Color   Col	Connector No.   M18	Terminal   Color   Signal Name [Specification]   No. of Wire   Signal Name [Specification]   4

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# [BOSE AUDIO WITH NAVIGATION]

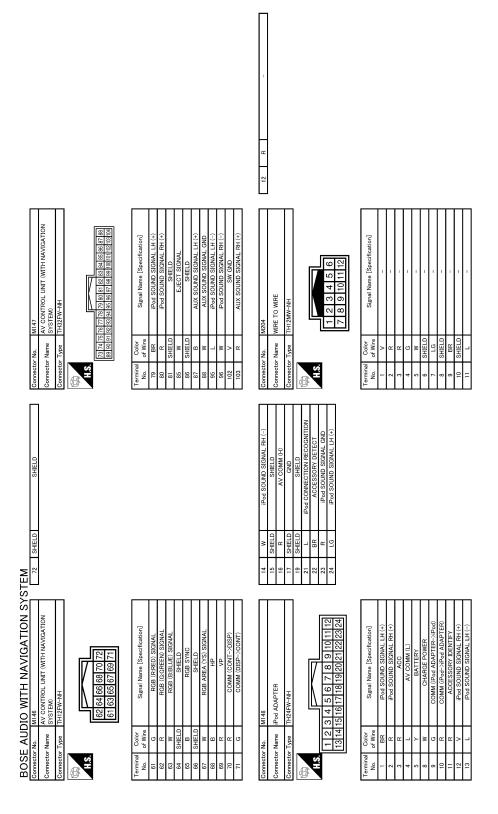
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	M33  COMBINATION SWITCH (SPIRAL CABLE)  TK08FGY-1V  24 25 26  31 32 33 34	Signal Name [Specification]  -[With audio steering switch and telephone] -[With audio steering switch and telephone] -[With audio steering switch and telephone]	No. M49  Type TRI2FW-NH  12 11 10 9 8 7 6 5 4 3 2 1  24 23 22 21 20 19 18 17 16 15 14 13	Signal Name [Specification]  RATTERY[With navigation system] SHELD[With navigation system] SHELD[With navigation system] IVI MAGE GNOED/With navigation system] HP[With navigation system] HP[With navigation system] HP[With navigation system] COMERA (VS) SIGNAL COMM (CONT-DISP) CAMERA INAGE SIGNAL		F
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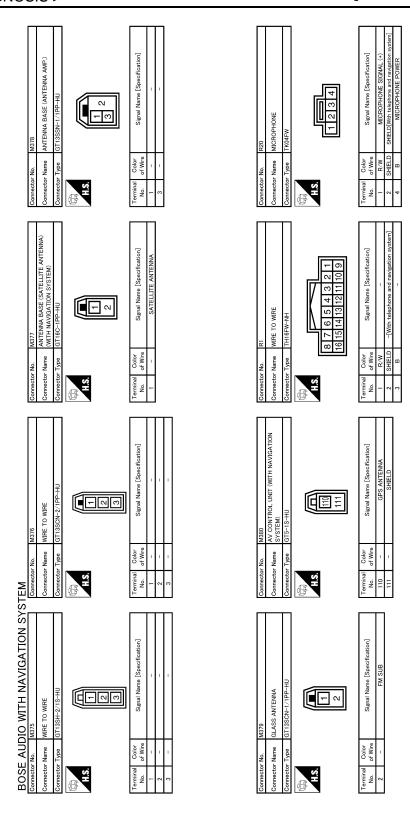


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# [BOSE AUDIO WITH NAVIGATION]

Connector No. M303 Connector Name COMBNATION SWITCH (SPIRAL CABLE) Connector Type TK08FGY H.S.  [20] 19 118 17 16 15 14 13	Terminal   Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]   15   -	Cornector Name WIRE TO WIRE Cornector Type GT16C-1PP-HU  H.S.  Terminal Color Signal Name [Specification]	A B C
Connector No. M260 Connector Name Pod SIDE Connector Type IP16FGY    1 2 3	Terminal   Color   Signal Name [Specification]   Color   Col	Connector No. M373 Connector Name WIRE TO WIRE Connector Type GT16C-IPP-HU  Terminal Color No. of Wire  Signal Name [Specification]	E F G
TEM   M233   Connector No.   M233   Connector Name   AUXILIARY INPUT JACKS   Connector Type   A08FW   M23   M35   M35	Terminal   Color   Signal Name [Specification]   No. of Wire   Sound Signal Name [Specification]   Sound Signal Name   Sound Name	Connector No.  Connector Name SYSTEM) Connector Type FAKRA  Terminal Color No. of Wire Signal Name [Specification] SORTELLITE ANTENNA  SATELLITE ANTENNA	J K
BOSE AUDIO WITH NAVIGATION SYSTEM  Connector Name WIRE TO WIRE  Connector Name WIRE TO WIRE  Connector Type THISMW-CSZ  MAN  M.S.  19 10 11 12 13 14 15 16 17 18 20	Terminal   Color   Signal Name   Specification   Color   No. of Wire   Signal Name   Specification   Color	Connector Name   AV CONTROL UNIT (WITH NAVIGATION	AV O

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# SYMPTOM DIAGNOSIS

### MULTI AV SYSTEM SYMPTOMS

Symptom Table

#### RELATED TO NAVIGATION

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take
	All switches cannot be operated.     "MULTI AV" is displayed on system selection screen when the CONSULT-III is started.	Multifunction switch power supply and ground circuit.     AV communication circuit between AV control unit and multifunction switch.  Perform CONSULT-III self-diagnosis. Refer to AV-589.  "CONSULT-III Function (MULTI AV)".
Multifunction switch and preset switch operation does not work.	<ul> <li>All switches cannot be operated.</li> <li>"MULTI AV" is not displayed on system selection screen when the CONSULT-III is initialized.</li> </ul>	AV control unit power supply and ground circuit malfunction. Refer to AV-619, "AV CONTROL UNIT : Diagnosis Procedure".
	Only specified switch cannot be operated.	Multifunction switch or preset switch malfunction.  Replace multifunction switch AV-534, "Exploded View" or preset switch AV-535, "Exploded View".
Fuel aconomy display vehicle set	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to AV-589, "CONSULT-III Function (MULTI AV)".
Fuel economy display, vehicle set- ting operation is abnormal.	There is no malfunction in the self-diagnosis results.	Ignition signal circuit malfunction.  Refer to AV-619, "AV CONTROL UNIT : Diagnosis Procedure".
There is no guide sound	On the setting display select "system sound (guide sound volume, etc.)," and confirm that guide sound is ON.	AV control unit malfunction.  Replace AV control unit. Refer to AV-764, "Exploded View".

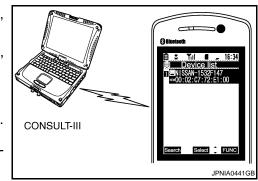
#### RELATED TO HANDS-FREE PHONE

- Check that the cellular phone is a corresponding type (Bluetooth[™] correspondence) when the hands-free related malfunction vehicle is in service before performing a diagnosis.
- There is a case that malfunction occurs due to the version change of the phone type, etc. even though it is a
  corresponding type. Therefore, confirm it by changing the cellular phone to another corresponding type
  phone, and check that it operates normally. It is necessary to distinguish whether the cause is the vehicle or
  cellular phone.

