

SECTION **AV**

AUDIO, VISUAL & NAVIGATION SYSTEM

CONTENTS

BASE AUDIO WITHOUT NAVIGATION	Component Parts Location	18	F
	Component Description	19	
BASIC INSPECTION	REAR VIEW MONITOR SYSTEM	20	G
DIAGNOSIS AND REPAIR WORKFLOW	System Diagram	20	
Work Flow	System Description	20	
INSPECTION AND ADJUSTMENT	Component Parts Location	22	H
	Component Description	22	
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	DIAGNOSIS SYSTEM (AV CONTROL UNIT) ...	24	I
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description	Diagnosis Description	24	
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement	CONSULT-III Function (MULTI AV)	33	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	DTC/CIRCUIT DIAGNOSIS	36	J
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description	U1000 CAN COMM CIRCUIT	36	K
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement	Description	36	
PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT	DTC Logic	36	
PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Description	Diagnosis Procedure	36	
PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement	U1010 CONTROL UNIT (CAN)	37	L
SYSTEM DESCRIPTION	Description	37	
MULTI AV SYSTEM	DTC Logic	37	
System Diagram	Diagnosis Procedure	37	
System Description	U1310 AV CONTROL UNIT	38	M
Component Parts Location	Description	38	
Component Description	DTC Logic	38	
AUDIO SYSTEM	U1200 AV CONTROL UNIT	39	AV
System Diagram	Description	39	
System Description	DTC Logic	39	
	U1216 AV CONTROL UNIT	40	O
	Description	40	
	DTC Logic	40	
	U1243 DISPLAY UNIT	41	P
	Description	41	
	DTC Logic	41	
	Diagnosis Procedure	41	
	U1250 CAMERA CONTROL UNIT	43	

Description	43	Description	58
DTC Logic	43	Diagnosis Procedure	58
Diagnosis Procedure	43		
U1255 SATELLITE RADIO TUNER	44	DISK EJECT SIGNAL CIRCUIT	60
Description	44	Description	60
DTC Logic	44	Diagnosis Procedure	60
Diagnosis Procedure	44		
U1300 AV COMM CIRCUIT	46	REAR VIEW CAMERA IMAGE SIGNAL CIR-	
Description	46	CUIT	61
		Description	61
		Diagnosis Procedure	61
POWER SUPPLY AND GROUND CIRCUIT	47	REAR VIEW CAMERA POWER SUPPLY	62
AV CONTROL UNIT	47	Description	62
AV CONTROL UNIT : Diagnosis Procedure	47	Diagnosis Procedure	62
DISPLAY UNIT	47		
DISPLAY UNIT : Diagnosis Procedure	47	CAMERA IMAGE SIGNAL CIRCUIT (CAM-	
		ERA CONTROL UNIT TO AV CONTROL	
		UNIT)	63
MULTIFUNCTION SWITCH	48	Description	63
MULTIFUNCTION SWITCH : Diagnosis Proce-		Diagnosis Procedure	63
dure	48		
CAMERA CONTROL UNIT	49	COMPOSITE IMAGE SIGNAL CIRCUIT	64
CAMERA CONTROL UNIT : Diagnosis Procedure		Description	64
... 49	49	Diagnosis Procedure	64
SATELLITE RADIO TUNER	49	COMMUNICATION SIGNAL CIRCUIT	
SATELLITE RADIO TUNER : Diagnosis Proce-		(CONT-SAT)	65
dure	50	Description	65
		Diagnosis Procedure	65
RGB (R: RED) SIGNAL CIRCUIT	51	REQUEST SIGNAL CIRCUIT (SAT→CONT) ...	67
Description	51	Description	67
Diagnosis Procedure	51	Diagnosis Procedure	67
RGB (G: GREEN) SIGNAL CIRCUIT	52		
Description	52	STEERING ANGLE SENSOR SIGNAL CIR-	
Diagnosis Procedure	52	CUIT	68
RGB (B: BLUE) SIGNAL CIRCUIT	53	Description	68
Description	53	Diagnosis Procedure	68
Diagnosis Procedure	53		
RGB SYNCHRONIZING SIGNAL CIRCUIT	54	STEERING SWITCH SIGNAL A CIRCUIT	70
Description	54	Description	70
Diagnosis Procedure	54	Diagnosis Procedure	70
		Component Inspection	71
RGB AREA (YS) SIGNAL CIRCUIT	55	STEERING SWITCH SIGNAL B CIRCUIT	72
Description	55	Description	72
Diagnosis Procedure	55	Diagnosis Procedure	72
		Component Inspection	73
HORIZONTAL SYNCHRONIZING (HP) SIG-		STEERING SWITCH SIGNAL GND CIRCUIT... 74	
NAL CIRCUIT	56	Description	74
Description	56	Diagnosis Procedure	74
Diagnosis Procedure	56	Component Inspection	75
VERTICAL SYNCHRONIZING (VP) SIGNAL		ECU DIAGNOSIS INFORMATION	76
CIRCUIT	57	AV CONTROL UNIT	76
Description	57	Reference Value	76
Diagnosis Procedure	57	Wiring Diagram - BASE AUDIO AND REAR VIEW	
AUX IMAGE SIGNAL CIRCUIT	58	MONITOR -	82

