

# SECTION AV

## AUDIO, VISUAL & NAVIGATION SYSTEM

### CONTENTS

<b>BASE AUDIO</b>	
<b>BASIC INSPECTION</b>	4
<b>DIAGNOSIS AND REPAIR WORKFLOW</b>	4
Work Flow	4
<b>FUNCTION DIAGNOSIS</b>	6
<b>AUDIO SYSTEM</b>	6
System Diagram	6
System Description	6
Component Parts Location	6
Component Description	7
<b>DIAGNOSIS SYSTEM (AUDIO UNIT)</b>	8
Diagnosis Description	8
<b>COMPONENT DIAGNOSIS</b>	11
<b>POWER SUPPLY AND GROUND CIRCUIT</b>	11
<b>AUDIO UNIT</b>	11
AUDIO UNIT : Diagnosis Procedure	11
<b>STEERING SWITCH SIGNAL A CIRCUIT</b>	12
Description	12
Diagnosis Procedure	12
Component Inspection	13
<b>STEERING SWITCH SIGNAL B CIRCUIT</b>	14
Description	14
Diagnosis Procedure	14
Component Inspection	15
<b>STEERING SWITCH SIGNAL GND CIRCUIT</b>	16
Description	16
Diagnosis Procedure	16
Component Inspection	16
<b>ECU DIAGNOSIS</b>	18
<b>AUDIO UNIT</b>	18
Reference Value	18
Wiring Diagram - BASE AUDIO -	20
<b>SYMPTOM DIAGNOSIS</b>	25
<b>AUDIO SYSTEM</b>	25
Symptom Table	25
<b>NORMAL OPERATING CONDITION</b>	26
Description	26
<b>PRECAUTION</b>	27
<b>PRECAUTIONS</b>	27
<b>FOR USA AND CANADA</b>	27
FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	27
<b>FOR MEXICO</b>	27
FOR MEXICO : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	27
<b>PREPARATION</b>	28
<b>PREPARATION</b>	28
Commercial Service Tools	28
<b>ON-VEHICLE REPAIR</b>	29
<b>AUDIO UNIT</b>	29
Exploded View	29
Removal and Installation	29
<b>TWEETER</b>	30
Exploded View	30
Removal and Installation	30
<b>FRONT SPEAKER</b>	31
Exploded View	31
Removal and Installation	31

<b>REAR SPEAKER</b>	.....	32
Exploded View	.....	32
Removal and Installation	.....	32
<b>STEERING SWITCH</b>	.....	33
Exploded View	.....	33
Removal and Installation	.....	33
<b>RADIO ANTENNA</b>	.....	34
Exploded View	.....	34
Removal and Installation	.....	34
<b>ANTENNA FEEDER</b>	.....	35
Location of Antenna	.....	35
<b>BOSE AUDIO</b>		
<b>BASIC INSPECTION</b>	.....	36
<b>DIAGNOSIS AND REPAIR WORKFLOW</b>	.....	36
Work Flow	.....	36
<b>FUNCTION DIAGNOSIS</b>	.....	38
<b>AUDIO SYSTEM</b>	.....	38
System Diagram	.....	38
System Description	.....	38
Component Parts Location	.....	39
Component Description	.....	39
<b>HANDS-FREE PHONE SYSTEM</b>	.....	41
System Diagram	.....	41
System Description	.....	41
Component Parts Location	.....	42
Component Description	.....	42
<b>DIAGNOSIS SYSTEM (AUDIO UNIT)</b>	.....	44
Diagnosis Description	.....	44
<b>DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)</b>	.....	47
Diagnosis Description	.....	47
<b>COMPONENT DIAGNOSIS</b>	.....	49
<b>POWER SUPPLY AND GROUND CIRCUIT</b>	....	49
<b>AUDIO UNIT</b>	.....	49
AUDIO UNIT : Diagnosis Procedure	.....	49
<b>BOSE AMP.</b>	.....	49
BOSE AMP. : Diagnosis Procedure	.....	49
<b>SATELLITE RADIO TUNER</b>	.....	50
SATELLITE RADIO TUNER : Diagnosis Procedure	.....	50
<b>TEL ADAPTER UNIT</b>	.....	50
TEL ADAPTER UNIT : Diagnosis Procedure	.....	50
<b>STEERING SWITCH SIGNAL A CIRCUIT</b>	.....	52
Description	.....	52
Diagnosis Procedure	.....	52
Component Inspection	.....	53
<b>STEERING SWITCH SIGNAL B CIRCUIT</b>	.....	54
Description	.....	54
Diagnosis Procedure	.....	54
Component Inspection	.....	55
<b>STEERING SWITCH SIGNAL GND CIRCUIT</b>	....	56
Description	.....	56
Diagnosis Procedure	.....	56
Component Inspection	.....	56
<b>STEERING SWITCH SIGNAL A CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)</b>	.....	58
Description	.....	58
Diagnosis Procedure	.....	58
Component Inspection	.....	59
<b>STEERING SWITCH SIGNAL B CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)</b>	.....	60
Description	.....	60
Diagnosis Procedure	.....	60
Component Inspection	.....	61
<b>STEERING SWITCH SIGNAL GND CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)</b>	.....	62
Description	.....	62
Diagnosis Procedure	.....	62
Component Inspection	.....	62
<b>STEERING SWITCH SIGNAL A CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)</b>	.....	64
Description	.....	64
Diagnosis Procedure	.....	64
<b>STEERING SWITCH SIGNAL B CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)</b>	.....	65
Description	.....	65
Diagnosis Procedure	.....	65
<b>STEERING SWITCH SIGNAL GND CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)</b>	.....	66
Description	.....	66
Diagnosis Procedure	.....	66
<b>COMMUNICATION SIGNAL CIRCUIT</b>	.....	67
Description	.....	67
Diagnosis Procedure	.....	67
<b>REQUEST SIGNAL CIRCUIT (SAT TO AU- DIO)</b>	.....	69
Description	.....	69
Diagnosis Procedure	.....	69
<b>AMP. ON SIGNAL CIRCUIT</b>	.....	71
Description	.....	71
Diagnosis Procedure	.....	71
<b>WOOFER AMP. ON SIGNAL CIRCUIT</b>	.....	72
Description	.....	72

Diagnosis Procedure .....	72	<b>PREPARATION .....</b>	149
<b>MICROPHONE SIGNAL CIRCUIT .....</b>	<b>73</b>	Commercial Service Tools .....	149
Description .....	73		
Diagnosis Procedure .....	73		
<b>TELEPHONE ON SIGNAL CIRCUIT .....</b>	<b>75</b>	<b>ON-VEHICLE REPAIR .....</b>	150
Description .....	75		
Diagnosis Procedure .....	75		
<b>ECU DIAGNOSIS .....</b>	<b>76</b>	<b>AUDIO UNIT .....</b>	150
<b>AUDIO UNIT .....</b>	<b>76</b>	Exploded View .....	150
Reference Value .....	76	Removal and Installation .....	150
Wiring Diagram - BOSE AUDIO - .....	80		
<b>BOSE AMP. .....</b>	<b>91</b>	<b>BOSE AMP. .....</b>	151
Reference Value .....	91	Exploded View .....	151
Wiring Diagram - BOSE AUDIO - .....	94	Removal and Installation .....	151
<b>WOOFER .....</b>	<b>105</b>	<b>TWEETER .....</b>	152
Reference Value .....	105	Exploded View .....	152
Wiring Diagram - BOSE AUDIO - .....	106	Removal and Installation .....	152
<b>SATELLITE RADIO TUNER .....</b>	<b>117</b>	<b>CENTER SPEAKER .....</b>	153
Reference Value .....	117	Exploded View .....	153
Wiring Diagram - BOSE AUDIO - .....	119	Removal and Installation .....	153
<b>TEL ADAPTER UNIT .....</b>	<b>130</b>	<b>FRONT SPEAKER .....</b>	154
Reference Value .....	130	Exploded View .....	154
Wiring Diagram - BOSE AUDIO - .....	133	Removal and Installation .....	154
<b>SYMPTOM DIAGNOSIS .....</b>	<b>144</b>	<b>REAR SPEAKER .....</b>	155
<b>AUDIO SYSTEM SYMPTOMS .....</b>	<b>144</b>	Exploded View .....	155
Symptom Table .....	144	Removal and Installation .....	155
<b>HANS-FREE PHONE SYMPTOMS .....</b>	<b>145</b>	<b>WOOFER .....</b>	156
Symptom Table .....	145	Exploded View .....	156
<b>NORMAL OPERATING CONDITION .....</b>	<b>147</b>	Removal and Installation .....	156
Description .....	147	<b>SATELLITE RADIO TUNER .....</b>	157
<b>PRECAUTION .....</b>	<b>148</b>	Exploded View .....	157
<b>PRECAUTIONS .....</b>	<b>148</b>	Removal and Installation .....	157
<b>FOR USA AND CANADA .....</b>	<b>148</b>	<b>RADIO &amp; SATELLITE RADIO ANTENNA .....</b>	158
FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	148	Exploded View .....	158
<b>FOR MEXICO .....</b>	<b>148</b>	Removal and Installation .....	158
FOR MEXICO : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	148	<b>STEERING SWITCH .....</b>	159
<b>PREPARATION .....</b>	<b>149</b>	Exploded View .....	159
		Removal and Installation .....	159
<b>MICROPHONE .....</b>	<b>160</b>	<b>MICROPHONE .....</b>	160
Exploded View .....	160	Exploded View .....	160
Removal and Installation .....	160	Removal and Installation .....	160
<b>TEL ADAPTER UNIT .....</b>	<b>161</b>	<b>TEL ADAPTER UNIT .....</b>	161
Exploded View .....	161	Exploded View .....	161
Removal and Installation .....	161	Removal and Installation .....	161
<b>TEL ANTENNA .....</b>	<b>162</b>	<b>TEL ANTENNA .....</b>	162
Exploded View .....	162	Exploded View .....	162
Removal and Installation .....	162	Removal and Installation .....	162
<b>ANTENNA FEEDER .....</b>	<b>163</b>	<b>ANTENNA FEEDER .....</b>	163
Location of Antenna .....	163		

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

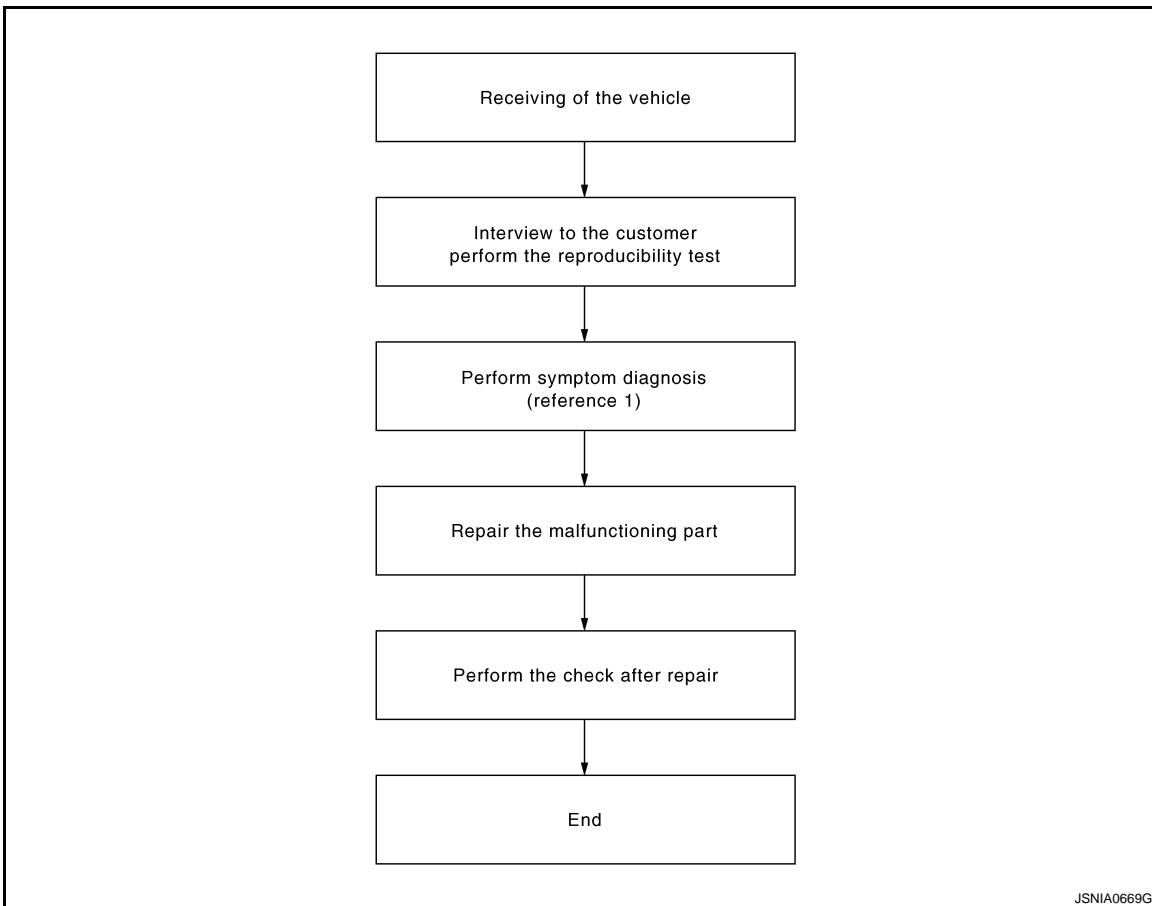
# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORKFLOW

### Work Flow

INFOID:000000004235098

### OVERALL SEQUENCE



Reference 1 ... Refer to [AV-25, "Symptom Table"](#).

### DETAILED FLOW

#### 1. CHECK SYMPTOM

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.

>> GO TO 2.

#### 2. PERFORM DIAGNOSIS BY SYMPTOM

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to [AV-25, "Symptom Table"](#).

>> GO TO 3.

#### 3. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace the malfunctioning parts.

>> GO TO 4.

#### 4. FINAL CHECK

## DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[BASE AUDIO]

Perform the operation to check that the malfunction symptom is solved or any other symptoms are present.

Is there any symptom?

YES    >> GO TO 2.

NO    >> INSPECTION END

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

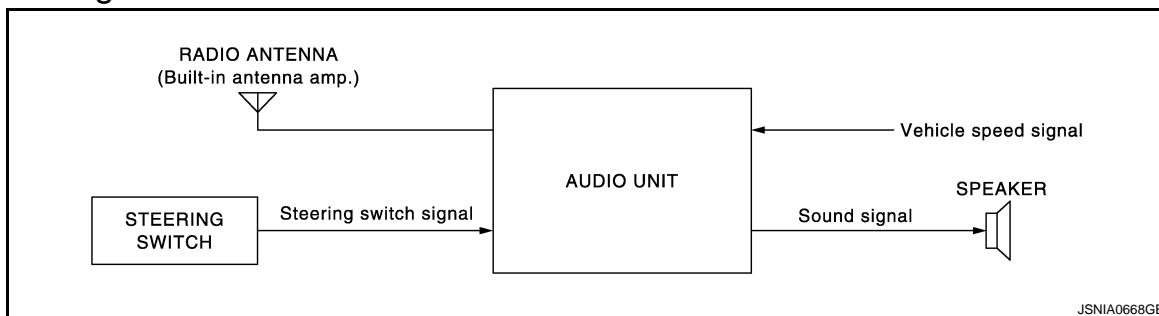
&lt; FUNCTION DIAGNOSIS &gt;

# FUNCTION DIAGNOSIS

## AUDIO SYSTEM

### System Diagram

INFOID:0000000004235099



### System Description

INFOID:0000000004235100

#### AUDIO SYSTEM

##### Audio functions

AM/FM radio

CD/6CD

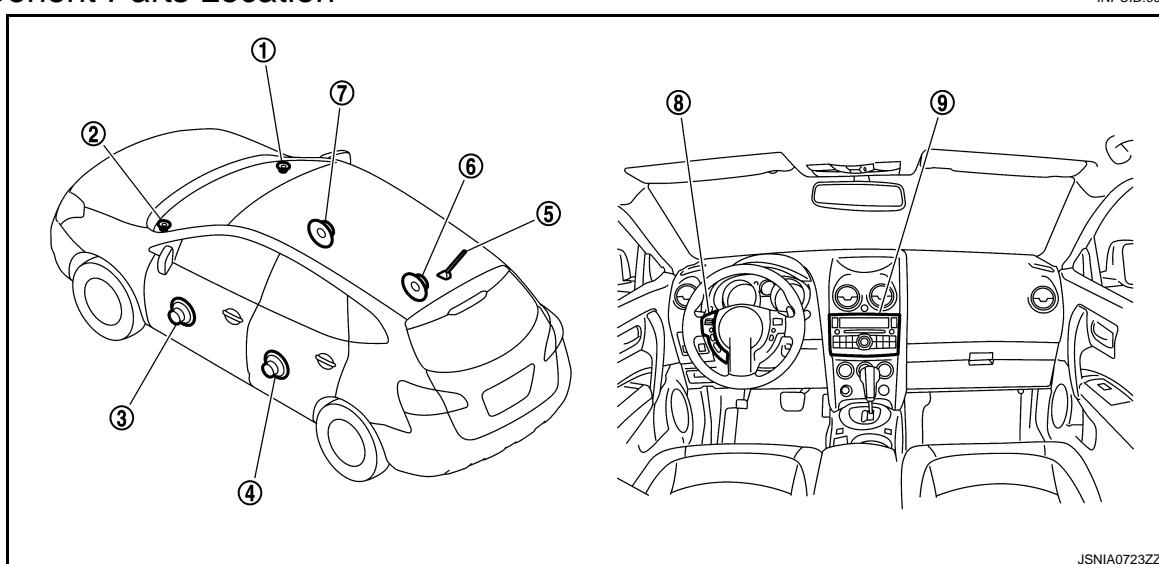
- Radio signal are received by radio antenna, next it is amplified by antenna amp., and finally it is input to audio unit. (Antenna amp. is built into radio antenna.)
- Audio unit outputs the audio signal to each speaker.

#### SPEED SENSITIVE VOLUME (6CD MODELS)

- Volume level of this system goes up and down automatically in proportion to the vehicle speed.
- The control level can be selected by the customer.

### Component Parts Location

INFOID:0000000004235101



- |                     |                    |                     |
|---------------------|--------------------|---------------------|
| 1. Tweeter RH       | 2. Tweeter LH      | 3. Front speaker LH |
| 4. Rear speaker LH  | 5. Radio antenna   | 6. Rear speaker RH  |
| 7. Front speaker RH | 8. Steering switch | 9. Audio unit       |

# AUDIO SYSTEM

< FUNCTION DIAGNOSIS >

## Component Description

[BASE AUDIO]

INFOID:000000004235102

Part name	Description
Audio unit	Controls audio system functions.
Front speaker	<ul style="list-style-type: none"><li>• Outputs sound signal from audio unit.</li><li>• Outputs high, mid and low range sounds.</li></ul>
Tweeter	<ul style="list-style-type: none"><li>• Outputs sound signal from audio unit.</li><li>• Outputs high range sounds.</li></ul>
Rear speaker	<ul style="list-style-type: none"><li>• Outputs sound signal from audio unit.</li><li>• Outputs high, mid and low range sounds.</li></ul>
Radio antenna (Built-in antenna amp.)	<ul style="list-style-type: none"><li>• Radio signal received by radio antenna is amplified and sent to audio unit.</li><li>• Power (antenna amp. ON signal) is supplied from audio unit.</li></ul>
Steering switch	<ul style="list-style-type: none"><li>• Each audio operation can be operated.</li><li>• Steering switch signal (operation signal) is output to audio unit.</li></ul>

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

# DIAGNOSIS SYSTEM (AUDIO UNIT)

< FUNCTION DIAGNOSIS >

[BASE AUDIO]

## DIAGNOSIS SYSTEM (AUDIO UNIT)

### Diagnosis Description

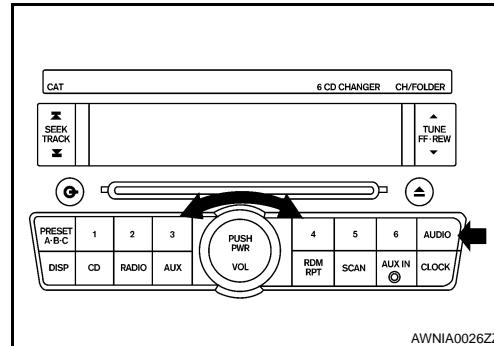
INFOID:0000000004235103

Self-diagnosis mode can check the following items.

- Audio unit hardware/software versions
- Continuity of each speaker channel
- Continuity of each audio unit switch

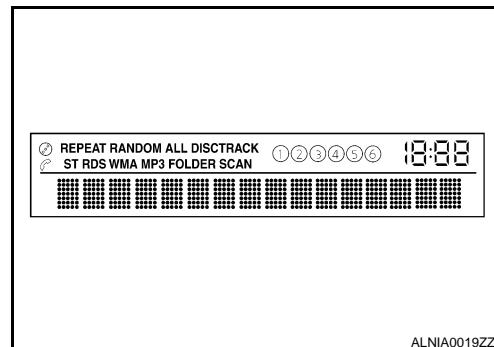
### OPERATION PROCEDURE

1. Turn ignition switch to the ON position.
2. Turn the audio unit off.
3. While pressing the "AUDIO" button, turn the volume control dial clockwise or counterclockwise 30 clicks or more. When the self-diagnosis mode is started, a short beep will be heard.



AWNIA0026ZZ

4. Initially, all display segments will be illuminated.



ALNIA0019ZZ

### Version Check

1. Press the "AUDIO" switch to enter version diagnostics. "Software" (audio software version) is displayed.



ALNIA0020ZZ

# DIAGNOSIS SYSTEM (AUDIO UNIT)

[BASE AUDIO]

< FUNCTION DIAGNOSIS >

2. Press the “AUDIO” switch again to display the “Hardware” (audio hardware version).



ALNIA0021ZZ

3. Press the “AUDIO” switch again to display the “CD Mech” (CD mechanism version).



ALNIA0022ZZ

4. Press the “AUDIO” switch again to display the “SDARS” (satellite radio version).



ALNIA0023ZZ

## Channel Check Diagnostics

When all segments are illuminated, press the “TUNE” up switch to enter channel check diagnostics. The self-diagnostic function will then send a tone to each channel (FL, RL, RR, FR) for 1 second.



ALNIA0024ZZ

## Button Check Diagnostics

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

## DIAGNOSIS SYSTEM (AUDIO UNIT)

### < FUNCTION DIAGNOSIS >

[BASE AUDIO]

When all segments are illuminated, press the “TUNE” down switch to enter button check diagnostics. When each audio unit switch is pressed, a tone will sound and the switch name will be displayed.

BUTTON CHECK

ALNIA0025ZZ

## COMPONENT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT AUDIO UNIT

#### AUDIO UNIT : Diagnosis Procedure

INFOID:000000004235104

##### 1. CHECK FUSE

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

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	20

##### Is inspection result OK?

YES >> GO TO 2.

NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

##### 2. CHECK AUDIO UNIT POWER SUPPLY CIRCUIT

Check voltage between the audio unit and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage
Battery power supply	M46	19	OFF	Battery voltage
ACC power supply	M46	7	ACC	Battery voltage

##### Is inspection result OK?

YES >> INSPECTION END

NO >> Check harness between audio unit and fuse.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

# STEERING SWITCH SIGNAL A CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

## STEERING SWITCH SIGNAL A CIRCUIT

### Description

INFOID:0000000004235105

Transmits the steering switch signal to audio unit.

### Diagnosis Procedure

INFOID:0000000004235106

#### 1.CHECK STEERING SWITCH SIGNAL A CIRCUIT

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

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

4. Check continuity between audio unit harness connector.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	6		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

#### Is inspection result OK?

- 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.

(+)		(-)		Voltage (Approx.)
Audio unit		Audio unit		
Connector	Terminal	Connector	Terminal	
M46	6	M46	15	3.3 V

#### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace audio unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch ON.
2. Check steering switch. Refer to [AV-13, "Component Inspection"](#).

#### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

# STEERING SWITCH SIGNAL A CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

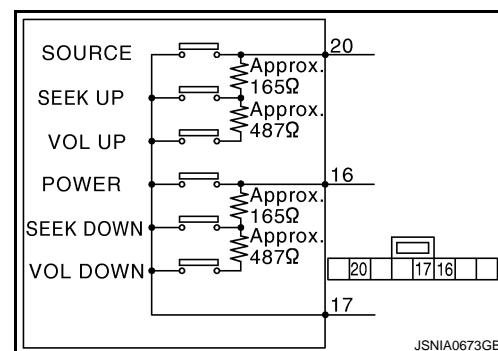
## Component Inspection

INFOID:000000004235107

Measure the resistance between the steering switch connector.

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
20	17	VOL UP switch ON	645 – 659
		SEEK UP switch ON	163 – 167
		SOURCE switch ON	0
16	17	VOL DOWN switch ON	645 – 659
		SEEK DOWN switch ON	163 – 167
		POWER switch ON	0



# STEERING SWITCH SIGNAL B CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

## STEERING SWITCH SIGNAL B CIRCUIT

### Description

INFOID:0000000004235108

Transmits the steering switch signal to audio unit.

### Diagnosis Procedure

INFOID:0000000004235109

#### 1.CHECK STEERING SWITCH SIGNAL B CIRCUIT

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

Audio unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M46	16	M33	32	Existed

4. Check continuity between audio unit harness connector.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	16		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

#### Is inspection result OK?

- 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.

(+)		(-)		Voltage (Approx.)
Audio unit		Audio unit		
Connector	Terminal	Connector	Terminal	
M46	16	M46	15	3.3 V

#### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace audio unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch ON.
2. Check steering switch. Refer to [AV-15, "Component Inspection"](#).

#### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

# STEERING SWITCH SIGNAL B CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

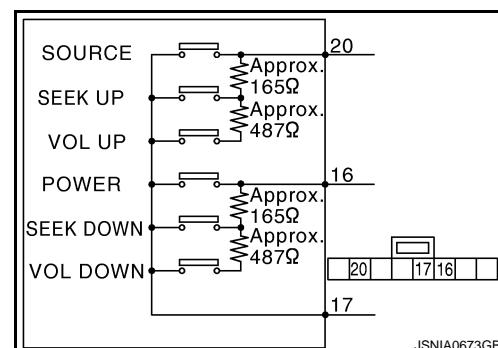
## Component Inspection

INFOID:000000004235110

Measure the resistance between the steering switch connector.

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
20	17	VOL UP switch ON	645 – 659
		SEEK UP switch ON	163 – 167
		SOURCE switch ON	0
16	17	VOL DOWN switch ON	645 – 659
		SEEK DOWN switch ON	163 – 167
		POWER switch ON	0



# STEERING SWITCH SIGNAL GND CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

## STEERING SWITCH SIGNAL GND CIRCUIT

### Description

INFOID:0000000004235111

Transmits the steering switch signal to audio unit.

### Diagnosis Procedure

INFOID:0000000004235112

#### 1.CHECK STEERING SWITCH SIGNAL GND CIRCUIT

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

Audio unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M46	15	M33	31	Existed

##### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

##### Is inspection result OK?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3.CHECK GROUND CIRCUIT

1. Connect audio unit connector.
2. Check continuity between audio unit harness connector terminals 15 and ground.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	15		Existed

##### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace audio unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch ON.
2. Check steering switch. Refer to [AV-16, "Component Inspection"](#).

##### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:0000000004235113

Measure the resistance between the steering switch connector.

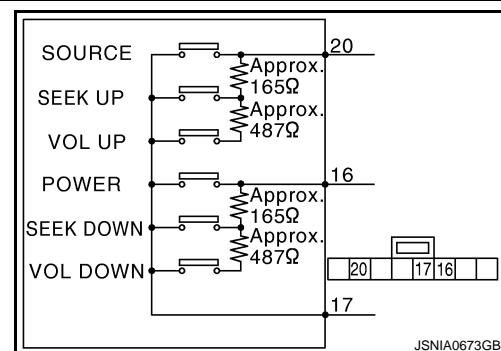
# STEERING SWITCH SIGNAL GND CIRCUIT

< COMPONENT DIAGNOSIS >

[BASE AUDIO]

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
20	17	VOL UP switch ON	645 – 659
		SEEK UP switch ON	163 – 167
		SOURCE switch ON	0
16	17	VOL DOWN switch ON	645 – 659
		SEEK DOWN switch ON	163 – 167
		POWER switch ON	0



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

AV

O  
P

# AUDIO UNIT

&lt; ECU DIAGNOSIS &gt;

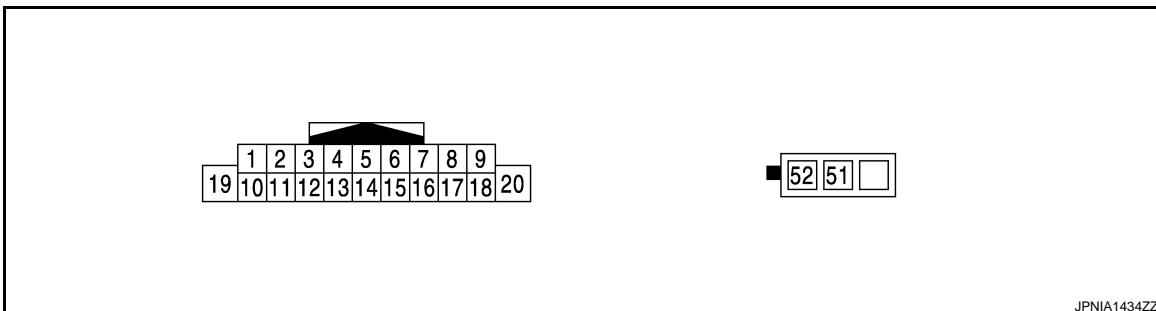
[BASE AUDIO]

## ECU DIAGNOSIS AUDIO UNIT

### Reference Value

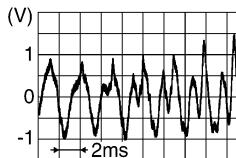
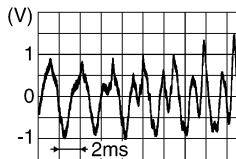
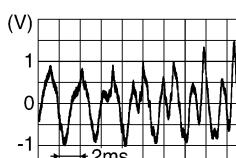
INFOID:000000004235114

### TERMINAL LAYOUT



JPNIA1434ZZ

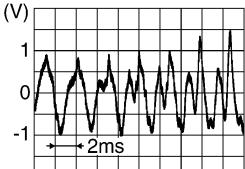
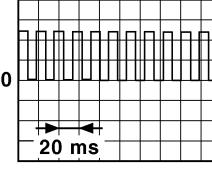
### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/ Output		
2 (R)	3 (G)	Sound signal front LH	Output	Ignition switch ON	Voice output
					 SKIB3609E
4 (V)	5 (LG)	Sound signal rear LH	Output	Ignition switch ON	Voice output
					 SKIB3609E
6 (W)	15 (GR)	Steering switch signal A	Input	Ignition switch ON	Keep pressing SOURCE switch
					1.1 V
					2.2 V
					3.3 V
7 (SB)	Ground	ACC power supply	Input	Ignition switch ACC	—
					Battery voltage
11 (O)	12 (W)	Sound signal front RH	Output	Ignition switch ON	Voice output
					 SKIB3609E

# AUDIO UNIT

[BASE AUDIO]

< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
13 (L)	14 (P)	Sound signal rear RH	Output	Ignition switch ON	Voice output	 SKIB3609E
15 (GR)	Ground	Steering switch signal ground	—	Ignition switch ON	—	0 V
16 (O)	15 (GR)	Steering switch signal B	Input	Ignition switch ON	Keep pressing POWER switch	0 V
					Keep pressing SEEK DOWN switch	1.1 V
					Keep pressing VOL DOWN switch	2.2 V
					Except for above	3.3 V
18 (L)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25MPH)	<b>NOTE:</b> The maximum voltage varies de- pending on the specification (destination unit).  JSNIA0012GB
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
51	—	Antenna signal	Input	—	—	—
52	Ground	Antenna amp. ON signal	Output	Ignition switch ON	—	12.0 V

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

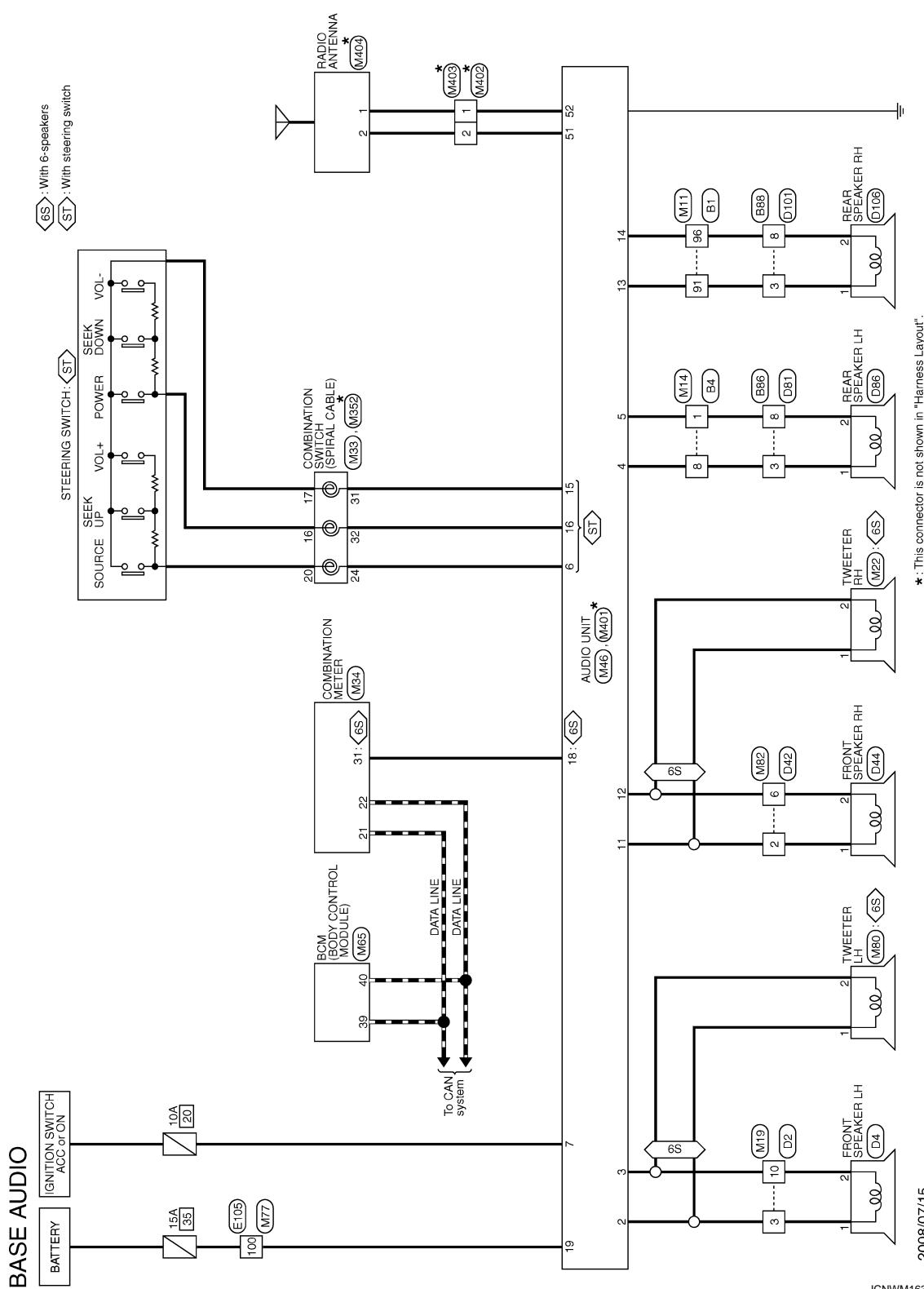
# AUDIO UNIT

< ECU DIAGNOSIS >

[BASE AUDIO]

## Wiring Diagram - BASE AUDIO -

INFOID:000000004235115



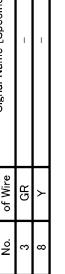
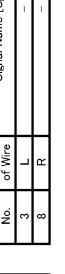
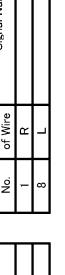
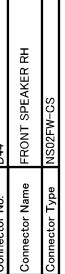
2008/07/15

JCNWM1637GI

# AUDIO UNIT

< ECU DIAGNOSIS >

[BASE AUDIO]

BASE AUDIO		B1		B4		B86		D42		D44	
Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name
TH80MW-CS16-TM4	WIRE TO WIRE	NS16MW-CS	WIRE TO WIRE	NS12MW-CS	WIRE TO WIRE	NS12MW-CS	WIRE TO WIRE	NS10FW-CS	FRONT SPEAKER LH	NS10FW-CS	FRONT SPEAKER RH
											
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
91	GR	-	1	R	-	3	L	-	4	G	-
96	Y	-	3	L	-	6	R	-	8	Y	-

JCNWM1638Gf

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

# AUDIO UNIT

< ECU DIAGNOSIS >

[BASE AUDIO]

## BASE AUDIO

Connector No.	DB1	Connector No.	D101
Connector Name	WIRE TO WIRE	Connector Name	REAR SPEAKER RH (WITHOUT BOSE SYSTEM)
Connector Type	NS12FW-CS	Connector Type	NS12FW-CS
Terminal No.	Color of Wire	Signal Name [Specification]	Signal Name [Specification]
3	L	-	-
8	R	-	-

Connector No.	D86	Connector No.	M14
Connector Name	REAR SPEAKER LH (WITHOUT BOSE SYSTEM)	Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS	Connector Type	NS16FW-CS
Terminal No.	Color of Wire	Signal Name [Specification]	Signal Name [Specification]
1	L	-	-
2	R	-	-

Connector No.	E105	Connector No.	M19
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4	Connector Type	NS16FW-CS
Terminal No.	Color of Wire	Signal Name [Specification]	Signal Name [Specification]
91	L	-	-
96	P	-	-

Connector No.	TH80FW-CS16-TM4	Connector No.	TH80FW-CS16-TM4
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4	Connector Type	TH80FW-CS16-TM4
Terminal No.	Color of Wire	Signal Name [Specification]	Signal Name [Specification]
100	L	-	-
100	P	-	-

JCNWM1639GI

**AUDIO UNIT**

[BASE AUDIO]

BASE AUDIO		M22		M33		M34	
Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name
Connector Type	TWDYFR	Connector Type	TK08FY-TV	Connector Type	SAB4DFW	Connector Type	SAB4DFW
							
Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire
1	L	24	BR	21	L	2	CAN-H
2	Y	31	GR	22	P	3	CAN-L
		32	O	31	L		VEHICLE SPEED (8-PULSE)
Signal Name [Specification]		Signal Name [Specification]		Signal Name [Specification]		Signal Name [Specification]	
1	-	16	O	16	O	16	STEERING SW SIGNAL B
2	-	18	L	18	L	18	VEHICLE SPEED SIGNAL (8-PULSE)
		19	Y	19	Y	19	BAT
Signal Name [Specification]		Signal Name [Specification]		Signal Name [Specification]		Signal Name [Specification]	
1	2	3	4	5	6	7	8
2	10	11	12	13	14	15	16
3	19	20	21	22	23	24	25
4	26	27	28	29	30	31	32
5	33	34	35	36	37	38	39
6	30	31	32	33	34	35	36
7	37	38	39	40	41	42	43
8	44	45	46	47	48	49	50
9	51	52	53	54	55	56	57
10	58	59	60	61	62	63	64
11	65	66	67	68	69	70	71
12	72	73	74	75	76	77	78
13	79	80	81	82	83	84	85
14	86	87	88	89	90	91	92
15	93	94	95	96	97	98	99

JCNWMM1640GI

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

# AUDIO UNIT

## < ECU DIAGNOSIS >

## [BASE AUDIO]

BASE AUDIO

Connector No.	M60	Connector No.	M82	Connector No.	M352	Connector No.	M401
Connector Name	TWEETER LH	Connector Name	WIRE TO WIRE	Connector Name	COMBINATION SWITCH (SPIRAL CABLE)	Connector Name	AUDIO UNIT
Connector Type	TK02FBR	Connector Type	NS10MW-CS	Connector Type	TR0FGY	Connector Type	GT1SSH-2/Z-S/HU



Connector No.	M92
Connector Name	WIRE TO WIRE
Connector Type	NS10MWN-CS



Connector No.	M0532
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK05FGY



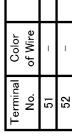
Connector No.	M401
Connector Name	AUDIO UNIT
Connector Type	GT3SSH2/1S-HU



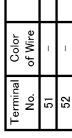
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	B	[Without BOSE system]	2	O	-
2	GR	-[With BOSE system]	6	W	-



Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
16	-	-	51	-	ANTENNA SIGNAL
17	-	-	52	-	ANTENNA AMP ON SIGNAL



Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
16	-	-	51	-	ANTENNA SIGNAL
17	-	-	52	-	ANTENNA AMP ON SIGNAL



Connector No.	M402	Connector No.	M403
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	GT135SC-1/i-S-HU	Connector Type	GT135GN-1/i-P-HU



Connector No.	M404
Connector Name	RADIO ANTENNA
Connector Type	GT13SSN-1/FP-HU

Connector No.	M404
Connector Name	RADIO ANTENNA
Connector Type	GT13SSN-1/FP-HU

Terminal No.	Color of Wires	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-	1	-	-
2	-	-	2	-	-



Terminal No.	Color of Wires	Signal Name [Specification]
1	-	-
2	-	-

Terminal No.	Color of Wires	Signal Name [Specification]
1	-	-
2	-	-

JCNWM1641G

&lt; SYMPTOM DIAGNOSIS &gt;

# SYMPTOM DIAGNOSIS

## AUDIO SYSTEM

### Symptom Table

INFOID:000000004235116

### AUDIO SYSTEM

Symptoms	Check items	Possible malfunction location / Action to take
Audio sound is not heard.	No sound from all speakers.	Audio unit power supply and ground circuit. Refer to <a href="#">AV-11, "AUDIO UNIT : Diagnosis Procedure".</a>
	Sound is not heard only from the specific places.	Sound signal circuit of malfunctioning system.