Simple check for Bluetooth[™] communication

If cellular phone and AV control unit cannot be connected with Bluetooth[™] communication, the following procedure allows the technician to judge which device has a malfunction.

- Turn on the cellular phone, not connecting Bluetooth[™] communication.
- Start CONSULT-III, then start Windows[®].
- 3. Set CONSULT-III near the cellular phone.
- 4. When operating Bluetooth[™] registration by cellular phone, check if CONSULT-III^{*} is displayed on the device name. (If another Bluetooth[™] device is located near the cellular phone, the name of the device will also be displayed.) NOTE:
  - *:Displayed device name is "NISSAN-******."
- If no device name is displayed, cellular phone is malfunctioning.
   Repair the cellular phone first, then perform diagnosis.
- If CONSULT-III is displayed on device name, cellular phone is normal. Perform diagnosis as per the following table.



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# [BOSE AUDIO WITH NAVIGATION]

Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
Does not recognize cellular phone connection. (no connection is displayed on the display at the guide.)	Repeat the registration of cellular phone.	AV control unit malfunction.  Replace AV control unit. Refer to AV-764, "Exploded View".
Hands-free phone cannot be established.	<ul> <li>Hands-free phone operation can be made, but the communication cannot be established.</li> <li>Hands-free phone operation can be performed, however, voice between each other cannot be heard during the conversation.</li> </ul>	AV control unit malfunction.  Replace AV control unit. Refer to AV-764, "Exploded View".
The other party's voice cannot	Check the "microphone speaker" in Inspection & Adjustment Mode if sound is heard.	AV control unit malfunction.  Replace AV control unit. Refer to AV-764, "Exploded View".
be heard by hands-free phone.	Check the "microphone speaker" in Inspection & Adjustment Mode if sound is not heard.	AV control unit malfunction.  Replace AV control unit. Refer to AV-764, "Exploded View".
Sound is not heard by the other party with hands-free phone	Sound operation function is normal.	AV control unit malfunction.  Replace AV control unit. Refer to AV-764, "Exploded View".
communication.	Sound operation function does not work.	Microphone signal circuit malfunction. Refer to AV-633, "Diagnosis Procedure".

### **RELATED TO CAMERA**

Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
Camera image is not displayed (displayed in black and nothing can be displayed)	AUX image is not displayed.	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit.     Refer to AV-629, "Diagnosis Procedure".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit.     Refer to AV-630, "Diagnosis Procedure".</li> </ul>
Camera image is not shown. (Vehicle width and possible route line is displayed.)	_	<ul> <li>Camera image signal circuit between camera control unit and rear view camera.</li> <li>Refer to AV-635, "Diagnosis Procedure".</li> <li>Rear view camera ON signal circuit.</li> <li>Refer to AV-636, "Diagnosis Procedure".</li> </ul>
	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to AV-589. "CONSULT-III Function (MULTI AV)".
Camera image is not displayed.	AUX image is normal.	Camera image signal circuit malfunction between camera control unit and front display unit.  Refer to AV-637, "Diagnosis Procedure".
(Only warning message under area is displayed.)	AUX image is not displayed.	RGB area (YS) signal circuit malfunction between AV control unit and front display unit.  Refer to AV-628, "Diagnosis Procedure".
	Select "Camera Cont." of confirmation/Adjustment mode, Reverse Sensor is not turned ON at "Connection Confirmation".	Reverse signal circuit malfunction (camera control unit).
CAMERA image is rolling.	AUX image is also rolling.	<ul> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit.     Refer to AV-629, "Diagnosis Procedure".</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit.     Refer to AV-630, "Diagnosis Procedure".</li> </ul>

#### < SYMPTOM DIAGNOSIS >

## [BOSE AUDIO WITH NAVIGATION]

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Symptoms	Check items	Probable malfunction location
Camera image does not switch.	Malfunction of self-diagnosis result is indicated.	Camera-connection recognition signal circuit malfunction between AV control unit and camera control unit. Refer to AV-616, "Diagnosis Procedure".
	Malfunction of self-diagnosis result is not indicated.	Reverse signal circuit malfunction (AV control unit).
Possible route line is indicated abnormally when camera image is displayed.	_	Steering angle sensor signal circuit malfunction. Refer to AV-638, "Diagnosis Procedure".

#### **RELATED TO RGB IMAGE**

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take
RGB image is not shown.	All RGB images are not shown.     "MULTI AV" is displayed on system selection screen when the CONSULT-III is started.	Perform CONSULT-III self-diagnosis. Refer to AV-589, "CONSULT-III Function (MULTI AV)".
NGB image is not shown.	<ul> <li>All RGB images are not shown.</li> <li>"MULTI AV" is not displayed on system selection screen when the CONSULT-III is started.</li> </ul>	AV control unit power supply and ground circuit malfunction.  Refer to AV-619, "AV CONTROL UNIT: Diagnosis Procedure".
	Light blue (Cyan) tint.	RGB signal (R: red) circuit malfunction between AV control unit and display unit.  Refer to AV-624, "Diagnosis Procedure".
Color of RGB image is not proper.	Purple (Magenta) tint.	RGB signal (G: green) circuit malfunction between AV control unit and display unit.  Refer to AV-625, "Diagnosis Procedure".
	Screen looks yellowish.	RGB signal (B: blue) circuit malfunction between AV control unit and display unit.  Refer to AV-626, "Diagnosis Procedure".
RGB screen is rolling.	_	RGB synchronizing signal circuit malfunction between AV control unit and front display unit.  Refer to AV-627, "Diagnosis Procedure".

#### RELATED TO VOICE CONTROL

Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
The voice cannot be controlled	Voice sounds at "Voice Microphone Test" of Confirmation/Adjustment mode.	AV control unit malfunction.  Replace AV control unit. Refer to AV-764, "Exploded View".
even if the voice control screen is displayed.	Voice does not sound at "Voice Micro-	Microphone circuit malfunction. Refer to AV-633, "Diagnosis Procedure".
	Steering switch "SOURCE", "MENU UP", "MENU DOWN", "ENTER" operates, but "v\section " does not operate.	Steering switch malfunction. Replace steering switch. Refer to AV-775, "Removal and Installation".
The voice cannot be controlled (Voice control screen is not displayed).	Steering switch's "SOURCE", "MENU UP", "MENU DOWN", " "ENTER" does not operate.	Steering switch signal A circuit malfunction. Refer to AV-640, "Diagnosis Procedure".
	All steering switches do not work.	Steering switch signal GND circuit malfunction. Refer to AV-644, "Diagnosis Procedure".