DTC Index	95	Removal and Installation	158
DISPLAY UNIT	97	ANTENNA BASE	159
Reference Value	97	Exploded View	159
Wiring Diagram - BASE AUDIO AND REAR VIEW MONITOR -	99	Removal and Installation	159
CAMERA CONTROL UNIT	113	MULTIFUNCTION SWITCH	160
Reference Value	113	Exploded View	160
Wiring Diagram - BASE AUDIO AND REAR VIEW MONITOR -	115	Removal and Installation	160
SATELLITE RADIO TUNER	129	PRESET SWITCH	161
Reference Value	129	Exploded View	161
Wiring Diagram - BASE AUDIO AND REAR VIEW MONITOR -	130	Removal and Installation	161
SYMPTOM DIAGNOSIS	144	AUXILIARY INPUT JACKS	162
MULTI AV SYSTEM SYMPTOMS	144	Exploded View	162
Symptom Table	144	Removal and Installation	162
NORMAL OPERATING CONDITION	148	CAMERA CONTROL UNIT	163
Description	148	Exploded View	163
PRECAUTION	150	Removal and Installation	163
PRECAUTIONS	150	REAR VIEW CAMERA	164
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	150	Exploded View	164
Precaution for Trouble Diagnosis	150	Removal and Installation	164
Precaution for Harness Repair	150	Adjustment	165
PREPARATION	152	STEERING ANGLE SENSOR	166
PREPARATION	152	Exploded View	166
Commercial Service Tools	152	Removal and Installation	166
REMOVAL AND INSTALLATION	153	ANTENNA FEEDER	167
AV CONTROL UNIT	153	Harness Layout	167
Exploded View	153	BOSE AUDIO WITH NAVIGATION	
Removal and Installation	153	BASIC INSPECTION	168
DISPLAY UNIT	154	DIAGNOSIS AND REPAIR WORKFLOW	168
Exploded View	154	Work Flow (Multi AV)	168
Removal and Installation	154	Work Flow (Sonar)	170
FRONT DOOR SPEAKER	155	INSPECTION AND ADJUSTMENT	172
Exploded View	155	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	172
Removal and Installation	155	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description ..	172
REAR DOOR SPEAKER	156	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement	172
Exploded View	156	ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	172
Removal and Installation	156	ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description	172
FRONT SQUAWKER	157	ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement ...	172
Exploded View	157	PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT	172
Removal and Installation	157	PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Description	172
SATELLITE RADIO TUNER	158		
Exploded View	158		