### RELATED TO STEERING SWITCH

Symptoms	Possible malfunction location / Action to take
All steering switches are not operated.	Steering switch signal ground circuit. Refer to <a href="#">AV-16, "Diagnosis Procedure".</a>
Only specified switch cannot be operated.	Replace steering switch.
"SEEK UP", "VOL UP" and "SOURCE" switches are not operated.	Steering switch signal A circuit. Refer to <a href="#">AV-12, "Diagnosis Procedure".</a>
"SEEK DOWN", "VOL DOWN" and "POWER" switches are not operated.	Steering switch signal B circuit. Refer to <a href="#">AV-14, "Diagnosis Procedure".</a>

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

# NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BASE AUDIO]

## NORMAL OPERATING CONDITION

### Description

INFOID:0000000004235117

#### RELATED TO AUDIO

- The majority of the audio malfunctions are the result of outside causes (bad CD, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.
- The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check that noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment. 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. (6CD models)
- Check that 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.

Symptoms	Cause and Counter measure
Cannot play	Check that the CD was inserted correctly.
	Check that the CD is scratched or dirty.
	Check that there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	The player will play correctly after it returns to the normal temperature if there is a temperature increase error.
	Only the music CD files (CD-DA data) will be played if there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD. (6CD models)
	Files with extensions other than ".MP3", ".WMA", ".mp3", or ".wma" cannot be played. (6CD models)
	Check that the finalization process, such as session close and disc close, is done for the disc.
	Check that the CD is protected by copyright.
Poor sound quality	Check that 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 multi session disc, some time may be required before the music starts playing. (6CD models)
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.

&lt; PRECAUTION &gt;

## PRECAUTION

### PRECAUTIONS FOR USA AND CANADA

#### FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000004678931

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.

### FOR MEXICO

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

INFOID:000000004678932

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. 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".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

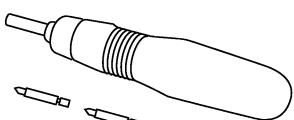
P

&lt; PREPARATION &gt;

**PREPARATION****PREPARATION**

## Commercial Service Tools

INFOID:000000004235120

Tool name	Description
Power tool	 Loosening bolts and nuts PBIC0191E

&lt; ON-VEHICLE REPAIR &gt;

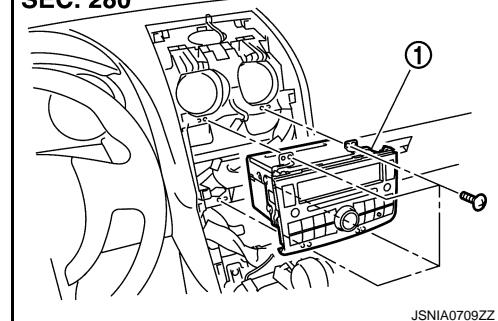
# ON-VEHICLE REPAIR

## AUDIO UNIT

### Exploded View

INFOID:0000000004235121

SEC. 280



1. Audio unit

### Removal and Installation

INFOID:0000000004235122

#### REMOVAL

1. Remove cluster lid C and cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove audio unit mounting screws.
3. Pull out audio unit, remove harness clip, and then disconnect antenna feeder and harness connectors.
4. Remove audio unit and bracket as a unit.
5. Remove brackets from audio unit.

#### INSTALLATION

Install in the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

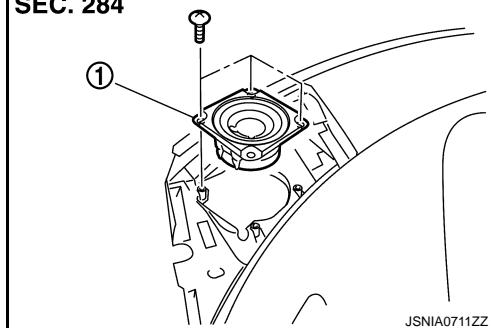
&lt; ON-VEHICLE REPAIR &gt;

## TWEETER

### Exploded View

INFOID:0000000004235123

SEC. 284



JSNIA0711ZZ

1. Tweeter

### Removal and Installation

INFOID:0000000004235124

#### REMOVAL

1. Remove instrument panel. Refer to [IP-13, "Removal and Installation"](#).
2. Remove tweeter from instrument panel.

#### INSTALLATION

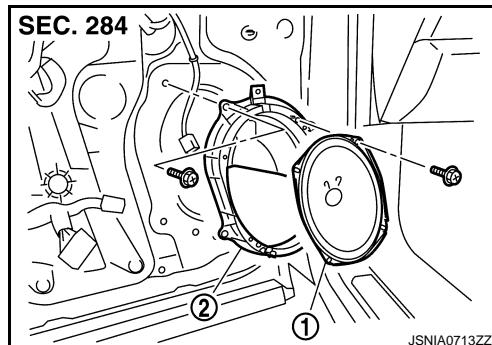
Installation is the reverse order of removal.

&lt; ON-VEHICLE REPAIR &gt;

## FRONT SPEAKER

### Exploded View

INFOID:0000000004235125



1. Front speaker
2. Bracket

### Removal and Installation

INFOID:0000000004235126

#### REMOVAL

1. Remove front door finisher. Refer to [INT-11. "FRONT DOOR FINISHER : Removal and Installation"](#).
2. Remove front door speaker from bracket.

#### INSTALLATION

Install in the reverse order of removal.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

AV

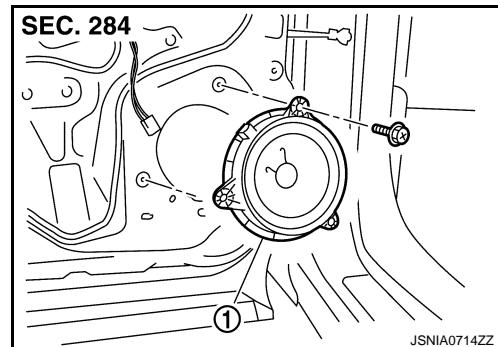
O  
P

&lt; ON-VEHICLE REPAIR &gt;

## REAR SPEAKER

### Exploded View

INFOID:0000000004235127



1. Rear speaker

### Removal and Installation

INFOID:0000000004235128

#### REMOVAL

1. Remove rear door finisher. Refer to [INT-14, "REAR DOOR FINISHER : Removal and Installation"](#).
2. Remove rear speaker.

#### INSTALLATION

Installation is the reverse order of removal.

< ON-VEHICLE REPAIR >

## STEERING SWITCH

### Exploded View

INFOID:0000000004235129

Refer to [SR-5, "Exploded View".](#)

### Removal and Installation

INFOID:0000000004235130

#### REMOVAL

Refer to [SR-5, "Removal and Installation".](#)

#### INSTALLATION

Installation is the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

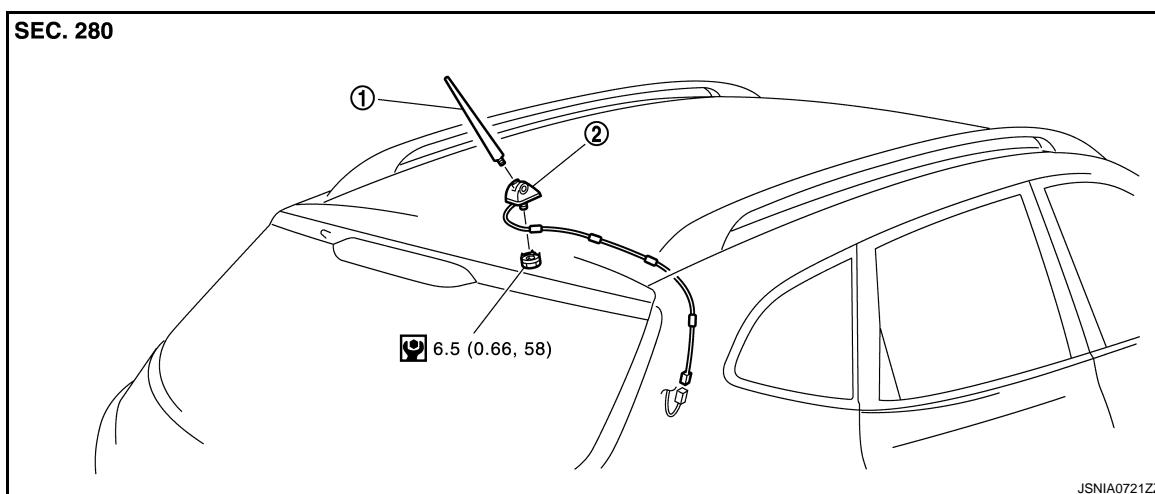
O

P

&lt; ON-VEHICLE REPAIR &gt;

**RADIO ANTENNA****Exploded View**

INFOID:000000004235131



1. Antenna rod

2. Antenna base

**Removal and Installation**

INFOID:000000004235132

**REMOVAL**

1. Remove headlining assembly. Refer to [INT-23, "NORMAL ROOF : Removal and Installation"](#) (normal roof models) or [INT-26, "SUNROOF : Removal and Installation"](#) (sunroof models).
2. Remove nuts, and then remove radio antenna.

**INSTALLATION**

Installation is the reverse order of removal.

**CAUTION:**

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

# ANTENNA FEEDER

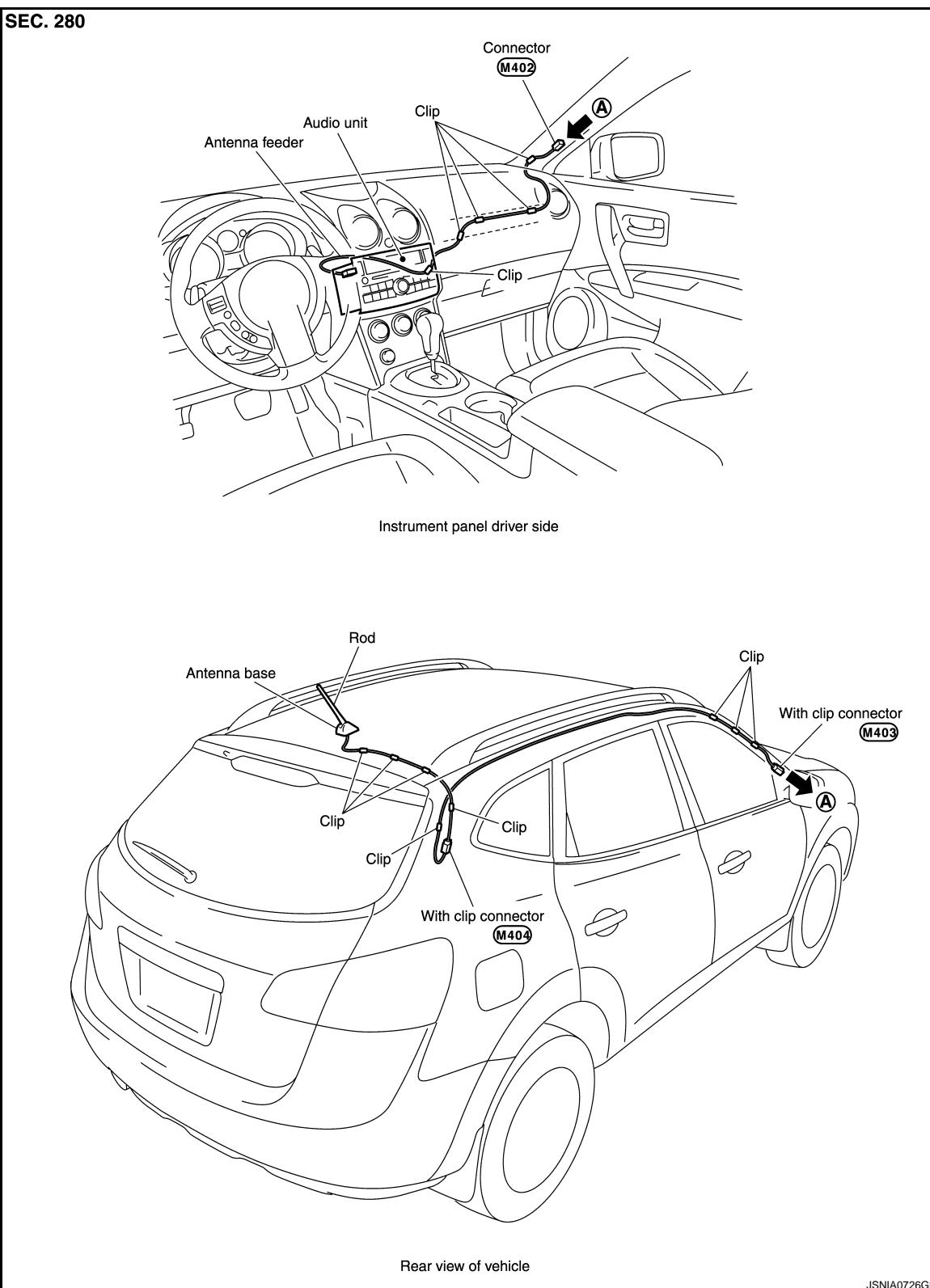
[BASE AUDIO]

< ON-VEHICLE REPAIR >

## ANTENNA FEEDER

### Location of Antenna

INFOID:0000000004235133



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
  
AV  
  
O  
  
P

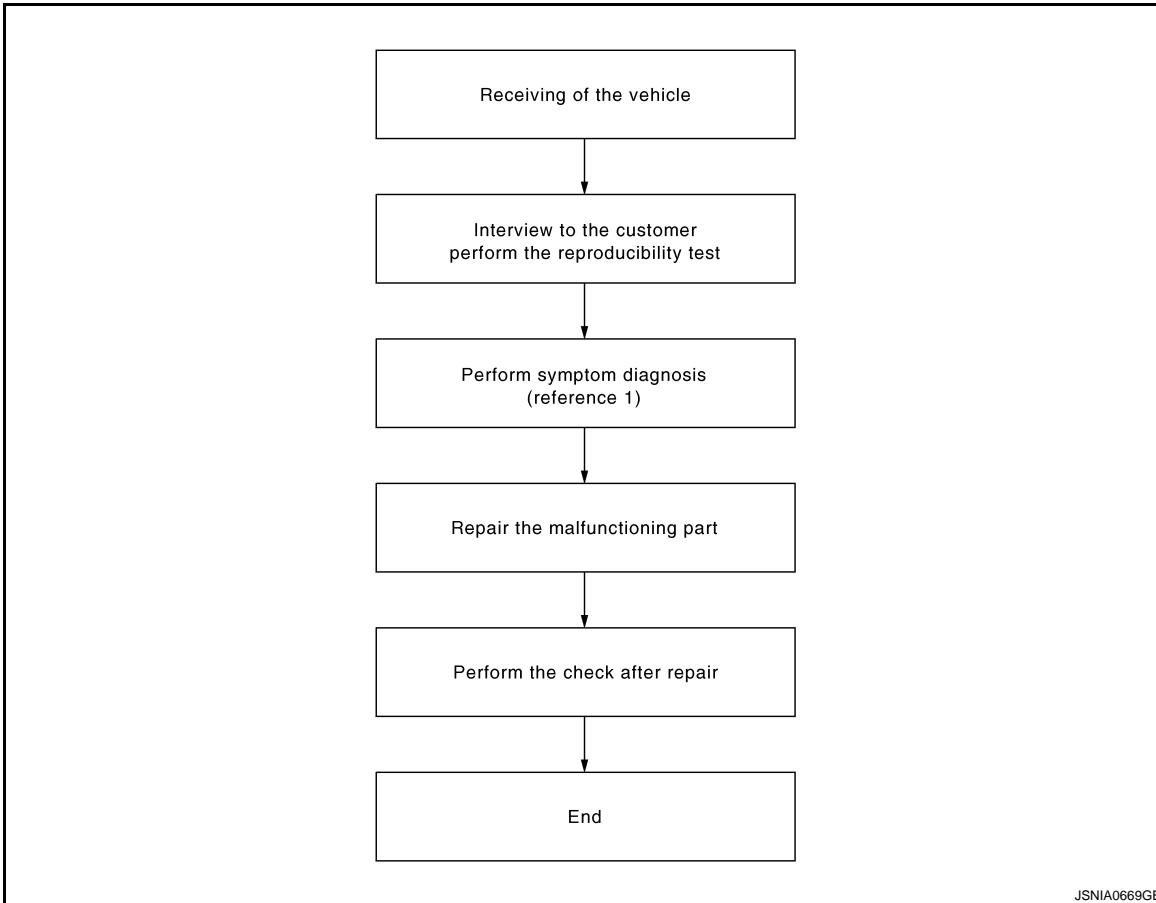
# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORKFLOW

### Work Flow

INFOID:000000004235134

### OVERALL SEQUENCE



Reference 1 ... Refer to [AV-144, "Symptom Table"](#).

### DETAILED FLOW

#### 1. CHECK SYMPTOM

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.

>> GO TO 2.

#### 2. PERFORM DIAGNOSIS BY SYMPTOM

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to [AV-144, "Symptom Table"](#).

>> GO TO 3.

#### 3. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace the malfunctioning parts.

>> GO TO 4.

## DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[BOSE AUDIO]

### 4.FINAL CHECK

Perform the operation to check that the malfunction symptom is solved or any other symptoms are present.

Is there any symptom?

YES >> GO TO 2.

NO >> INSPECTION END

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

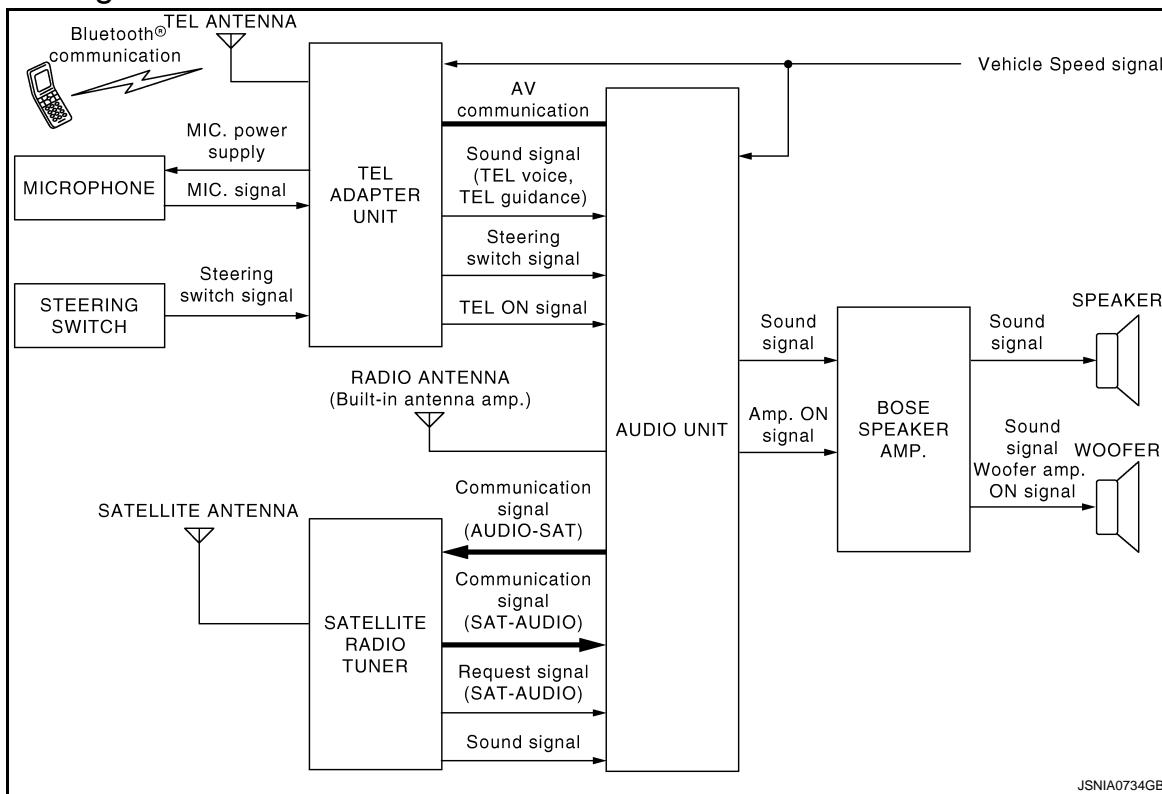
&lt; FUNCTION DIAGNOSIS &gt;

# FUNCTION DIAGNOSIS

## AUDIO SYSTEM

### System Diagram

INFOID:0000000004235135



JSNIA0734GB

### System Description

INFOID:0000000004235136

#### AUDIO SYSTEM

##### Audio functions

AM/FM radio

6CD

- Radio signal are received by radio antenna, next it is amplified by antenna amp., and finally it is input to audio unit. (Antenna amp. is built into radio antenna.)
- Audio unit outputs sound signal to BOSE amp. and BOSE amp. outputs to each speaker.

##### SATELLITE RADIO SYSTEM

- Radio signal are supplied to satellite radio tuner from the satellite antenna.
- The satellite radio tuner then sends sound signal to the audio unit.
- Audio unit outputs sound signal to BOSE amp. and BOSE amp. outputs to each speaker.

##### SPEED SENSITIVE VOLUME

- Volume level of this system goes up and down automatically in proportion to the vehicle speed.
- The control level can be selected by the customer.

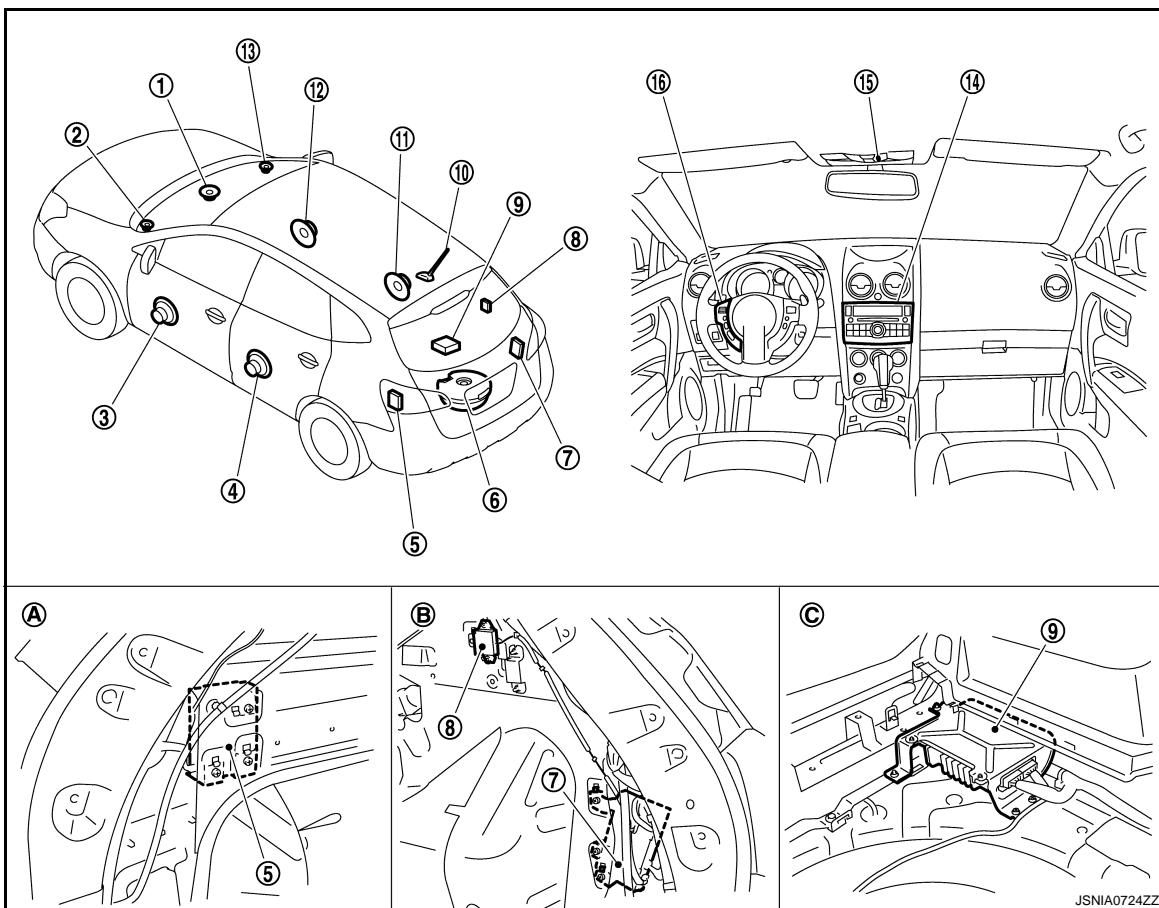
# AUDIO SYSTEM

[BOSE AUDIO]

< FUNCTION DIAGNOSIS >

## Component Parts Location

INFOID:000000004235137



- |                                     |                          |                      |
|-------------------------------------|--------------------------|----------------------|
| 1. Center speaker                   | 2. Tweeter LH            | 3. Front speaker LH  |
| 4. Rear speaker LH                  | 5. Satellite radio tuner | 6. Woofer            |
| 7. TEL adapter unit                 | 8. TEL antenna           | 9. BOSE amp.         |
| 10. Radio & satellite radio antenna | 11. Rear speaker RH      | 12. Front speaker RH |
| 13. Tweeter RH                      | 14. Audio unit           | 15. Microphone       |
| 16. Steering switch                 |                          |                      |
| A. Luggage side LH                  | B. Luggage side RH       | C. Luggage side RH   |

## Component Description

INFOID:000000004235138

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L

M

AV

O

P

Part name	Description
Audio unit	Controls audio system and satellite radio system functions.
BOSE amp.	<ul style="list-style-type: none"> <li>• Receives power (amp. ON) and sound signals from audio unit, and outputs sound signals to each speaker.</li> <li>• Woofer amp. ON signal is output to woofer.</li> </ul>
Steering switch	<ul style="list-style-type: none"> <li>• Each audio operation can be operated.</li> <li>• Steering switch signal (operation signal) is output to audio unit. (without hands-free phone system)</li> <li>• Steering switch signal (operation signal) is output to audio unit through TEL adapter unit. (with hands-free phone system)</li> </ul>
Front speaker	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs high, mid and low range sounds.</li> </ul>
Tweeter	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs high range sounds.</li> </ul>
Center speaker	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs mid and high range sounds.</li> </ul>

## AUDIO SYSTEM

### < FUNCTION DIAGNOSIS >

[BOSE AUDIO]

Part name	Description
Rear speaker	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs high, mid and low range sounds.</li></ul>
Woofer	<ul style="list-style-type: none"><li>• Woofer amp. ON signal is input from BOSE amp.</li><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low range sounds.</li></ul>
Radio & satellite radio antenna	<p>Radio antenna</p> <ul style="list-style-type: none"><li>• Radio signal received by radio antenna is amplified and sent to audio unit.</li><li>• Power (antenna amp. ON signal) is supplied from audio unit.</li><li>• Satellite radio antenna</li><li>• Sound signal (satellite radio) is received and output to audio unit.</li></ul>
Satellite radio tuner	<ul style="list-style-type: none"><li>• Receives radio signals from satellite antenna.</li><li>• Sends sound signals to audio unit.</li></ul>

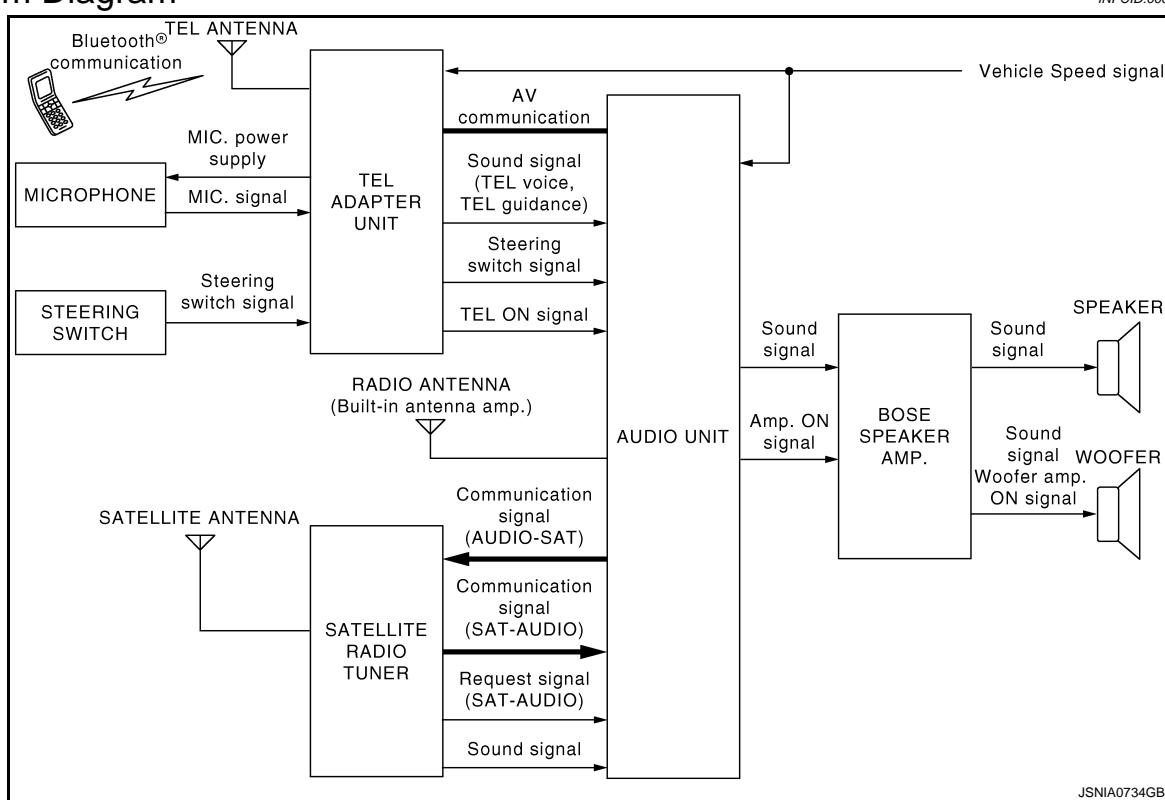
# HANDS-FREE PHONE SYSTEM

[BOSE AUDIO]

< FUNCTION DIAGNOSIS >

## HANDS-FREE PHONE SYSTEM

### System Diagram



### System Description

- INFOID:0000000004235140
- 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 audio unit and output via BOSE amp. to the front speaker when operating the telephone.
  - TEL adapter unit has the on board self-diagnosis function. Refer to [AV-47, "Diagnosis Description"](#).

#### WHEN RECEIVING A CALL

Telephone voice signal received with the portable telephone is input from TEL antenna via TEL adapter unit to audio unit with Bluetooth communication and output via BOSE amp. to the front speaker. The operation is performed with the steering switch or voice recognition function.

#### WHEN A CALL IS ORIGINATED

Speech sound (telephone voice signal) is input from the microphone to the TEL adapter unit. It is input from the TEL antenna via Bluetooth 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.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV

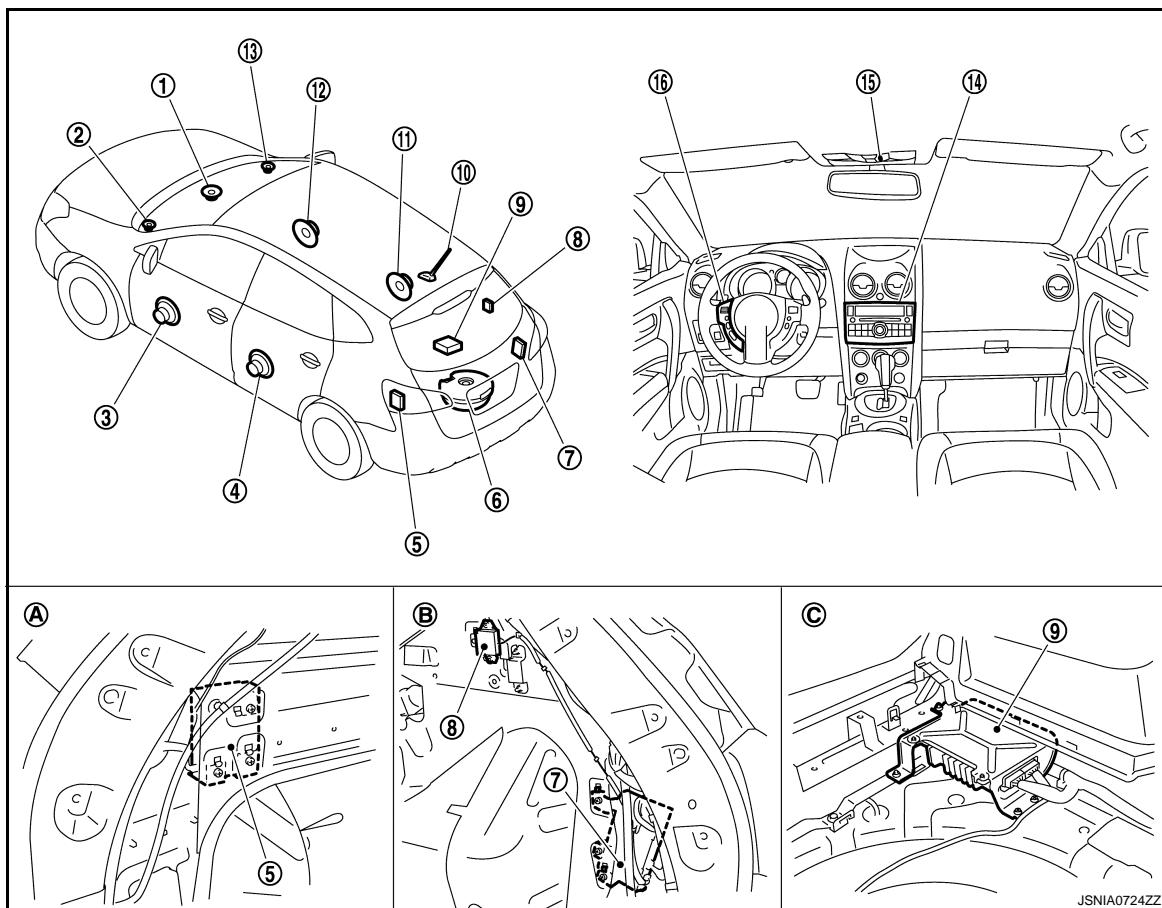
# HANDS-FREE PHONE SYSTEM

[BOSE AUDIO]

< FUNCTION DIAGNOSIS >

## Component Parts Location

INFOID:000000004235141



- |                                     |                          |                      |
|-------------------------------------|--------------------------|----------------------|
| 1. Center speaker                   | 2. Tweeter LH            | 3. Front speaker LH  |
| 4. Rear speaker LH                  | 5. Satellite radio tuner | 6. Woofer            |
| 7. TEL adapter unit                 | 8. TEL antenna           | 9. BOSE amp.         |
| 10. Radio & satellite radio antenna | 11. Rear speaker RH      | 12. Front speaker RH |
| 13. Tweeter RH                      | 14. Audio unit           | 15. Microphone       |
| 16. Steering switch                 |                          |                      |
| A. Luggage side LH                  | B. Luggage side RH       | C. Luggage side RH   |

## Component Description

INFOID:000000004235142

Part name	Description
Audio unit	<ul style="list-style-type: none"> <li>• Receives telephone voice signal from TEL adapter unit.</li> <li>• Sends telephone voice and voice guidance signals to BOSE amp.</li> <li>• Audio unit and TEL adapter unit exchange data by AV communication, and control audio unit display.</li> </ul>
BOSE amp.	Inputs power (amp. ON) and sound signal from audio unit, and outputs sound signal to each speaker.
Front door speaker	
Tweeter	Receives telephone voice and voice guidance signals from BOSE amp.
Center speaker	
Steering switch	<ul style="list-style-type: none"> <li>• The hands free phone system can be operated.</li> <li>• Steering switch signal (operation signal) is output to audio unit through TEL adapter unit.</li> </ul>
Microphone	<ul style="list-style-type: none"> <li>• Uses when operating the hands-free phone.</li> <li>• Outputs microphone signal (telephone voice signal) to the TEL adapter unit.</li> <li>• The power (microphone power supply) is supplied from the TEL adapter unit.</li> </ul>

# HANDS-FREE PHONE SYSTEM

[BOSE AUDIO]

< FUNCTION DIAGNOSIS >

Part name	Description
TEL adapter unit	<ul style="list-style-type: none"><li>• Receives the steering switch signal (operation signal) from the steering switch.</li><li>• Inputs the telephone voice signal from TEL antenna during reception and outputs into the audio unit.</li><li>• Inputs the telephone voice signal from microphone during speech recognition and outputs it to the TEL antenna.</li></ul>
TEL antenna	Connects with the portable telephone via Bluetooth® communication and communicates the telephone voice signal.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

# DIAGNOSIS SYSTEM (AUDIO UNIT)

< FUNCTION DIAGNOSIS >

[BOSE AUDIO]

## DIAGNOSIS SYSTEM (AUDIO UNIT)

### Diagnosis Description

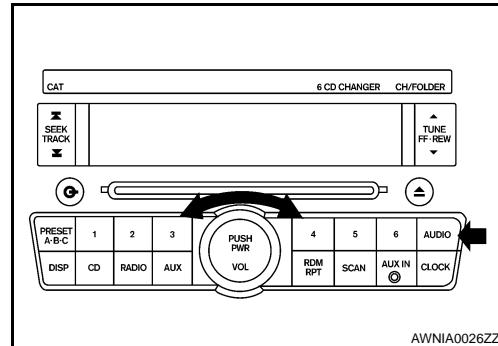
INFOID:0000000004235143

Self-diagnosis mode can check the following items.