#### **RELATED TO AUDIO**

Trouble diagnosis chart by symptom

## [BOSE AUDIO WITH NAVIGATION]

Symptoms	Check items	Possible malfunction location / Action to take	
The CD cannot be removed.	_	Disk eject signal circuit malfunction between AV control unit and preset switch.  Refer to AV-632, "Diagnosis Procedure".	
	No sound from all speakers.	<ul> <li>Amp. ON signal circuit.</li> <li>BOSE amp. power supply and ground circuit.</li> <li>Refer to <u>AV-621</u>, "BOSE AMP.: <u>Diagnosis Procedure"</u>.</li> </ul>	
Audio sound is not heard.	There is no sound from the woofer.	<ul> <li>Woofer amp. power supply and ground circuit. Refer to AV-622, "WOOFER: Diagnosis Procedure".</li> <li>Sound signal woofer circuit between BOSE amp. and woofer.</li> <li>Sound signal woofer circuit between BOSE amp. and woofer.</li> <li>Woofer amp. ON signal circuit between BOSE amp. and woofer.</li> </ul>	
	There is no sound from the center speaker.	Sound signal center speaker circuit.	
	There is sound only from specific places (RH front, RH rear, LH front and LH rear).	Sound signal circuit of suspect system.	
	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-589, "CONSULT-III Function (MULTI AV)".	
Satellite radio is not received.	There is no malfunction in the CON-SULT-III self-diagnosis result.	Perform the following inspection procedure.  1. Check antenna base mounting nut for looseness.  NOTE:  Tightening torque: 6.5 N·m (0.66 kg-m, 58 in-lb)  2. Visually check for satellite radio antenna feeder.  3. Replace the antenna base.  Refer to AV-786, "Exploded View".  4. Replace the AV control unit.  Refer to AV-764, "Exploded View".	
AM/FM radio is not received.	Other audio sounds are normal.	Antenna amp. ON signal circuit.     Antenna feeder.	

# RELATED TO $iPod^{\mathbb{R}}$

Trouble diagnosis chart by symptom

Connect another  $iPod^{\mathbb{B}}$  and check if the symptom is reproduced or not. If the symptom is reproduced, diagnose the vehicle. If no malfunction is detected, replace the iPod harness.

## NOTE:

It is unable to read a connection between iPod® and iPod harness.

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take	
There is no sound from the iPod [®] .	Other audio sounds are normal.	<ul> <li>iPod sound signal circuit between AV control unit and iPod adapter.</li> <li>iPod sound signal circuit between iPod[®] and iPod adapter.</li> </ul>	
It does not change to iPod mode.	There is malfunction in the CONSULT-III self-diagnosis.	Perform CONSULT-III self-diagnosis. Refer to AV-589, "CONSULT-III Function (MULTI AV)".	
"iPod is not connected" is displayed when it comes to iPod mode.	Connected to iPod [®] .	iPod connection recognition signal circuit between iPod® and iPod adapter.	
iPod [®] cannot charge the battery.	_	iPod battery charge circuit between iPod [®] and iPod adapter.	
The title of music file in the iPod [®] is not indicated.		Communication circuit between iPod® and iPod adapter.	
Accessing the iPod [®] is unavailable from the vehicle.		Communication circuit between Irou and Irou adapter.	

#### < SYMPTOM DIAGNOSIS >

#### [BOSE AUDIO WITH NAVIGATION]

### RELATED TO STEERING SWITCH

Trouble diagnosis chart by symptom

Trouble diagnosis chart by symptom

Symptoms	Probable malfunction location
None of the steering switch operations work.	Steering switch signal GND circuit malfunction. Refer to AV-644, "Diagnosis Procedure".
Only specified switch (1) cannot be operated.	Steering switch malfunction.  Refer to AV-775, "Exploded View".
Steering switch's "SOURCE", "MENU UP", "MENU DOWN", "  "", "ENTER"switches do not work.	Steering switch signal A circuit malfunction. Refer to AV-640, "Diagnosis Procedure".
Steering switch's "", "VOL UP", "VOL DOWN", """ switches do not work.	Steering switch signal B circuit malfunction. Refer to AV-642, "Diagnosis Procedure".

#### **RELATED TO AUXILIARY INPUT**

#### NOTE:

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

Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
No vocal sound is heard when AUX mode is selected.	Vocal sound is heard when other modes are selected.	AUX sound signal circuit (auxiliary input jacks to AV control unit).
Image is not displayed when AUX mode is selected.	Camera image is displayed.	AUX image signal circuit malfunction. Refer to AV-631, "Diagnosis Procedure".

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## NORMAL OPERATING CONDITION

**Description** 

#### NOTE:

- For Navigation system operation information, refer to Navigation system Owner's Manual.
- · Vehicle operation information, refer to Owner's Manual.

#### **BASIC OPERATIONS**

Symptom	Possible cause	Possible solution
	The brightness is at the lowest setting.	Adjust the brightness of the display.
No image is displayed.	The systems in the video mode.	Press <b><disc-aux></disc-aux></b> to change the mode.
	The display is turned off.	Press < Day/Night> to turn on the display.
Na veias avidanas is sveilable. On	The volume is not set correctly, or it is turned off.	Adjust the volume of voice guidance.
No voice guidance is available. Or The volume is too high or too low.	Voice guidance is not provided for certain streets (roads displayed in gray).	This is not a malfunction.
No map is displayed on the screen.	A screen other than map screen is displayed.	Press <map>.</map>
The screen is too dim. The movement is slow.	The temperature in the interior of the vehicle is low.	Wait until the interior of the vehicle has warmed up.
Some pixels in the display are darker or brighter than others.	This condition is an inherent characteristic of liquid crystal displays.	This is not a malfunction.
Some menu items cannot be selected.	Some menu items become unavailable while the vehicle is driven.	Park the vehicle in a safe location, and then operate the navigation system.

#### NOTE:

Locations stored in the Address Book and other memory functions may be lost if the vehicle's battery is disconnected or becomes discharged. If this occurs, service the vehicle's battery as necessary and re-enter the information in the Address Book.

#### RELATED TO VOICE RECOGNITION

#### Related to Basic Operation

Symptom	Possible cause	Possible solution
The system does not recognize your command. or The system recognizes your command incorrectly	The interior of the vehicle is too noisy.	Close the windows or have other occupants quiet.
	The volume of your voice is too low.	Speak louder.
	The volume if your voice is too loud.	Speak softer.
	Your pronunciation is unclear.	Speak clearly.
	You are speaking before the voice recognition is ready	Press and release " " switch on the steering switch, and speak a command after the tone sounds.
	8 seconds or more have passed after you pressed and released "w≨" switch on the steering switch.	Make sure to speak a command within 8 seconds after you press and release ""≨" switch on the steering switch.
	Only a limited range of voice commands is usable for each screen.	Use a correct voice command appropriate for the current screen.
	The fan of the air conditioner is too loud.	If the air conditioner is set to "Auto", the fan speed is automatically lowered and voice commands can be recognized more easily.  Lower the fan speed as necessary or set the air conditioner to "Auto".

#### Related to Item Choice

The system should respond correctly to all voice commands without difficulty. If problems are encountered, follow the solutions given in this guide for the appropriate error.

#### NORMAL OPERATING CONDITION

#### < SYMPTOM DIAGNOSIS >

#### [BOSE AUDIO WITH NAVIGATION]

Where the solutions are listed by number, try each solution in turn, starting with number one, until the problem is resolved.

Symptom/ error message	Solution
Displays "COMMAND NOT RECOGNIZED" or the system fails to interpret the command correctly.	Ensure that the command format is valid.
	2. Speak clearly without pausing between words and at a level appropriate to the ambient noise level.
	Ensure that the ambient noise level is not excessive, for example, windows open or defrost on.  NOTE:  If it is too noisy to use the phone, it is likely that voice commands will not be recognized.
	4. If optional words of the command have been omitted, then command should be tried with these in place.
The system consistently selects the wrong voicetag	Ensure that the voicetag requested matches what was originally stored. This can be confirmed by giving the "Addressbook" Directory or Phone Directory command.
	2. Replace one of the voicetags being confused with a different voicetag.