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

AV

O

P

PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement	172
CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR)	172
CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Description	173
CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Special Repair Requirement ..	173
SYSTEM DESCRIPTION	179
MULTI AV SYSTEM	179
System Diagram	179
System Description	180
Component Parts Location	183
Component Description	184
AUDIO SYSTEM	187
System Diagram	187
System Description	187
Component Parts Location	189
Component Description	190
NAVIGATION SYSTEM	192
System Diagram	192
System Description	192
Component Parts Location	195
Component Description	196
REAR VIEW MONITOR SYSTEM	197
System Diagram	197
System Description	197
Component Parts Location	199
Component Description	200
AROUND VIEW MONITOR SYSTEM	201
System Diagram	201
System Description	201
Component Parts Location	208
Component Description	209
CAMERA ASSISTANCE SONAR SYSTEM ...	211
System Diagram	211
System Description	211
Component Parts Location	215
Component Description	216
DIAGNOSIS SYSTEM (AV CONTROL UNIT). 217	
Diagnosis Description	217
CONSULT-III Function (MULTI AV)	233
DIAGNOSIS SYSTEM (AROUND VIEW MONITOR CONTROL UNIT)	237
Diagnosis Description	237
DIAGNOSIS SYSTEM [SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)]	240
CONSULT-III Function (SONAR)	240

DTC/CIRCUIT DIAGNOSIS	242
U1000 CAN COMM CIRCUIT	242
Description	242
DTC Logic	242
Diagnosis Procedure	242
U1010 CONTROL UNIT (CAN)	243
Description	243
DTC Logic	243
Diagnosis Procedure	243
U1310 AV CONTROL UNIT	244
Description	244
DTC Logic	244
U1200 AV CONTROL UNIT	245
Description	245
DTC Logic	245
U1201 AV CONTROL UNIT	246
Description	246
DTC Logic	246
U1216 AV CONTROL UNIT	247
Description	247
DTC Logic	247
U1217 AV CONTROL UNIT	248
Description	248
DTC Logic	248
U1218 AV CONTROL UNIT	249
Description	249
DTC Logic	249
U1219 AV CONTROL UNIT	250
Description	250
DTC Logic	250
U1220 AV CONTROL UNIT	251
Description	251
DTC Logic	251
U121A AV CONTROL UNIT	252
Description	252
DTC Logic	252
U121B AV CONTROL UNIT	253
Description	253
DTC Logic	253
U121C AV CONTROL UNIT	254
Description	254
DTC Logic	254
U121D AV CONTROL UNIT	255
Description	255
DTC Logic	255
U121E AV CONTROL UNIT	256
Description	256

DTC Logic	256	Diagnosis Procedure	270
U121F AV CONTROL UNIT	257	B2702 CORNER SENSOR [FR]	271
Description	257	Description	271
DTC Logic	257	DTC Logic	271
Diagnosis Procedure	257	B2703 SENSOR HARNESS OPEN [CR-FR] ..	272
U1204 GPS	258	Description	272
Description	258	DTC Logic	272
DTC Logic	258	Diagnosis Procedure	272
Diagnosis Procedure	258	B2704 CORNER SENSOR [RL]	273
U1205 GPS	259	Description	273
Description	259	DTC Logic	273
DTC Logic	259	B2705 SENSOR HARNESS OPEN [CR-RL] ..	274
Diagnosis Procedure	259	Description	274
U1206 GPS	260	DTC Logic	274
Description	260	Diagnosis Procedure	274
DTC Logic	260	B2706 CORNER SENSOR [RR]	275
Diagnosis Procedure	260	Description	275
U1207 GPS	261	DTC Logic	275
Description	261	B2707 SENSOR HARNESS OPEN [CR-RR] .	276
DTC Logic	261	Description	276
Diagnosis Procedure	261	DTC Logic	276
U1243 DISPLAY UNIT	262	Diagnosis Procedure	276
Description	262	POWER SUPPLY AND GROUND CIRCUIT ..	277
DTC Logic	262	AV CONTROL UNIT	277
Diagnosis Procedure	262	AV CONTROL UNIT : Diagnosis Procedure	277
U1244 GPS ANTENNA	264	DISPLAY UNIT	277
Description	264	DISPLAY UNIT : Diagnosis Procedure	277
DTC Logic	264	MULTIFUNCTION SWITCH	278
Diagnosis Procedure	264	MULTIFUNCTION SWITCH : Diagnosis Proce-	278
U1250 CAMERA CONTROL UNIT	265	dure	278
Description	265	BOSE AMP.	279
DTC Logic	265	BOSE AMP. : Diagnosis Procedure	279
Diagnosis Procedure	265	IPOD ADAPTER	279
U1258 SATELLITE RADIO ANTENNA	266	iPod ADAPTER : Diagnosis Procedure	279
Description	266	CAMERA CONTROL UNIT	280
DTC Logic	266	CAMERA CONTROL UNIT : Diagnosis Procedure	..280
Diagnosis Procedure	266	AROUND VIEW MONITOR CONTROL UNIT	280
U1300 AV COMM CIRCUIT	267	AROUND VIEW MONITOR CONTROL UNIT : Di-	agnosis Procedure
WITH REAR VIEW MONITOR	267	agnosis Procedure	280
WITH REAR VIEW MONITOR : Description	267	SONAR CONTROL UNIT (WITH AROUND VIEW	MONITOR)
WITH AROUND VIEW MONITOR	267	281	SONAR CONTROL UNIT (WITH AROUND VIEW
WITH AROUND VIEW MONITOR : Description ..	267	MONITOR) : Diagnosis Procedure	281
B2700 CORNER SENSOR [FL]	269	RGB (R: RED) SIGNAL CIRCUIT	283
Description	269	Description	283
DTC Logic	269	Diagnosis Procedure	283
B2701 SENSOR HARNESS OPEN [CR-FL] ..	270		
Description	270		
DTC Logic	270		