- Audio unit hardware/software versions
- Continuity of each speaker channel
- Continuity of each audio unit switch

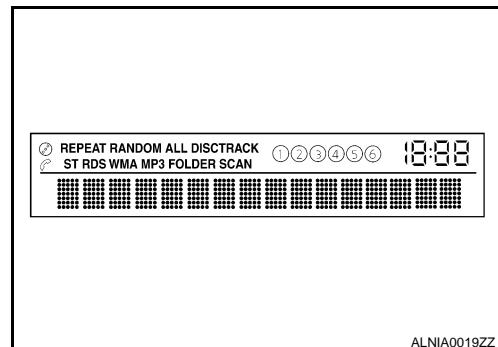
### OPERATION PROCEDURE

1. Turn ignition switch to the ON position.
2. Turn the audio unit off.
3. While pressing the "AUDIO" button, turn the volume control dial clockwise or counterclockwise 30 clicks or more. When the self-diagnosis mode is started, a short beep will be heard.



AWNIA0026ZZ

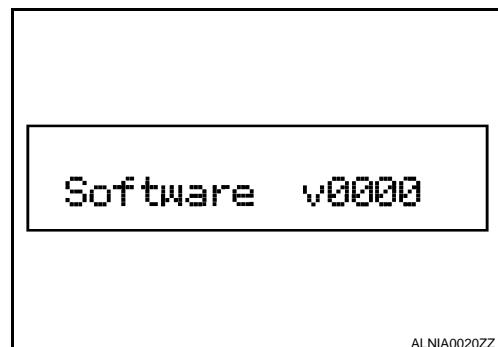
4. Initially, all display segments will be illuminated.



ALNIA0019ZZ

### Version Check

1. Press the "AUDIO" switch to enter version diagnostics. "Software" (audio software version) is displayed.



ALNIA0020ZZ

# DIAGNOSIS SYSTEM (AUDIO UNIT)

[BOSE AUDIO]

## < FUNCTION DIAGNOSIS >

2. Press the “AUDIO” switch again to display the “Hardware” (audio hardware version).



ALNIA0021ZZ

A  
B  
C  
D  
E  
F  
G

3. Press the “AUDIO” switch again to display the “CD Mech” (CD mechanism version).



ALNIA0022ZZ

H  
I  
J  
K  
L  
M

4. Press the “AUDIO” switch again to display the “SDARS” (satellite radio version).



ALNIA0023ZZ

N  
O  
P  
AV

## Channel Check Diagnostics

When all segments are illuminated, press the “TUNE” up switch to enter channel check diagnostics. The self-diagnostic function will then send a tone to each channel (FL, RL, RR, FR) for 1 second.



ALNIA0024ZZ

O  
P

## Button Check Diagnostics

## DIAGNOSIS SYSTEM (AUDIO UNIT)

### < FUNCTION DIAGNOSIS >

[BOSE AUDIO]

When all segments are illuminated, press the "TUNE" down switch to enter button check diagnostics. When each audio unit switch is pressed, a tone will sound and the switch name will be displayed.

BUTTON CHECK

ALNIA0025ZZ

**DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)****Diagnosis Description**

INFOID:0000000004235144

**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
STEP 1	Self-diagnosis	The self-diagnosis mode performs the microphone test and the diagnosis of TEL adapter unit, TEL antenna and steering unit, and then reads out the results with the sound and indicates them on the audio screen.
STEP 2	Hands free phone system initialization	Hands free phone system initialization mode can perform the initialization of hands free phone system.
	Speaker adaptation data deleting	The speaker adaptation data deleting mode can delete the speaker adaptation data.

**SELF-DIAGNOSIS RESULTS**

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

**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 (Audio screen)	Failure message	Possible causes
DTC 10000	Internal failure	TEL adapter unit
DTC 01000	Bluetooth antenna open	TEL antenna
DTC 00100	Bluetooth antenna shorted	
DTC 00010	Button ladder A is stuck	Steering switch
DTC 00001	Button ladder B is stuck	
DTC 00000	There are no failure records to report	—

## The Details of Error Count

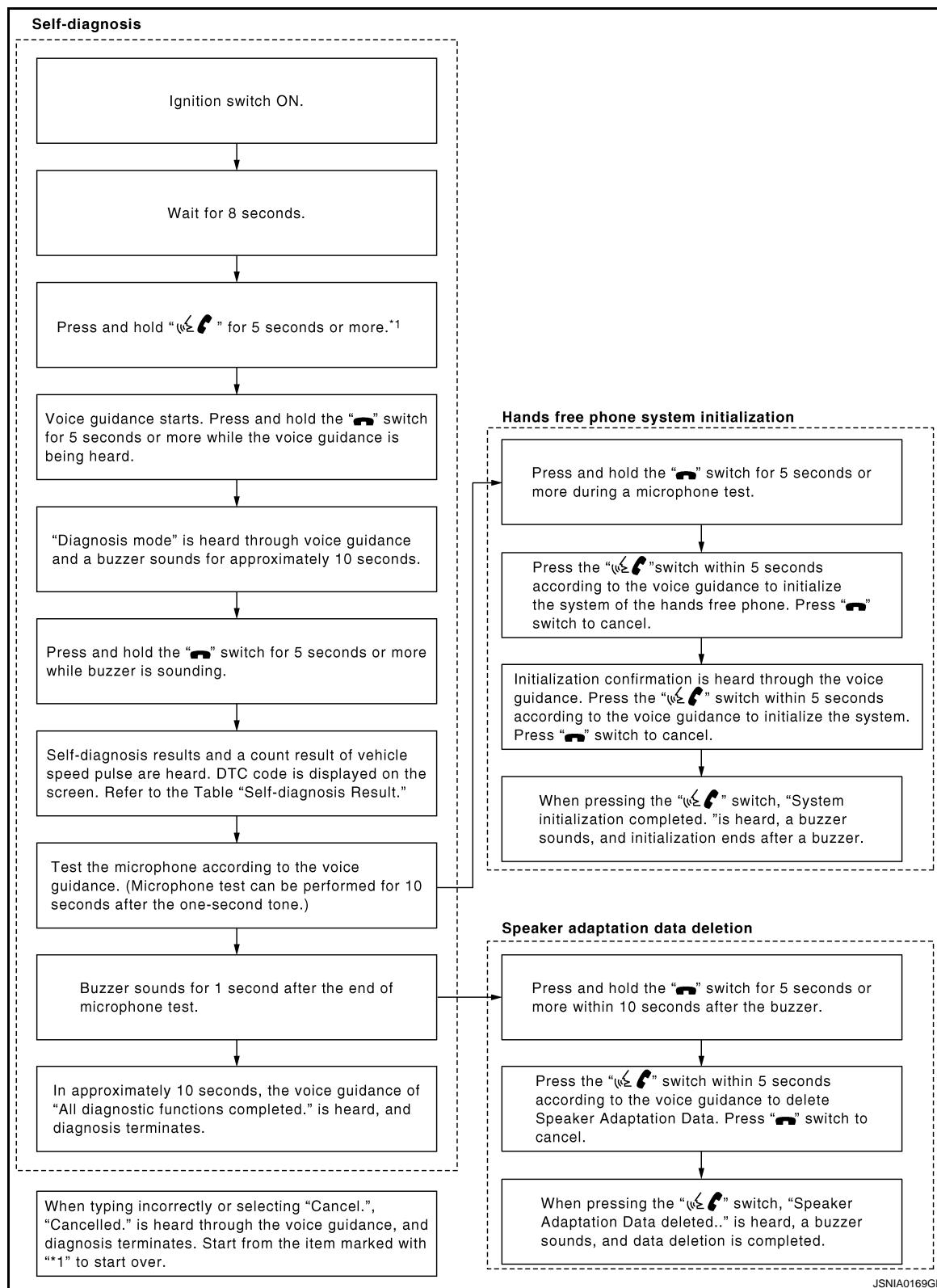
The error count guides "0" when the error occurs. The next time it counts up "1" if it is normal with the ignition switch ON. It continues the count up unless the initialization of hands free phone system is performed.

# DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)

< FUNCTION DIAGNOSIS >

[BOSE AUDIO]

## FLOW CHART OF TROUBLE DIAGNOSIS



JSNIA0169GB

## COMPONENT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT AUDIO UNIT

#### AUDIO UNIT : Diagnosis Procedure

INFOID:000000004235145

##### 1. CHECK FUSE

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

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	20

##### Is inspection result OK?

YES >> GO TO 2.

NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

##### 2. CHECK AUDIO UNIT POWER SUPPLY CIRCUIT

Check voltage between the audio unit and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage
Battery power supply	M46	19	OFF	Battery voltage
ACC power supply	M46	7	ACC	Battery voltage

##### Is inspection result OK?

YES >> INSPECTION END

NO >> Check harness between audio unit and fuse.

### BOSE AMP.

#### BOSE AMP. : Diagnosis Procedure

INFOID:000000004235146

##### 1. CHECK FUSE

Check that the following fuses of the BOSE amp. are not blown.

Power source	Fuse No.
Battery	13

##### Is inspection result OK?

YES >> GO TO 2.

NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

##### 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between BOSE speaker amp harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage
Battery power supply	B64	11	OFF	Battery voltage

##### Is inspection result OK?

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.

# POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B64	12	OFF	Continuity should exist.

Is inspection result OK?

- YES >> INSPECTION END  
NO >> Repair harness or connector.

## SATELLITE RADIO TUNER

### SATELLITE RADIO TUNER : Diagnosis Procedure

INFOID:000000004235147

#### 1. CHECK FUSES

Check that the following fuses of the satellite radio tuner are not blown.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	20

Is inspection result OK?

- YES >> GO TO 2.  
NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

#### 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between the satellite radio tuner and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage
Battery power supply	B19	12	OFF	Battery voltage
ACC power supply	B19	16	ACC	Battery voltage

Is inspection result OK?

- YES >> INSPECTION END  
NO >> Check harness between satellite radio tuner and fuse.

## TEL ADAPTER UNIT

### TEL ADAPTER UNIT : Diagnosis Procedure

INFOID:000000004235148

#### 1. CHECK FUSES

Check that the following fuses of the TEL adapter unit are not blown.

Power source	Fuse No.
Battery	35
Ignition switch ACC or ON	20
Ignition switch ON or START	1

Is inspection result OK?

- YES >> GO TO 2.  
NO >> If fuse is blown, be sure to eliminate 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	Voltage
Battery power supply	B6	1	OFF	Battery voltage
ACC power supply	B6	2	ACC	Battery voltage
Ignition signal	B6	3	ON	Battery voltage

Is inspection result OK?

# POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

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	B6	4	OFF	Continuity should exist.
		21	OFF	Continuity should exist.
		22	OFF	Continuity should exist.
		23	OFF	Continuity should exist.
		24	OFF	Continuity should exist.

Is inspection result OK?

YES >> INSPECTION END

NO >> Repair harness or connector.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

# STEERING SWITCH SIGNAL A CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL A CIRCUIT

### Description

INFOID:0000000004678870

Transmits the steering switch signal to audio unit.

### Diagnosis Procedure

INFOID:0000000004678871

#### 1.CHECK STEERING SWITCH SIGNAL A CIRCUIT

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

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

4. Check continuity between audio unit harness connector.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	6		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

#### Is inspection result OK?

- 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.

(+)		(-)		Voltage (Approx.)
Audio unit		Audio unit		
Connector	Terminal	Connector	Terminal	
M46	6	M46	15	3.3 V

#### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace audio unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch ON.
2. Check steering switch. Refer to [AV-53, "Component Inspection"](#).

#### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

# STEERING SWITCH SIGNAL A CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

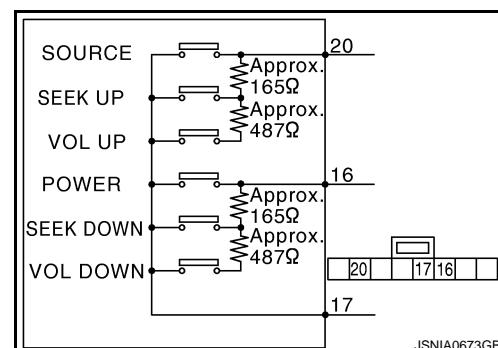
## Component Inspection

INFOID:000000004678872

Measure the resistance between the steering switch connector.

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
16	17	VOL UP switch ON	645 – 659
		SEEK UP switch ON	163 – 167
		SOURCE switch ON	0
20	17	VOL DOWN switch ON	645 – 659
		SEEK DOWN switch ON	163 – 167
		POWER switch ON	0



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# STEERING SWITCH SIGNAL B CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL B CIRCUIT

### Description

INFOID:0000000004678873

Transmits the steering switch signal to audio unit.

### Diagnosis Procedure

INFOID:0000000004678874

#### 1.CHECK STEERING SWITCH SIGNAL B CIRCUIT

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

Audio unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M46	16	M33	32	Existed

4. Check continuity between audio unit harness connector.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	16		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

#### Is inspection result OK?

- 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.

(+)		(-)		Voltage (Approx.)
Audio unit		Audio unit		
Connector	Terminal	Connector	Terminal	
M46	16	M46	15	3.3 V

#### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace audio unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch ON.
2. Check steering switch. Refer to [AV-55, "Component Inspection"](#).

#### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

# STEERING SWITCH SIGNAL B CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

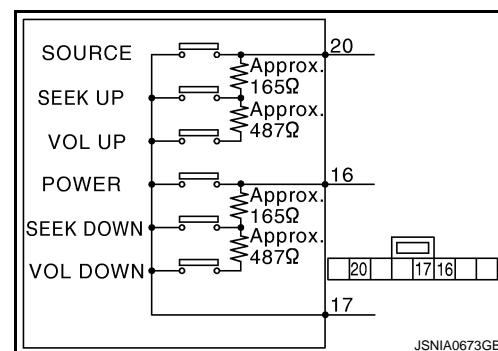
## Component Inspection

INFOID:000000004678875

Measure the resistance between the steering switch connector.

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
16	17	VOL UP switch ON	645 – 659
		SEEK UP switch ON	163 – 167
		SOURCE switch ON	0
20	17	VOL DOWN switch ON	645 – 659
		SEEK DOWN switch ON	163 – 167
		POWER switch ON	0



# STEERING SWITCH SIGNAL GND CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL GND CIRCUIT

### Description

INFOID:0000000004678876

Transmits the steering switch signal to audio unit.

### Diagnosis Procedure

INFOID:0000000004678877

#### 1.CHECK STEERING SWITCH SIGNAL GND CIRCUIT

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

Audio unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M46	15	M33	31	Existed

##### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

##### Is inspection result OK?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3.CHECK GROUND CIRCUIT

1. Connect audio unit connector.
2. Check continuity between audio unit harness connector terminals 15 and ground.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	15		Existed

##### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace audio unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch ON.
2. Check steering switch. Refer to [AV-56, "Component Inspection"](#).

##### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:0000000004678878

Measure the resistance between the steering switch connector.

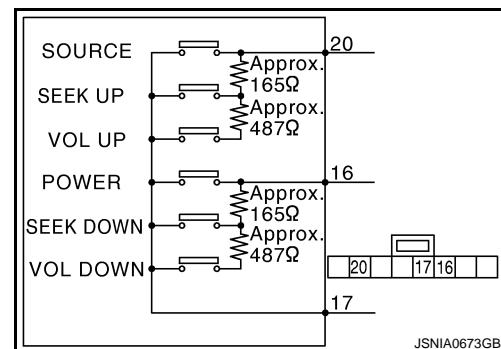
# STEERING SWITCH SIGNAL GND CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
16	17	VOL UP switch ON	645 – 659
		SEEK UP switch ON	163 – 167
		SOURCE switch ON	0
20	17	VOL DOWN switch ON	645 – 659
		SEEK DOWN switch ON	163 – 167
		POWER switch ON	0



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

AV

O  
P

# STEERING SWITCH SIGNAL A CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL A CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

### Description

INFOID:000000004235149

- Transmits the steering switch signal to TEL adapter unit.
- Transmits the steering switch signal to audio unit through TEL adapter unit.

### Diagnosis Procedure

INFOID:000000004235150

#### 1. CHECK STEERING SWITCH SIGNAL A CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

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

TEL adapter unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
B6	12	M33	24	Existed

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

TEL adapter unit		Ground	Continuity
Connector	Terminal		
B6	12		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

#### Is inspection result OK?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK TEL ADAPTER UNIT VOLTAGE

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

(+)	(-)	Voltage (Approx.)		
TEL adapter unit	TEL adapter unit			
Connector	Terminal	Connector	Terminal	
B6	12	B6	14	5.0 V

#### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace TEL adapter unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-59, "Component Inspection"](#).

#### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

# STEERING SWITCH SIGNAL A CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

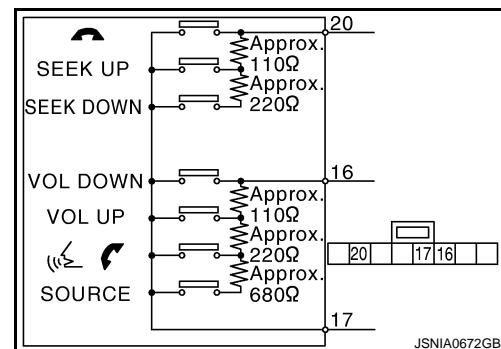
## Component Inspection

INFOID:000000004235151

Measure the resistance between the steering switch connector.

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
16	17	SOURCE switch ON	1000 – 1020
		⌚ switch ON	327 – 333
		VOL UP switch ON	109 – 111
		VOL DOWN switch ON	0
		SEEK DOWN switch ON	327 – 333
		SEEK UP switch ON	109 – 111
20		⌚ switch ON	0



# STEERING SWITCH SIGNAL B CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL B CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

### Description

INFOID:000000004235152

- Transmits the steering switch signal to TEL adapter unit.
- Transmits the steering switch signal to audio unit through TEL adapter unit.

### Diagnosis Procedure

INFOID:000000004235153

#### 1. CHECK STEERING SWITCH SIGNAL B CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

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

TEL adapter unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
B6	13	M33	32	Existed

4. Check continuity between audio unit harness connector.

TEL adapter unit		Ground	Continuity
Connector	Terminal		
B6	13		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

#### Is inspection result OK?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK TEL ADAPTER UNIT VOLTAGE

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

(+)	(-)	Voltage (Approx.)		
TEL adapter unit	TEL adapter unit			
Connector	Terminal	Connector	Terminal	
B6	13	B6	14	5.0 V

#### Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace TEL adapter unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-61, "Component Inspection"](#).

#### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

# STEERING SWITCH SIGNAL B CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

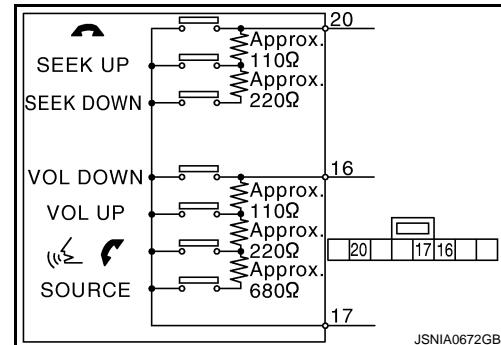
## Component Inspection

INFOID:000000004235154

Measure the resistance between the steering switch connector.

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
16	17	SOURCE switch ON	1000 – 1020
		⌚ switch ON	327 – 333
		VOL UP switch ON	109 – 111
		VOL DOWN switch ON	0
		SEEK DOWN switch ON	327 – 333
		SEEK UP switch ON	109 – 111
20		⌚ switch ON	0



# STEERING SWITCH SIGNAL GND CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL GND CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

### Description

INFOID:000000004235155

- Transmits the steering switch signal to TEL adapter unit.
- Transmits the steering switch signal to audio unit through TEL adapter unit.

### Diagnosis Procedure

INFOID:000000004235156

#### 1. CHECK STEERING SWITCH SIGNAL GND CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

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

TEL adapter unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
B6	14	M33	31	Existed

Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

Is inspection result OK?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK GROUND CIRCUIT

1. Connect TEL adapter unit connector.
2. Check continuity between TEL adapter unit harness connector.

TEL adapter unit		Ground	Continuity
Connector	Terminal		
B6	14		Existed

Is inspection result OK?

- YES >> GO TO 4.  
NO >> Replace TEL adapter unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-62, "Component Inspection"](#).

Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000004235157

Measure the resistance between the steering switch connector.

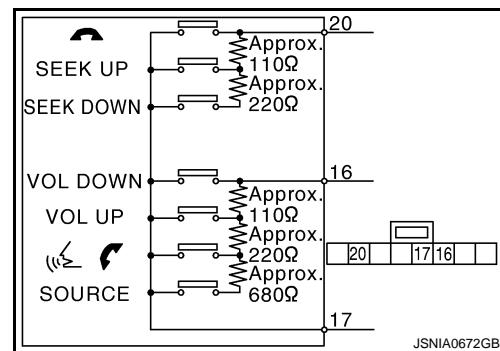
# STEERING SWITCH SIGNAL GND CIRCUIT (STEERING SWITCH TO TEL ADAPTER UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

Standard

Steering switch		Condition	Resistance Ω
Terminal	Terminal		
16	17	SOURCE switch ON	1000 – 1020
		⌚ switch ON	327 – 333
		VOL UP switch ON	109 – 111
		VOL DOWN switch ON	0
		SEEK DOWN switch ON	327 – 333
		SEEK UP switch ON	109 – 111
20		⌚ switch ON	0



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

AV

O  
P

# STEERING SWITCH SIGNAL A CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)

< COMPONENT DIAGNOSIS > [BOSE AUDIO]

## STEERING SWITCH SIGNAL A CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)

### Description

INFOID:000000004235158

- Transmits the steering switch signal to TEL adapter unit.
- Transmits the steering switch signal to audio unit through TEL adapter unit.

### Diagnosis Procedure

INFOID:000000004235159

#### 1. CHECK STEERING SWITCH SIGNAL A (TEL ADAPTER UNIT TO AUDIO UNIT) CIRCUIT

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

Audio unit		TEL adapter unit		Continuity
Connector	Terminal	Connector	Terminal	
M46	6	B6	17	Existed

4. Check continuity between audio unit harness connector.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	6		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AUDIO UNIT VOLTAGE

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

(+)		(-)		Voltage (Approx.)
Audio unit		Audio unit		
Connector	Terminal	Connector	Terminal	
M46	6	M46	15	3.3 V

#### Is inspection result OK?

- YES >> Replace TEL adapter unit.  
NO >> Replace audio unit.

# STEERING SWITCH SIGNAL B CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL B CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)

### Description

INFOID:000000004235160

- Transmits the steering switch signal to TEL adapter unit.
- Transmits the steering switch signal to audio unit through TEL adapter unit.

### Diagnosis Procedure

INFOID:000000004235161

#### 1. CHECK STEERING SWITCH SIGNAL B (TEL ADAPTER UNIT TO AUDIO UNIT) CIRCUIT

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

Audio unit		TEL adapter unit		Continuity
Connector	Terminal	Connector	Terminal	
M46	16	B6	18	Existed

4. Check continuity between audio unit harness connector terminal.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	16		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AUDIO UNIT VOLTAGE

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

(+)		(-)		Voltage (Approx.)
Audio unit		Audio unit		
Connector	Terminal	Connector	Terminal	
M46	16	M46	15	3.3 V

#### Is inspection result OK?

- YES >> Replace TEL adapter unit.  
NO >> Replace audio unit.

# STEERING SWITCH SIGNAL GND CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## STEERING SWITCH SIGNAL GND CIRCUIT (TEL ADAPTER UNIT TO AUDIO UNIT)

### Description

INFOID:000000004235162

- Transmits the steering switch signal to TEL adapter unit.
- Transmits the steering switch signal to audio unit through TEL adapter unit.

### Diagnosis Procedure

INFOID:000000004235163

#### 1. CHECK STEERING SWITCH SIGNAL GND (TEL ADAPTER UNIT TO AUDIO UNIT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect audio unit connector and TEL adapter unit connector.
3. Check continuity between audio unit harness connector terminal 15 and TEL adapter unit harness connector terminal 19.

Audio unit		TEL adapter unit		Continuity
Connector	Terminal	Connector	Terminal	
M46	15	B6	19	Existed

##### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK GROUND CIRCUIT

1. Connect audio unit connector.
2. Check continuity between audio unit harness connector.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	15		Existed

##### Is inspection result OK?

- YES >> Replace TEL adapter unit.  
NO >> Replace audio unit.

# COMMUNICATION SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## COMMUNICATION SIGNAL CIRCUIT

### Description

INFOID:0000000004235164

Satellite radio tuner and audio unit are connected with a serial communication. They transmit the operation signal from audio unit to satellite radio tuner.

### Diagnosis Procedure

INFOID:0000000004235165

#### 1.CHECK CONTINUITY COMMUNICATION SIGNAL (AUDIO-SAT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner connector and audio unit connector.
3. Check continuity between satellite radio tuner harness connector and audio unit harness connector.

Satellite radio tuner		Audio unit		Continuity
Connector	Terminal	Connector	Terminal	
B19	9	M48	39	Existed
	10		40	Existed

4. Check continuity between satellite radio tuner harness connector and ground.

Satellite radio tuner		Ground	Continuity
Connector	Terminal		
B19	9		Not existed
	10		

#### Is inspection result OK?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2.CHECK AUDIO UNIT

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

Audio unit		Ground	Voltage (Approx.)
Connector	Terminal		
M48	39		4.0 V

#### Is inspection result OK?

YES >> GO TO 3.

NO >> Replace audio unit.

#### 3.CHECK SATELLITE RADIO TUNER

1. Turn ignition switch OFF.
2. Disconnect audio unit connector, and connect satellite radio tuner connector.
3. Turn ignition switch ON.
4. Check voltage between satellite radio tuner harness connector and ground.

Satellite radio tuner		Ground	Voltage (Approx)
Connector	Terminal		
B19	10		7.5 V

#### Is inspection result OK?

YES >> GO TO 4.

NO >> Replace satellite radio tuner.

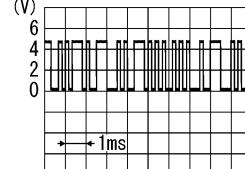
# COMMUNICATION SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## 4. CHECK COMMUNICATION SIGNAL (SAT-AUDIO)

1. Turn ignition switch OFF.
2. Connect audio unit connector.
3. Turn ignition switch ON.
4. Check signal between satellite radio tuner harness connector and ground.

Satellite radio tuner		Condition	Reference value
Connector	Terminal		
B19	9	Ground When satellite radio mode is selected.	 PKIB5039J

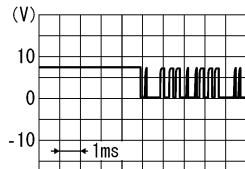
Is inspection result OK?

YES >> GO TO 5.

NO >> Replace satellite radio tuner.

## 5. CHECK COMMUNICATION SIGNAL (AUDIO-SAT)

Check signal between audio unit harness connector and ground.

Audio unit		Condition	Reference value
Connector	Terminal		
M48	40	Ground When satellite radio mode is selected.	 SKIA9301J

Is inspection result OK?

YES >> INSPECTION END

NO >> Replace audio unit.

# REQUEST SIGNAL CIRCUIT (SAT TO AUDIO)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## REQUEST SIGNAL CIRCUIT (SAT TO AUDIO)

### Description

INFOID:0000000004235166

Request signal transmits the signal to recognize the connection of satellite radio tuner from satellite radio tuner to audio unit.

### Diagnosis Procedure

INFOID:0000000004235167

#### 1. CHECK CONTINUITY REQUEST SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner connector and audio unit connector.
3. Check continuity between satellite radio tuner unit harness connector and audio unit harness connector.

Satellite radio tuner		Audio unit		Continuity
Connector	Terminal	Connector	Terminal	
B19	8	M48	38	Existed

4. Check continuity between satellite radio tuner harness connector and ground.

Satellite radio tuner		Ground	Continuity
Connector	Terminal		
B19	8		Not existed

#### Is inspection result OK?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK AUDIO UNIT

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

Audio unit		Ground	Voltage (Approx.)
Connector	Terminal		
M48	38		4.0 V

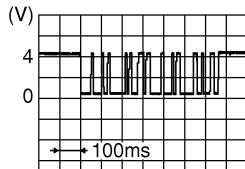
#### Is inspection result OK?

YES >> GO TO 3.

NO >> Replace audio unit.

#### 3. CHECK CONTINUITY REQUEST SIGNAL

1. Turn ignition switch OFF.
2. Connect satellite radio tuner connector.
3. Turn ignition switch ON.
4. Check signal between satellite radio tuner harness connector and ground.

Satellite radio tuner		Condition	Reference value
Connector	Terminal		
B19	8	When satellite radio mode is selected.	 JSNIA0675ZZ

## REQUEST SIGNAL CIRCUIT (SAT TO AUDIO)

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

Is inspection result OK?

- YES    >> INSPECTION END
- NO     >> Replace satellite radio tuner.

&lt; COMPONENT DIAGNOSIS &gt;

**AMP. ON SIGNAL CIRCUIT****Description**

INFOID:0000000004235168

When the audio system is turned on, a voltage signal is supplied from the audio unit to the BOSE amp. When this signal is received, the BOSE amp. will turn on.

**Diagnosis Procedure**

INFOID:0000000004235169

**1. CHECK CONTINUITY AMP. ON SIGNAL CIRCUIT**

1. Turn ignition switch OFF.
2. Disconnect audio unit connector and BOSE amp. connector.
3. Check continuity between audio unit harness connector and BOSE amp. harness connector.

Audio unit		BOSE amp.		Continuity
Connector	Terminal	Connector	Terminal	
M46	1	B65	31	Existed

4. Check continuity between audio unit harness connector terminal 1 and ground.

Audio unit		Ground	Continuity
Connector	Terminal		
M46	1		Not existed

Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

**2. CHECK VOLTAGE AMP. ON SIGNAL**

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

Audio unit		Ground	Voltage (Approx.)
Connector	Terminal		
M46	1		12.0 V

Is inspection result OK?

- YES >> Replace BOSE amp.  
NO >> Replace audio unit.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

# WOOFER AMP. ON SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## WOOFER AMP. ON SIGNAL CIRCUIT

### Description

INFOID:0000000004235170

When the audio system is turned on, a voltage signal is supplied from the BOSE amp. to the woofer. When this signal is received, the woofer will turn on.

### Diagnosis Procedure

INFOID:0000000004235171

#### 1. CHECK CONTINUITY WOOFER AMP. ON SIGNAL CIRCUIT

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

BOSE amp.		Woofer		Continuity
Connector	Terminal	Connector	Terminal	
B65	25	B63	4	Existed

4. Check continuity between BOSE amp. harness connector and ground.

BOSE amp.		Ground	Continuity
Connector	Terminal		
B65	25		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK VOLTAGE AMP. ON SIGNAL

1. Connect BOSE amp. connector
2. Turn ignition switch ON.
3. Check voltage between BOSE amp. harness connector and ground.

BOSE amp.		Ground	Voltage (Approx.)
Connector	Terminal		
B65	25		12.0 V

#### Is inspection result OK?

- YES >> Replace woofer.  
NO >> Replace BOSE amp.

# MICROPHONE SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## MICROPHONE SIGNAL CIRCUIT

### Description

INFOID:0000000004235172

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

### Diagnosis Procedure

INFOID:0000000004235173

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

1. 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	Terminal	Connector	Terminal	
B6	7	R3	1	Existed
	8		2	
	29		4	

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

TEL adapter unit		Ground	Continuity
Connector	Terminal		
B6	7		Not existed
	29		

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK MICROPHONE POWER SUPPLY

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

TEL adapter unit		Ground	Voltage (Approx.)
Connector	Terminal		
B6	29		5.0 V

#### Is inspection result OK?

- YES >> GO TO 3.  
NO >> Replace TEL adapter unit.

#### 3.CHECK MICROPHONE SIGNAL

1. Turn ignition switch OFF.
2. Connect microphone connector.
3. Turn ignition switch ON.
4. Check signal between TEL adapter unit harness connector terminals 7 and 8.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

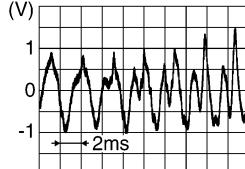
O

P

# MICROPHONE SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

TEL adapter unit		TEL adapter unit		Condition	Reference value
Connector	Terminal	Connector	Terminal		
B6	7	B6	8	Give a voice.	 SKIB3609E

Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace microphone.

# TELEPHONE ON SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[BOSE AUDIO]

## TELEPHONE ON SIGNAL CIRCUIT

### Description

INFOID:0000000004235174

When telephone is being used. TEL adapter unit transmits telephone ON signal to audio unit.