#### Related to Telephone

The system should respond correctly to all voice commands without difficulty. If problems are encountered, try the following solutions.

Where the solutions are listed by number, try each solution in turn, starting with number 1, until the problem is resolved.

Symptom	Solution	
System fails to interpret the command correctly.	1. Ensure that the command is valid.	
	2. Ensure that the command is spoken after the tone.	
	3. Speak clearly without pausing between words and at level appropriate to the ambient noise level in the vehicle.	
	4. Ensure that the ambient noise level is not excessive (for example, windows open or defroster on).  NOTE:  If it is too noisy to use the phone, it is likely that the voice commands will not be recognized.	
	5. If more than one command was said at a time, try saying the commands separately.	
	6. If the system consistently fails to recognize commands, the voice training procedure should be carried out to improve the recognition response for the speaker. See "Speaker adaptation (SA) mode" earlier in this section. Refer to "OWNER'S MANUAL".	
The system consistently selects the wrong voicetag	Ensure that the phone book entry name requested matches what was originally stored. This can be confirmed by using the "List Names" command.	
	2. Replace one of the names being confused with a new name.	

#### **RELATED TO AUDIO**

- The majority of the audio malfunctions are the result of outside causes (bad CD/cassette, 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 carry the Compact Disc Logo. If not, the disc is not mastered to the "red book" Compact Disc Standard and may not play.

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### [BOSE AUDIO WITH NAVIGATION]

Symptom Cause and Counter measure		
	Check if the CD/CF was inserted correctly.	
	Check if the CD/CF is scratched or dirty.	
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.	
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.	
Cannot play	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.	
	Files with extensions other than ".MP3", ".WMA", ".mp3", or ".wma" cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.	
	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.	
	Check if the finalization process, such as session close and disc close, is done for the disc.	
	Check if the CD/CF is protected by copyright.	
Poor sound quality	Check if the CD/CF is scratched or dirty.	
It takes a relatively long time be- fore the music starts playing.	If there are many folder or file levels on the MP3/WMA CD/CF, or if it is a multisession disc, some time may be required before the music starts playing.	
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.	
Skipping with high bit rate files	Skipping may occur with large quantities of data such as high bit rate data.	
Move immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ".mp3", or ".wma", or when play is prohibited by copyright protection, the player will skip to the next song.	
The songs do not play back in the desired order.	The playback order is the order in which the files were written by the software, so the files might not play in the desired order.	

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.

#### NOTE:

- 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.

#### RELATED TO VEHICLE ICON

Symptom	Possible cause	Possible solution
Names of roads differ between Plan View and Birdview [™] .	This is because the quantity of the displayed information is reduced so that the screen does not become too crowded. There is also a chance that names of the roads may be displayed multiple times, and the names appearing on the screen may be different because of a processing procedure.	This is not a malfunction.
The vehicle icon is not displayed in the correct position.	The vehicle was transported after the ignition switch was pressed off, for example, by a ferry or car transporter.	Drive the vehicle for a while on a road where GPS signals can be received.
	The position and direction of the vehicle icon may be incorrect depending on the driving environments and the levels of positioning accuracy of the navigation system.	This is not a malfunction. Drive the vehicle for a while to automatically correct the position and direction of the vehicle icon.
When the vehicle is traveling on a new road, the vehicle icon is located on another road nearby.	Because the new road is not stored in the map data, the system automatically places the vehicle icon on the nearest road available.	Updated road information will be included in the next version of the map data.

### **NORMAL OPERATING CONDITION**

### < SYMPTOM DIAGNOSIS >

## [BOSE AUDIO WITH NAVIGATION]

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Symptom	Possible cause	Possible solution
The screen does not switch to the night screen even after turning on the headlights.	The daytime screen was set the last time the headlights were turned on.	Set the screen to the night screen mode using <day night=""> when you turn on the headlights.</day>
The map does not scroll even when the vehicle is moving.	The current location map screen is not displayed.	Press <map>.</map>
The vehicle icon is not displayed.	The current location map screen is not displayed.	Press <map>.</map>
The location of the vehicle icon is misaligned from the actual position.	When using tire chains or replacing the tires, speed calculations based on the speed sensor may be incorrect.	Drive the vehicle for a while (at approximately 19 MPH for about 30 minutes) to automatically correct the vehicle icon position.  If this does not correct the vehicle icon position, contact an INFINITI dealer.
	The map data has a mistake or is incomplete (the vehicle icon position is always misaligned in the same area).	Updated road information will be included in the next version of the map data.

## RELATED TO ROUTE CALCULATION AND VISUAL GUIDANCE

Symptom	Possible cause	Possible solution
Waypoints are not included in the auto reroute calculation.	Waypoints that you have already passed are not included in the auto reroute calculation.	If you want to go to that waypoint again, you need to edit the route.
	Route calculation has not yet been performed.	Set the destination and perform route calculation.
Route information is not dis-	You are not driving on the suggested route.	Drive on the suggested route.
played.	Route guidance is set to off.	Turn on route guidance.
	Route information is not provided for certain types of roads (roads displayed in gray).	This is not a malfunction.
The auto reroute calculation (or detour calculation) suggests the same route as the one previously suggested.	Route calculations took priority conditions into consideration, but the same route was calculated.	This is not a malfunction.
A waypoint cannot be added.	Five waypoints are already set on the route, including ones that you have already passed.	A maximum of 5 waypoints can be set on the route. If you want to go to 6 or more waypoints, perform route calculations multiple times as necessary.
	Roads near the destination cannot be calculated.	Reset the destination to a main or ordinary road, and recalculate the route.
	The starting point and destination are too close.	Set a more distant destination.
The suggested route is not displayed.	The starting point and destination are too far away.	Divide your trip by selecting one or two intermediate destinations, and perform route calculations multiple times.
	There are time restricted roads (by the day of the week, by time) near the current vehicle location or destination.	Set [Use Time Restricted Roads] to off.
The part of the route that you have already passed is deleted.	A route is managed by sections between waypoints. If you passed the first waypoint, the section between the starting point and the waypoint is deleted. (It may not be deleted depending on the area.)	This is not a malfunction.
	If there are restrictions (such as one-way streets) on roads close to the starting point or destination, the system may suggest an indirect route.	Adjust the location of the starting point or destination.
An indirect route is suggested.	The system may suggest an indirect route because route calculation does not take into consideration some areas such as narrow streets (gray roads.)	Reset the destination to a main or ordinary road, and recalculate the route.

Revision: 2008 October AV-759 2009 Murano

## **NORMAL OPERATING CONDITION**

### < SYMPTOM DIAGNOSIS >

## [BOSE AUDIO WITH NAVIGATION]

Symptom	Possible cause	Possible solution
The landmark information does not correspond to the actual information.	This may be caused by insufficient or incorrect map data.	Updated information will be included in the next version of the data.
The suggested route does not exactly connect to the starting point, waypoints, or destination.	There is no data for route calculation closes to these locations.	Set the starting point, waypoints and destination on a main road, and perform route calculation.