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

RGB (G: GREEN) SIGNAL CIRCUIT	284	WITH REAR VIEW MONITOR	300
Description	284	WITH REAR VIEW MONITOR : Description	300
Diagnosis Procedure	284	WITH REAR VIEW MONITOR : Diagnosis Procedure	300
RGB (B: BLUE) SIGNAL CIRCUIT	285	WITH AROUND VIEW MONITOR	301
Description	285	WITH AROUND VIEW MONITOR : Description ..	301
Diagnosis Procedure	285	WITH AROUND VIEW MONITOR : Diagnosis Procedure	301
RGB SYNCHRONIZING SIGNAL CIRCUIT ...	286	STEERING SWITCH SIGNAL A CIRCUIT	304
Description	286	Description	304
Diagnosis Procedure	286	Diagnosis Procedure	304
RGB AREA (YS) SIGNAL CIRCUIT	287	Component Inspection	305
Description	287	STEERING SWITCH SIGNAL B CIRCUIT	306
Diagnosis Procedure	287	Description	306
HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT	288	Diagnosis Procedure	306
Description	288	Component Inspection	307
Diagnosis Procedure	288	STEERING SWITCH SIGNAL GND CIRCUIT..	308
VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT	289	Description	308
Description	289	Diagnosis Procedure	308
Diagnosis Procedure	289	Component Inspection	308
AUX IMAGE SIGNAL CIRCUIT	290	FRONT CAMERA COMMUNICATION SIGNAL CIRCUIT	310
Description	290	Description	310
Diagnosis Procedure	290	Diagnosis Procedure	310
MODE CHANGE SIGNAL CIRCUIT	291	FRONT CAMERA IMAGE SIGNAL CIRCUIT ..	311
Description	291	Description	311
Diagnosis Procedure	291	Diagnosis Procedure	311
DISK EJECT SIGNAL CIRCUIT	292	REAR CAMERA COMMUNICATION SIGNAL CIRCUIT	313
Description	292	Description	313
Diagnosis Procedure	292	Diagnosis Procedure	313
MICROPHONE SIGNAL CIRCUIT	293	REAR CAMERA IMAGE SIGNAL CIRCUIT ...	314
Description	293	Description	314
Diagnosis Procedure	293	Diagnosis Procedure	314
REAR VIEW CAMERA IMAGE SIGNAL CIRCUIT	295	SIDE CAMERA LH COMMUNICATION SIGNAL CIRCUIT	316
Description	295	Description	316
Diagnosis Procedure	295	Diagnosis Procedure	316
CAMERA IMAGE SIGNAL CIRCUIT	297	SIDE CAMERA LH IMAGE SIGNAL CIRCUIT..	317
WITH REAR VIEW MONITOR	297	Description	317
WITH REAR VIEW MONITOR : Description	297	Diagnosis Procedure	317
WITH REAR VIEW MONITOR : Diagnosis Procedure	297	SIDE CAMERA RH COMMUNICATION SIGNAL CIRCUIT	319
WITH AROUND VIEW MONITOR	297	Description	319
WITH AROUND VIEW MONITOR : Description ...	298	Diagnosis Procedure	319
WITH AROUND VIEW MONITOR : Diagnosis Procedure	298	SIDE CAMERA RH IMAGE SIGNAL CIRCUIT..	320
STEERING ANGLE SENSOR SIGNAL CIRCUIT	300	Description	320
		Diagnosis Procedure	320
		BUZZER CIRCUIT	322