### Diagnosis Procedure

INFOID:0000000004235175

#### 1.CHECK CONTINUITY TELEPHONE ON SIGNAL CIRCUIT

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

TEL adapter unit		Audio unit		Continuity
Connector	Terminal	Connector	Terminal	
B6	11	M47	28	Existed

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

TEL adapter unit		Ground	Continuity
Connector	Terminal		
B6	11		Not existed

#### Is inspection result OK?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK TELEPHONE ON SIGNAL

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

Audio unit		Ground	Condition	Voltage (Approx.)
Connector	Terminal		While using hands-free phone system	0 V
M47	28		While not using hands-free phone system	5.0 V

#### Is inspection result OK?

- YES >> INSPECTION END  
NO >> Replace audio unit.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

# AUDIO UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

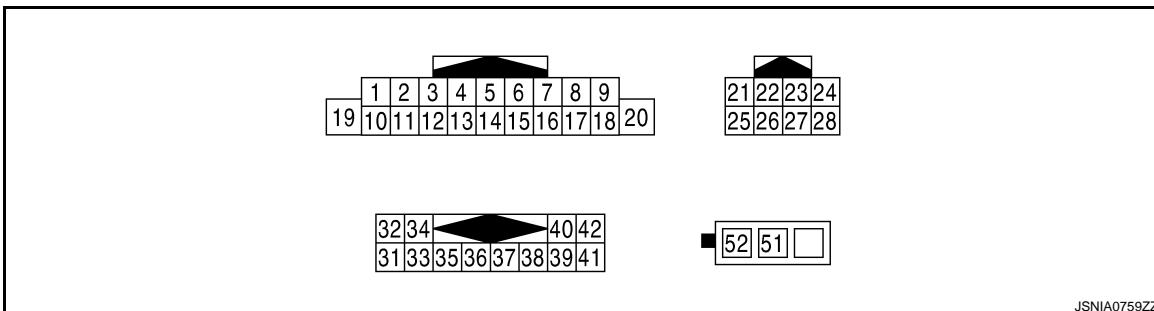
## ECU DIAGNOSIS

### AUDIO UNIT

#### Reference Value

INFOID:000000004235176

#### TERMINAL LAYOUT



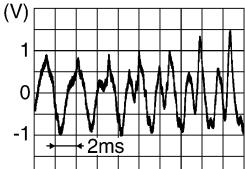
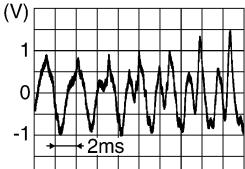
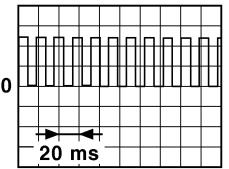
#### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition	Reference value (Approx.)	
+	-	Signal name	Input/ Output			
1 (BR)	Ground	BOSE amp. ON signal	Output	Ignition switch ON	—	
2 (R)	3 (G)	Sound signal front LH	Output	Ignition switch ON	Sound signal output	
4 (V)	5 (LG)	Sound signal rear LH	Output	Ignition switch ON	Sound signal output	
6 (W) (BR)*	15 (GR)	Steering switch signal A	Input	Ignition switch ON	Keep pressing SOURCE switch	
7 (SB)	Ground	ACC power supply	Input		0 V	
					Keep pressing SEEK UP switch	
					2.2 V	
9 (R)	8 (Y)	Illumination signal	Input	Ignition switch OFF	Except for above	
10	—	Shield	—		3.3 V	
7 (SB)	Ground	ACC power supply	Input	Ignition switch ACC	—	
9 (R)	8 (Y)	Illumination signal	Input	Ignition switch OFF	Lighting switch is ON	
10	—	Shield	—	—	0 V	
10	—	Shield	—	—	Lighting switch is OFF	
10	—	Shield	—	—	12.0 V	
10	—	Shield	—	—	—	

# AUDIO UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
11 (O)	12 (W)	Sound signal front RH	Output	Ignition switch ON	Sound signal output	 SKIB3609E
13 (L)	14 (P)	Sound signal rear RH	Output	Ignition switch ON	Sound signal output	 SKIB3609E
15 (GR)	Ground	Steering switch signal ground	—	Ignition switch ON	—	0 V
16 (O)	15 (GR)	Steering switch signal B	Input	Ignition switch ON	Keep pressing POWER switch*	0 V
					Keep pressing SEEK DOWN switch	1.1 V
					Keep pressing VOL DOWN switch	2.2 V
					Except for above	3.3 V
18 (L)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25MPH)	<b>NOTE:</b> The maximum voltage varies depending on the specification (destination unit).  JSNIA0012GB
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
20	—	Shield	—	—	—	—
21 (L)	—	AV communication signal (H)	—	Input/ Output	—	—
22 (P)	—	AV communication signal (L)	—	Input/ Output	—	—
23	—	Shield	—	—	—	—
25	—	Shield	—	—	—	—

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

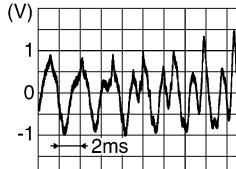
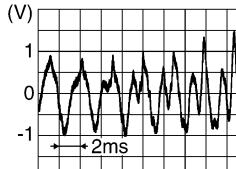
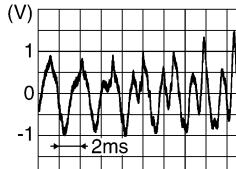
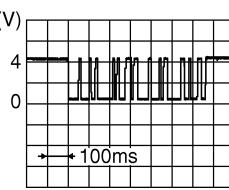
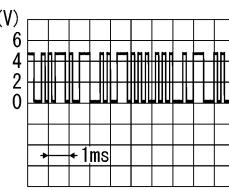
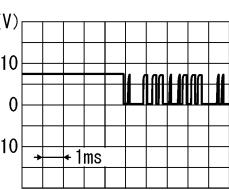
O

P

# AUDIO UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
26 (BR)	27 (Y)	Sound signal (Telephone voice, telephone guidance)	Input	Ignition switch ON	Give a voice	 SKIB3609E
28 (V)	Ground	Telephone ON signal	Input	Ignition switch ON	While using hands-free phone system	0 V
					While not using hands-free phone system	5.0 V
32 (L)	31 (R)	Satellite radio sound signal LH	Input	Ignition switch ON	When satellite radio mode is selected	 SKIB3609E
34 (W)	33 (G)	Satellite radio sound signal RH	Input	Ignition switch ON	When satellite radio mode is selected	 SKIB3609E
35	—	Shield	—	—	—	—
36	—	Shield	—	—	—	—
38 (Y)	Ground	Request signal (SAT TO AUDIO)	Input	Ignition switch ON	When satellite radio mode is selected	 JSNIA0675ZZ
39 (B)	Ground	Communication signal (SAT-AUDIO)	Input	Ignition switch ON	When satellite radio mode is selected	 PKIB5039J
40 (L)	Ground	Communication signal (AUDIO-SAT)	Output	Ignition switch ON	When satellite radio mode is selected	 SKIA9301J

# AUDIO UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
51	—	Antenna signal	Input	—	—	—
52	Ground	Antenna amp. ON signal	Output	Ignition switch ON	—	12.0 V

\* : Without telephone system

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

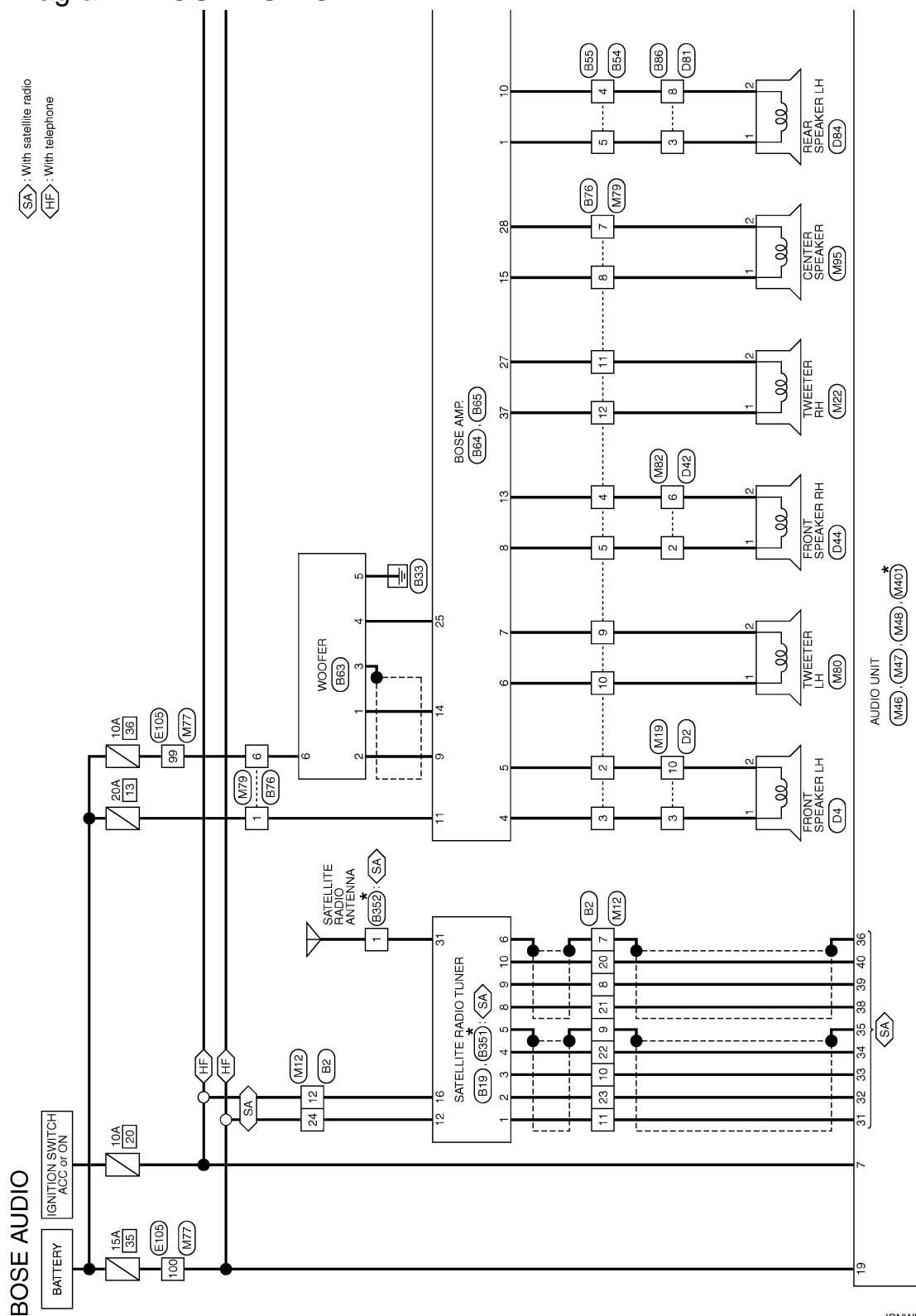
# AUDIO UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

## Wiring Diagram - BOSE AUDIO -

INFOID:0000000004235177



\*:This connector is not shown in "Harness Layout".

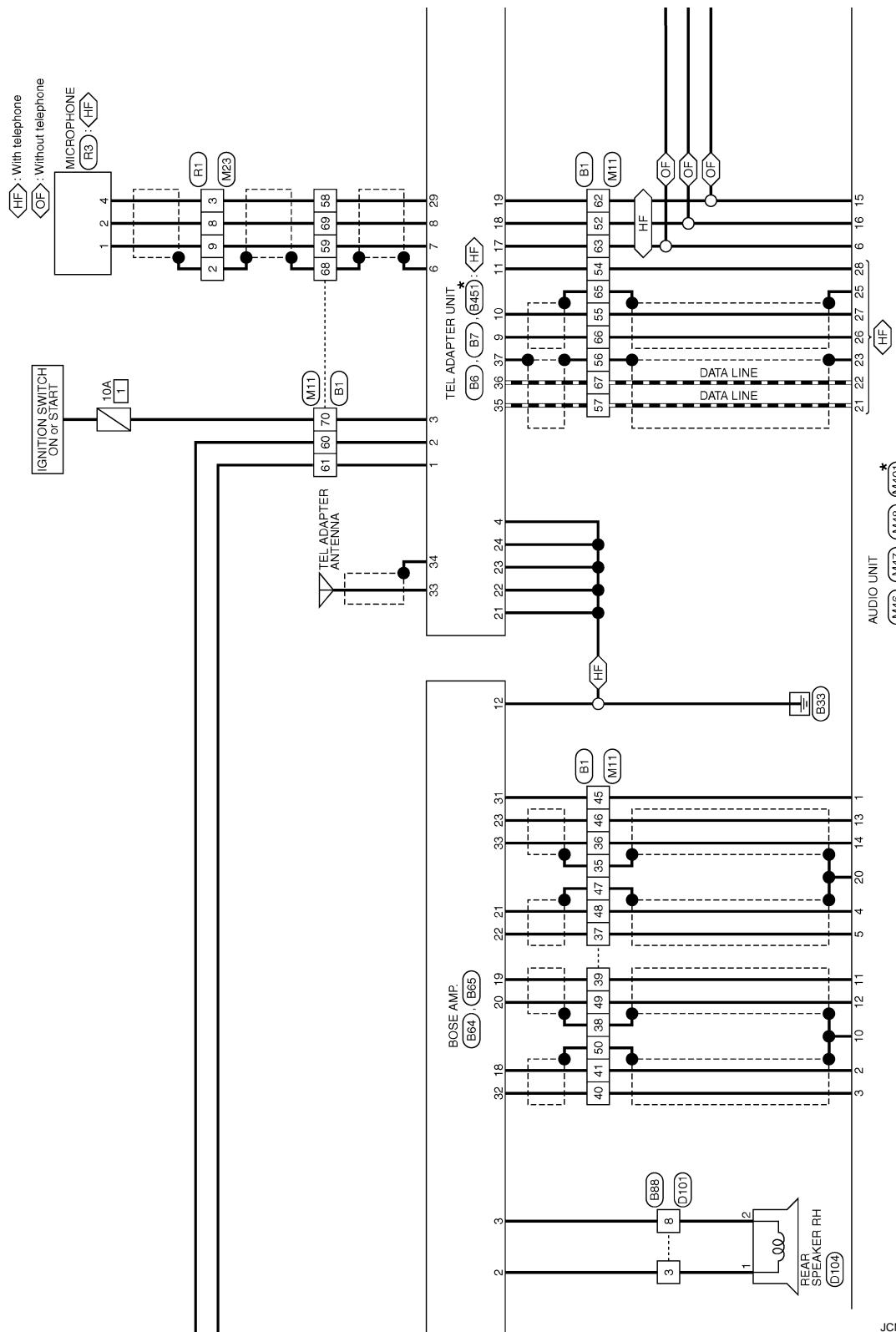
2008/07/15

JCNWM1642GI

# AUDIO UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >



\*: This connector is not shown in "Harness Layout".

JCNWM1643GI

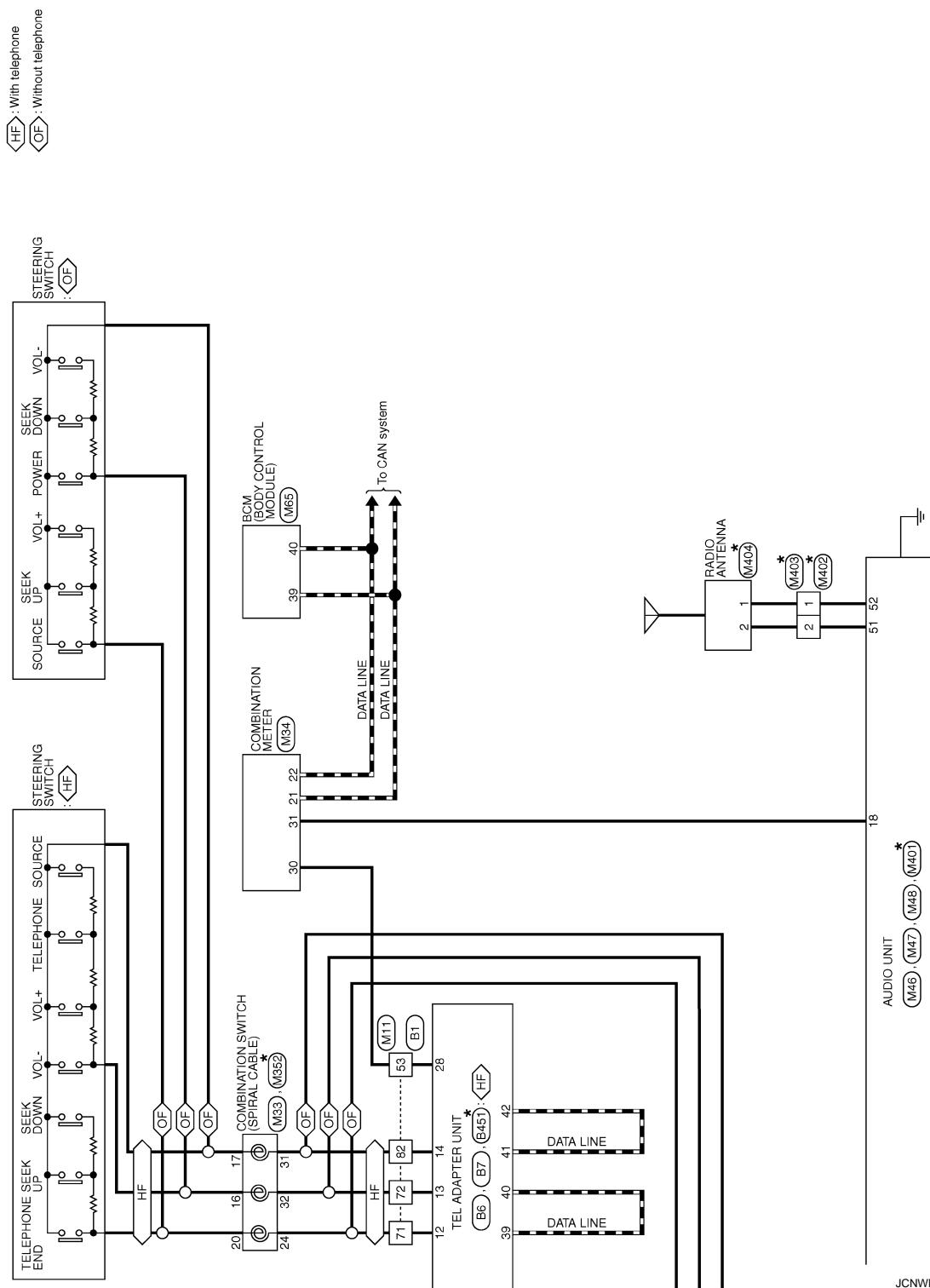
A B C D E F G H I J K L M N O P

AV

# AUDIO UNIT

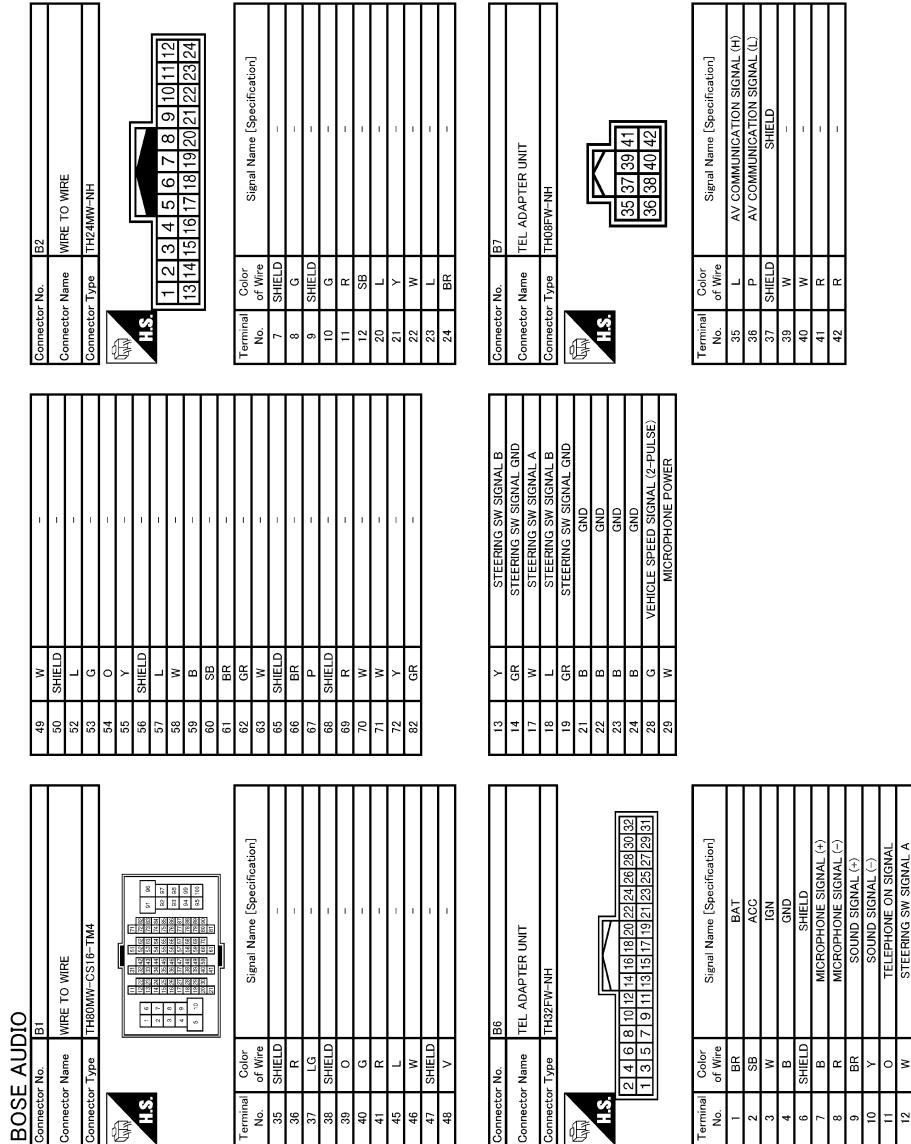
< ECU DIAGNOSIS >

[BOSE AUDIO]



\*: This connector is not shown in "Harness Layout".

JCNWM1644GI



JCNWM1645GI

# AUDIO UNIT

< ECU DIAGNOSIS >

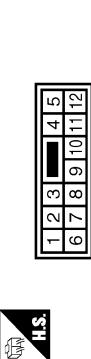
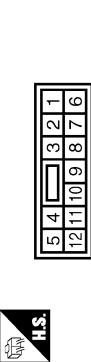
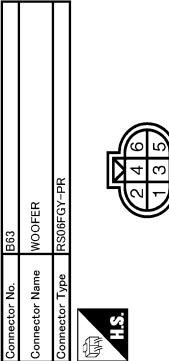
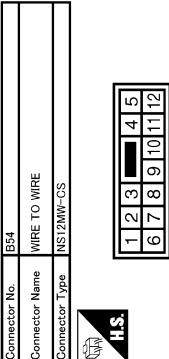
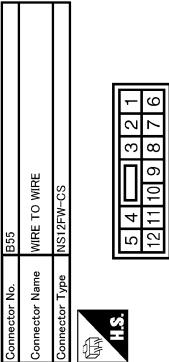
[BOSE AUDIO]

## BOSE AUDIO

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS
	

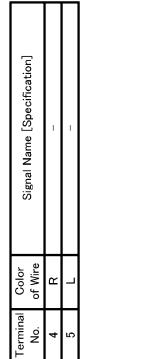
Terminal No.	Color of Wire	Signal Name [Specification]
4	R	—
5	L	—

Connector No.	B64
Connector Name	BOSE AMP
Connector Type	SGA12FBR-SJA2

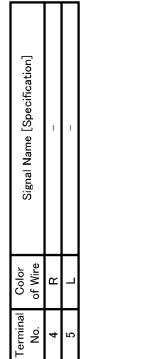
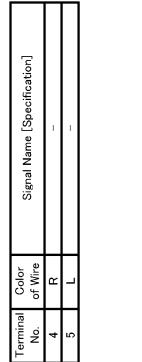


Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
4	R	—	1	BR	SOUND SIGNAL WOOFER (-)
5	L	—	2	Y	SOUND SIGNAL WOOFER (+)

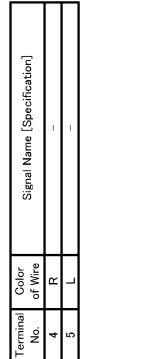
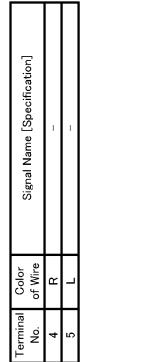
Terminal No.	Color of Wire	Signal Name [Specification]
12	B	GND
13	R	SOUND SIGNAL FRONT SPEAKER RH (-)
14	BR	SOUND SIGNAL WOOFER (-)



Connector No.	B63
Connector Name	WOOFER
Connector Type	RS036EGY-PR



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	SOUND SIGNAL CENTER SPEAKER (+)
16	R	SOUND SIGNAL CENTER SPEAKER (-)
18	O	SOUND SIGNAL FRONT LH (+)
19	O	SOUND SIGNAL FRONT RH (+)
20	W	SOUND SIGNAL FRONT LH (-)
21	V	SOUND SIGNAL FRONT RH (-)
22	LG	SOUND SIGNAL REAR LH (+)
23	W	SOUND SIGNAL REAR RH (+)
25	G	WOOFER AMP. ON SIGNAL
27	W	SOUND SIGNAL TWEETER RH (-)
28	O	SOUND SIGNAL CENTER SPEAKER (-)
31	L	AMP. ON SIGNAL



# AUDIO UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

<b>BOSE AUDIO</b>						
Connector No.	B76					
Connector Name	WIRE TO WIRE					
Connector Type	NS12MW-CS					
						
12	O					
1	2	3	4	5		
6	7	8	9	10	11	12
<b>WIRE TO WIRE</b>						
Connector No.	B86					
Connector Name	WIRE TO WIRE					
Connector Type	NS12MW-CS					
						
1	2	3	4	5		
6	7	8	9	10	11	12
<b>NS12MW-CS</b>						
Terminal No.	Color of Wire	Signal Name [Specification]				
1	W	-				
2	P	-				
3	B	-				
4	R	-				
5	G	-				
6	SB	-				
7	O	-				
8	V	-				
9	GR	-				
10	BR	-				
11	W	-				
<b>SATELLITE RADIO ANTENNA</b>						
Connector No.	B352					
Connector Name	SATELLITE RADIO ANTENNA					
Connector Type	GT16C-1FP-HU					
						
1	33					
31	34					
<b>TEL ADAPTER UNIT</b>						
Connector No.	B451					
Connector Name	TEL ADAPTER UNIT					
Connector Type	GT16C-1SHU					
						
1	33					
31	34					
<b>GT16C-1SHU</b>						
Terminal No.	Color of Wire	Signal Name [Specification]				
1	-	-				
31	-	-				
<b>TELEPHONE SIGNAL</b>						
Terminal No.	Color of Wire	Signal Name [Specification]				
33	-	TEL ANTENNA SIGNAL				
34	-	SHIELD				
<b>SHIELD</b>						
Terminal No.	Color of Wire	Signal Name [Specification]				
3	-	-				
10	P	-				

JCNWM1647GI

AV

O

P

K

M

L

G

T

M

D

C

B

A

# AUDIO UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO		Connector No.	D4	Connector Name	D42	Connector Name	D44	Connector Name	D81	
Connector No.	Front Speaker LH	Connector Name	FRONT SPEAKER RH	Connector Type	NSD0FW-CS	Connector Type	NSD0FW-CS	Connector Type	NS12FW-CS	
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-		2	G	-		3	L	-
2	P	-		6	R	-		8	R	-
BOSE AUDIO		Connector No.	D4	Connector Name	D42	Connector Name	D44	Connector Name	D81	
Connector No.	REAR SPEAKER LH (WITH BOSE SYSTEM)	Connector Name	REAR SPEAKER RH (WITH BOSE SYSTEM)	Connector Type	NSD0FR-CS	Connector Type	NSD0FR-CS	Connector Type	TH0DFW-CS16-TM4	
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-		2	GR	-		99	SB	-
2	R	-		8	Y	-		100	L	-

JCNWM1648GI

# AUDIO UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO		Connector No.	M11	Connector No.	M12	Connector No.	M19
Connector Name	WIRE TO WIRE			Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	THBDFW-CS16-TM4			Connector Type	TH24FW-NH	Connector Type	NS18BMW-CS
49	W	-		49	W	-	
50	SHIELD	-		50	O	-	
52	O	-		53	G	-	
54	V	-		54	V	-	
55	Y	-		55	Y	-	
56	SHIELD	-		56	SHIELD	-	
57	L	-		57	L	-	
58	W	-		58	W	-	
59	B	-		59	B	-	
60	SB	-		60	SB	-	
61	BR	-		61	BR	-	
62	GR	-		62	GR	-	
63	W	-		63	W	-	
65	SHIELD	-		65	SHIELD	-	
66	BR	-		66	BR	-	
67	P	-		67	P	-	
68	SHIELD	-		68	SHIELD	-	
69	R	-		69	R	-	
70	LG	-		70	LG	-	
71	BR	-		71	BR	-	
72	O	-		72	O	-	
82	GR	-		82	GR	-	
48	V	-		48	V	-	
35	SHIELD	-		35	SHIELD	-	
36	P	-		36	P	-	
37	LG	-		37	LG	-	
38	SHIELD	-		38	SHIELD	-	
39	O	-		39	O	-	
40	G	-		40	G	-	
41	R	-		41	R	-	
45	BR	-		45	BR	-	
46	L	-		46	L	-	
47	SHIELD	-		47	SHIELD	-	
21				21			
24				24			
26				26			
27				27			
31				31			
32				32			
33				33			
34				34			

COMBINATION METER		Connector No.	M34	Connector No.	M33	Connector Name	COMBINATION METER
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]	
1	2	3	4	5	6	7	8
2	3	4	5	6	7	8	9
3	4	5	6	7	8	9	10
4	5	6	7	8	9	10	11
5	6	7	8	9	10	11	12
6	7	8	9	10	11	12	13
7	8	9	10	11	12	13	14
8	9	10	11	12	13	14	15
9	10	11	12	13	14	15	16
10	11	12	13	14	15	16	17
11	12	13	14	15	16	17	18
12	13	14	15	16	17	18	19
13	14	15	16	17	18	19	20
14	15	16	17	18	19	20	21
15	16	17	18	19	20	21	22
16	17	18	19	20	21	22	23
17	18	19	20	21	22	23	24
18	19	20	21	22	23	24	25
19	20	21	22	23	24	25	26
20	21	22	23	24	25	26	27
21	22	23	24	25	26	27	28
22	23	24	25	26	27	28	29
23	24	25	26	27	28	29	30
24	25	26	27	28	29	30	31
25	26	27	28	29	30	31	32
26	27	28	29	30	31	32	33
27	28	29	30	31	32	33	34

VEHICLE SPEED (G-PULSE)		Connector No.	M32	Connector Name	VEHICLE SPEED (G-PULSE)		
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]	
1	L	-		2	SHIELD	-	
2	Y	-		3	V	-	
3	R	-		8	R	-	
9	B	-		9	B	-	

CAN-H		Connector No.	M31	Connector Name	CAN-H		
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]	
21	L	-		21	BR	-	
22	P	-		22	GR	-	
30	Y	-		30	O	-	
31	L	-		31	Y	-	

JCNWM1649GI

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z  
AV

# AUDIO UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >

BOSE AUDIO		M46		M47		M79		M77		M65		M44			
Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name		
Connector Name	AUDIO UNIT	Connector No.	AUDIO UNIT	Connector No.	AUDIO UNIT	Connector No.	WIRE TO WIRE	Connector No.	WIRE TO WIRE	Connector No.	BCM (BODY CONTROL MODULE)	Connector No.	WIRE TO WIRE		
Connector Type	TH1BFW-CS2	Connector Type	TH08FW-NH	Connector Type	TH08FW-NH	Connector Type	NS12FW-OS	Connector Type	TH08MMU-CS16-TM4	Connector Type	CAN-H	Connector Type	TH4DFW-NH		
Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]		Terminal No.	Color of Wire	Signal Name [Specification]	
1	BR	AMP ON SIGNAL		21	L	SOUND SIGNAL REAR RH (+)		1	LG	REQUEST SIGNAL (SAT TO AUDIO)		1	SB	CAN-H	
2	R	SOUND SIGNAL FRONT LH (-)		22	P	SOUND SIGNAL REAR RH (-)		2	P	AV COMMUNICATION SIGNAL (L)		2	Y	CAN-L	
3	G	SOUND SIGNAL FRONT LH (+)		23	SHIELD	SOUND SIGNAL LH (-)		3	G	AV COMMUNICATION SIGNAL (R)		3	Y	REQUEST SIGNAL (AUDIO TO SAT)	
4	V	SOUND SIGNAL REAR LH (+)		25	SHIELD	SOUND SIGNAL LH (+)		4	W	SOUND SIGNAL LH (-)		4	Y	COMMUNICATION SIGNAL (SAT-AUDIO)	
5	LG	SOUND SIGNAL REAR LH (-)		26	BR	SOUND SIGNAL (+)		5	SHIELD	SOUND SIGNAL LH (+)		5	Y	COMMUNICATION SIGNAL (AUDIO-SAT)	
6	W	STEERING SW SIGNAL AI (With telephone)		27	Y	SOUND SIGNAL (-)		6	SHIELD	SHIELD		6	Y	TELEPHONE ON SIGNAL	
6	BR	STEERING SW SIGNAL AI (Without telephone)		28	V	TELEPHONE ON SIGNAL		7	SHIELD	SHIELD		7	Y	REQUEST SIGNAL (AUDIO TO SAT)	
7	SB	ACC						8	SHIELD	SHIELD		8	B	COMMUNICATION SIGNAL (SAT-AUDIO)	
10	SHIELD							9	SHIELD	SHIELD		9	GR	COMMUNICATION SIGNAL (AUDIO-SAT)	
11	O	SOUND SIGNAL FRONT RH (+)						10	SHIELD	SHIELD		10	L	COMMUNICATION SIGNAL (AUDIO-SAT)	
12	W	SOUND SIGNAL FRONT RH (-)						11	SHIELD	SHIELD		11	Y	COMMUNICATION SIGNAL (AUDIO-SAT)	

JCNWM1650GI

# AUDIO UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO					
Connector No.	MS0	Connector No.	MS2	Connector No.	M95
Connector Name	TWEETER LH	Connector Name	WIRE TO WIRE	Connector Name	CENTER SPEAKER
Connector Type	TK02FBR	Connector Type	NS10MV-CS	Connector Type	TK02FBR
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	{With BOSE system}	2	O	V
2	P	{Without BOSE system}	6	W	P
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—	2	—	—
2	—	—	6	—	—
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—	16	—	—
2	—	—	17	—	—
			20	—	—
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—	1	—	—
2	—	—	2	—	—

JCNWM1651GI

A B C D E F G H I J K L M N P O V

# AUDIO UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO	
Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]	Signal Name [Specification]
2	SHIELD	-	B
3	W	-	MICROPHONE SIGNAL (+)
4	R	-	MICROPHONE SIGNAL (-)
9	B	-	MICROPHONE POWER

JCNWM1652GI

# BOSE AMP.

[BOSE AUDIO]

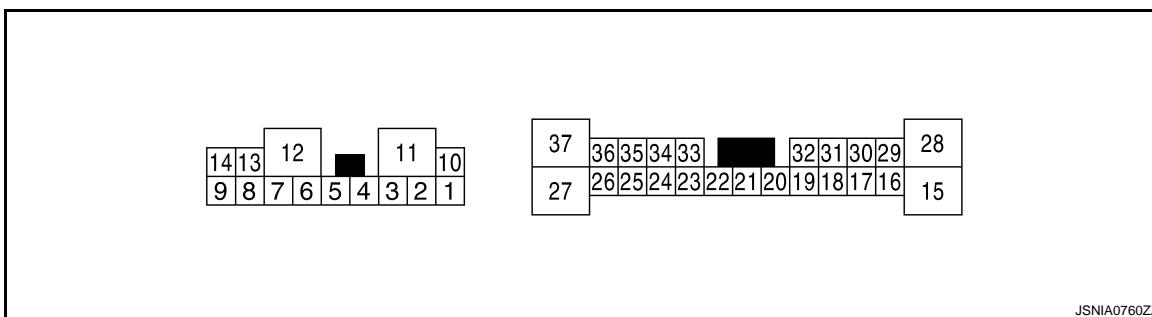
< ECU DIAGNOSIS >

**BOSE AMP.**

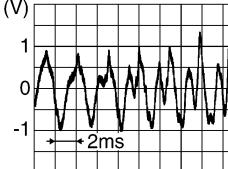
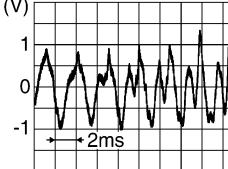
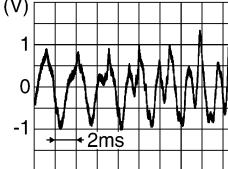
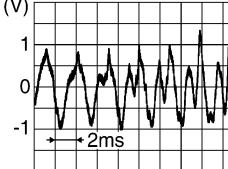
Reference Value

INFOID:0000000004235178

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/ Output		
1 (L)	10 (R)	Sound signal rear speaker LH	Output	Ignition switch ON	Sound signal output  SKIB3609E
2 (GR)	3 (Y)	Sound signal rear speaker RH	Output	Ignition switch ON	Sound signal output  SKIB3609E
4 (B)	5 (P)	Sound signal front speaker LH	Output	Ignition switch ON	Sound signal output  SKIB3609E
6 (BR)	7 (GR)	Sound signal tweeter LH	Output	Ignition switch ON	Sound signal output  SKIB3609E

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

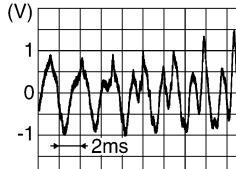
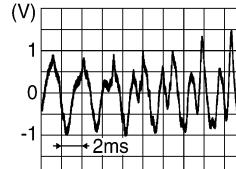
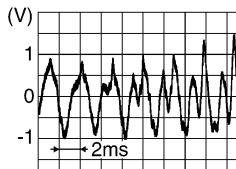
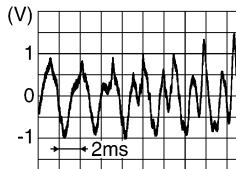
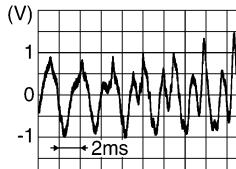
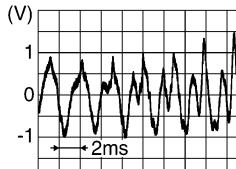
O

P

# BOSE AMP.

[BOSE AUDIO]

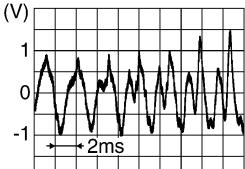
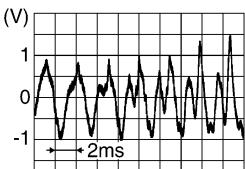
< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
8 (G)	13 (R)	Sound signal front speaker RH	Output	Ignition switch ON	Sound signal output	 SKIB3609E
9 (Y)	14 (BR)	Sound signal woofer	Output	Ignition switch ON	Sound signal output	 SKIB3609E
11 (W)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
12 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
15 (V)	28 (O)	Sound signal center speak- er	Output	Ignition switch ON	Sound signal output	 SKIB3609E
18 (R)	32 (G)	Sound signal front LH	Input	Ignition switch ON	Sound signal output	 SKIB3609E
19 (O)	20 (W)	Sound signal front RH	Input	Ignition switch ON	Sound signal output	 SKIB3609E
21 (V)	22 (LG)	Sound signal rear LH	Input	Ignition switch ON	Sound signal output	 SKIB3609E

# BOSE AMP.

[BOSE AUDIO]

< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
23 (W)	33 (R)	Sound signal rear RH	Input	Ignition switch ON	Sound signal output	 SKIB3609E
25 (G)	Ground	Woofer Amp. ON signal	Output	Ignition switch ACC	—	12.0 V
31 (L)	Ground	BOSE amp. ON signal	Input	Ignition switch ACC	—	12.0 V
37 (O)	27 (W)	Sound signal tweeter RH	Output	Ignition switch ON	Sound signal output	 SKIB3609E

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

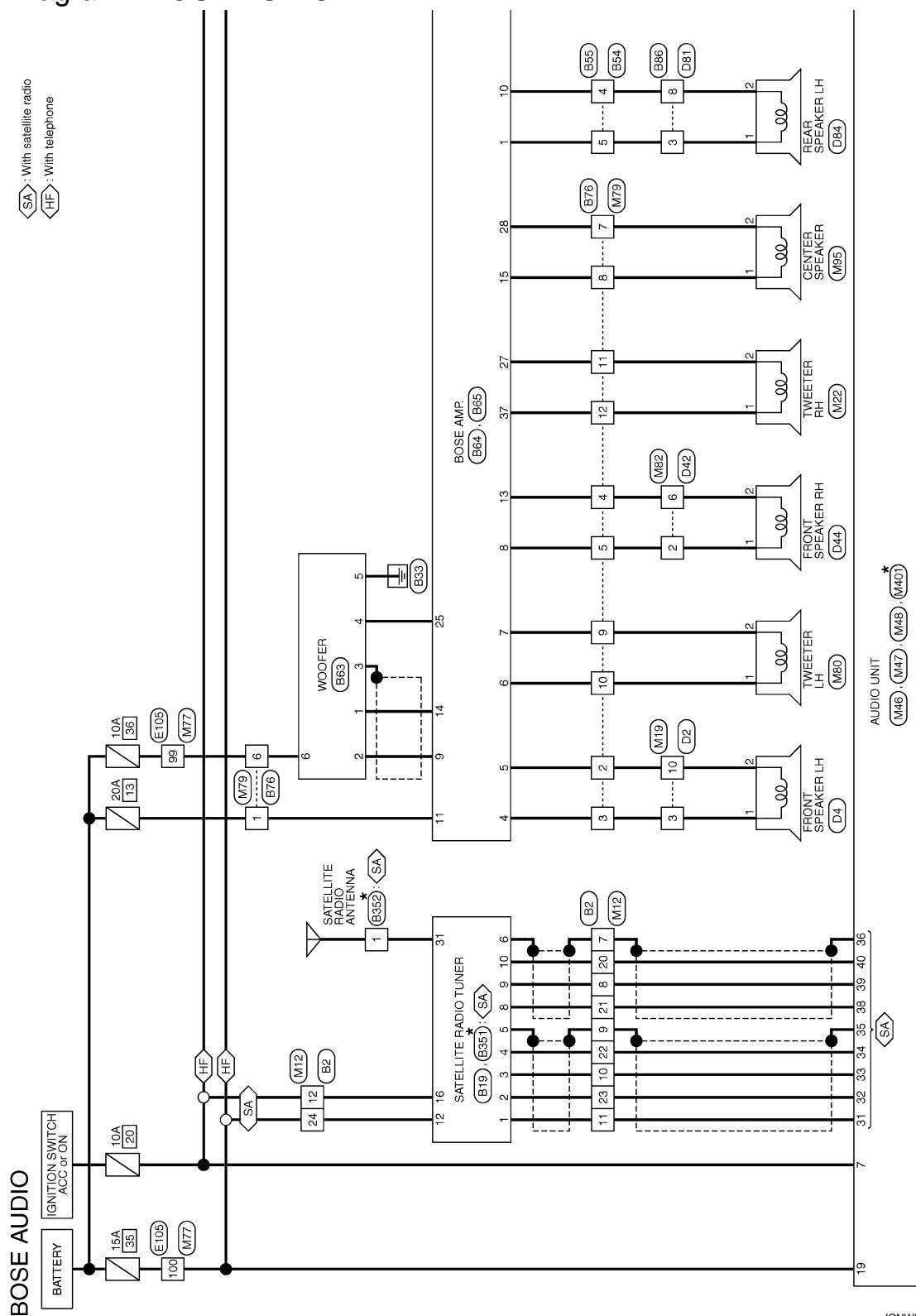
# BOSE AMP.