### RELATED TO VOICE GUIDANCE

Symptom	Possible cause	Possible solution
	Voice guidance is only available at certain intersections marked with? In some cases, voice guidance is not available even when the vehicle should make a turn.	This is not a malfunction.
Voice guidance is not available	The vehicle has deviated from the suggested route.	Go back to the suggested route or request route calculation again
	Voice guidance is set to off.	Turn on voice guidance.
	Route guidance is set to off.	Turn on voice guidance.
The guidance contact does not correspond to the actual condition.	The contact of voice guidance may vary, depending on the types of intersections at which turn are made.	Follow all traffic rules and regulations.

### RELATED TO TRAFFIC INFORMATION

Symptom	Possible cause	Possible solution
The traffic information is not displayed	The traffic information is not set to on.	Set the traffic information to on.
	You are in an area where traffic information is not available	Scroll to an area where traffic information is available
	You have not subscribed to XM NavTraffic or, your subscription to XM NavTraffic has expired.	Check your subscription status of XM NavTraffic.
	The map scale is set at a level where the display of icons is impossible.	Check that the map scale is set at a level in which the display of icons is possible.
With the automatic detour route search ON, no detour route is set to avoid congested areas.	There is no faster route compared to the current route, based on the road network and traffic information.	The automatic detour search is not intended for avoiding traffic jams. It searches for the fastest route taking into consideration such things as traffic jams.
The route does not avoid road section with traffic information stating it is closed due to road construction.	The navigation system is designed not to avoid this event because the actual period of closure may differ from the declared roadwork period.	Observe the actual road condition and follow the instructions on road for detour when necessary. If the road closure is for certain, use detour function and set the detour distance to avoid the closed road section.
Traffic information displayed differs from information from other media (e.g. radio).	Other media may use different information sources.	Observe the actual road conditions and regulations. Always observe safe driving practices and follow all traffic regulations.

## **PRECAUTION**

### **PRECAUTIONS**

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

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 AIRBAG" and "SEAT BELT" 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 AIRBAG".
- Never 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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

## Precaution for Trouble Diagnosis

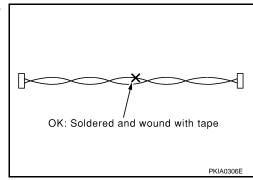
#### AV COMMUNICATION SYSTEM

- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage at 7.0 V or less.
- Turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

### Precaution for Harness Repair

#### AV COMMUNICATION SYSTEM

 Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



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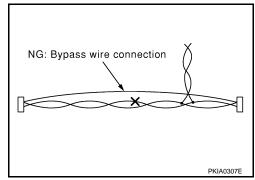
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### **PRECAUTIONS**

### < PRECAUTION >

## [BOSE AUDIO WITH NAVIGATION]

 Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)



### **PREPARATION**

< PREPARATION >

## [BOSE AUDIO WITH NAVIGATION]

# **PREPARATION**

## **PREPARATION**

## **Commercial Service Tools**

Tool name		Description
Power tool	PBIC0191E	Loosening screws

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# **ON-VEHICLE REPAIR**

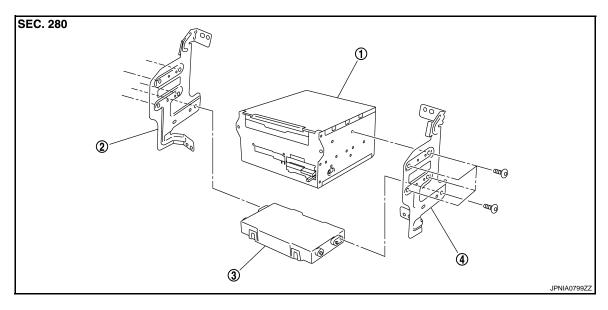
## AV CONTROL UNIT

Exploded View

**REMOVAL** 

Refer to IP-11, "Exploded View".

**DISASSEMBLY** 



1. AV control unit

2. Bracket LH

3. A/C auto amp.

4. Bracket RH

### Removal and Installation

INFOID:0000000003356695

### **REMOVAL**

- 1. Remove cluster lid C. Refer to IP-11, "Exploded View".
- 2. Remove AV control unit with a A/C auto amp. as a single unit from the body.
- 3. Remove bracket screws, and then remove AV control unit.

#### INSTALLATION

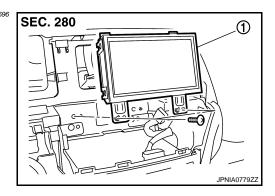
## FRONT DISPLAY UNIT

### [BOSE AUDIO WITH NAVIGATION]

# FRONT DISPLAY UNIT

**Exploded View** 

INFOID:0000000003356696



I. Front display unit

## Removal and Installation

#### **REMOVAL**

- 1. Remove center ventilator assembly. Refer to IP-11, "Exploded View".
- 2. Remove display unit with bracket as a single unit.

#### **INSTALLATION**

Install in the reverse order of removal.

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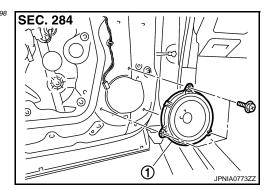
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## FRONT DOOR SPEAKER

**Exploded View** 

INFOID:0000000003356698



Front door speaker

### Removal and Installation

INFOID:0000000003356699

#### **REMOVAL**

- Remove front door finisher. Refer to <u>INT-11, "FRONT DOOR FINISHER: Exploded View"</u>.
- 2. Remove front door speaker screws, then disconnect front door speaker connector and remove front door speaker.

#### **INSTALLATION**

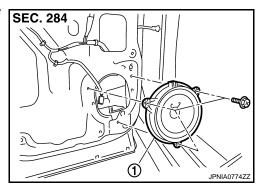
### **REAR DOOR SPEAKER**

[BOSE AUDIO WITH NAVIGATION]

## **REAR DOOR SPEAKER**

## **Exploded View**

INFOID:0000000003356702



. Rear door speaker

### Removal and Installation

INFOID:0000000003356703

### **REMOVAL**

- 1. Remove rear door finisher. Refer to <a href="INT-15">INT-15</a>, "REAR DOOR FINISHER: Exploded View".
- Remove rear door speaker screws, then disconnect rear door speaker connector and remove rear door speaker.

#### **INSTALLATION**

Install in the reverse order of removal.

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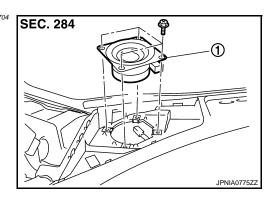
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### [BOSE AUDIO WITH NAVIGATION]

## **FRONT SQUAWKER**

**Exploded View** 

INFOID:0000000003356704



Front squawker

### Removal and Installation

INFOID:0000000003356705

#### **REMOVAL**

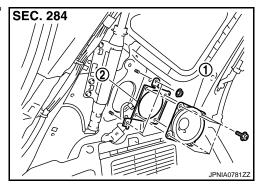
- 1. Remove speaker grille. Refer to IP-11, "Exploded View".
- Remove front squawker screws, lift up the front squawker and disconnect front squawker connector. Then remove the front squawker.