Description	322	PRECAUTION	572	A
Component Function Check	322	PRECAUTIONS	572	B
Diagnosis Procedure	322	Caution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	572	C
ECU DIAGNOSIS INFORMATION	324	Caution for Trouble Diagnosis	572	D
AV CONTROL UNIT	324	Caution for Harness Repair	572	E
Reference Value	324	PREPARATION	574	F
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -	330	Commercial Service Tools	574	G
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR -	346	REMOVAL AND INSTALLATION	575	H
Fail-Safe	367	AV CONTROL UNIT	575	I
DTC Index	369	Exploded View	575	J
DISPLAY UNIT	371	Removal and Installation	575	K
Reference Value	371	DISPLAY UNIT	576	L
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -	373	Exploded View	576	M
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR -	389	Removal and Installation	576	AV
BOSE AMP.	411	FRONT DOOR SPEAKER	577	O
Reference Value	411	Exploded View	577	P
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -	413	Removal and Installation	577	
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR -	429	REAR DOOR SPEAKER	578	
iPod ADAPTER	451	Exploded View	578	
Reference Value	451	Removal and Installation	578	
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -	453	FRONT SQUAWKER	579	
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR -	468	Exploded View	579	
CAMERA CONTROL UNIT	490	Removal and Installation	579	
Reference Value	490	REAR SQUAWKER	580	
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -	492	Exploded View	580	
AROUND VIEW MONITOR CONTROL UNIT ..	509	Removal and Installation	580	
Reference Value	509	CENTER SPEAKER	581	
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR -	513	Exploded View	581	
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)	535	Removal and Installation	581	
Reference Value	535	WOOFER	582	
Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR -	537	Exploded View	582	
Fail-Safe	558	Removal and Installation	582	
DTC Index	559	BOSE AMP.	583	
SYMPTOM DIAGNOSIS	560	Exploded View	583	
MULTI AV SYSTEM SYMPTOMS	560	Removal and Installation	583	
Symptom Table	560	ANTENNA BASE	584	
NORMAL OPERATING CONDITION	567	Exploded View	584	
Description	567	Removal and Installation	584	
		MULTIFUNCTION SWITCH	585	
		Exploded View	585	
		Removal and Installation	585	
		PRESET SWITCH	586	
		Exploded View	586	