[BOSE AUDIO]

< ECU DIAGNOSIS >

Wiring Diagram - BOSE AUDIO -

INFOID:0000000004535237



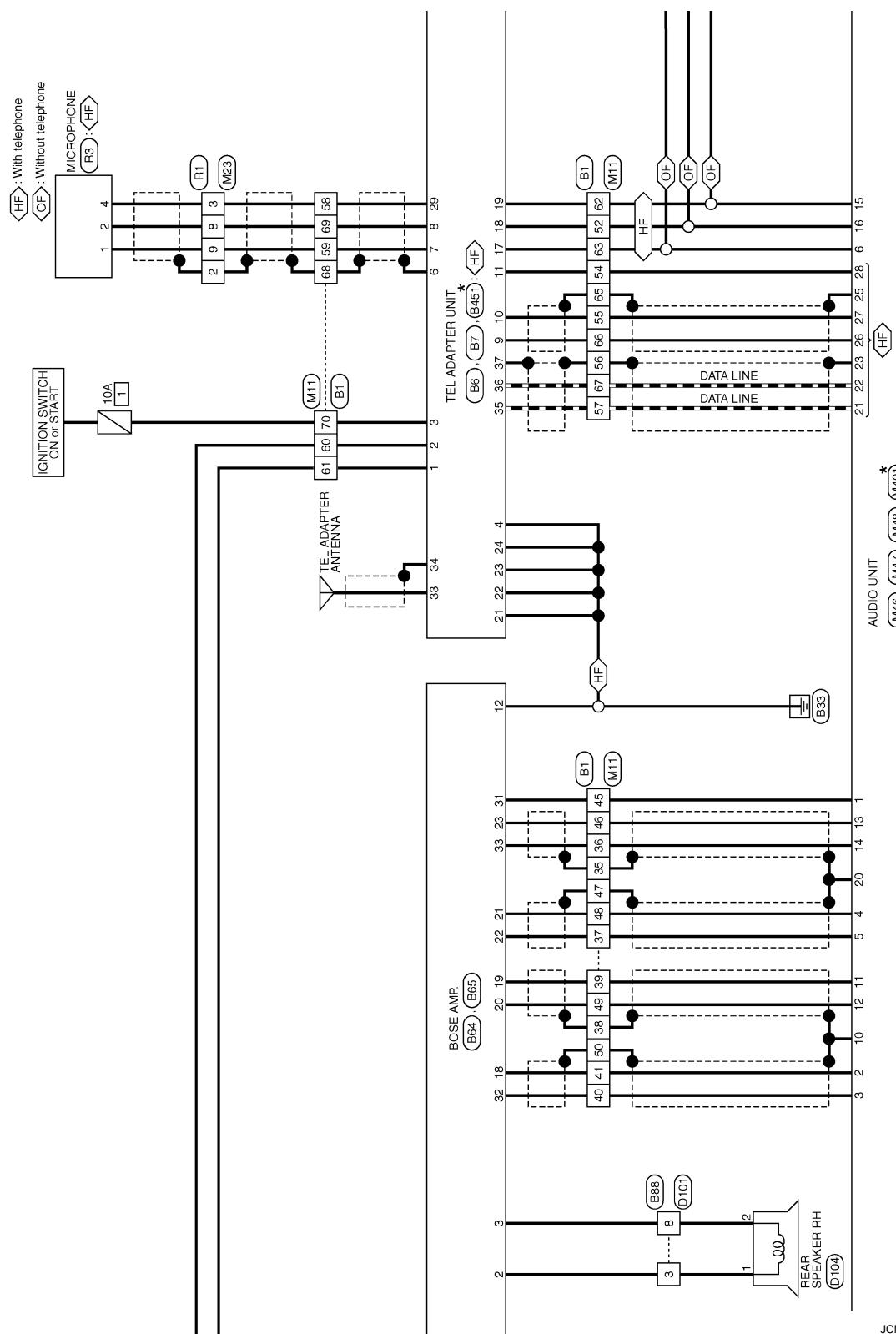
2008/07/15

JCNWM1642GI

# BOSE AMP.

[BOSE AUDIO]

< ECU DIAGNOSIS >



JCNWM1643GI

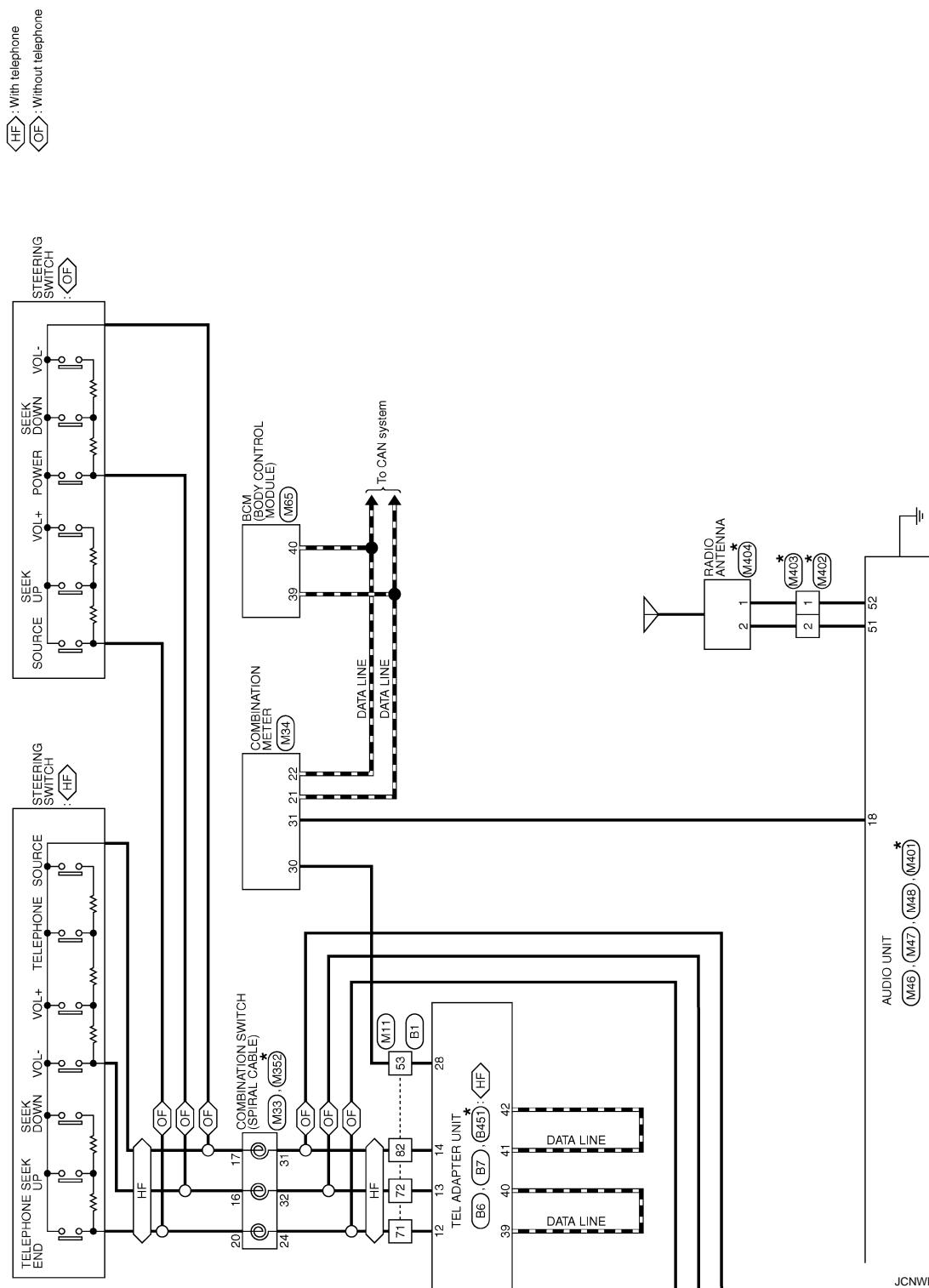
A B C D E F G H I M O P

AV

# BOSE AMP.

< ECU DIAGNOSIS >

[BOSE AUDIO]



\*: This connector is not shown in "Harness Layout".

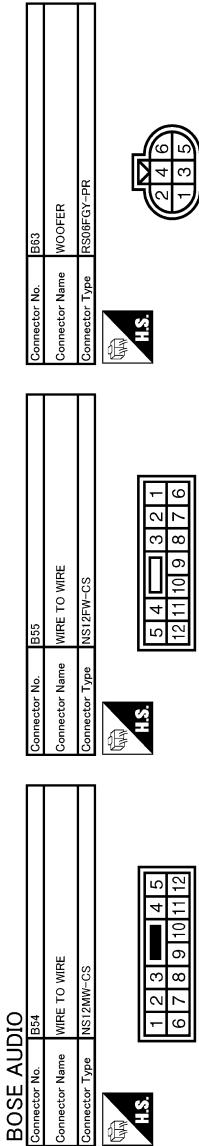
JCNWM1644GI



# BOSE AMP.

< ECU DIAGNOSIS >

[BOSE AUDIO]



Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-	1	R	SOUND SIGNAL WOOFER (-)
5	L	-	2	Y	SOUND SIGNAL WOOFER (+)

SHIELD

WOOFER AMP ON SIGNAL

GND

BAT

Connector No.	B63	32	G	SOUND SIGNAL FRONT LH (-)
Connector Name	WOOFER	33	R	SOUND SIGNAL FRONT RH (-)
Connector Type	RS06EGY-PR	37	O	SOUND SIGNAL TWEETER RH (+)

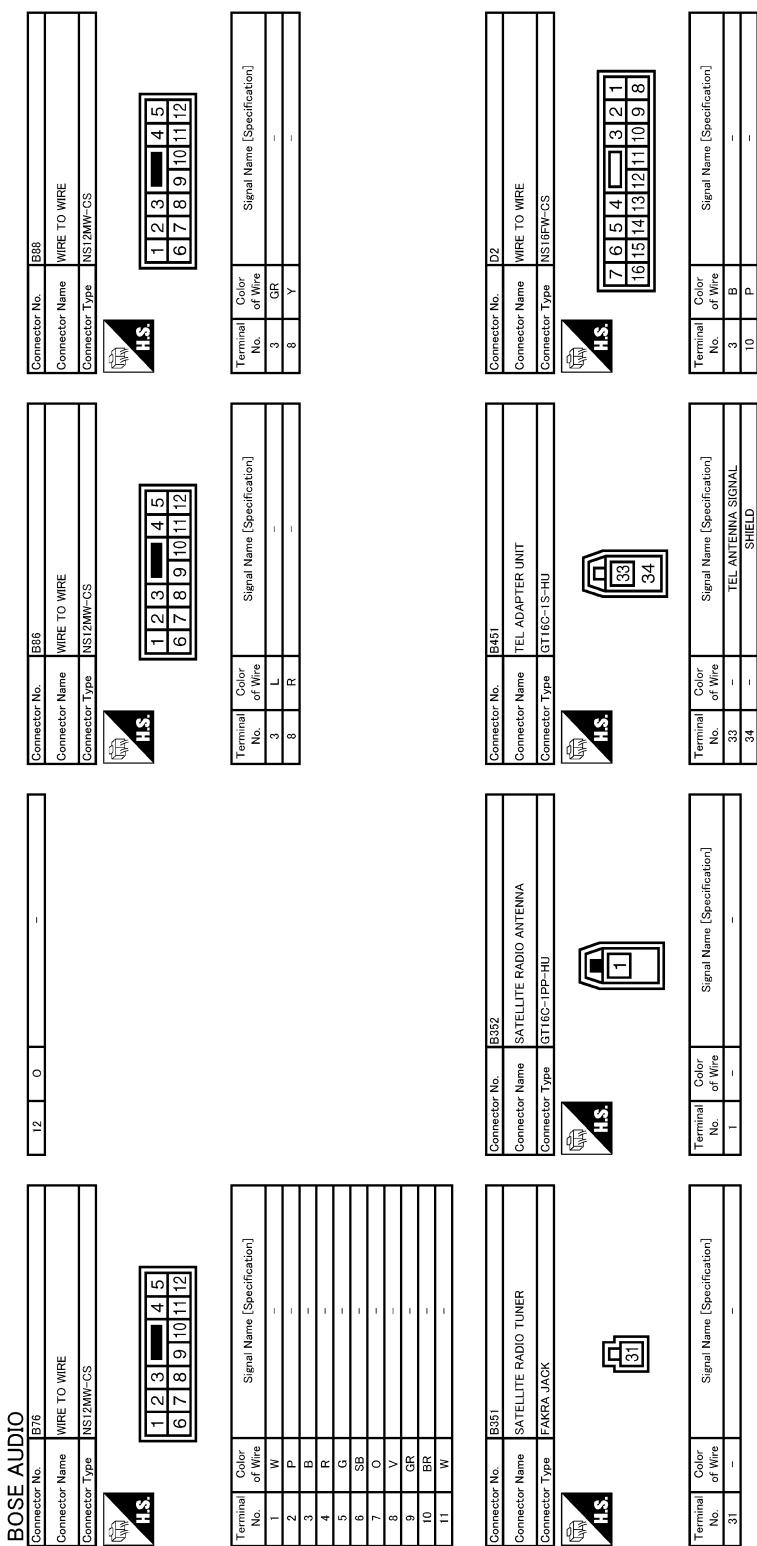
Connector No.	B65	32	G	SOUND SIGNAL FRONT LH (-)
Connector Name	BOSE AMP.	33	R	SOUND SIGNAL FRONT RH (-)
Connector Type	SCA19FR-SG44	37	O	SOUND SIGNAL TWEETER RH (+)

12	B	GND	32	G	SOUND SIGNAL FRONT LH (-)
13	R	SOUND SIGNAL FRONT SPEAKER RH (-)	33	R	SOUND SIGNAL FRONT RH (-)
14	BR	SOUND SIGNAL WOOFER (-)	37	O	SOUND SIGNAL TWEETER RH (+)

14	13	12	33	25	27
1	2	3	2	3	4
9	8	7	21	22	23
6	5	4	19	20	21
3	2	1	18	19	20

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	L	SOUND SIGNAL REAR SPEAKER LH (+)	15	V	SOUND SIGNAL CENTER SPEAKER (+)
2	GR	SOUND SIGNAL REAR SPEAKER RH (+)	18	R	SOUND SIGNAL FRONT LH (+)
3	Y	SOUND SIGNAL REAR SPEAKER RH (-)	19	O	SOUND SIGNAL FRONT RH (+)
4	B	SOUND SIGNAL FRONT SPEAKER LH (+)	20	W	SOUND SIGNAL FRONT RH (-)
5	P	SOUND SIGNAL FRONT SPEAKER LH (-)	21	V	SOUND SIGNAL REAR LH (+)
6	BR	SOUND SIGNAL TWEETER LH (+)	22	LG	SOUND SIGNAL REAR LH (-)
7	GR	SOUND SIGNAL TWEETER LH (-)	23	W	SOUND SIGNAL REAR RH (+)
8	G	SOUND SIGNAL FRONT SPEAKER RH (+)	25	G	WOOFER AMP. ON SIGNAL
9	Y	SOUND SIGNAL WOOFER (+)	27	W	SOUND SIGNAL TWEETER RH (-)
10	R	SOUND SIGNAL REAR SPEAKER LH (-)	28	O	SOUND SIGNAL CENTER SPEAKER (-)
11	W	BAT	31	L	AMP. ON SIGNAL

JCNWM1646GI



JCNWM1647GI

# BOSE AMP.

< ECU DIAGNOSIS >

[BOSE AUDIO]

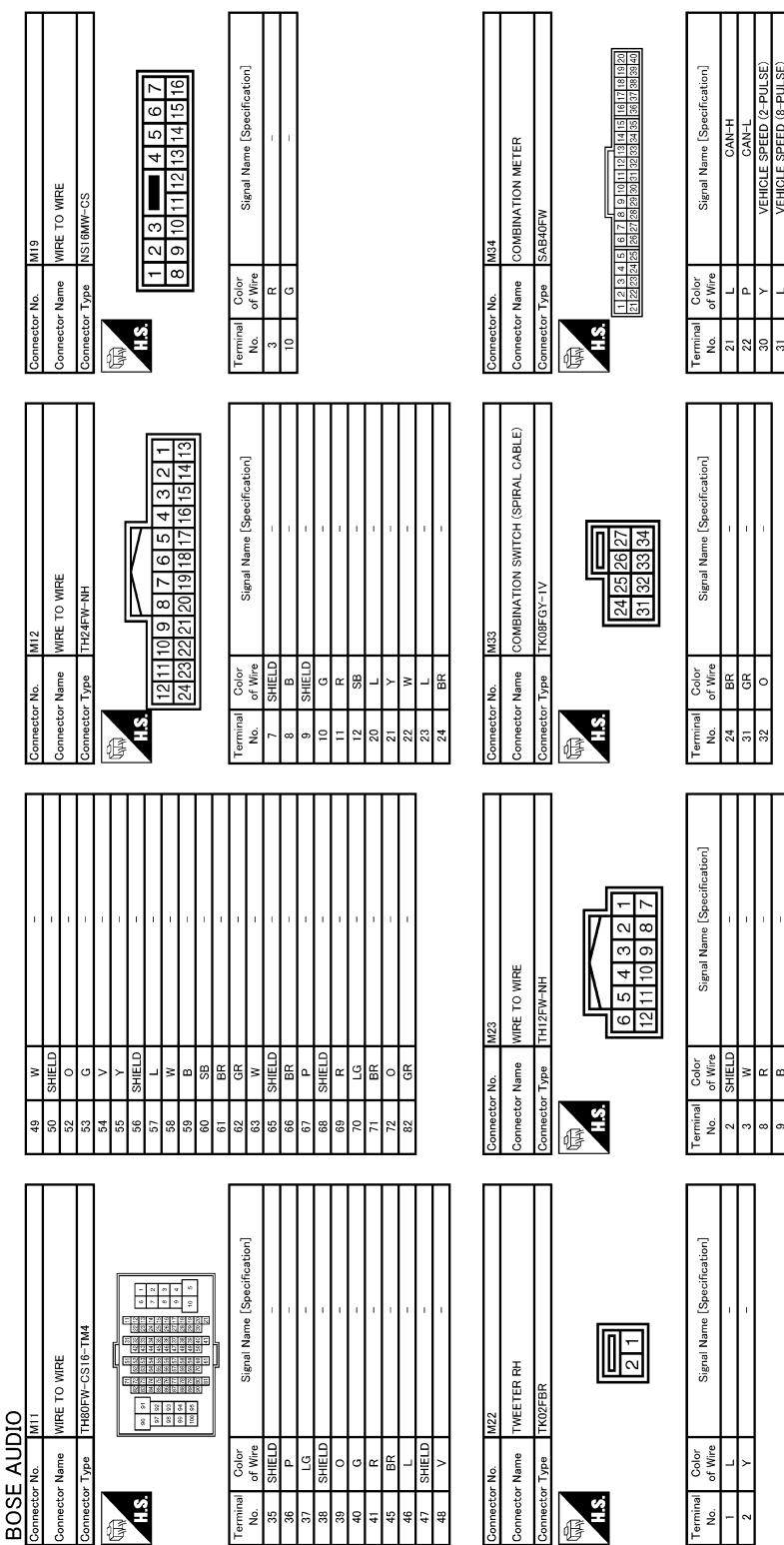
BOSE AUDIO		Connector No.	D42	Connector No.	D44	Connector No.	D81
Connector No.	D4	Connector Name	FRONT SPEAKER LH	Connector Name	FRONT SPEAKER RH	Connector Name	WIRE TO WIRE
Connector Name	NSD0FW-CS	Connector Type	NS10FW-CS	Connector Type	NS10FW-CS	Connector Type	NS12FW-CS
							
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire
1	B	-	2	G	-	3	L
2	P	-	6	R	-	8	R
							
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire
1	G	-	2	R	-	3	-
6	R	-	7	-	-	8	-
							
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire
1	G	-	2	R	-	3	-
6	R	-	7	-	-	8	-
							
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire
1	GR	-	2	Y	-	99	SB
2	R	-	8	Y	-	100	L
							

JCNWM1648G

# BOSE AMP.

< ECU DIAGNOSIS >

[BOSE AUDIO]



JCNWM1649GI

# BOSE AMP.

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO		M46		M47		M79		M77		M65		M66		
Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name							
Connector Name	AUDIO UNIT	Connector No.	AUDIO UNIT	Connector No.	AUDIO UNIT	Connector No.	WIRE TO WIRE	Connector No.	WIRE TO WIRE	Connector No.	BCM (BODY CONTROL MODULE)	Connector No.	CAN-H	
Connector Type	TH1FW-CS2	Connector Type	TH0BW-NH	Connector Type	TH0BW-NH	Connector Type	TH80MH-CS16-TM4	Connector Type	TH4DFW-NH	Connector Type	TH4DFW-NH	Connector Type	CAN-L	
13	L	13	L	13	L	12	SOUND SIGNAL REAR RH (+)	12	SOUND SIGNAL REAR RH (+)	12	SOUND SIGNAL FRONT RH (+)	12	SOUND SIGNAL FRONT RH (+)	L
14	P	14	P	14	P	11	SOUND SIGNAL REAR RH (+)	11	SOUND SIGNAL REAR RH (+)	11	SOUND SIGNAL FRONT LH (+)	11	SOUND SIGNAL FRONT LH (+)	-
15	GR	15	GR	15	GR	10	STEERING SW SIGNAL CND	10	STEERING SW SIGNAL CND	10	STEERING SW SIGNAL B (-)	10	STEERING SW SIGNAL B (-)	-
16	O	16	O	16	O	9	VEHICLE SPEED SIGNAL (8-PULSE)	9	VEHICLE SPEED SIGNAL (8-PULSE)	9	VEHICLE SPEED SIGNAL (8-PULSE)	9	VEHICLE SPEED SIGNAL (8-PULSE)	-
18	L	18	L	18	L	8	BAT.	8	BAT.	8	BAT.	8	BAT.	-
19	Y	19	Y	19	Y	7	SHIELD	7	SHIELD	7	SHIELD	7	SHIELD	-
20	SHIELD	20	SHIELD	20	SHIELD	6	SOUND SIGNAL REAR LH (-)	6	SOUND SIGNAL REAR LH (-)	6	SOUND SIGNAL REAR LH (-)	6	SOUND SIGNAL REAR LH (-)	-
1	BR	1	BR	1	BR	5	AMP ON SIGNAL	5	AMP ON SIGNAL	5	AMP ON SIGNAL	5	AMP ON SIGNAL	-
2	R	2	R	2	R	4	SOUND SIGNAL FRONT LH (+)	4	SOUND SIGNAL FRONT LH (+)	4	SOUND SIGNAL FRONT LH (+)	4	SOUND SIGNAL FRONT LH (+)	-
3	G	3	G	3	G	3	SOUND SIGNAL FRONT LH (-)	3	SOUND SIGNAL FRONT LH (-)	3	SOUND SIGNAL FRONT LH (-)	3	SOUND SIGNAL FRONT LH (-)	-
4	V	4	V	4	V	2	SOUND SIGNAL REAR LH (+)	2	SOUND SIGNAL REAR LH (+)	2	SOUND SIGNAL REAR LH (+)	2	SOUND SIGNAL REAR LH (+)	-
5	LG	5	LG	5	LG	1	SOUND SIGNAL REAR LH (-)	1	SOUND SIGNAL REAR LH (-)	1	SOUND SIGNAL REAR LH (-)	1	SOUND SIGNAL REAR LH (-)	-
6	W	6	W	6	W	0	STEERING SW SIGNAL AI (With telephone)	0	STEERING SW SIGNAL AI (Without telephone)	0	STEERING SW SIGNAL AI (Without telephone)	0	STEERING SW SIGNAL AI (Without telephone)	-
6	BR	6	BR	6	BR	1	ACC.	1	ACC.	1	ACC.	1	ACC.	-
7	SB	7	SB	7	SB	0	SHIELD	0	SHIELD	0	SHIELD	0	SHIELD	-
10	SHIELD	10	SHIELD	10	SHIELD	9	SOUND SIGNAL FRONT RH (+)	9	SOUND SIGNAL FRONT RH (+)	9	SOUND SIGNAL FRONT RH (+)	9	SOUND SIGNAL FRONT RH (+)	-
11	O	11	O	11	O	8	SOUND SIGNAL FRONT RH (-)	8	SOUND SIGNAL FRONT RH (-)	8	SOUND SIGNAL FRONT RH (-)	8	SOUND SIGNAL FRONT RH (-)	-
12	W	12	W	12	W	7	SOUND SIGNAL FRONT RH (-)	7	SOUND SIGNAL FRONT RH (-)	7	SOUND SIGNAL FRONT RH (-)	7	SOUND SIGNAL FRONT RH (-)	-

JCNWM1650GI

**BOSE AMP.**

## < ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO

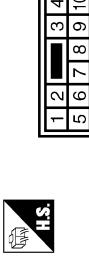
Connector No.	IM552
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Connector No.	M95
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



Connector No.	M8/2
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Connector No.	M80
Connector Name	TWEETER LH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
16	-	-
17	-	-
20	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
2	O	-
6	W	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-[With BOSE system]
2	P	-[Without BOSE system]



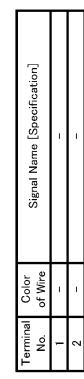
Connector No.	M403
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-1/1PP-HU



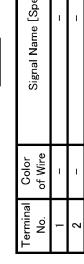
Connector No.	M402
Connector Name	WIRE TO WIRE
Connector Type	GTI3SC-1/IS-HU



Connector No.	M401
Connector Name	AUDIO UNIT
Connector Type	GT133H-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-



Terminal No.	Color of Wire	Signal Name [Specification]
51	-	ANTENNA SIGNAL
52	-	ANTENNA AMP. ON SIGNAL

JCNWM1651GE

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# BOSE AMP.

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO	
Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]	Signal Name [Specification]
2	SHIELD	-	MICROPHONE SIGNAL (+)
3	W	-	MICROPHONE SIGNAL (-)
8	R	-	MICROPHONE POWER
9	B	-	

JCNWM1652GI

# WOOFER

[BOSE AUDIO]

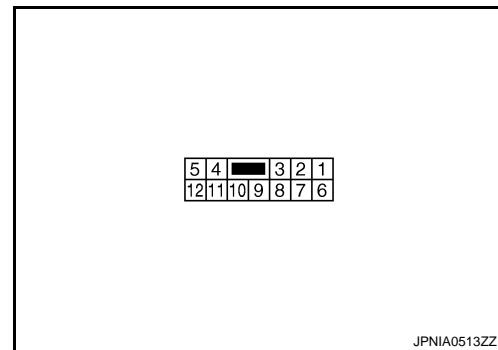
< ECU DIAGNOSIS >

## WOOFER

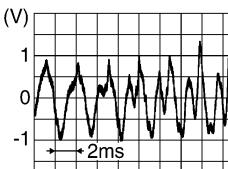
### Reference Value

INFOID:0000000004535351

### TERMINAL LAYOUT



### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
2 (Y)	1 (BR)	Sound signal woofer	Output	Ignition switch ON	Sound signal output	 SKIB3609E
3	—	Shield	—	—	—	—
4 (G)	Ground	Woofer amp. ON signal	Input	Ignition switch ON	—	12.0 V
5 (B)	Ground	GND	—	Ignition switch ON	—	0 V
6 (SB)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

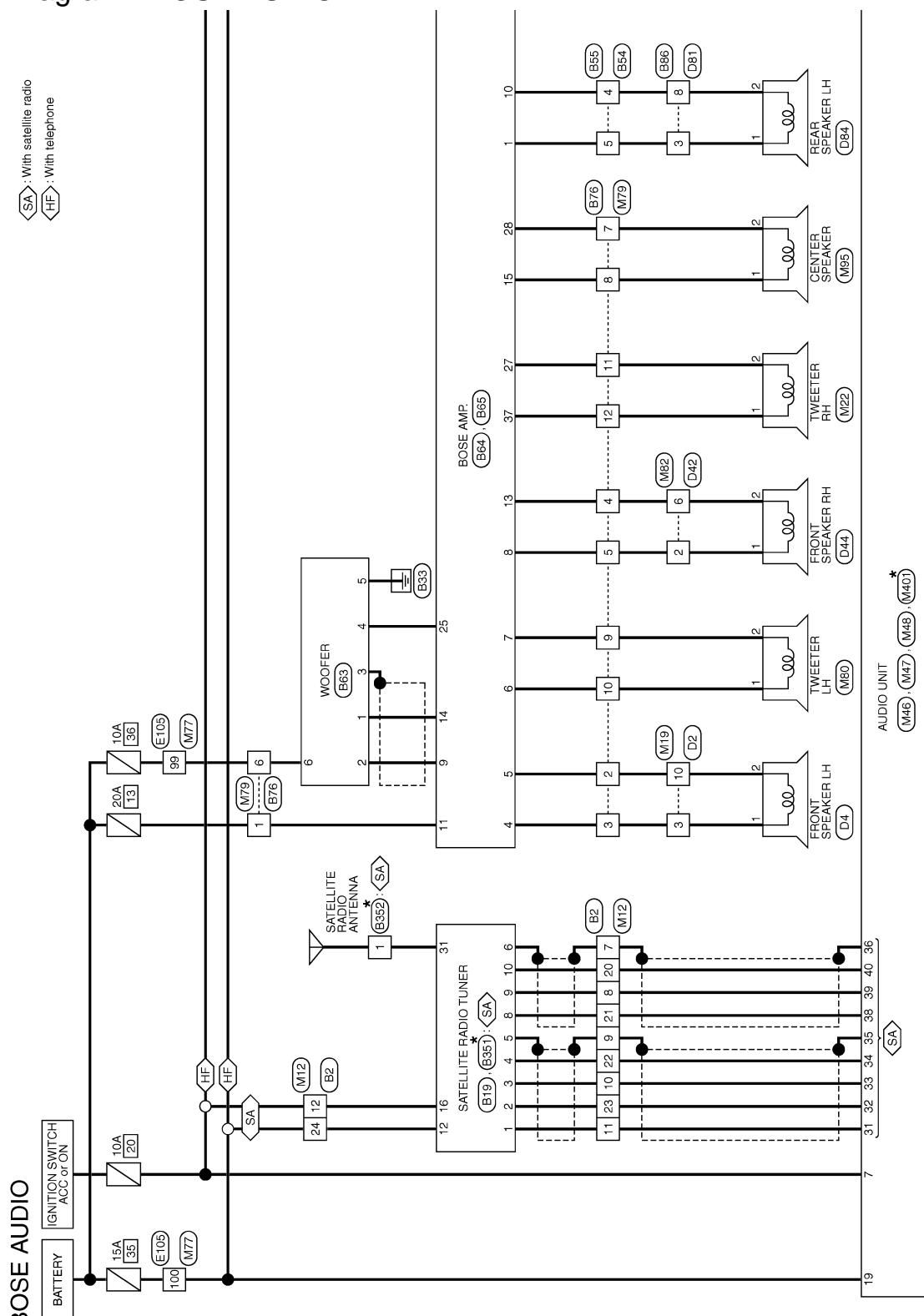
# WOOFER

[BOSE AUDIO]

< ECU DIAGNOSIS >

Wiring Diagram - BOSE AUDIO -

INFOID:0000000004535353



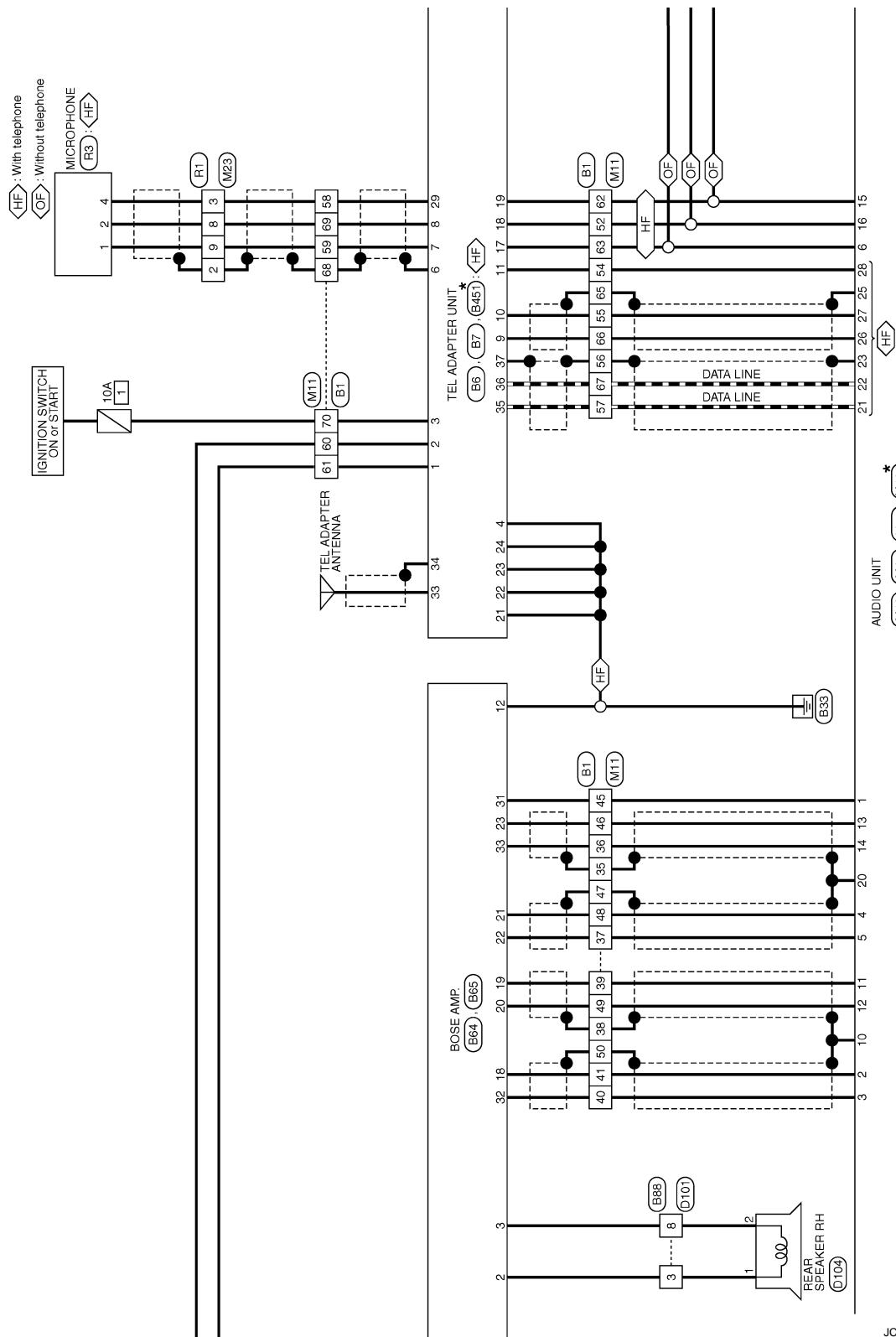
2008/07/15

JCNWM1642GI

# WOOFER

[BOSE AUDIO]

< ECU DIAGNOSIS >



\*: This connector is not shown in "Harness Layout".