#### **INSTALLATION**

## **REAR SPEAKER**

## **Exploded View**

INFOID:0000000003470919



- 1. Rear speaker
- 2. Rear speaker bracket

### Removal and Installation

INFOID:0000000003470920

#### **REMOVAL**

- 1. Remove luggage side finisher upper. Refer to INT-33, "Exploded View".
- 2. Remove rear speaker screws, lift up the rear speaker and disconnect rear speaker connector. Then remove the rear speaker.

#### **INSTALLATION**

Install in the reverse order of removal.

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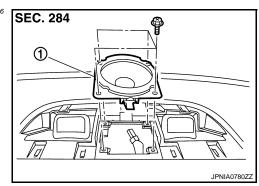
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[BOSE AUDIO WITH NAVIGATION]

## **CENTER SPEAKER**

## **Exploded View**

INFOID:0000000003356706



Center speaker

### Removal and Installation

INFOID:0000000003356707

#### **REMOVAL**

- 1. Remove center speaker grille. Refer to IP-11, "Exploded View".
- 2. Remove center speaker screws, lift up the center speaker and disconnect center speaker connector. Then remove the center speaker.

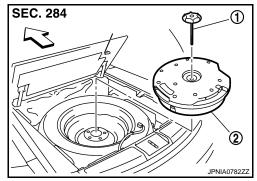
#### **INSTALLATION**

### [BOSE AUDIO WITH NAVIGATION]

## **WOOFER**

## **Exploded View**

INFOID:0000000003356708



⟨
⇒: Vehicle front

- 1. Clamp
- 2. Woofer

### Removal and Installation

INFOID:0000000003356709

#### **REMOVAL**

- 1. Remove luggage floor finisher center (back). Refer to <a href="INT-33">INT-33</a>, "Exploded View".
- 2. Remove clamp, disconnect woofer connector and remove the woofer.

#### **INSTALLATION**

Install in the reverse order of removal.

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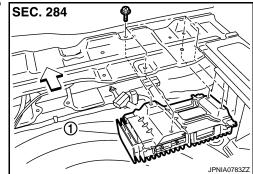
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## BOSE AMP.

## **Exploded View**

INFOID:0000000003356710



BOSE amp.

### Removal and Installation

INFOID:0000000003356711

#### **REMOVAL**

- 1. Remove luggage floor finisher. Refer to <a href="INT-33">INT-33</a>, "Exploded View".
- 2. Remove BOSE amp. screws, disconnect BOSE amp. connector and remove the BOSE amp.

#### **INSTALLATION**

## **MULTIFUNCTION SWITCH**

[BOSE AUDIO WITH NAVIGATION]

## **MULTIFUNCTION SWITCH**

**Exploded View** 

INFOID:0000000003356718

Α

В

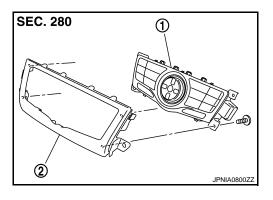
D

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**REMOVAL** 

Refer to IP-11, "Exploded View".

DISASSEMBLY



- 1. Multifunction switch
- Cluster lid D

### Removal and Installation

INFOID:0000000003356719

#### **REMOVAL**

- 1. Remove cluster lid D. Refer to IP-11, "Exploded View".
- 2. Remove multifunction switch with center ventilator grille as a single unit.
- 3. Remove multifunction switch screws, remove multifunction switch from cluster lid D.

#### **INSTALLATION**

Install in the reverse order of removal.

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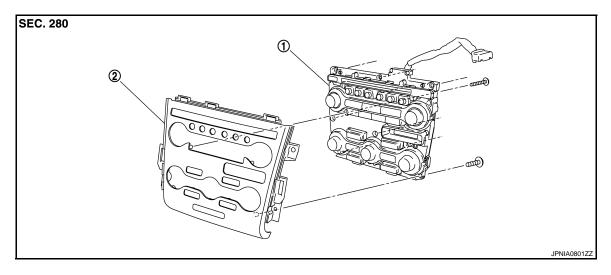
## PRESET SWITCH

Exploded View

**REMOVAL** 

Refer to IP-11, "Exploded View".

#### **DISASSEMBLY**



1. Preset switch

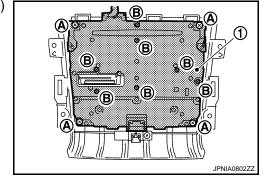
2. Cluster lid C

#### Removal and Installation

INFOID:0000000003356721

#### **REMOVAL**

- 1. Remove cluster lid C. Refer to IP-11, "Exploded View".
- 2. Remove preset switch screws (A) (B), remove preset switch (1) from cluster lid C.
  - 1. Preset switch
  - A. Screw
  - B. Screw



#### **INSTALLATION**

STEERING SWITCH	
< ON-VEHICLE REPAIR >	[BOSE AUDIO WITH NAVIGATION]
STEERING SWITCH	
Exploded View	INFOID:000000003356722
Refer to ST-15, "Exploded View".	
Removal and Installation	INFOID:000000003356723
REMOVAL	
Refer to ST-15, "Removal and Installation".	
INSTALLATION Install in the reverse order of removal.	

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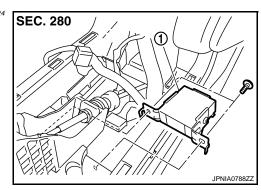
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## **IPOD ADAPTER**

**Exploded View** 

INFOID:0000000003356724



1. iPod adapter

### Removal and Installation

INFOID:0000000003356725

#### **REMOVAL**

- 1. Remove front console pocket assembly. Refer to IP-19, "Exploded View".
- 2. Disconnect iPod adapter connector, remove iPod adapter screws and remove the iPod adapter.

#### **INSTALLATION**

### **IPOD CONNECTOR**

### < ON-VEHICLE REPAIR >

## [BOSE AUDIO WITH NAVIGATION]

## **IPOD CONNECTOR**

**Exploded View** 

INFOID:0000000003356726

Α

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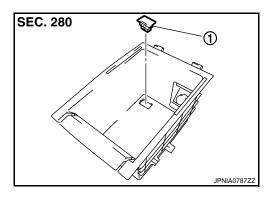
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**REMOVAL** 

Refer to IP-19, "Exploded View".

DISASSEMBLY



iPod connector

### Removal and Installation

INFOID:0000000003356727

#### **REMOVAL**

- 1. Remove center console. Refer to <a href="IP-19">IP-19</a>, "Exploded View".
- 2. Press the pawl from the back of center console to remove iPod connector.

#### **INSTALLATION**

Install in the reverse order of removal.

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[BOSE AUDIO WITH NAVIGATION]

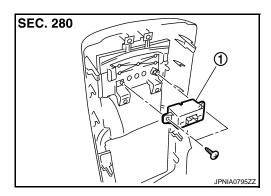
## **AUXILIARY INPUT JACKS**

Exploded View

**REMOVAL** 

Refer to IP-19, "Exploded View".

**DISASSEMBLY** 



1. Auxiliary input jacks

### Removal and Installation

INFOID:0000000003356729

#### **REMOVAL**

- Remove console rear finisher. Refer to <u>IP-19, "Exploded View"</u>.
- 2. Remove auxiliary input jacks from center console.