Removal and Installation	586	REAR CAMERA	598
iPod ADAPTER	587	Exploded View	598
Exploded View	587	Removal and Installation	598
Removal and Installation	587	SIDE CAMERA LH	599
iPod CONNECTOR	588	Exploded View	599
Exploded View	588	Removal and Installation	599
Removal and Installation	588	SIDE CAMERA RH	600
AUXILIARY INPUT JACKS	589	Exploded View	600
Exploded View	589	Removal and Installation	600
Removal and Installation	589	SONAR CONTROL UNIT (WITH AROUND	
MICROPHONE	590	VIEW MONITOR)	601
Exploded View	590	Exploded View	601
Removal and Installation	590	Removal and Installation	601
GPS ANTENNA	591	SONAR SENSOR	602
Exploded View	591	FRONT	602
Harness Layout	591	FRONT : Exploded View	602
Removal and Installation	592	FRONT : Removal and Installation	602
CAMERA CONTROL UNIT	593	REAR	602
Exploded View	593	REAR : Exploded View	603
Removal and Installation	593	REAR : Removal and Installation	603
AROUND VIEW MONITOR CONTROL UNIT .	594	BUZZER	604
Exploded View	594	Exploded View	604
Removal and Installation	594	Removal and Installation	604
REAR VIEW CAMERA	595	STEERING ANGLE SENSOR	605
Exploded View	595	Exploded View	605
Removal and Installation	595	Removal and Installation	605
Adjustment	596	ANTENNA FEEDER	606
FRONT CAMERA	597	Harness Layout	606
Exploded View	597		
Removal and Installation	597		

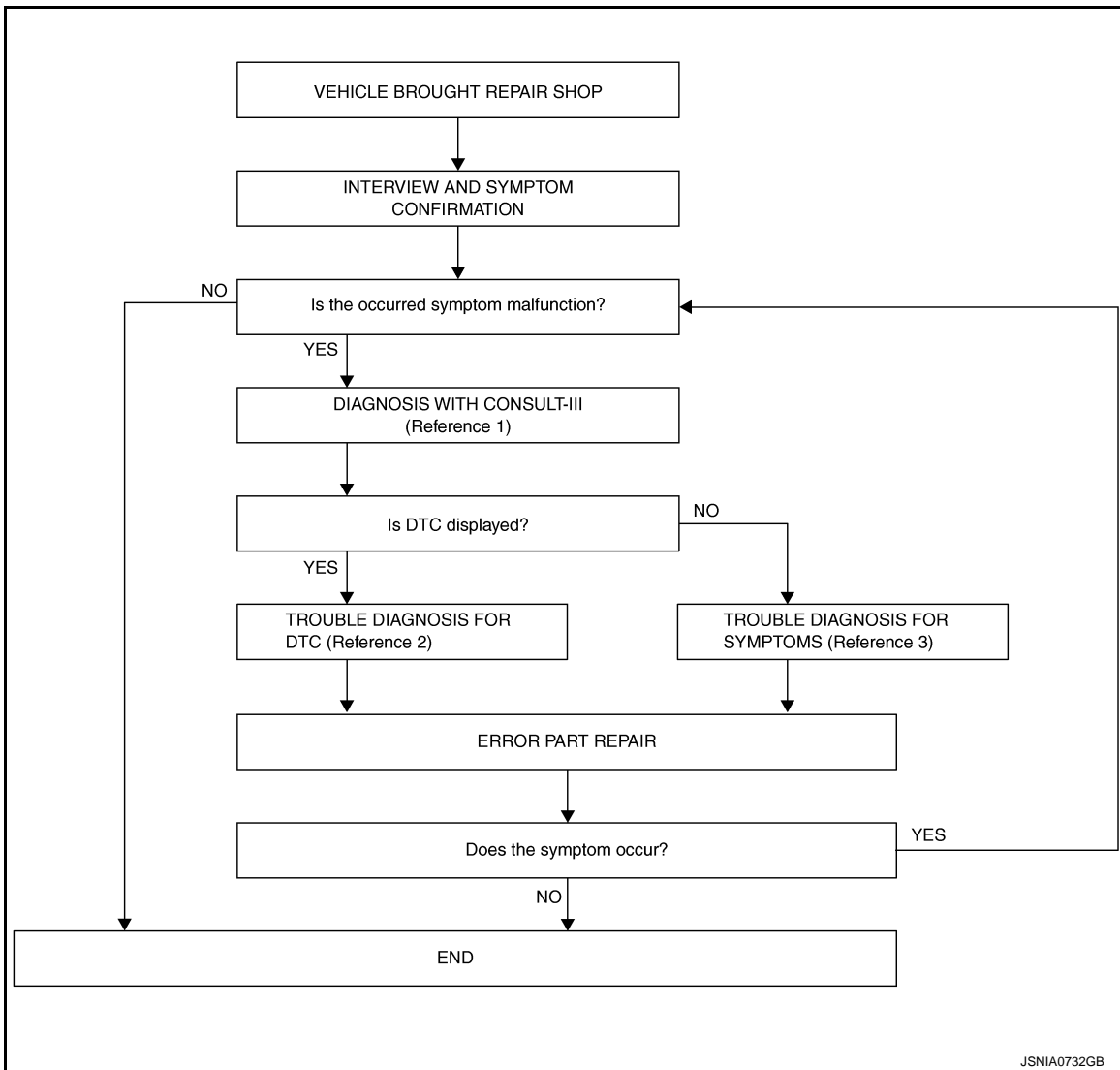
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000004347455