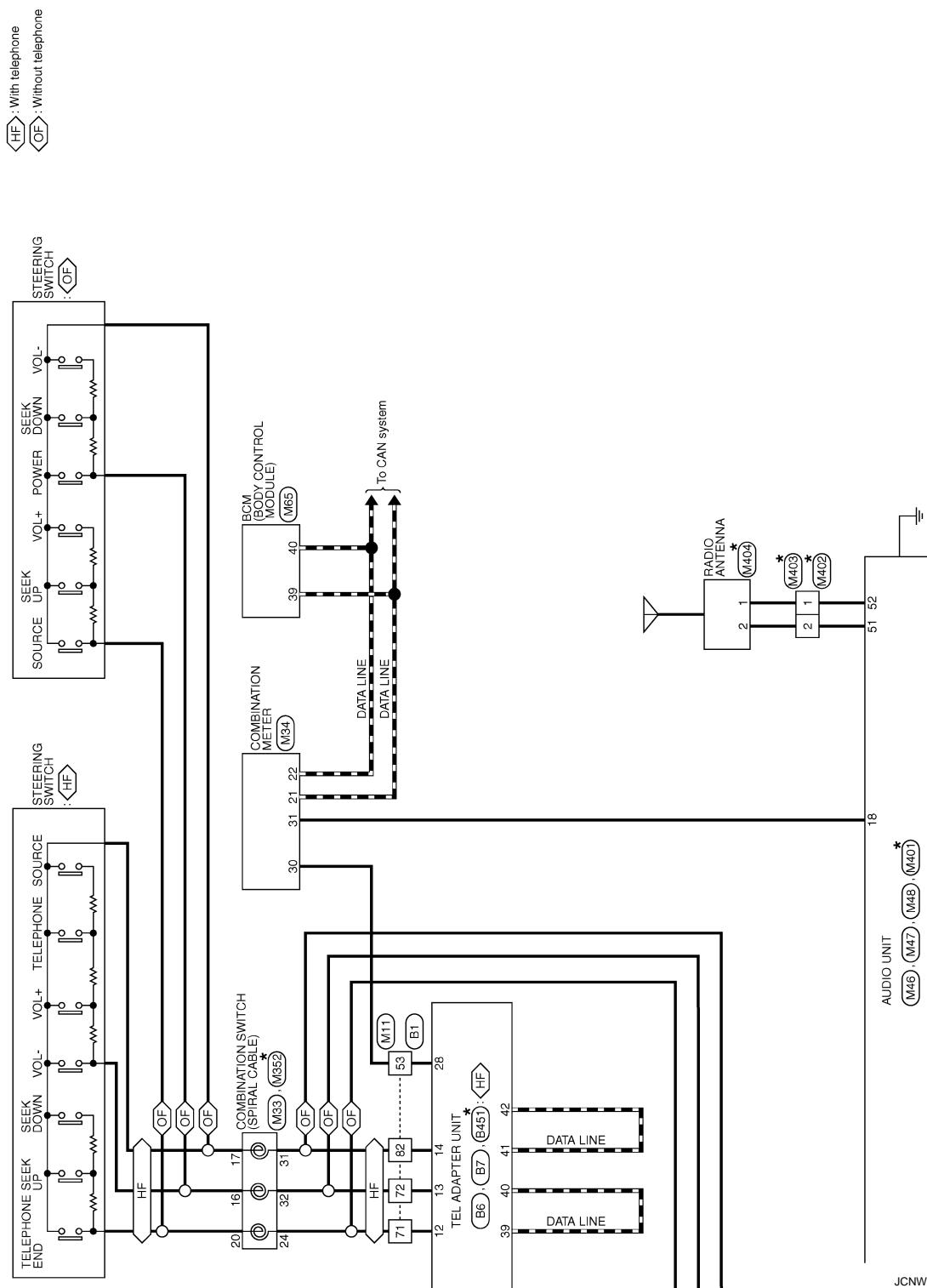
JCNWM1643GI

A B C D E F G H I M P AV O

# WOOFER

[BOSE AUDIO]

< ECU DIAGNOSIS >



JCNWM1644GI

# WOOFER

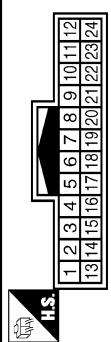
[BOSE AUDIO]

< ECU DIAGNOSIS >

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z  
AV

## BOSE AUDIO

Connector No.	B1	
Connector Name	WIRE TO WIRE	
Connector Type	TH80MW-CS16-TM4	



Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
35	SHIELD	-	63	W	-
36	R	-	65	SHIELD	-
37	LG	-	66	BR	-
38	SHIELD	-	67	P	-
39	O	-	68	SHIELD	-
40	G	-	69	R	-
41	R	-	70	W	-
45	L	-	71	W	-
46	W	-	72	Y	-
47	SHIELD	-	82	GR	-
48	V	-	62	GR	-
			64	GR	-
			65	SHIELD	-
			66	G	-
			67	SHIELD	-
			68	G	-
			69	R	-
			70	SB	-
			71	L	-
			72	Y	-
			73	W	-
			74	L	-
			75	BR	-
			76	BR	-
			77	BR	-
			78	BR	-
			79	BR	-
			80	BR	-
			81	BR	-
			82	BR	-

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
49	W	-	50	SHIELD	-
52	L	-	53	G	-
54	O	-	55	Y	-
56	SHIELD	-	57	L	-
58	W	-	59	B	-
60	SB	-	61	BR	-
62	GR	-	63	W	-
65	SHIELD	-	66	BR	-
67	P	-	68	SHIELD	-
69	R	-	70	W	-
71	W	-	72	Y	-
73	W	-	74	L	-
75	BR	-	76	BR	-
77	BR	-	78	BR	-
79	BR	-	80	BR	-
81	BR	-	82	BR	-

Connector No.	B7	
Connector Name	TEL ADAPTER UNIT	
Connector Type	TH3ZFV-NH	



Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
13	Y	STEERING SW SIGNAL B	14	GR	STEERING SW SIGNAL A
17	W	STEERING SW SIGNAL A	18	LG	STEERING SW SIGNAL B
19	GR	STEERING SW SIGNAL GND	21	B	GND
22	B	GND	23	B	GND
24	B	GND	28	G	VEHICLE SPEED SIGNAL (2-PULSE)
29	V	MICROPHONE POWER			

Connector No.	B19	
Connector Name	SATELLITE RADIO TUNER	
Connector Type	A16FW	



Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AV COMMUNICATION SIGNAL (H)	2	L	AV COMMUNICATION SIGNAL (L)
3	P	AV COMMUNICATION SIGNAL (L)	3	G	AV COMMUNICATION SIGNAL (H)
37	SHIELD	SHIELD	39	W	SHIELD
40	W	-	41	R	-
42	R	-	43	Y	REQUEST SIGNAL (SAT TO AUDIO)
			9	G	COMMUNICATION SIGNAL (SAT-AUDIO)
			10	L	COMMUNICATION SIGNAL (AUDIO-SAT)
			12	BR	BAT
			16	SE	ACC

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMMUNICATION SIGNAL (H)	36	P	AV COMMUNICATION SIGNAL (L)
37	SHIELD	SHIELD	39	W	SHIELD
40	W	-	41	R	-
42	R	-	43	Y	REQUEST SIGNAL (SAT TO AUDIO)
			9	G	COMMUNICATION SIGNAL (SAT-AUDIO)
			10	L	COMMUNICATION SIGNAL (AUDIO-SAT)
			12	BR	BAT
			16	SE	ACC

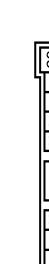
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMMUNICATION SIGNAL (H)	36	P	AV COMMUNICATION SIGNAL (L)
37	SHIELD	SHIELD	39	W	SHIELD
40	W	-	41	R	-
42	R	-	43	Y	REQUEST SIGNAL (SAT TO AUDIO)
			9	G	COMMUNICATION SIGNAL (SAT-AUDIO)
			10	L	COMMUNICATION SIGNAL (AUDIO-SAT)
			12	BR	BAT
			16	SE	ACC

JCNWM1645GI

# WOOFER

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO		BOSE AUDIO		BOSE AUDIO		BOSE AUDIO	
Connector No.	B54	Connector No.	B55	Connector No.	B63	Connector No.	B65
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WOOFER	Connector Name	SOUND SIGNAL FRONT LH (-)
Connector Type	NS12MW-CS	Connector Type	NS12FW-CS	Connector Type	RS06EGY-PR	Connector Type	SOUND SIGNAL FRONT RH (-)
							
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire
4	R	-	4	R	SOUND SIGNAL WOOFER (-)	32	G
5	L	-	5	L	SOUND SIGNAL WOOFER (+)	33	R
					SIGNAL SHIELD	37	O
					WOOFER AMP. ON SIGNAL		
					GND		
					BAT		
12	B	GND	12	B	SOUND SIGNAL FRONT LH (-)	32	G
13	R	SOUND SIGNAL FRONT SPEAKER RH (-)	13	R	SOUND SIGNAL FRONT RH (-)	33	R
14	BR	SOUND SIGNAL WOOFER (-)	14	BR	SOUND SIGNAL WOOFER (+)	37	O
14	13	12	12	11	10	37	
9	8	7	6	5	4	32	
10	9	11	10	11	12	31	
11	W	BAT	27	25	23	22	
						21	
						LG	
						23	
						25	
						27	
						28	
						31	
							L

JCNWM1646GI

## **WOOFER**

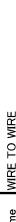
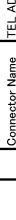
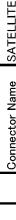
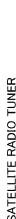
[BOSE AUDIO]

< ECU DIAGNOSIS >

BOSE AUDIO

	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td></td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5																						
6	7	8	9	10																						
11	12		13	14																						
15	16	17	18	19																						
20	21	22	23	24																						
	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td></td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5																						
6	7	8	9	10																						
11	12		13	14																						
15	16	17	18	19																						
20	21	22	23	24																						
	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td></td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5																						
6	7	8	9	10																						
11	12		13	14																						
15	16	17	18	19																						
20	21	22	23	24																						
	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td></td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5																						
6	7	8	9	10																						
11	12		13	14																						
15	16	17	18	19																						
20	21	22	23	24																						
	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td></td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5																						
6	7	8	9	10																						
11	12		13	14																						
15	16	17	18	19																						
20	21	22	23	24																						
	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td></td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24
1	2	3	4	5																						
6	7	8	9	10																						
11	12		13	14																						
15	16	17	18	19																						
20	21	22	23	24																						

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-	3	L	-
2	P	-	6	R	-
3	B	-			
4	R	-			
5	G	-			
6	SB	-			
7	O	-			
8	V	-			
9	GR	-			
10	BR	-			
11	W	-			

JCNWM1647GE

# WOOFER

[BOSE AUDIO]

< ECU DIAGNOSIS >

BOSE AUDIO		D4		D42		D44		D81		E105		D104		D101		DB4		
Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	Connector No.	Connector Name	
Front Speaker LH	FRONT SPEAKER LH	NSD0FW-CS	NSD0FW-CS	NSD0FW-CS	FRONT SPEAKER RH	NSD0FW-CS	NSD0FW-CS	NSD0FW-CS	FRONT SPEAKER RH (WITH BOSE SYSTEM)	REAR SPEAKER RH (WITH BOSE SYSTEM)	THD0FW-CS16-TM4	NSD0FBR-CS	NSD0FBR-CS	NSD0FBR-CS	NSD0FBR-CS	NSD0FBR-CS	REAR SPEAKER LH (WITH BOSE SYSTEM)	
H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	H.S.	
2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	2 1	
10 9 8 7 6 5	4 3 └ 2 1	10 9 8 7 6 5	4 3 └ 2 1	10 9 8 7 6 5	5 4 └ 3 2 1	12 11 10 9 8 7 6	5 4 └ 3 2 1	12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6	16 15 14 13 12 11 10 9 8 7 6
Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	Color of Wire	Signal Name [Specification]	
B	-	G	-	R	-	G	-	R	-	G	-	R	-	G	-	R	-	
P	-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	
Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	Terminal No.	Color of Wire	
1	B	2	G	6	R	1	G	2	R	6	R	1	G	2	R	6	R	

JCNWM1648G!

# WOOFER

[BOSE AUDIO]

< ECU DIAGNOSIS >

BOSE AUDIO		Connector No.	M11	Connector No.	M12	Connector No.	M19
Connector Name	WIRE TO WIRE			Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	THBDFW-CS16-TM4			Connector Type	TH24FW-NH	Connector Type	NS18BMW-CS
49	W	-		49	W	-	
50	SHIELD	-		50	SHIELD	-	
52	O	-		52	O	-	
53	G	-		53	G	-	
54	V	-		54	V	-	
55	Y	-		55	Y	-	
56	SHIELD	-		56	SHIELD	-	
57	L	-		57	L	-	
58	W	-		58	W	-	
59	B	-		59	B	-	
60	SB	-		60	SB	-	
61	BR	-		61	BR	-	
62	GR	-		62	GR	-	
63	W	-		63	W	-	
65	SHIELD	-		65	SHIELD	-	
66	BR	-		66	BR	-	
67	P	-		67	P	-	
68	SHIELD	-		68	SHIELD	-	
69	R	-		69	R	-	
70	LG	-		70	LG	-	
71	BR	-		71	BR	-	
72	O	-		72	O	-	
82	GR	-		82	GR	-	
48	V	-		48	V	-	
35	SHIELD	-		35	SHIELD	-	
36	P	-		36	P	-	
37	LG	-		37	LG	-	
38	SHIELD	-		38	SHIELD	-	
39	O	-		39	O	-	
40	G	-		40	G	-	
41	R	-		41	R	-	
45	BR	-		45	BR	-	
46	L	-		46	L	-	
47	SHIELD	-		47	SHIELD	-	
48	V	-		48	V	-	
24	BR	-		24	BR	-	
25	W	-		25	W	-	
26	LG	-		26	LG	-	
27	BR	-		27	BR	-	
28	O	-		28	O	-	
29	GR	-		29	GR	-	
30	Y	-		30	Y	-	
31	SB	-		31	SB	-	
32	GR	-		32	GR	-	
33	BR	-		33	BR	-	
34	W	-		34	W	-	
21	SHIELD	-		21	SHIELD	-	
22	P	-		22	P	-	
23	Y	-		23	Y	-	
24	LG	-		24	LG	-	
25	BR	-		25	BR	-	
26	O	-		26	O	-	
27	GR	-		27	GR	-	
28	SB	-		28	SB	-	
29	W	-		29	W	-	
30	Y	-		30	Y	-	
31	BR	-		31	BR	-	
32	O	-		32	O	-	
33	GR	-		33	GR	-	
34	SB	-		34	SB	-	

JCNWM1649GI

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z  
AV

# WOOFER

[BOSE AUDIO]

< ECU DIAGNOSIS >

BOSE AUDIO		M46		M47		M48	
Connector No.	TH1FW-CS2	Connector Name	AUDIO UNIT <th>Connector No.</th> <td>TH0FW-NH</td> <th>Connector Name</th> <td>AUDIO UNIT</td>	Connector No.	TH0FW-NH	Connector Name	AUDIO UNIT
Connector Type		Connector Type		Connector Type	<th>Connector Type</th> <td>A1/FW</td>	Connector Type	A1/FW
13	L	SOUND SIGNAL REAR RH (+)		13	L	SOUND SIGNAL REAR RH (+)	
14	P	SOUND SIGNAL REAR RH (-)		14	P	SOUND SIGNAL REAR LH (-)	
15	GR	STEERING SW SIGNAL CND		15	O	STEERING SW SIGNAL B (-)	
16	O	VEHICLE SPEED SIGNAL (8-PULSE)		16	L	VEHICLE SPEED SIGNAL (8-PULSE)	
18	L	BAT.		19	Y		
19	Y	SHEILD		20	SHEILD	SHEILD	
21	2	3	4	21	22	23	24
22	3	4	5	25	26	27	28
23	4	5	6	24	25	26	27
24	5	6	7	27	28	30	31
25	6	7	8	28	31	33	34
26	7	8	9	29	32	34	35
27	8	9	10	30	33	35	36
28	9	10	11	31	34	36	37
29	10	11	12	32	35	37	38
30	11	12	13	33	36	38	39
31	12	13	14	34	37	39	40
32	13	14	15	35	38	40	41
33	14	15	16	36	39	41	-
34	15	16	17	37	39	-	-
35	16	17	18	38	39	-	-
36	17	18	19	39	40	-	-
37	18	19	20	40	41	-	-
38	19	20	-	-	-	-	-
39	20	-	-	-	-	-	-
40	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
44	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-
47	-	-	-	-	-	-	-
48	-	-	-	-	-	-	-
49	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-
52	-	-	-	-	-	-	-
53	-	-	-	-	-	-	-
54	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-
56	-	-	-	-	-	-	-
57	-	-	-	-	-	-	-
58	-	-	-	-	-	-	-
59	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
63	-	-	-	-	-	-	-
64	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-
66	-	-	-	-	-	-	-
67	-	-	-	-	-	-	-
68	-	-	-	-	-	-	-
69	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-
71	-	-	-	-	-	-	-
72	-	-	-	-	-	-	-
73	-	-	-	-	-	-	-
74	-	-	-	-	-	-	-
75	-	-	-	-	-	-	-
76	-	-	-	-	-	-	-
77	-	-	-	-	-	-	-
78	-	-	-	-	-	-	-
79	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-
81	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
83	-	-	-	-	-	-	-
84	-	-	-	-	-	-	-
85	-	-	-	-	-	-	-
86	-	-	-	-	-	-	-
87	-	-	-	-	-	-	-
88	-	-	-	-	-	-	-
89	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
91	-	-	-	-	-	-	-
92	-	-	-	-	-	-	-
93	-	-	-	-	-	-	-
94	-	-	-	-	-	-	-
95	-	-	-	-	-	-	-
96	-	-	-	-	-	-	-
97	-	-	-	-	-	-	-
98	-	-	-	-	-	-	-
99	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-

JCNWM1650GI

# WOOFER

[BOSE AUDIO]

< ECU DIAGNOSIS >

BOSE AUDIO					
Connector No.	MS0	Connector No.	MS2	Connector No.	M95
Connector Name	TWEETER LH	Connector Name	WIRE TO WIRE	Connector Name	CENTER SPEAKER
Connector Type	TK02FBR	Connector Type	NS10MW-CS	Connector Type	TK02FBR
					
					
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	{With BOSE system}	2	O	V
2	P	{Without BOSE system}	6	W	P
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—	2	—	—
2	—	—	6	—	—
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	—	ANTENNA SIGNAL	2	—	—
2	—	ANTENNA AMP ON SIGNAL			

JCNWM1651GI

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

# WOOFER

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO			
Connector No.	R1		
Connector Name	WIRE TO WIRE		
Connector Type	TH12MW-NH		
			
			
			
Signal Name [Specification]			
Terminal No.	Color of Wire	Signal Name [Specification]	Signal Name
2	SHIELD	-	-
3	W	-	MICROPHONE SIGNAL (+)
8	R	-	MICROPHONE SIGNAL (-)
9	B	-	MICROPHONE POWER

JCNWM1652GI

# SATELLITE RADIO TUNER

[BOSE AUDIO]

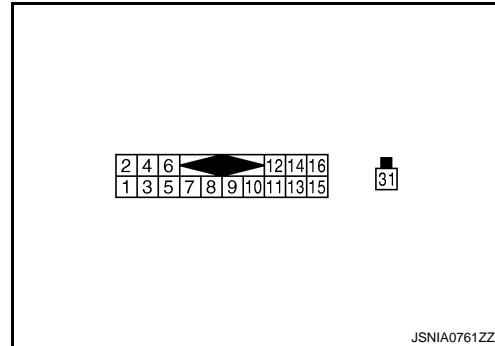
< ECU DIAGNOSIS >

## SATELLITE RADIO TUNER

### Reference Value

INFOID:0000000004235180

### TERMINAL LAYOUT



### PHYSICAL VALUES

Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
2 (L)	1 (R)	Satellite radio sound signal LH	Output	Ignition switch ON	When satellite radio mode is selected	 SKIB3609E
4 (W)	3 (G)	Satellite radio sound signal RH	Output	Ignition switch ON	When satellite radio mode is selected	 SKIB3609E
5	—	Shield	—	—	—	—
6	—	Shield	—	—	—	—
8 (Y)	Ground	Request signal (SAT TO AUDIO)	Output	Ignition switch ON	When satellite radio mode is selected	 JSNIA0675ZZ
9 (G)	Ground	Communication signal (SAT-AUDIO)	Output	Ignition switch ON	When satellite radio mode is selected	 PKIB5039J

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

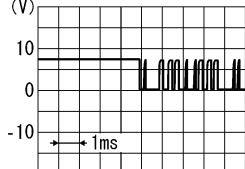
O

P

# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >

Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
10 (L)	Ground	Communication signal (AUDIO→SAT)	Input	Ignition switch ON	When satellite radio mode is selected	 SKIA9301J
12 (BR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
16 (SB)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
31	—	Satellite radio antenna sig- nal	Input	—	—	—

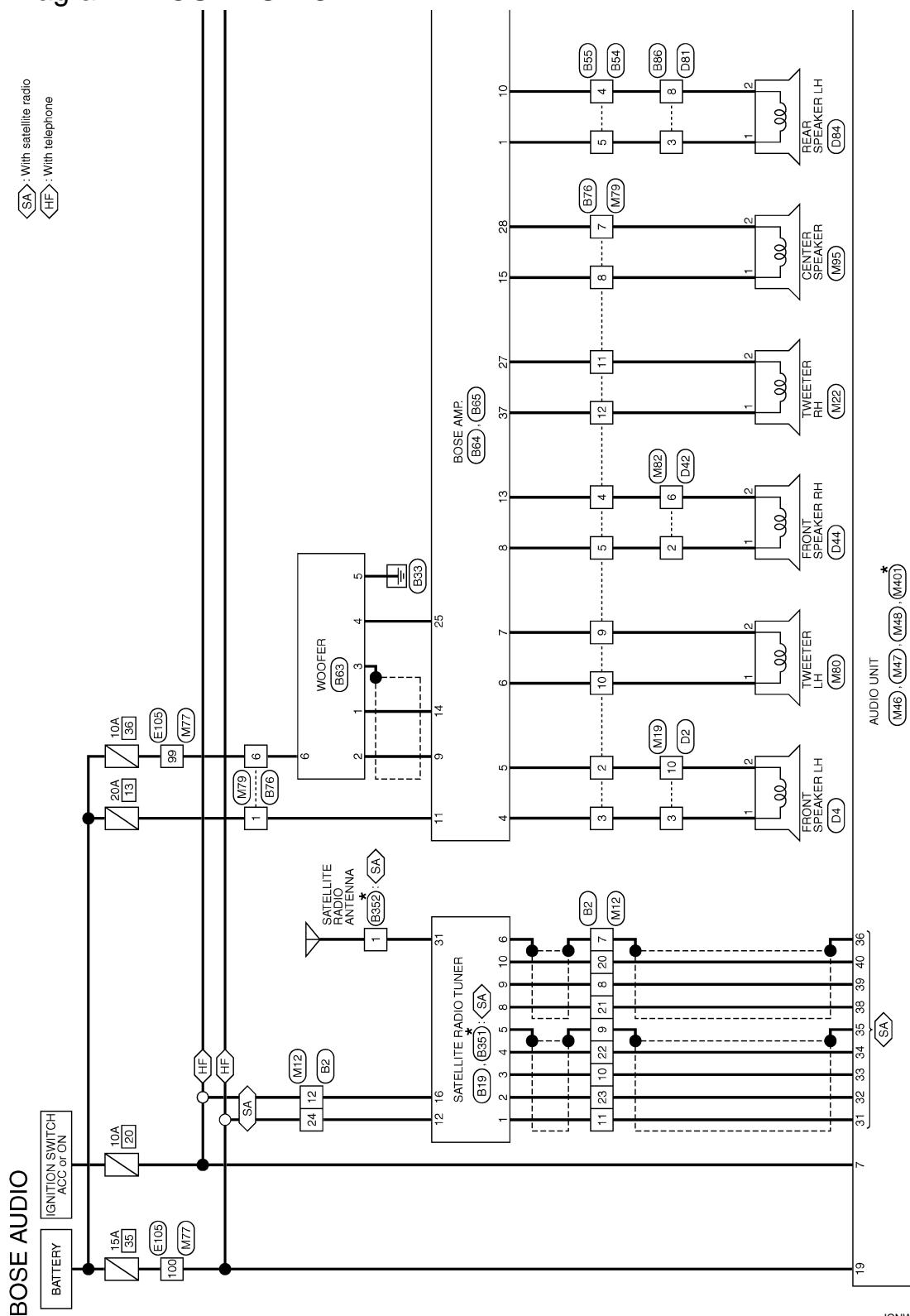
# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >

Wiring Diagram - BOSE AUDIO -

INFOID:000000004535238



\*:This connector is not shown in "Harness Layout".

2008/07/15

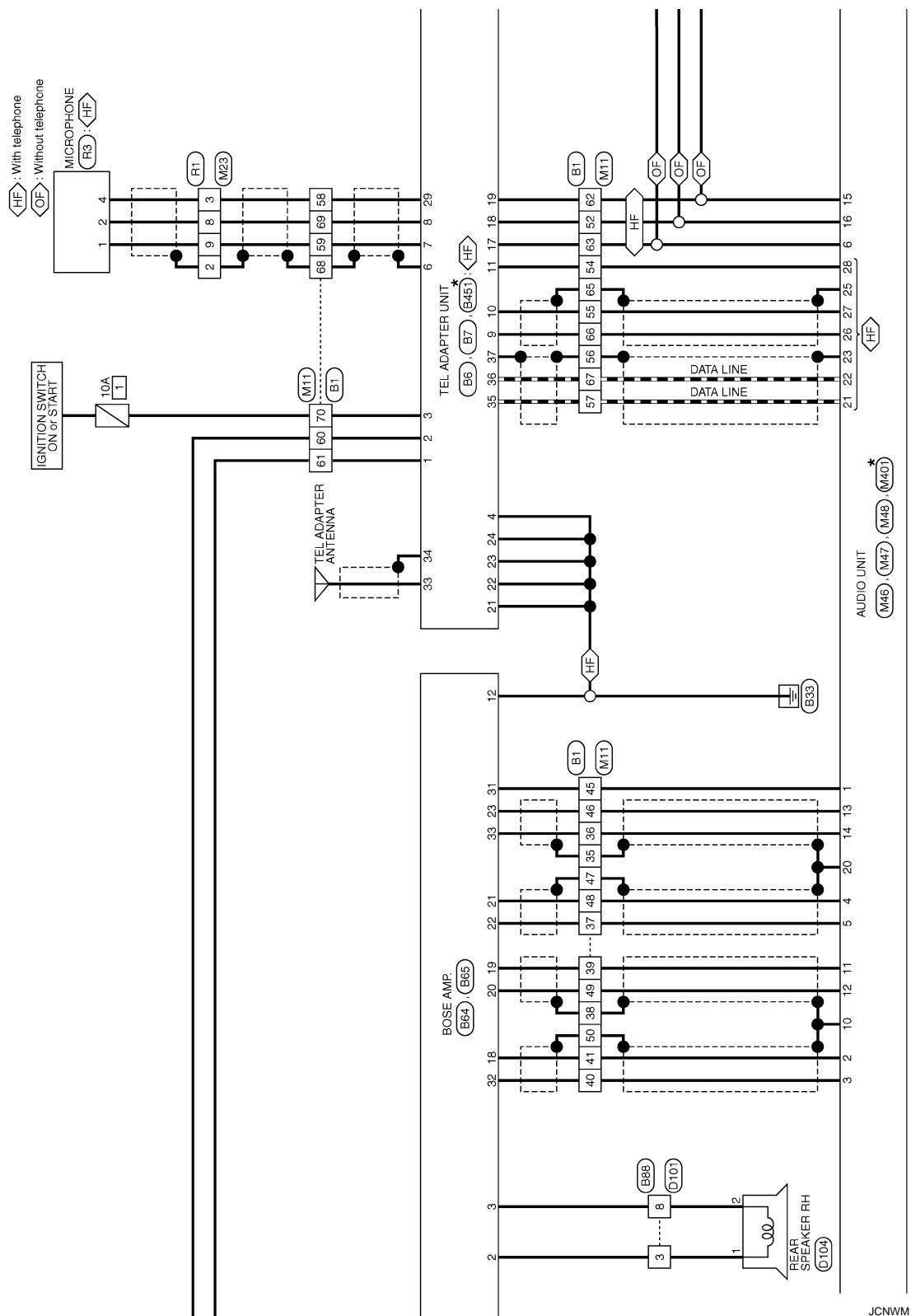
JCNWM1642G

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS >

[BOSE AUDIO]



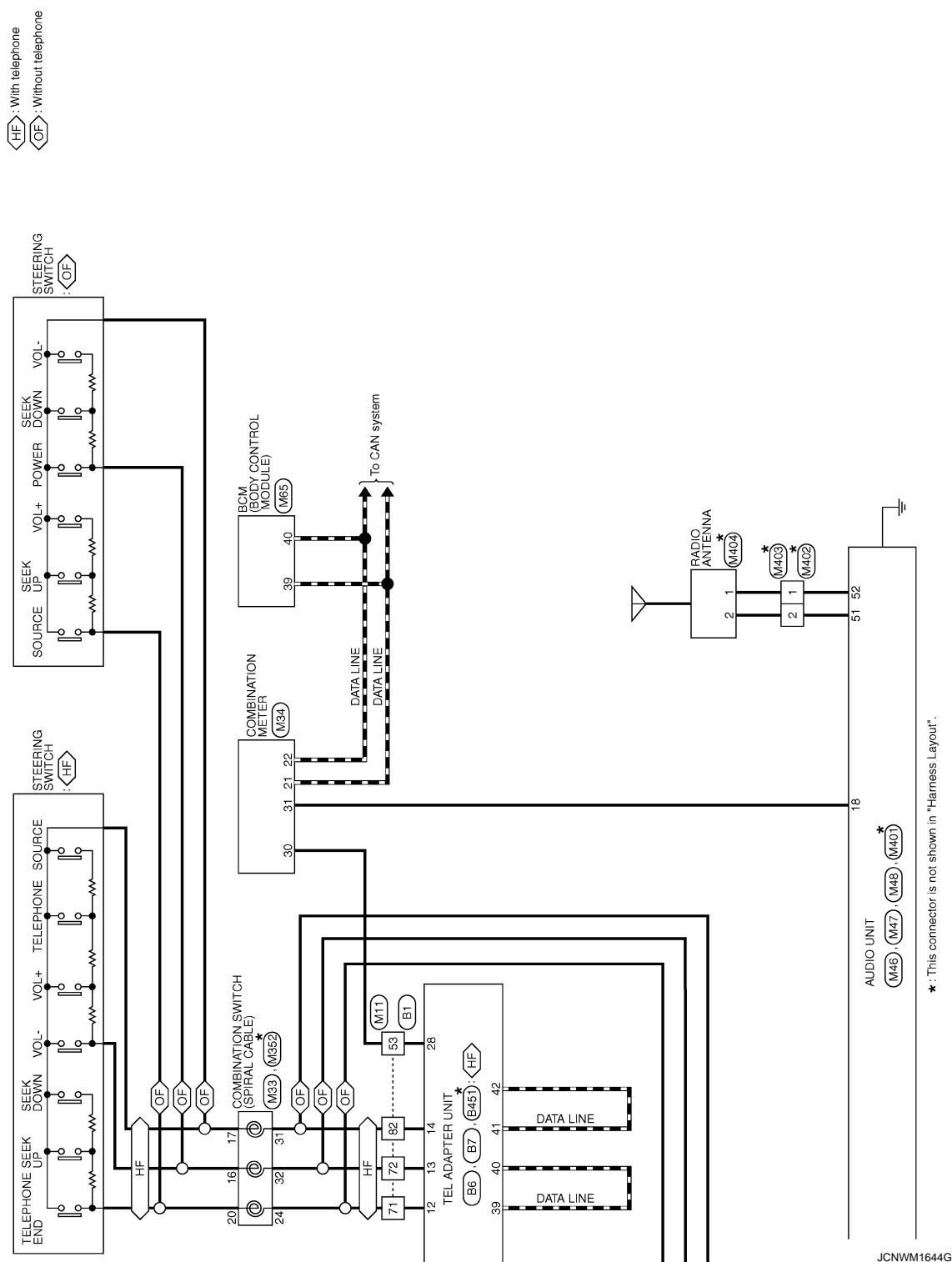
\* : This connector is not shown in "Harness Layout".

JCNWM1643GI

# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >



\*: This connector is not shown in "Harness Layout".

# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >

## BOSE AUDIO

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS 16-TM4



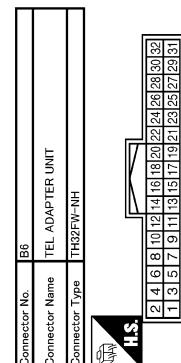
Terminal No.	Color of Wire	Signal Name [Specification]
35	SHIELD	-
36	R	-
37	L.G	-
38	SHIELD	-
39	O	-
40	G	-
41	R	-
45	L	-
46	W	-
47	SHIELD	-
48	V	-

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
49	W	-	50	SHIELD	-
50	SHIELD	-	52	L	-
53	G	-	54	O	-
55	Y	-	56	SHIELD	-
57	L	-	58	W	-
59	B	-	60	SB	-
61	BR	-	62	GR	-
63	V	-	65	SHIELD	-
66	BR	-	67	P	-
68	SHIELD	-	69	R	-
70	W	-	71	W	-
72	Y	-	82	GR	-
82	GR	-	82	GR	-

Connector No.	B6
Connector Name	TEL ADAPTER UNIT
Connector Type	TH3ZFV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	Y	STEERING SW SIGNAL B
14	GR	STEERING SW SIGNAL GND
17	W	STEERING SW SIGNAL A
18	L	STEERING SW SIGNAL B
19	GR	STEERING SW SIGNAL GND
21	B	GND
22	B	GND
23	B	GND
24	B	GND
28	G	VEHICLE SPEED SIGNAL (2-PULSE)
29	W	MICROPHONE POWER



Connector No.	B7
Connector Name	TEL ADAPTER UNIT
Connector Type	TH3ZFV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	BAT
2	SB	ACC
3	W	IGN
4	B	GRID
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL (+)
8	R	MICROPHONE SIGNAL (-)
9	BR	SOUND SIGNAL (+)
10	Y	SOUND SIGNAL (-)
11	O	TELEPHONE ON SIGNAL
12	W	STEERING SW SIGNAL A

Connector No.	B19
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AV COMMUNICATION SIGNAL (H)
2	L	AV COMMUNICATION SIGNAL (L)
3	P	SHIELD
37	SHIELD	SHIELD
39	W	SHIELD
40	W	SHIELD
41	R	SHIELD
42	R	SHIELD
8	Y	REQUEST SIGNAL (SAT TO AUDIO)
9	G	COMMUNICATION SIGNAL (SAT-AUDIO)
10	L	COMMUNICATION SIGNAL (AUDIO-SAT)
12	BR	BAT
16	SB	ACC

JCNWM1645G!