## **INSTALLATION**

### **MICROPHONE**

### < ON-VEHICLE REPAIR >

### [BOSE AUDIO WITH NAVIGATION]

## **MICROPHONE**

**Exploded View** 

INFOID:0000000003356730

Α

В

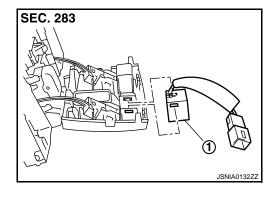
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**REMOVAL** 

Refer to INL-115, "Exploded View".

DISASSEMBLY



1. Microphone

### Removal and Installation

INFOID:0000000003356731

#### **REMOVAL**

- 1. Remove map lamp. Refer to <a href="INL-115">INL-115</a>, "Exploded View".
- 2. Remove microphone from map lamp.

### **INSTALLATION**

Install in the reverse order of removal.

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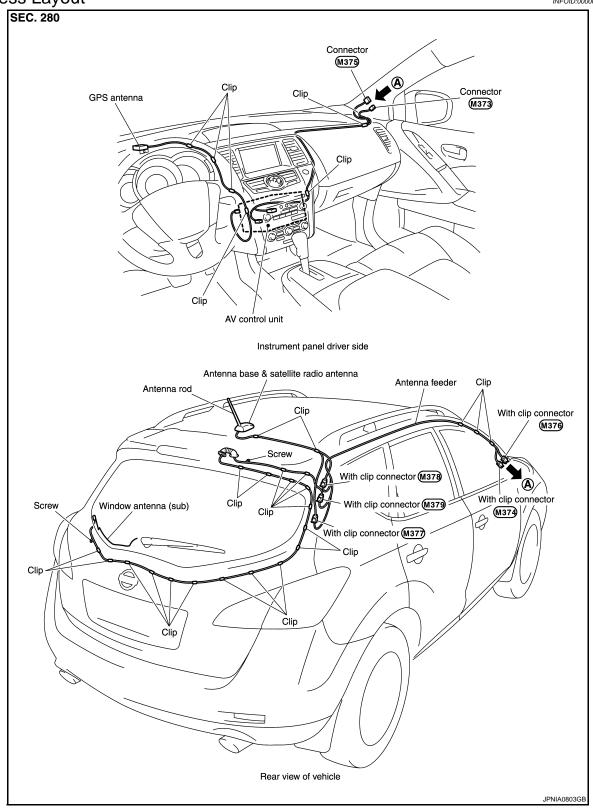
C

## **GPS ANTENNA**

Exploded View

Harness Layout

INFOID:0000000003356733



### **GPS ANTENNA**

### < ON-VEHICLE REPAIR >

## [BOSE AUDIO WITH NAVIGATION]

### Removal and Installation

#### INFOID:0000000003356734

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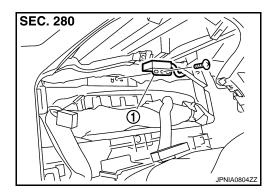
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#### **REMOVAL**

- 1. Remove combination meter. Refer to MWI-145, "Exploded View".
- 2. Disconnect GPS antenna connector from AV control unit.
- 3. Remove GPS antenna (1) from instrument panel.



#### **INSTALLATION**

Install in the reverse order of removal.

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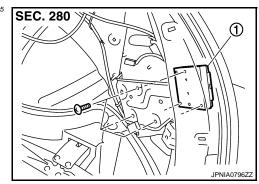
#### ΑV

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## CAMERA CONTROL UNIT

## **Exploded View**

INFOID:0000000003356735



Camera control unit

### Removal and Installation

INFOID:0000000003356736

#### **REMOVAL**

- 1. Remove luggage side finisher lower (RH). Refer to INT-33, "Exploded View".
- Remove camera control unit screws, disconnect camera control unit connector and remove the camera control unit.

### **INSTALLATION**

Install in the reverse order of removal.

Adjustment INFOID:000000003356737

#### **ADJUSTMENT**

There may be a misalignment of possible route line center position of rear view monitor after removing camera control unit. Therefore, correct neutral position with the following procedure.

- 1. Steer the steering wheel to the leftmost and rightmost ends.
- 2. Drive vehicle at 30 km/h (18.6 MPH) min. speed at least 100 m (328.1 ft).

### [BOSE AUDIO WITH NAVIGATION]

## **REAR VIEW CAMERA**

Exploded View

INFOID:0000000003356738

Α

В

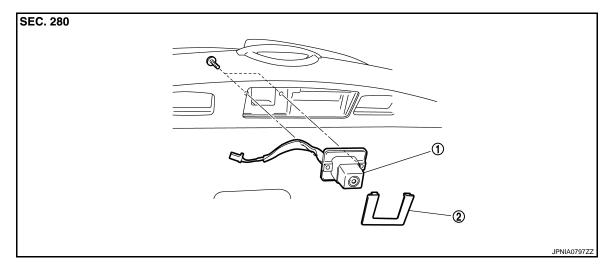
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**REMOVAL** 

Refer to INT-37, "Exploded View".

DISASSEMBLY



1. Rear view camera

2. Finisher

#### Removal and Installation

INFOID:0000000003356739

#### **REMOVAL**

- Remove back door finisher inner. Refer to <u>INT-37</u>, "<u>Exploded View</u>".
- 2. Remove finisher.
- 3. Remove rear view camera screws, disconnect rear view camera connector and remove rear view camera from back door assembly.

#### INSTALLATION

Install in the reverse order of removal.

Adjustment INFOID:000000003356740

Adjust the guide line position if the guide line position is shifted after installing the rear view camera.

ΑV

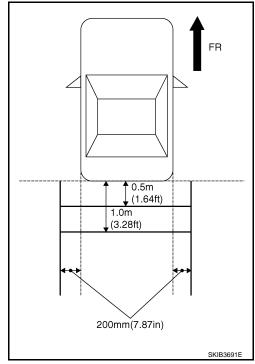
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- Draw lines on rearward area of the vehicle passing through the following points: 200 mm (7.87 in) from both sides of the vehicle, and 0.5 m (1.64 ft), 1.0 m (3.28 ft) from the rear end of the bumper.
- 2. Set into "Adjust offset of rear view camera" mode of Confirmation / Adjustment mode.

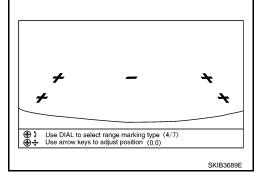


Rotate the center dial, and then select the guiding line pattern so that its angle is aligned with the correction line of the rear of the vehicle.

### Selected pattern : 7

4. Make fine adjustment to the correction line of the rear of the vehicle with up/down/left/right switches so that its position is aligned with the guiding line. Press "OK" switch and record the adjusted guiding line position to the camera control unit.

Up/Down adjustment range : -20 - 20Left/Right adjustment range : -20 - 20



#### CALITION

Never operate other function such as pressing BACK while writing index data.

If Confirmation/Adjustment mode does not function in the above procedure, perform one of the following service to adjust the index again.

- · Remove battery for five min. Then reconnect battery.
- Remove camera control unit connector for five min. Then reconnect camera control unit connector.