OVERALL SEQUENCE



- Reference 1... Refer to [AV-33. "CONSULT-III Function \(MULTI AV\)".](#)
- Reference 2... Refer to [AV-95. "DTC Index".](#)
- Reference 3... Refer to [AV-144. "Symptom Table".](#)

DETAILED FLOW

1. INTERVIEW AND SYMPTOM CONFIRMATION

Check the malfunction symptoms by performing the following items.

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

Is the occurred symptom malfunction?

- YES >> GO TO 2.
- NO >> INSPECTION END

2. DIAGNOSIS WITH CONSULT-III

DIAGNOSIS AND REPAIR WORKFLOW

[BASE AUDIO WITHOUT NAVIGATION]

< BASIC INSPECTION >

1. Connect CONSULT-III and perform a self-diagnosis for "MULTI AV". Refer to [AV-33. "CONSULT-III Function \(MULTI AV\)".](#)

NOTE:

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

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

Is DTC displayed?

YES >> GO TO 3.

NO >> GO TO 4.

3. TROUBLE DIAGNOSIS FOR DTC

1. Check the DTC indicated in the self-diagnosis results.
2. Perform the relevant diagnosis referring to the DTC Index. Refer to [AV-95. "DTC Index".](#)

>> GO TO 5.

4. TROUBLE DIAGNOSIS FOR SYMPTOMS

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

>> GO TO 5.

5. ERROR PART REPAIR

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

NOTE:

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

3. Check that the symptom does not occur.

Does the symptom occur?

YES >> GO TO 1.

NO >> INSPECTION END

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BASE AUDIO WITHOUT NAVIGATION]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000004347456

Always correct the center position of the predicted course line after disconnecting the battery negative terminal.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:000000004347457

1. CORRECTION OF CENTER POSITION OF PREDICTED COURSE LINE

Refer to the following for details.

>> Refer to [AV-11, "PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000004347458

When camera control unit is replaced, the center position of predicted course line shall be corrected.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000004347459

1. CORRECTION OF CENTER POSITION OF PREDICTED COURSE LINE

Refer to the following for details.

>> Refer to [AV-11, "PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT

PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Description

INFOID:000000004347460

Adjust the center position of the predicted course line of the rear view monitor if it is shifted.

PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement

INFOID:000000004347461

1. STEERING OPERATION

Steer the steering wheel to the leftmost and rightmost ends.

>> GO TO 2

2. DRIVING

Drive the vehicle straight ahead 100 m (328.1 ft) or more at a speed of 30 km/h (18.6 MPH) or more.