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS >

[BOSE AUDIO]

## BOSE AUDIO

Connector No.	B64	Connector No.	B65
Connector Name	WIRE TO WIRE	Connector Name	WOOFER
Connector Type	NS12MW-CS	Connector Type	RS06FGY-PR



Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-
5	L	-



Terminal No.	Color of Wire	Signal Name [Specification]
1	2	3
6	7	8



Connector No.	B64	Connector No.	B65
Connector Name	WIRE TO WIRE	Connector Name	WOOFER
Connector Type	NS12FW-CS	Connector Type	RS06FGY-PR



Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-	1	BR	SOUND SIGNAL WOOFER (-)
5	L	-	2	Y	SOUND SIGNAL WOOFER (+)

SHIELD

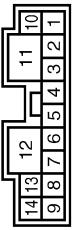
WOOFER AMP ON SIGNAL

GND

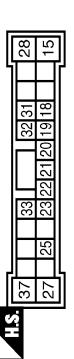
BAT

Terminal No.	Color of Wire	Signal Name [Specification]
12	B	GND
13	R	SOUND SIGNAL FRONT SPEAKER RH (-)

SOUND SIGNAL WOOFER (-)



Connector No.	B65	Connector No.	B64
Connector Name	BOSE AMP.	Connector Name	BOSE AMP.
Connector Type	SCA1FBR-SG4	Connector Type	SGA12FBR-SG4



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	SOUND SIGNAL REAR SPEAKER LH (+)
2	GR	SOUND SIGNAL REAR SPEAKER RH (+)
3	Y	SOUND SIGNAL REAR SPEAKER RH (-)
4	B	SOUND SIGNAL FRONT SPEAKER LH (+)
5	P	SOUND SIGNAL FRONT SPEAKER LH (-)
6	BR	SOUND SIGNAL FRONT SPEAKER LH (+)
7	GR	SOUND SIGNAL FRONT SPEAKER LH (-)
8	G	SOUND SIGNAL FRONT SPEAKER RH (+)
9	Y	SOUND SIGNAL FRONT SPEAKER RH (-)
10	R	SOUND SIGNAL REAR SPEAKER LH (-)
11	W	BAT

Terminal No.	Color of Wire	Signal Name [Specification]
15	V	SOUND SIGNAL CENTER SPEAKER (+)
18	R	SOUND SIGNAL FRONT LH (+)
19	O	SOUND SIGNAL FRONT RH (+)
20	W	SOUND SIGNAL FRONT RH (-)
21	V	SOUND SIGNAL REAR LH (+)
22	LG	SOUND SIGNAL REAR LH (-)
23	W	SOUND SIGNAL REAR RH (+)
25	G	WOOFER AMP ON SIGNAL
27	W	SOUND SIGNAL TWEETER RH (-)
28	O	SOUND SIGNAL TWEETER RH (+)
31	L	AMP ON SIGNAL

JCNWM1646GI

AV

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS >

[BOSE AUDIO]

<b>BOSE AUDIO</b>	12      O      -	
Connector No.	B76	
Connector Name	WIRE TO WIRE	
Connector Type	NS12MW-CS	
		
Connector No.	B86	
Connector Name	WIRE TO WIRE	
Connector Type	NS12MW-CS	
		
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	P	-
3	B	-
4	R	-
5	G	-
6	SB	-
7	O	-
8	V	-
9	GR	-
10	BR	-
11	W	-
Terminal No.	Color of Wire	Signal Name [Specification]
1	2	3
2	3	4
3	4	5
4	5	-
5	6	-
6	7	-
7	8	-
8	9	-
9	10	-
10	11	-
11	12	-
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	-
6	R	-
8	Y	-
9	GR	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-

JCNWM1647GI

# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >

## BOSE AUDIO

Connector No.	D4
Connector Name	FRONT SPEAKER LH
Connector Type	NSD2FW-CS



Connector No.	D42
Connector Name	WIRE TO WIRE
Connector Type	NSD2FW-CS



Connector No.	D44
Connector Name	FRONT SPEAKER RH
Connector Type	NSD2FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	P	-



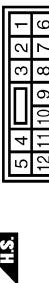
Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
6	R	-



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
2	R	-



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
8	Y	-



Connector No.	D54
Connector Name	REAR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NSD2FR-CS



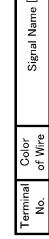
Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	NSD2FW-CS



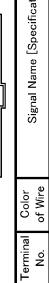
Connector No.	D104
Connector Name	REAR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NSD2FR-CS



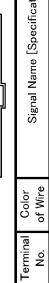
Connector No.	D105
Connector Name	WIRE TO WIRE
Connector Type	THDFW-CS16-M4



Connector No.	D105
Connector Name	WIRE TO WIRE
Connector Type	THDFW-CS16-M4



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-



JCNWM1648GI

AV

O

P

A

B

C

D

E

F

G

H

I

K

L

M

N

P

R

T

U

V

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS >

[BOSE AUDIO]

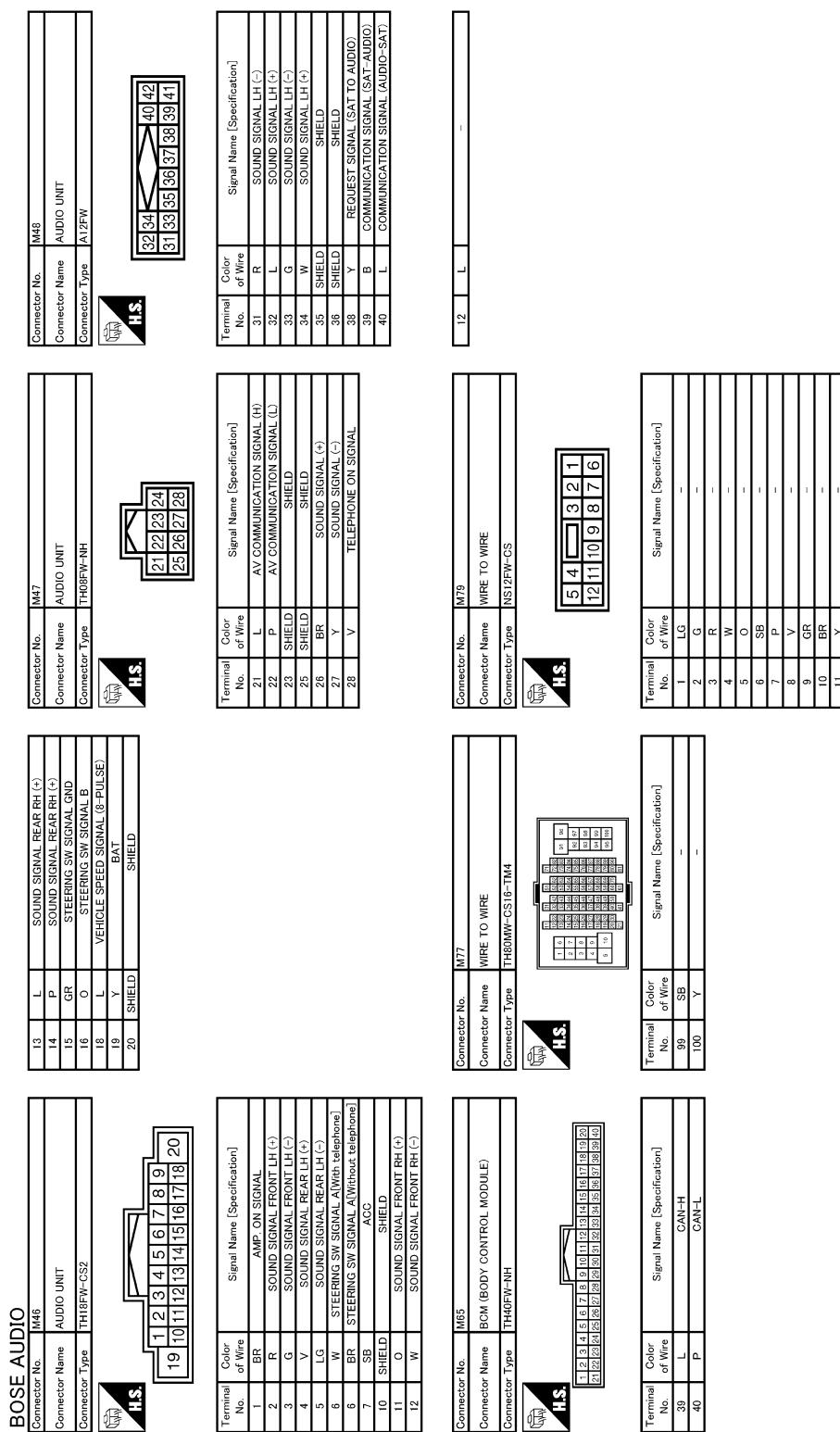
<b>BOSE AUDIO</b>			
Connector No.	M11	Connector No.	M12
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	THBDFW-CS16-TM4	Connector Type	THB4FW-NH
Terminal No.	Color of Wire	Signal Name [Specification]	
35	SHIELD	-	
36	P	-	
37	LG	-	
38	SHIELD	-	
39	O	-	
40	G	-	
41	R	-	
45	BR	-	
46	L	-	
47	SHIELD	-	
48	V	-	
49	W	-	
50	SHIELD	-	
52	O	-	
53	G	-	
54	V	-	
55	Y	-	
56	SHIELD	-	
57	L	-	
58	W	-	
59	B	-	
60	SB	-	
61	BR	-	
62	GR	-	
63	V	-	
65	SHIELD	-	
66	BR	-	
67	P	-	
68	SHIELD	-	
69	R	-	
70	LG	-	
71	LG	-	
72	O	-	
82	GR	-	
Terminal No.	Color of Wire	Signal Name [Specification]	
7	SHIELD	-	
8	B	-	
9	SHIELD	-	
10	G	-	
11	R	-	
12	SB	-	
20	L	-	
21	Y	-	
22	W	-	
23	L	-	
24	BR	-	
Connector No.	M22	Connector No.	M23
Connector Name	TWEETER RH	Connector Name	WIRE TO WIRE
Connector Type	TKQFWR	Connector Type	TH12FW-NH
Terminal No.	Color of Wire	Signal Name [Specification]	
1	L	-	
2	Y	-	
2	SHIELD	-	
3	W	-	
8	R	-	
9	B	-	
Connector No.	M19	Connector No.	M34
Connector Name	WIRE TO WIRE	Connector Name	COMBINATION METER
Connector Type	NS1BMW-CS	Connector Type	SAB4FW
Terminal No.	Color of Wire	Signal Name [Specification]	
21	L	CAN-H	
22	P	CAN-L	
30	Y	VEHICLE SPEED (2-PULSE)	
31	L	VEHICLE SPEED (6-PULSE)	
Terminal No.	Color of Wire	Signal Name [Specification]	
24	BR	-	
31	GR	-	
32	O	-	
Terminal No.	Color of Wire	Signal Name [Specification]	
6	5	1	
5	4	2	
4	3	3	
3	2	4	
2	1	5	
24	25	26	
25	26	27	
31	32	33	
32	33	34	

JCNWM1649GI

# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >



JCNWM1650GI

A B C D E F G H I J K L M N O P

# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >

BOSE AUDIO		Connector No.	M80	Connector Name	WIRE TO WIRE	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]
Connector No.	M80	Connector Name	TWEETER LH	Connector Type	TK02FBR	1	BR	2	V	16	-
Connector No.	M80	Connector Name	TWEETER RH	Connector Type	TK02FBR	2	P	3	P	17	-
Connector No.	M80	Connector Name	ANTENNA SIGNAL	Connector Type	GT1SSH-2/S-HU	51	-	4	-	20	-
Connector No.	M80	Connector Name	ANTENNA AMP. ON SIGNAL	Connector Type	GT1SSH-2/S-HU	52	-	5	-	-	-
BOSE AUDIO		Connector No.	M82	Connector Name	CENTER SPEAKER	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]
Connector No.	M82	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	1	2	3	4	18	-
Connector No.	M82	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	5	6	7	8	19	-
Connector No.	M82	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	9	10	11	12	20	-
Connector No.	M82	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	14	15	16	17	21	-
BOSE AUDIO		Connector No.	M95	Connector Name	CENTER SPEAKER	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]
Connector No.	M95	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	1	2	3	4	16	-
Connector No.	M95	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	5	6	7	8	17	-
Connector No.	M95	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	9	10	11	12	20	-
Connector No.	M95	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	14	15	16	17	18	-
Connector No.	M95	Connector Name	NS10MWY-CS	Connector Type	TK02FBR	19	20	21	-	-	-
BOSE AUDIO		Connector No.	M401	Connector Name	AUDIO UNIT	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]
Connector No.	M401	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	1	BR	2	V	1	-
Connector No.	M401	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	2	P	3	P	2	-
Connector No.	M401	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	51	-	52	-	-	-
Connector No.	M401	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	52	-	51	-	-	-
BOSE AUDIO		Connector No.	M402	Connector Name	WIRE TO WIRE	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]
Connector No.	M402	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	1	BR	2	V	1	-
Connector No.	M402	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	2	P	3	P	2	-
Connector No.	M402	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	51	-	52	-	-	-
Connector No.	M402	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	52	-	51	-	-	-
BOSE AUDIO		Connector No.	M403	Connector Name	WIRE TO WIRE	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]
Connector No.	M403	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	1	BR	2	V	1	-
Connector No.	M403	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	2	P	3	P	2	-
Connector No.	M403	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	51	-	52	-	-	-
Connector No.	M403	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	52	-	51	-	-	-
BOSE AUDIO		Connector No.	M404	Connector Name	RADIO ANTENNA	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]	Terminal Color of Wire No.	Signal Name [Specification]
Connector No.	M404	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	1	BR	2	V	1	-
Connector No.	M404	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	2	P	3	P	2	-
Connector No.	M404	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	51	-	52	-	-	-
Connector No.	M404	Connector Name	GT1SSH-2/S-HU	Connector Type	GT1SSH-2/S-HU	52	-	51	-	-	-

JCNWM1651GI

# SATELLITE RADIO TUNER

[BOSE AUDIO]

< ECU DIAGNOSIS >

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

BOSE AUDIO		
Connector No.	RI	
Connector Name	WIRE TO WIRE	
Connector Type	TH12MW-NH	
		
		
BOSE AUDIO		
Connector No.	R3	
Connector Name	MICROPHONE	
Connector Type	TK04FW	
		
		
Signal Name [Specification]		
Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	W	-
8	R	-
9	B	-
Signal Name [Specification]		
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	MICROPHONE SIGNAL (+)
2	R	MICROPHONE SIGNAL (-)
4	W	MICROPHONE POWER

JCNWM1652GI

# TEL ADAPTER UNIT

[BOSE AUDIO]

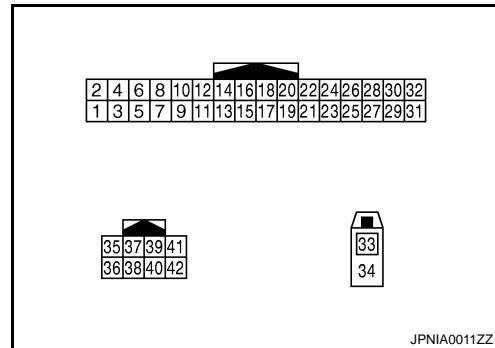
< ECU DIAGNOSIS >

## TEL ADAPTER UNIT

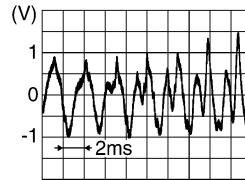
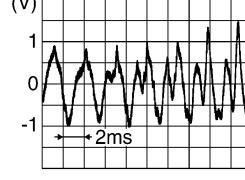
### Reference Value

INFOID:0000000004235182

### TERMINAL LAYOUT



### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (BR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
2 (SB)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
3 (W)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
4 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
6	—	Shield	—	—	—	—
7 (B)	8 (R)	Microphone signal	Input	Ignition switch ON	Give a voice	 SKIB3609E
9 (BR)	10 (Y)	Sound signal (Telephone voice, tele- phone guidance)	Output	Ignition switch ON	During voice guide output with the  switch pressed	 SKIB3609E
11 (O)	Ground	Telephone ON signal	Output	Ignition switch ON	While using hands-free phone system	0 V
					While not using hands-free phone system	5.0 V

# TEL ADAPTER UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
12 (W)	14 (GR)	Steering switch signal A	Input	Ignition switch ON	Keep pressing  switch	0 V
					Keep pressing SEEK UP switch	1.25 V
					Keep pressing SEEK DOWN switch	2.5 V
					Except for above	5.0 V
13 (Y)	14 (GR)	Steering switch signal B	Input	Ignition switch ON	Keep pressing VOL DOWN switch	0 V
					Keep pressing VOL UP switch	1.25 V
					Keep pressing   switch	2.5 V
					Keep pressing SOURCE switch	3.7 V
					Except for above.	5.0 V
14 (GR)	Ground	Steering switch signal ground	—	Ignition switch ON	—	0 V
17 (W)	19 (GR)	Steering switch signal A	Output	Ignition switch ON	Keep pressing SOURCE switch	0 V
					Keep pressing SEEK UP switch	1.1 V
					Keep pressing VOL UP switch	2.2 V
					Except for above	3.3 V
18 (L)	19 (GR)	Steering switch signal B	Output	Ignition switch ON	Keep pressing SEEK DOWN switch	1.1 V
					Keep pressing VOL DOWN switch	2.2 V
					Except for above	3.3 V
19 (GR)	Ground	Steering switch signal ground	—	Ignition switch ON	—	0 V
21 (B)	Ground	Control signal	—	Ignition switch ON	—	0 V
22 (B)	Ground	Control signal	—	Ignition switch ON	—	0 V
23 (B)	Ground	Control signal	—	Ignition switch ON	—	0 V
24 (B)	Ground	Ground	—	Ignition switch ON	—	0 V

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

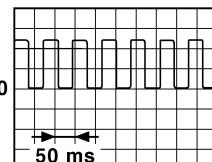
O

P

# TEL ADAPTER UNIT

**[BOSE AUDIO]**

< ECU DIAGNOSIS >

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
28 (G)	Ground	Vehicle speed signal (2-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25MPH)	<b>NOTE:</b> The maximum voltage varies depending on the specification (destination unit).  <small>JSNIA0015GB</small>
29 (W)	Ground	Microphone power supply	Output	Ignition switch ON	—	5.0 V
33	—	TEL antenna signal	Input	—	—	—
34	—	Shield	—	—	—	—
35 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
36 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
37	—	Shield	—	—	—	—
39 (W)	—	Data line	—	—	—	—
40 (W)	—	Data line	—	—	—	—
41 (R)	—	Data line	—	—	—	—
42 (R)	—	Data line	—	—	—	—

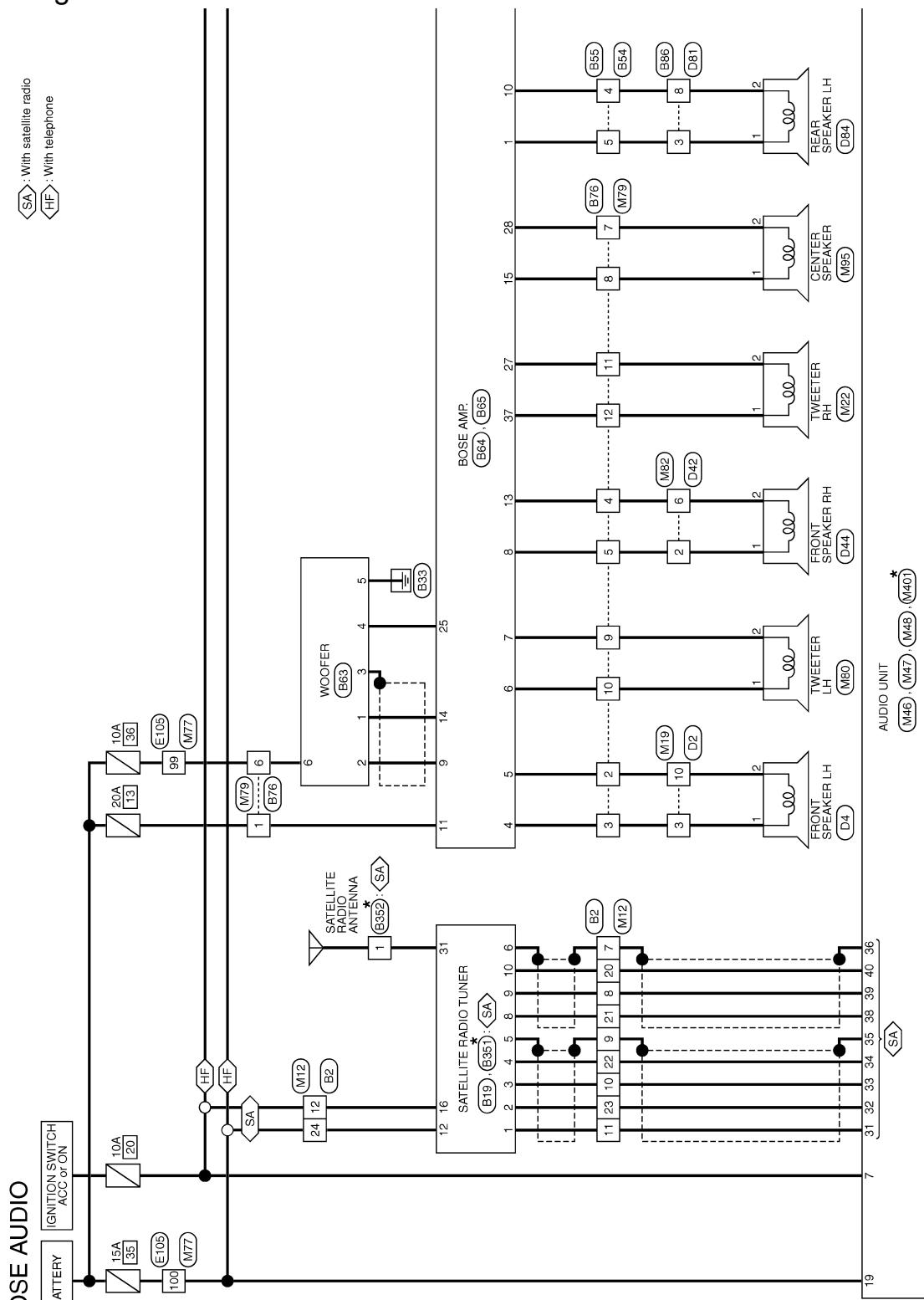
# **TEL ADAPTER UNIT**

< ECU DIAGNOSIS >

[BOSE AUDIO]

## Wiring Diagram - BOSE AUDIO -

INFOID:000000004535239



**\*:** This connector is not shown in "Harness Layout".

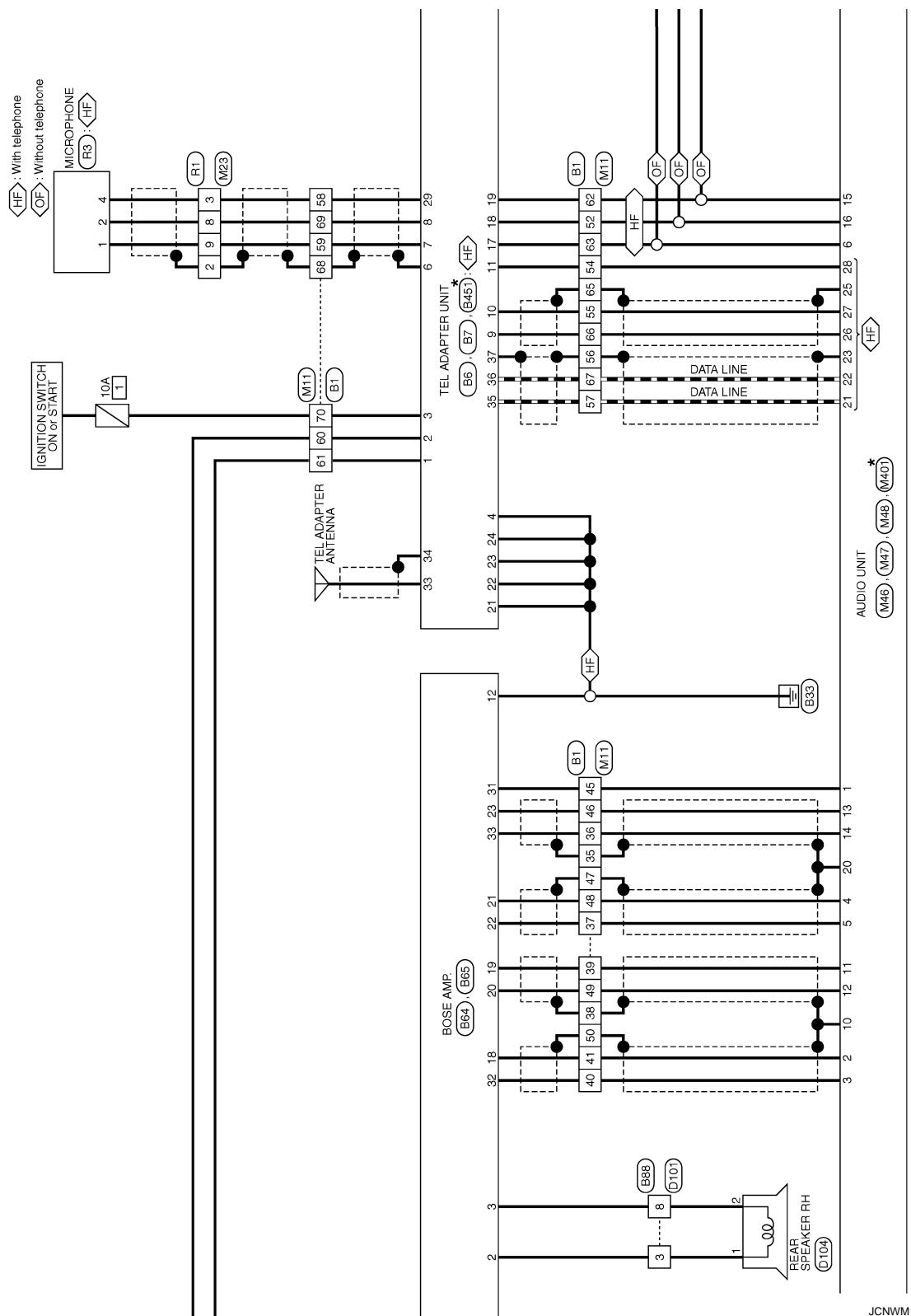
2008/07/15

JCNWM1642G

# TEL ADAPTER UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

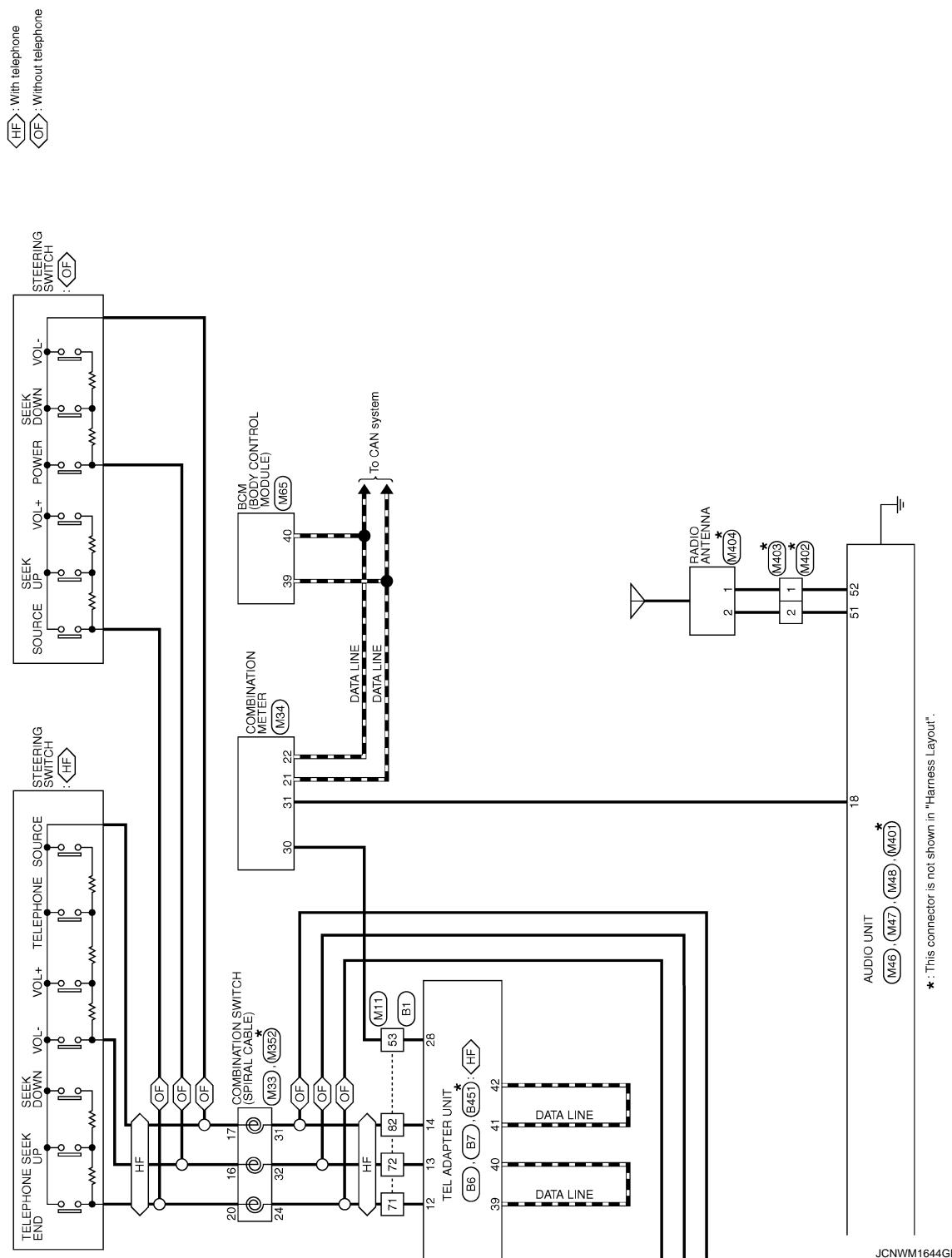


JCNWM1643GI

# TEL ADAPTER UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >



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

# TEL ADAPTER UNIT

< ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO		B1		B2		B19		B7		B6		B1		
Connector No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Connector No.	Color of Wire	Signal Name [Specification]	Connector No.	Color of Wire	Signal Name [Specification]	Connector No.	Color of Wire	Signal Name [Specification]
Connector Name	WIRE TO WIRE		49	W		Connector Name	R	SOUND SIGNAL LH (-)	Connector Name	L	SOUND SIGNAL LH (+)	Connector Name	BAT	
Connector Type	TH80MW-CS 16-TM4		50	SHIELD		Connector Type	P	SOUND SIGNAL LH (+)	Connector Type	G	SOUND SIGNAL RH (-)	Connector Type	ACC	
			52	L						SHIELD				
			53	G						SHIELD				
			54	O						SHIELD				
			55	Y						SHIELD				
			56	SHIELD						SHIELD				
			57	L						SHIELD				
			58	W						SHIELD				
			59	B						SHIELD				
			60	SB						SHIELD				
			61	BR						SHIELD				
			62	GR						SHIELD				
			63	V						SHIELD				
			65	SHIELD						SHIELD				
			66	BR						SHIELD				
			67	P						SHIELD				
			68	SHIELD						SHIELD				
			69	R						SHIELD				
			70	W						SHIELD				
			71	L						SHIELD				
			72	Y						SHIELD				
			82	GR						SHIELD				
			40	G						SHIELD				
			41	R						SHIELD				
			45	L						SHIELD				
			46	W						SHIELD				
			47	SHIELD						SHIELD				
			48	V						SHIELD				
			13	Y	STEERING SW SIGNAL B		13	Y	STEERING SW SIGNAL B	24	6	12	14	16
			14	GR	STEERING SW SIGNAL GND		14	GR	STEERING SW SIGNAL A	25	5	7	8	9
			17	W	STEERING SW SIGNAL A		17	W	STEERING SW SIGNAL B	26	3	9	10	11
			18	L	STEERING SW SIGNAL B		18	L	STEERING SW SIGNAL CND	27	1	3	5	13
			19	GR	STEERING SW SIGNAL CND		19	GR	STEERING SW SIGNAL CND	28	2	37	39	41
			21	B	GND		21	B	GND	29	36	38	40	42
			22	B	GND		22	B	GND					
			23	B	GND		23	B	GND					
			24	B	GND		24	B	GND					
			28	G	VEHICLE SPEED SIGNAL (2-PULSE)		28	G	MICROPHONE POWER					
			29	V										

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	BAT	35	L	AV COMMUNICATION SIGNAL (H)
2	SB	ACC	36	P	AV COMMUNICATION SIGNAL (L)
3	W	IGN	37	SHIELD	SHIELD
4	B	GRID	39	W	-
6	SHIELD	SHIELD	40	W	-
7	B	MICROPHONE SIGNAL (+)	41	R	REQUEST SIGNAL (SAT TO AUDIO)
8	R	MICROPHONE SIGNAL (-)	42	R	REQUEST SIGNAL (AUDIO TO SAT)
9	BR	SOUND SIGNAL (+)			COMMUNICATION SIGNAL (SAT-AUDIO)
10	Y	SOUND SIGNAL (-)			COMMUNICATION SIGNAL (AUDIO-SAT)
11	O	TELEPHONE ON SIGNAL			BAT
12	W	STEERING SW SIGNAL A			ACC

JCNWM1645GI

# TEL ADAPTER UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >

A B C D E F G H I J K L M N O P

BOSE AUDIO	
Connector No.	B64
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Terminal Color No. Signal Name [Specification]					
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-	1	BR	SOUND SIGNAL WOOFER (-)
5	L	-	2	Y	SOUND SIGNAL WOOFER (+)

Terminal No.	Color of Wire	Signal Name [Specification]
12	B	GND
13	R	SOUND SIGNAL FRONT SPEAKER RH (-)
14	BR	SOUND SIGNAL WOOFER (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	SOUND SIGNAL REAR SPEAKER LH (+)
2	GR	SOUND SIGNAL REAR SPEAKER RH (+)
3	Y	SOUND SIGNAL REAR SPEAKER RH (-)
4	B	SOUND SIGNAL FRONT SPEAKER LH (+)
5	P	SOUND SIGNAL FRONT SPEAKER LH (-)
6	BR	SOUND SIGNAL FRONT TWEETER LH (+)
7	GR	SOUND SIGNAL FRONT TWEETER LH (-)
8	G	SOUND SIGNAL FRONT SPEAKER RH (+)
9	Y	SOUND SIGNAL FRONT WOOFER (+)
10	R	SOUND SIGNAL REAR SPEAKER LH (-)
11	W	BAT

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	SOUND SIGNAL WOOFER (-)
2	Y	SOUND SIGNAL WOOFER (+)
3	SHIELD	SHIELD
4	G	WOOFER AMP ON SIGNAL
5	B	GND
6	SB	BAT

Terminal No.	Color of Wire	Signal Name [Specification]
12	G	SOUND SIGNAL FRONT LH (-)
13	R	SOUND SIGNAL REAR LH (-)
14	O	SOUND SIGNAL TWEETER RH (+)

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	SOUND SIGNAL CENTER SPEAKER (+)
2	R	SOUND SIGNAL FRONT LH (+)
3	O	SOUND SIGNAL FRONT RH (+)
4	W	SOUND SIGNAL FRONT RH (-)
5	V	SOUND SIGNAL REAR LH (+)
6	LG	SOUND SIGNAL REAR RH (-)
7	W	SOUND SIGNAL REAR RH (+)
8	G	WOOFER AMP ON SIGNAL
9	W	SOUND SIGNAL TWEETER RH (-)
10	O	SOUND SIGNAL CENTER SPEAKER (-)
11	L	AMP. ON SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	SOUND SIGNAL FRONT SPEAKER LH (+)
2	Y	SOUND SIGNAL FRONT SPEAKER RH (-)
3	SHIELD	SHIELD
4	G	WOOFER AMP ON SIGNAL
5	B	GND
6	SB	BAT

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	SOUND SIGNAL FRONT SPEAKER LH (+)
2	Y	SOUND SIGNAL FRONT SPEAKER RH (-)
3	SHIELD	SHIELD
4	G	WOOFER AMP ON SIGNAL
5	B	GND
6	SB	BAT

JCNWM1646GI

AV

# **TEL ADAPTER UNIT**

< ECU DIAGNOSIS >

[BOSE AUDIO]

<b>BOSE AUDIO</b>											
Connector No.	B16	Connector No.	B86								
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE								
Connector Type	NST12MW-CS	Connector Type	NST12MW-CS								
											
12	0	-	-								
Terminal No.	Color of Wire	Signal Name [Specification]									
1	W	-									
2	P	-									
3	B	-									
4	R	-									
5	G	-									
6	SB	-									
7	O	-									
8	V	-									
9	GR	-									
10	BR	-									
11	W	-									
12	0	-	-								
1	2	3	4	5	6	7	8	9	10	11	12
2	3	4	5	6	7	8	9	10	11	12	-
3	4	5	6	7	8	9	10	11	12	-	-
4	5	6	7	8	9	10	11	12	-	-	-
5	6	7	8	9	10	11	12	-	-	-	-
6	7	8	9	10	11	12	-	-	-	-	-
7	8	9	10	11	12	-	-	-	-	-	-
8	9	10	11	12	-	-	-	-	-	-	-
9	10	11	12	-	-	-	-	-	-	-	-
10	11	12	-	-	-	-	-	-	-	-	-
11	12	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-
13	14	15	16	17	18	19	20	21	22	23	24
14	15	16	17	18	19	20	21	22	23	24	25
15	16	17	18	19	20	21	22	23	24	25	26
16	17	18	19	20	21	22	23	24	25	26	27
17	18	19	20	21	22	23	24	25	26	27	28
18	19	20	21	22	23	24	25	26	27	28	29
19	20	21	22	23	24	25	26	27	28	29	30
20	21	22	23	24	25	26	27	28	29	30	31
21	22	23	24	25	26	27	28	29	30	31	32
22	23	24	25	26	27	28	29	30	31	32	33
23	24	25	26	27	28	29	30	31	32	33	34
24	25	26	27	28	29	30	31	32	33	34	35
25	26	27	28	29	30	31	32	33	34	35	36
26	27	28	29	30	31	32	33	34	35	36	37
27	28	29	30	31	32	33	34	35	36	37	38
28	29	30	31	32	33	34	35	36	37	38	39
29	30	31	32	33	34	35	36	37	38	39	40
30	31	32	33	34	35	36	37	38	39	40	41
31	32	33	34	35	36	37	38	39	40	41	42
32	33	34	35	36	37	38	39	40	41	42	43
33	34	35	36	37	38	39	40	41	42	43	44
34	35	36	37	38	39	40	41	42	43	44	45
35	36	37	38	39	40	41	42	43	44	45	46
36	37	38	39	40	41	42	43	44	45	46	47
37	38	39	40	41	42	43	44	45	46	47	48
38	39	40	41	42	43	44	45	46	47	48	49
39	40	41	42	43	44	45	46	47	48	49	50
40	41	42	43	44	45	46	47	48	49	50	51
41	42	43	44	45	46	47	48	49	50	51	52
42	43	44	45	46	47	48	49	50	51	52	53
43	44	45	46	47	48	49	50	51	52	53	54
44	45	46	47	48	49	50	51	52	53	54	55
45	46	47	48	49	50	51	52	53	54	55	56
46	47	48	49	50	51	52	53	54	55	56	57
47	48	49	50	51	52	53	54	55	56	57	58
48	49	50	51	52	53	54	55	56	57	58	59
49	50	51	52	53	54	55	56	57	58	59	60
50	51	52	53	54	55	56	57	58	59	60	61
51	52	53	54	55	56	57	58	59	60	61	62
52	53	54	55	56	57	58	59	60	61	62	63
53	54	55	56	57	58	59	60	61	62	63	64
54	55	56	57	58	59	60	61	62	63	64	65
55	56	57	58	59	60	61	62	63	64	65	66
56	57	58	59	60	61	62	63	64	65	66	67
57	58	59	60	61	62	63	64	65	66	67	68
58	59	60	61	62	63	64	65	66	67	68	69
59	60	61	62	63	64	65	66	67	68	69	70
60	61	62	63	64	65	66	67	68	69	70	71
61	62	63	64	65	66	67	68	69	70	71	72
62	63	64	65	66	67	68	69	70	71	72	73
63	64	65	66	67	68	69	70	71	72	73	74
64	65	66	67	68	69	70	71	72	73	74	75
65	66	67	68	69	70	71	72	73	74	75	76
66	67	68	69	70	71	72	73	74	75	76	77
67	68	69	70	71	72	73	74	75	76	77	78
68	69	70	71	72	73	74	75	76	77	78	79
69	70	71	72	73	74	75	76	77	78	79	80
70	71	72	73	74	75	76	77	78	79	80	81
71	72	73	74	75	76	77	78	79	80	81	82
72	73	74	75	76	77	78	79	80	81	82	83
73	74	75	76	77	78	79	80	81	82	83	84
74	75	76	77	78	79	80	81	82	83	84	85
75	76	77	78	79	80	81	82	83	84	85	86
76	77	78	79	80	81	82	83	84	85	86	87
77	78	79	80	81	82	83	84	85	86	87	88
78	79	80	81	82	83	84	85	86	87	88	89
79	80	81	82	83	84	85	86	87	88	89	90
80	81	82	83	84	85	86	87	88	89	90	91
81	82	83	84	85	86	87	88	89	90	91	92
82	83	84	85	86	87	88	89	90	91	92	93
83	84	85	86	87	88	89	90	91	92	93	94
84	85	86	87	88	89	90	91	92	93	94	95
85	86	87	88	89	90	91	92	93	94	95	96
86	87	88	89	90	91	92	93	94	95	96	97
87	88	89	90	91	92	93	94	95	96	97	98
88	89	90	91	92	93	94	95	96	97	98	99
89	90	91	92	93	94	95	96	97	98	99	100
90	91	92	93	94	95	96	97	98	99	100	101
91	92	93	94	95	96	97	98	99	100	101	102
92	93	94	95	96	97	98	99	100	101	102	103
93	94	95	96	97	98	99	100	101	102	103	104
94	95	96	97	98	99	100	101	102	103	104	105
95	96	97	98	99	100	101	102	103	104	105	106
96	97	98	99	100	101	102	103	104	105	106	107
97	98	99	100	101	102	103	104	105	106	107	108
98	99	100	101	102	103	104	105	106	107	108	109
99	100	101	102	103	104	105	106	107	108	109	110
100	101	102	103	104	105	106	107	108	109	110	111
101	102	103	104	105	106	107	108	109	110	111	112
102	103	104	105	106	107	108	109	110	111	112	113
103	104	105	106	107	108	109	110	111	112	113	114
104	105	106	107	108	109	110	111	112	113	114	115
105	106	107	108	109	110	111	112	113	114	115	116
106	107	108	109	110	111	112	113	114	115	116	117
107	108	109	110	111	112	113	114	115	116	117	118
108	109	110	111	112	113	114	115	116	117	118	119
109	110	111	112	113	114	115	116	117	118	119	120
110	111	112	113	114	115	116	117	118	119	120	121
111	112	113	114	115	116	117	118	119	120	121	122
112	113	114	115	116	117	118	119	120	121	122	123
113	114	115	116	117	118	119	120	121	122	123	124
114	115	116	117	118	119	120	121	122	123	124	125
115	116	117	118	119	120	121	122	123	124	125	126
116	117	118	119	120	121	122	123	124	125	126	127
117	118	119	120	121	122	123	124	125	126	127	128
118	119	120	121	122	123	124	125	126	127	128	129
119	120	121	122	123	124	125	126	127	128	129	130
120	121	122	123	124	125	126	127	128	129	130	131
121	122	123	124	125	126	127	128	129	130	131	132
122	123	124	125	126	127	128	129	130	131	132	133
123	124	125	126	127	128	129	130	131	132	133	134
124	125	126	127	128	129	130	131	132	133	134	135
125	126	127	128	129	130	131	132	133	134	135	136
126	127	128	129	130	131	132	133	134	135	136	137
127	128	129	130	131	132	133	134	135	136	137	138
128	129	130	131	132	133	134	135	136	137	138	139