### STEERING ANGLE SENSOR

[BOSE AUDIO WITH NAVIGATION]

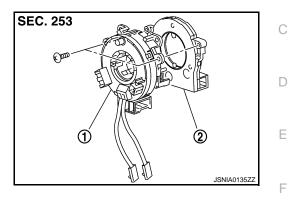
## STEERING ANGLE SENSOR

**Exploded View** 

**REMOVAL** 

Refer to ST-15, "Exploded View".

**DISASSEMBLY** 



- Spiral cable 1.
- Steering angle sensor

## Removal and Installation

INFOID:0000000003356742

INFOID:0000000003356741

#### **REMOVAL**

- Remove spiral cable.
- Remove steering angle sensor from spiral cable.

#### **INSTALLATION**

Install in the reverse order of removal.

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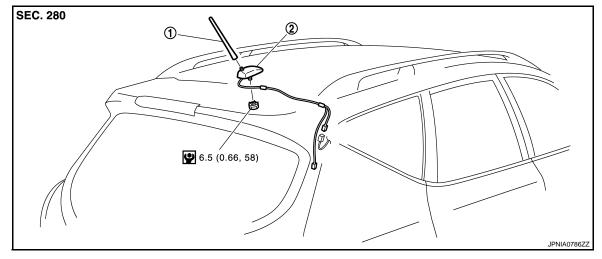
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### **ROOF ANTENNA**

## **Exploded View**

INFOID:0000000003356716



1. Rod antenna

2. Antenna bade & satellite radio antenna

Refer to GI-4, "Components" for symbols in the figure.

#### Removal and Installation

INFOID:0000000003356717

#### **REMOVAL**

- Remove headlining assembly (rear) to secure work space between vehicle and headlining. Refer to <u>INT-25</u>, "NORMAL ROOF: Exploded View" [without sunroof] or <u>INT-29</u>, "SUNROOF: Exploded View" [with sunroof].
- 2. Disconnect AM/FM main connector and satellite radio antenna connector.
- 3. Remove antenna base & satellite radio nut, and then remove antenna base &satellite radio antenna from roof panel.

#### **INSTALLATION**

Install in the reverse order of removal.

Antenna base & satellite radio antenna mounting nut

**9**: 6.5 N·m (0.66 kg-m, 58 in-lb)

#### **CAUTION:**

When Antenna base & satellite radio antenna mounting nut tightening torque is loose, be careful about tightening torque. Antenna sensitivity becomes poor, and when it is excessive, roof panel may become deformed.

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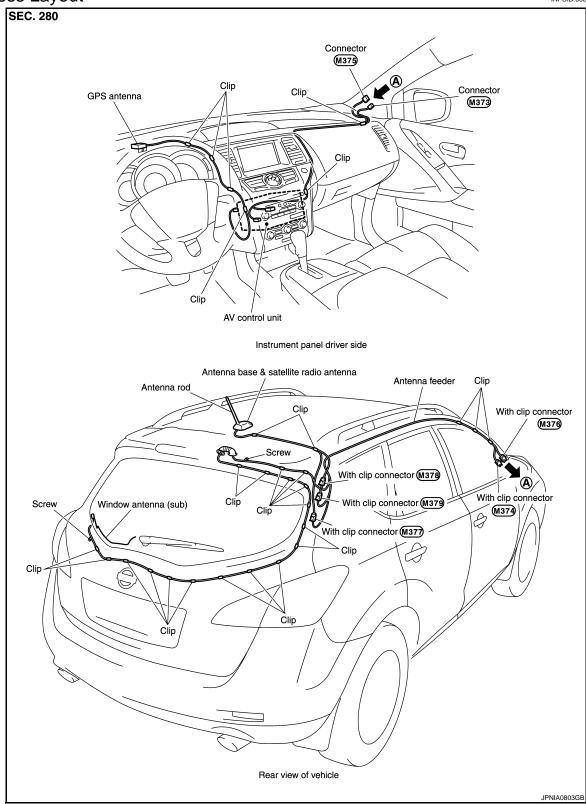
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# ANTENNA FEEDER (RADIO)

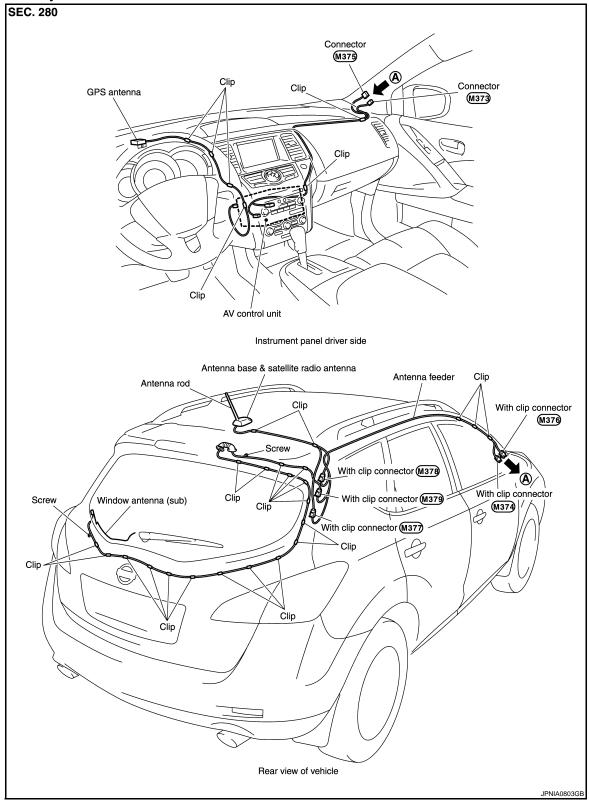
Harness Layout



Revision: 2008 October AV-787 2009 Murano

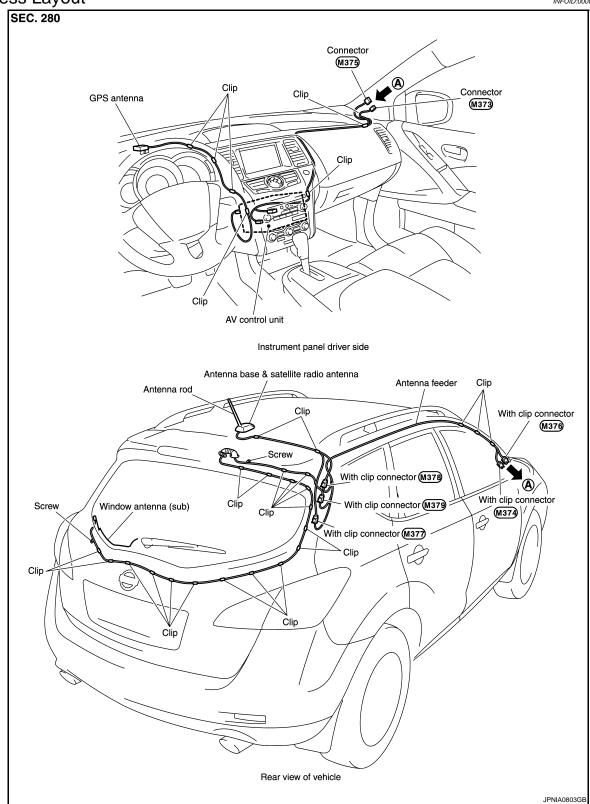
# ANTENNA FEEDER (SATELLITE RADIO)

Harness Layout



# **ANTENNA FEEDER (GPS)**

Harness Layout



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