JCNWM1647GI

# **TEL ADAPTER UNIT**

[BOSE AUDIO]

## < ECU DIAGNOSIS >

BOSE AUDIO

Connector No.	D4	Connector No.	D44	Terminal No.
Connector Name	WIRE TO WIRE	Connector Name	FRONT SPEAKER RH	Color No.
Connector Type	NS10FW-CS	Connector Type	NS10FW-CS	Color of Wire
				Signal Name [Specification]
Connector No.	04	Connector No.	04	Terminal No.
Connector Name	FRONT SPEAKER LH	Connector Name	FRONT SPEAKER LH	Color No.
Connector Type	NS10FW-CS	Connector Type	NS10FW-CS	Color of Wire
				Signal Name [Specification]
Terminal No.	1	Terminal No.	1	Terminal No.
Color of Wire	B	Color of Wire	G	Color No.
				Signal Name [Specification]
2	P	2	R	

JCNWM1648GE

BOSE AUDIO

Connector-No.	M19
Connector-Name	WIRE TO WIRE
Connector-Type	NSI 16MW-CS

Connector No.	M112
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

49	W	-
50	SHIELD	-
52	O	-
53	G	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
3	R	-
10	G	-

Terminal No.	Color of Wire	Signal Name [Specification]
7	SHIELD	-
8	B	-
9	SHIELD	-
10	G	-
11	R	-
12	SB	-
20	L	-
21	Y	-
22	W	-
23	L	-
24	BR	-

61	BR
62	GR
63	W
65	SHIELD
66	BR
67	P
68	SHIELD
69	R
70	LG
71	BR
72	O
82	GR

No.	Name	Color of Wire	terminal No.	Signal Name [Specification]
35	SHIELD	-		
36	P	-		
37	LG	-		
38	SHIELD	-		
39	O	-		
40	G	-		
41	R	-		
45	BR	-		
46	L	-		
47	SHIELD	-		
48	V	-		

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

Connector No.	M33
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-IV

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

Connector No	M22
Connector Name	TWEETER RH
Connector Type	TK02FBR

Terminal No.	Color or Wire	Signal Name [Specification]
21	L	CAN-H
22	P	CAN-L
30	Y	VEHICLE SPEED (2-PULSE)
31	Y	VEHICLE SPEED (8-PULSE)

Terminal No.	Color or Wire	Signal Name [Specification]
24	BR	-
31	GR	-
32	O	-

Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	W	-
8	R	-
9	B	-

terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	Y	-

ICNWM1649GE

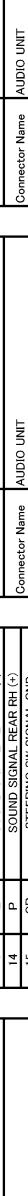
# TEL ADAPTER UNIT

[BOSE AUDIO]

## < ECU DIAGNOSIS >

BOSE AUDIO

Connector No.	M46	Connector No.	M47
Connector Name	AUDIO UNIT	Connector Name	AUDIO UNIT
Connector Type	TH18FW-CS2	Connector Type	TH18FW-NH
			
13	L	SOUND SIGNAL REAR RH (+)	
14	P	SOUND SIGNAL REAR RH (-)	
15	GR	STEERING SW SIGNAL GND	
16	O	STEERING SW SIGNAL B	
18	L	VEHICLE SPEED SIGNAL (8-PULSE)	
19	Y	BAT	
20	SHIELD	SHIELD	



Terminal No.	Color of Wire	Signal Name [Specification]
1	BIR	AMP ON SIGNAL
2	R	SOUND SIGNAL FRONT LH (+)
3	G	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	W	STEERING SW SIGNAL AI[With telephone]
6	BIR	STEERING SW SIGNAL AI[Without telephone]
10	SHIELD	SHIELD
11	O	SOUND SIGNAL FRONT RH (+)
12	W	SOUND SIGNAL FRONT RH (-)

13	L	SOUND SIGNAL REAR RH (+)
14	P	SOUND SIGNAL REAR REH (+)
15	GR	STEERING SW SIGNAL GND
16	O	STEERING SW SIGNAL B
18	L	VEHICLE SPEED SIGNAL (8-PULSE)
19	Y	BAT
20	SHIELD	SHIELD

32	34			40	42
31	33	35	36	37	39
					41

Terminal No.	Color of Wire	Signal Name [Specification]
21	L	AV COMMUNICATION SIGNAL (H)
22	P	AV COMMUNICATION SIGNAL (L)
23	SHIELD	SHIELD
25	SHIELD	SHIELD
26	BR	_SOUND SIGNAL (+)
27	Y	_SOUND SIGNAL (-)
28	V	TELEPHONE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
31	R	_SOUND SIGNAL LH (-)
32	L	_SOUND SIGNAL LH (+)
33	G	_SOUND SIGNAL LH (-)
34	W	_SOUND SIGNAL LH (+)
35	SHEILD	SHEILD
36	SHEILD	REQUEST SIGNAL (SAT TO AUDIO)
38	Y	REQUEST SIGNAL (SAT TO AUDIO)
39	B	COMMUNICATION SIGNAL (SAT-AUDIO)
40	I	COMMUNICATION SIGNAL (AUDIO-SAT)

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FV-HH

Connector No.	M79		
Connector Name	WIRE TO WIRE		
Connector Type	NS12FW-LCS		

Terminal No.	Color of Wire	Signal Name [Specification]
99	SB	-
100	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	G	-
3	R	-
4	W	-
5	O	-
6	SB	-
7	P	-
8	V	-
9	GR	-
10	BR	-
11	Y	-

# **TEL ADAPTER UNIT**

## < ECU DIAGNOSIS >

[BOSE AUDIO]

BOSE AUDIO

Connector No.	M80	Connector No.	M82	Connector No.	M95
Connector Name	TWEETER LH	Connector Name	WIRE TO WIRE	Connector Name	CENTER SPEAKER
Connector Type	TK02FBR	Connector Type	WS10WM-CS	Connector Type	TK02FBR
Connector No.	M352	Connector Name	COMBINATION SWITCH (SPIRAL CABLE)	Connector Type	TK08FGY

Connector No.	M95
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR

Connector No.	M352
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY

Terminal No.		Signal Name [Specification]		Terminal No.		Signal Name [Specification]		Terminal No.		Signal Name [Specification]	
1	2	[With BOSE system]		3	4	[Without BOSE system]		5	6	[Without BOSE system]	
7	8	[Without BOSE system]		9	10	[With BOSE system]		11	12	[With BOSE system]	
1	2	Color of Wire	Signal Name [Specification]	3	4	Color of Wire	Signal Name [Specification]	5	6	Color of Wire	Signal Name [Specification]
7	8	P	[With BOSE system]	9	10	O	[Without BOSE system]	11	12	V	[Without BOSE system]
1	2	P	[Without BOSE system]	3	4	W	[With BOSE system]	5	6	P	[Without BOSE system]
7	8	P	[Without BOSE system]	9	10	O	[With BOSE system]	11	12	V	[With BOSE system]

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
16	-	-
17	-	-
20	-	-

Connector No.	M444
Connector Name	RADIO ANTENNA
Connector Type	GT13SSN-1/PP-HU

Connector No.	M403
Connector Name	WIRE TO WIRE
Connector Type	GT13SGN-1/1PP-HU

Connector No.	M404
Connector Name	RADIO ANTENNA
Connector Type	GT13SSN-1/1PP-HU

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-	1	-	-
2	-	-	2	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	MA02
Connector Name	WIRE TO WIRE
Connector Type	GT13SG-1 / 1S-HU

Connector No.	M403
Connector Name	WIRE TO WIRE
Connector Type	GT13SGN-1/1PP-HU

Connector No.	M404
Connector Name	RADIO ANTENNA
Connector Type	GT13SSN-1/1PP-HU

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

JCNWM1651GE

# TEL ADAPTER UNIT

[BOSE AUDIO]

< ECU DIAGNOSIS >

A

B

C

D

E

F

G

H

I

J

K

L

M

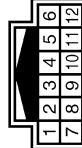
AV

O

P

BOSE AUDIO	
Connector No.	RI
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH
Connector No.	R3
Connector Name	MICROPHONE
Connector Type	TK04FW

  
HS

  
HS

Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-	1	B	MICROPHONE SIGNAL (+)
3	W	-	2	R	MICROPHONE SIGNAL (-)
8	R	-	4	W	MICROPHONE POWER
9	B	-			

JCNWM1652GI

&lt; SYMPTOM DIAGNOSIS &gt;

# SYMPTOM DIAGNOSIS

## AUDIO SYSTEM SYMPTOMS

### Symptom Table

INFOID:000000004235184

#### AUDIO SYSTEM

Symptoms	Check items	Possible malfunction location / Action to take
Audio sound is not heard.	No sound from all speakers.	<ul style="list-style-type: none"> <li>• Audio unit power supply and ground circuit. Refer to <a href="#">AV-49, "AUDIO UNIT : Diagnosis Procedure"</a>.</li> <li>• BOSE amp. power supply and ground circuit. Refer to <a href="#">AV-49, "BOSE AMP. : Diagnosis Procedure"</a>.</li> <li>• Amp. ON signal circuit. Refer to <a href="#">AV-71, "Diagnosis Procedure"</a>.</li> </ul>
	Sound is not heard from woofer.	<ul style="list-style-type: none"> <li>• Sound signal woofer circuit</li> <li>• Woofer amp. ON signal circuit. Refer to <a href="#">AV-72, "Diagnosis Procedure"</a>.</li> </ul>
	Sound is not heard only from the specific places.	Sound signal circuit of malfunctioning system.
Satellite radio is not received.	When "RADIO" switch is pressed, it change to satellite radio mode.	<ul style="list-style-type: none"> <li>• Satellite radio sound signal circuit</li> <li>• Satellite radio antenna</li> </ul>
	When "RADIO" switch is pressed, it does not change to satellite radio mode.	<ul style="list-style-type: none"> <li>• Satellite radio tuner power supply and ground circuit. Refer to <a href="#">AV-50, "SATELLITE RADIO TUNER : Diagnosis Procedure"</a>.</li> <li>• Request signal circuit. Refer to <a href="#">AV-69, "Diagnosis Procedure"</a>.</li> <li>• Communication circuit between audio unit and satellite radio tuner. Refer to <a href="#">AV-67, "Diagnosis Procedure"</a>.</li> </ul>

#### RELATED TO STEERING SWITCH

Symptoms	Possible malfunction location / Action to take
All steering switches are not operated.	Without telephone <ul style="list-style-type: none"> <li>• Steering switch signal ground circuit. Refer to <a href="#">AV-56, "Component Inspection"</a>.</li> </ul> With telephone <ul style="list-style-type: none"> <li>• Steering switch signal ground circuit. Refer to <a href="#">AV-66, "Diagnosis Procedure"</a>.</li> </ul>
Only specified switch cannot be operated.	Steering switch
"SEEK UP", "SEEK DOWN" and " " switches are not operated.	Steering switch signal A circuit (steering switch to TEL adapter unit). Refer to <a href="#">AV-58, "Diagnosis Procedure"</a> .
" ", "VOL UP", "VOL DOWN", "SOURCE" switches are not operated.	Steering switch signal B circuit (steering switch to TEL adapter unit). Refer to <a href="#">AV-60, "Diagnosis Procedure"</a> .
"VOL UP", "SEEK UP" and "SOURCE" switches are not operated.	Without telephone <ul style="list-style-type: none"> <li>• Steering switch signal A circuit. Refer to <a href="#">AV-52, "Diagnosis Procedure"</a>.</li> </ul> With telephone <ul style="list-style-type: none"> <li>• Steering switch signal A circuit (TEL adapter unit to audio unit). Refer to <a href="#">AV-64, "Diagnosis Procedure"</a>.</li> </ul>
"VOL DOWN" and "SEEK DOWN" switches are not operated.	Without telephone <ul style="list-style-type: none"> <li>• Steering switch signal B circuit. Refer to <a href="#">AV-54, "Diagnosis Procedure"</a>.</li> </ul> With telephone <ul style="list-style-type: none"> <li>• Steering switch signal B circuit (TEL adapter unit to audio unit). Refer to <a href="#">AV-65, "Diagnosis Procedure"</a>.</li> </ul>

&lt; SYMPTOM DIAGNOSIS &gt;

**HANS-FREE PHONE SYMPTOMS****Symptom Table**

INFOID:0000000004235185

**RELATED TO HANDS-FREE PHONE**

- Check that the cellular phone is corresponding type (Bluetooth® enabled) 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. Check to ensure the customer's phone is supported by checking the phone compatibility for the hands-free system.

**Simple Check for Bluetooth® Communication**

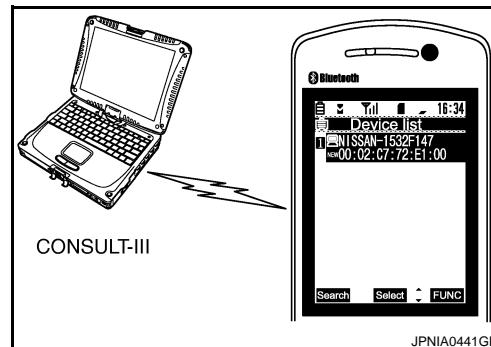
If cellular phone and TEL adapter unit cannot be connected with Bluetooth® communication, following procedure allows the technician to judge which device has malfunction.

- Turn on a cellular phone, not connecting Bluetooth® communication.
- Start CONSULT-III, then start Windows®.
- Set CONSULT-III near a cellular phone.
- When operated Bluetooth® registration by cellular phone, check if CONSULT-III\* would be displayed on the device name.  
(If other Bluetooth® device is located near cellular phone, a name of the device would be displayed also.)

**NOTE:**

\*:Displayed device name is "NISSAN-\*\*\*\*\*".

- If no device name is displayed, cellular phone is malfunction. 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.



JPNIA0441GB

**Trouble Diagnosis Chart by Symptom**

Symptoms	Check items	Possible malfunction location/Action to take
Does not recognize cellular phone connection.	Repeat the registration of cellular phone.	TEL adapter unit
Hands-free phone cannot be established.	Both the reception and the speech cannot be performed. Audio cannot be operated by steering switch.	TEL adapter unit power supply and ground circuit. Refer to <a href="#">AV-50, "TEL ADAPTER UNIT : Diagnosis Procedure".</a>
	Both the reception and the speech cannot be performed. Audio can be operated by steering switch.	Telephone ON signal circuit. Refer to <a href="#">AV-75, "Diagnosis Procedure".</a>
The other party's voice cannot be heard by hands-free phone.	Audio system sound is normal.	Sound signal (telephone voice, telephone guidance) circuit
	Audio system sound does not sound.	Refer to <a href="#">AV-144, "Symptom Table".</a>
Originating sound is not heard by the other party with hands-free phone communication.	Sound operation function is normal.	TEL adapter unit
	Sound operation function does not work.	Microphone signal circuit. Refer to <a href="#">AV-73, "Diagnosis Procedure".</a>
When hands-free phone is in use, the information (connection time etc.) is not displayed on the audio screen.	—	AV communication signal (H, L)

**RELATED TO STEERING SWITCH**

## HANS-FREE PHONE SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO]

Symptoms	Possible malfunction location / Action to take
Only specified switch cannot be operated.	Steering switch
"SEEK UP", "SEEK DOWN" and " " switches are not operated.	Steering switch signal A (steering switch to TEL adapter unit) circuit. Refer to <a href="#">AV-58, "Diagnosis Procedure".</a>
" ", "VOL UP", "VOL DOWN" and "SOURCE" switches are not operated.	Steering switch signal B (steering switch to TEL adapter unit) circuit. Refer to <a href="#">AV-61, "Component Inspection".</a>

# NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO]

## NORMAL OPERATING CONDITION

### Description

INFOID:0000000004235186

#### RELATED TO AUDIO

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

Symptoms	Cause and Counter measure
Cannot play	Check that the CD was inserted correctly.
	Check that the CD is scratched or dirty.
	Check that there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	The player will play correctly after it returns to the normal temperature if there is a temperature increase error.
	Only the music CD files (CD-DA data) will be played if there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD.
	Files with extensions other than ".MP3", ".WMA", ".mp3", or ".wma" cannot be played.
	Check that the finalization process, such as session close and disc close, is done for the disc.
Poor sound quality	Check that the CD is protected by copyright.
	Check that 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 multi session disc, some time may be required before the music starts playing.
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 TELEPHONE

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

Symptom	Possible cause	Possible solution
The voice on the other side is difficult to be heard.	The interior of the vehicle is too noisy.	Close the windows or have other occupants be quiet.
The voice is difficult to reach the other side of the connection.	The volume of the voice is too low.	Speak louder.
	Pronunciation is unclear.	Speak clearly.

&lt; PRECAUTION &gt;

## PRECAUTION

### PRECAUTIONS FOR USA AND CANADA

#### FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000004678934

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.

### FOR MEXICO

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

INFOID:000000004678933

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. 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".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

&lt; PREPARATION &gt;

**PREPARATION****PREPARATION****Commercial Service Tools**

INFOID:000000004235189

A

B

C

D

E

F

G

H

I

J

K

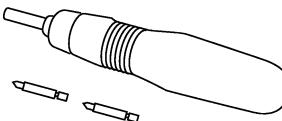
L

M

AV

O

P

Tool name	Description
Power tool	 Loosening bolts and nuts PBIC0191E

&lt; ON-VEHICLE REPAIR &gt;

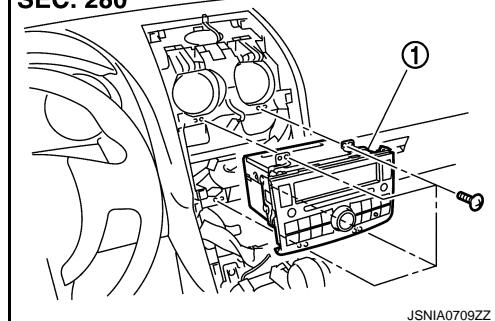
# ON-VEHICLE REPAIR

## AUDIO UNIT

### Exploded View

INFOID:0000000004235190

SEC. 280



JSNIA0709ZZ

1. Audio unit

### Removal and Installation

INFOID:0000000004235191

#### REMOVAL

1. Remove cluster lid C and cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove audio unit mounting screws.
3. Pull out audio unit, remove harness clip, and then disconnect antenna feeder and harness connectors.
4. Remove audio unit and bracket as a unit.
5. Remove brackets from audio unit.

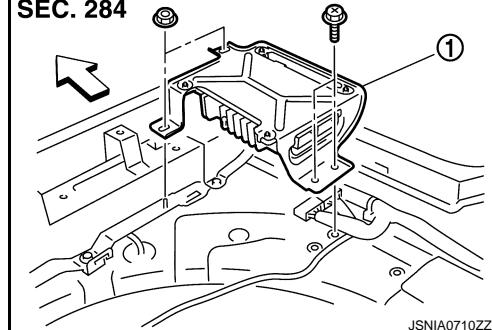
#### INSTALLATION

Install in the reverse order of removal.

&lt; ON-VEHICLE REPAIR &gt;

**BOSE AMP.****Exploded View**

INFOID:0000000004235192

**SEC. 284**

←: Vehicle front

1. BOSE amp.

**Removal and Installation**

INFOID:0000000004235193

**REMOVAL**

1. Remove luggage floor spacer assembly (FR, RH). Refer to [INT-31, "Removal and Installation"](#).
2. Remove BOSE amp.

**INSTALLATION**

Install in the reverse order of removal.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

AV

O  
P

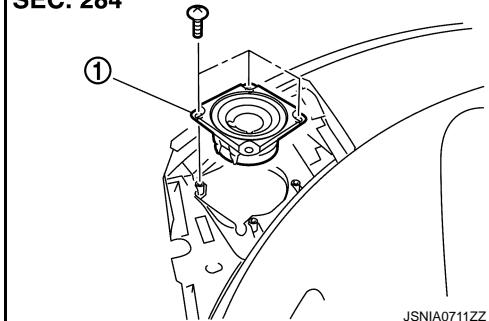
&lt; ON-VEHICLE REPAIR &gt;

## TWEETER

### Exploded View

INFOID:0000000004235194

SEC. 284



#### 1. Tweeter

### Removal and Installation

INFOID:0000000004235195

#### REMOVAL

1. Remove instrument panel. Refer to [IP-13, "Removal and Installation"](#).
2. Remove tweeter from instrument panel.

#### INSTALLATION

Installation is the reverse order of removal.

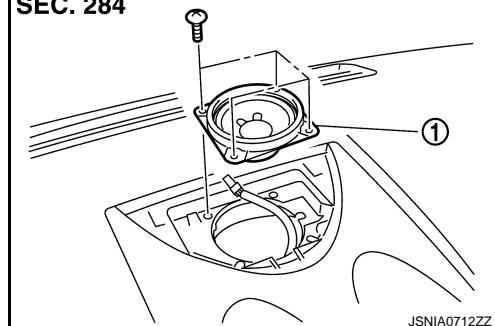
< ON-VEHICLE REPAIR >

## CENTER SPEAKER

### Exploded View

INFOID:0000000004235196

SEC. 284



JSNIA0712ZZ

1. Center speaker

### Removal and Installation

INFOID:0000000004235197

#### REMOVAL

1. Remove center speaker grille. Refer to [IP-12, "Exploded View"](#).
2. Remove center speaker.

#### INSTALLATION

Installation is the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

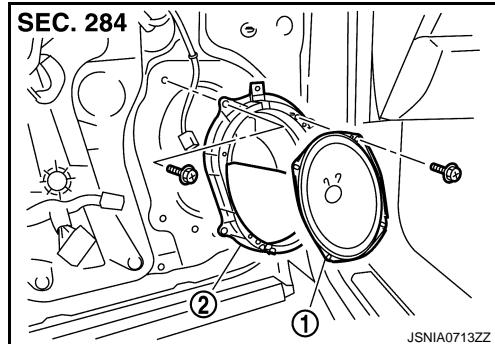
P

&lt; ON-VEHICLE REPAIR &gt;

## FRONT SPEAKER

### Exploded View

INFOID:0000000004235198



1. Front speaker
2. Bracket

### Removal and Installation

INFOID:0000000004235199

#### REMOVAL

1. Remove front door finisher. Refer to [INT-11, "FRONT DOOR FINISHER : Removal and Installation".](#)
2. Remove front door speaker from bracket.

#### INSTALLATION

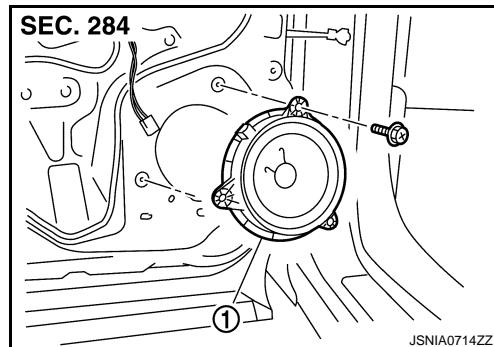
Install in the reverse order of removal.

&lt; ON-VEHICLE REPAIR &gt;

## REAR SPEAKER

### Exploded View

INFOID:0000000004235200



JSNIA0714ZZ

1. Rear speaker

### Removal and Installation

INFOID:0000000004235201

#### REMOVAL

1. Remove rear door finisher. Refer to [INT-14, "REAR DOOR FINISHER : Removal and Installation"](#).
2. Remove rear speaker.

#### INSTALLATION

Installation is the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

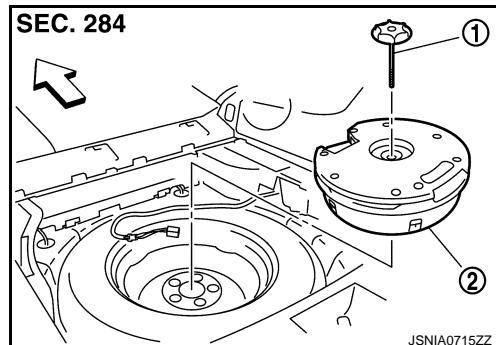
&lt; ON-VEHICLE REPAIR &gt;

## WOOFER

### Exploded View

INFOID:0000000004235202

SEC. 284



JSNIA0715ZZ

◀: Vehicle front

1. Clamp
2. Woofer

### Removal and Installation

INFOID:0000000004235203

#### REMOVAL

1. Remove luggage floor center box. Refer to [INT-31, "Removal and Installation"](#).
2. Remove clamp, and then remove woofer.

#### INSTALLATION

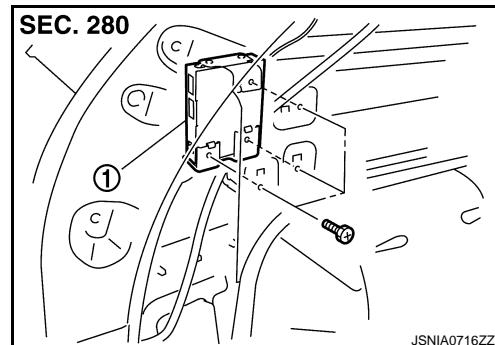
Install in the reverse order of removal.

< ON-VEHICLE REPAIR >

## SATELLITE RADIO TUNER

### Exploded View

INFOID:0000000004235204



JSNIA0716ZZ

1. Satellite radio tuner

### Removal and Installation

INFOID:0000000004235205

#### REMOVAL

1. Remove luggage side lower finisher (LH). Refer to [INT-31, "Removal and Installation"](#).
2. Remove satellite radio tuner.

#### INSTALLATION

Install in the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

K

L

M

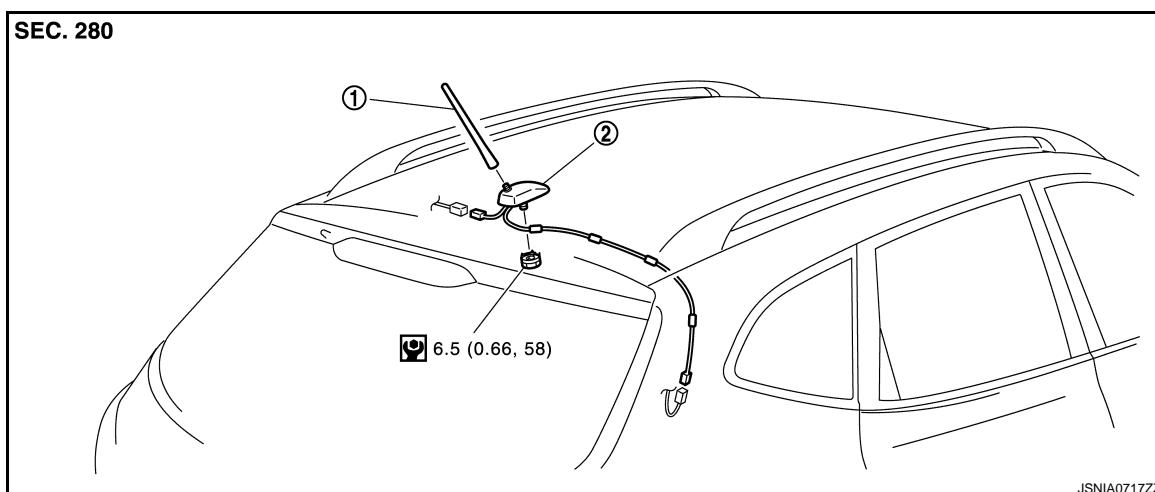
AV

O

P

**RADIO & SATELLITE RADIO ANTENNA****Exploded View**

INFOID:0000000004235206



1. Antenna rod
2. Antenna base & satellite radio antenna

**Removal and Installation**

INFOID:0000000004235207

**REMOVAL**

1. Remove headlining assembly. Refer to [INT-23, "NORMAL ROOF : Removal and Installation"](#) (normal roof models) or [INT-26, "SUNROOF : Removal and Installation"](#) (sunroof models).
2. Remove nuts, and then remove radio & satellite radio antenna.

**INSTALLATION**

Installation is the reverse order of removal.

**CAUTION:**

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

< ON-VEHICLE REPAIR >

## STEERING SWITCH

### Exploded View

INFOID:0000000004235208

Refer to [SR-5, "Exploded View".](#)

### Removal and Installation

INFOID:0000000004235209

#### REMOVAL

Refer to [SR-5, "Removal and Installation".](#)

#### INSTALLATION

Installation is the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

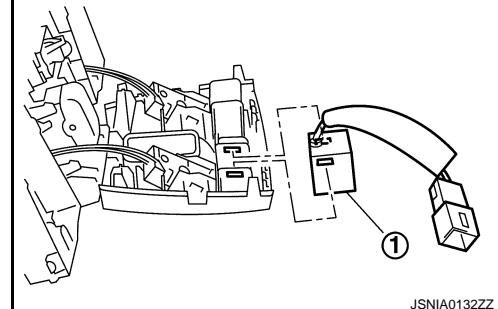
< ON-VEHICLE REPAIR >

## MICROPHONE

### Exploded View

INFOID:0000000004235210

SEC. 283



JSNIA0132ZZ

1. Microphone

### Removal and Installation

INFOID:0000000004235211

#### REMOVAL

1. Remove map lamp. Refer to [INL-65, "Removal and Installation"](#).
2. Remove microphone from map lamp.

#### INSTALLATION

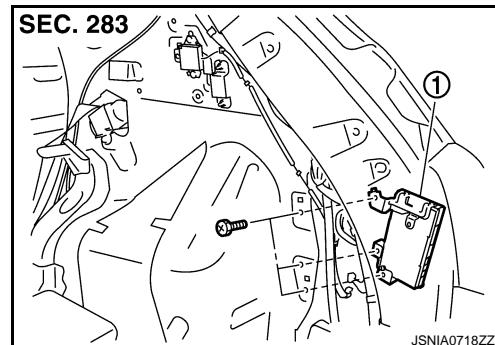
Installation is the reverse order of removal.

&lt; ON-VEHICLE REPAIR &gt;

## TEL ADAPTER UNIT

### Exploded View

INFOID:0000000004235212



1. TEL adapter unit

### Removal and Installation

INFOID:0000000004235213

#### REMOVAL

1. Remove luggage side lower finisher (RH). Refer to [INT-31, "Removal and Installation"](#).
2. Remove TEL adapter unit.

#### INSTALLATION

Install in the reverse order of removal.

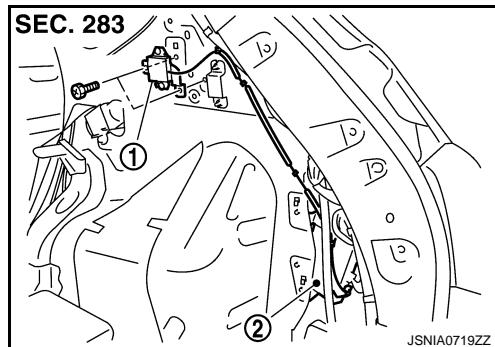
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
  
AV  
  
O  
P

< ON-VEHICLE REPAIR >

### TEL ANTENNA

#### Exploded View

INFOID:0000000004235214



JSNIA0719ZZ

1. TEL antenna
2. TEL adapter unit

#### Removal and Installation

INFOID:0000000004235215

##### REMOVAL

1. Remove luggage side upper finisher (RH). Refer to [INT-31, "Removal and Installation"](#).
2. Remove TEL antenna.

# ANTENNA FEEDER

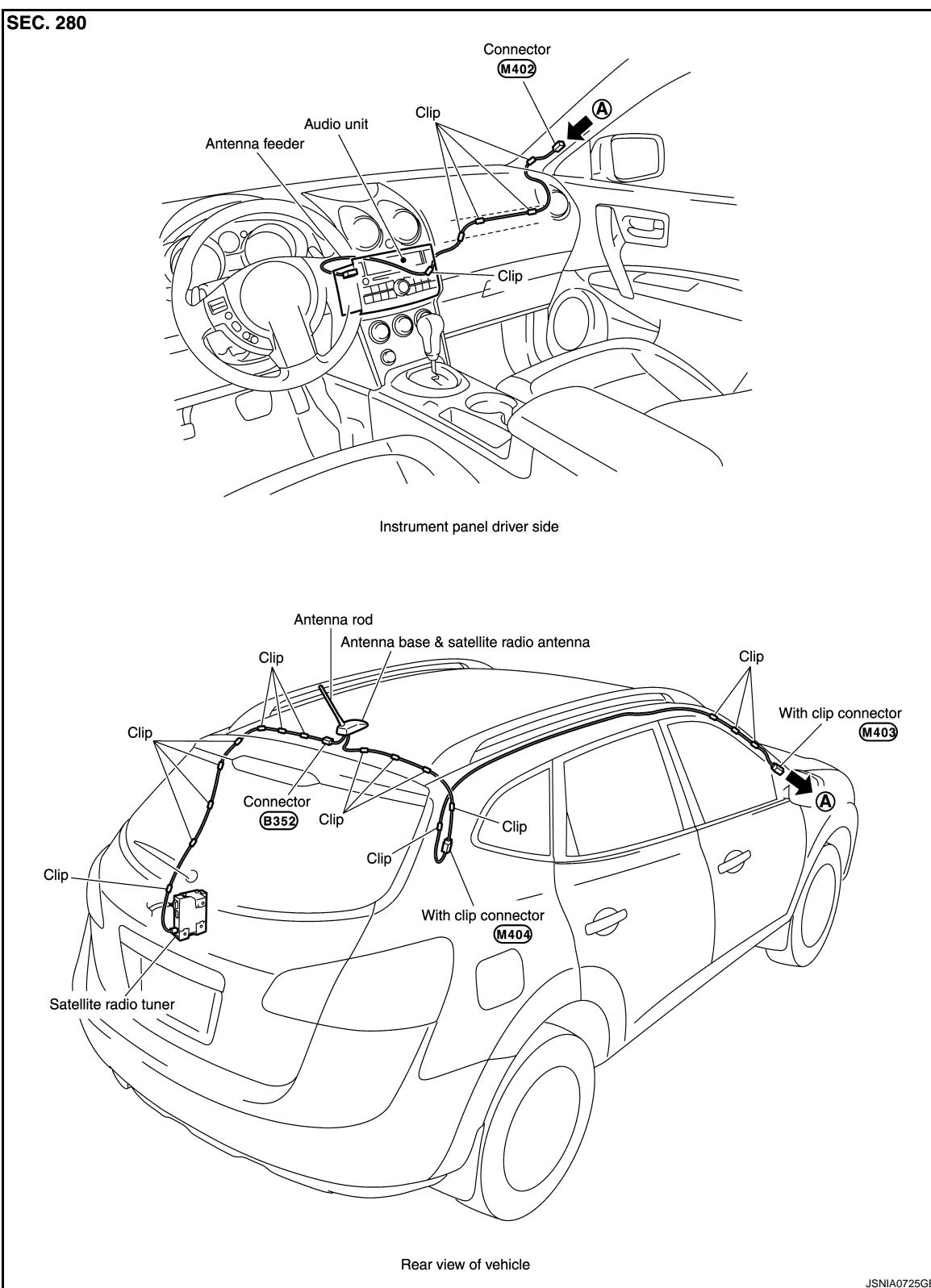
[BOSE AUDIO]

< ON-VEHICLE REPAIR >

## ANTENNA FEEDER

### Location of Antenna

INFOID:0000000004235216



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