>> END

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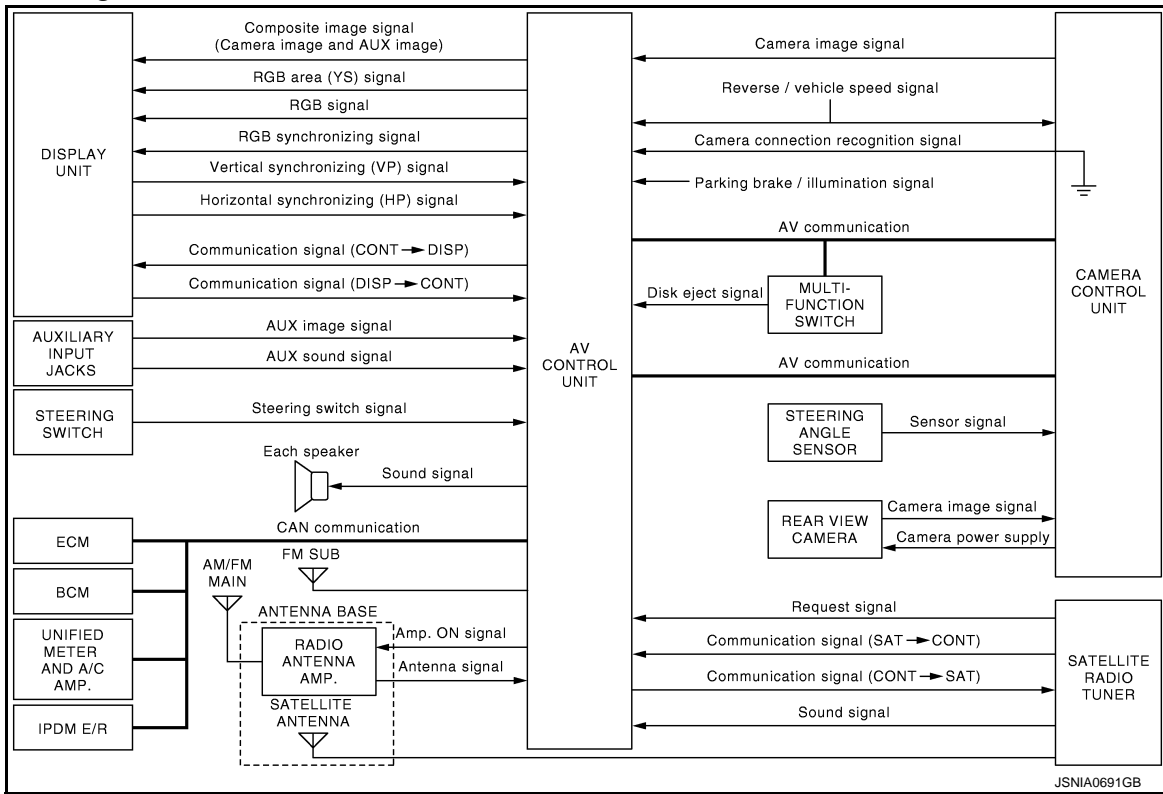
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SYSTEM DESCRIPTION

MULTI AV SYSTEM

System Diagram

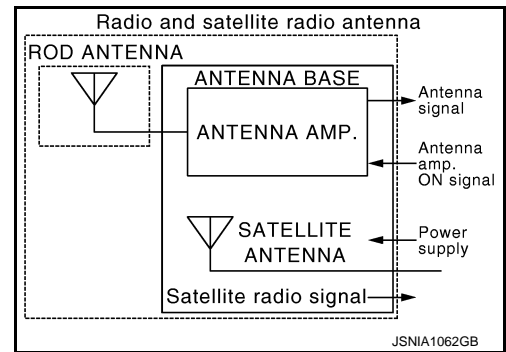
INFOID:000000004347462



JSNIA0691GB

NOTE:

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



JSNIA1062GB

System Description

INFOID:000000004347463

Multi AV system means that the following systems are integrated.

System name	System explanation
AUDIO SYSTEM	AV-17. "System Description"
REAR VIEW MONITOR SYSTEM	AV-20. "System Description"

MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

System name	System explanation
VEHICLE INFORMATION SYSTEM	<ul style="list-style-type: none"> Indicates the status of audio, climate control system, fuel economy and maintenance. AV control unit displays the fuel consumption status while receiving data signal through CAN communication from ECM, unified meter and A/C amp. AV control unit is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.
AUXILIARY INPUT SYSTEM	Refer to "AUXILIARY INPUT SYSTEM" shown below.

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

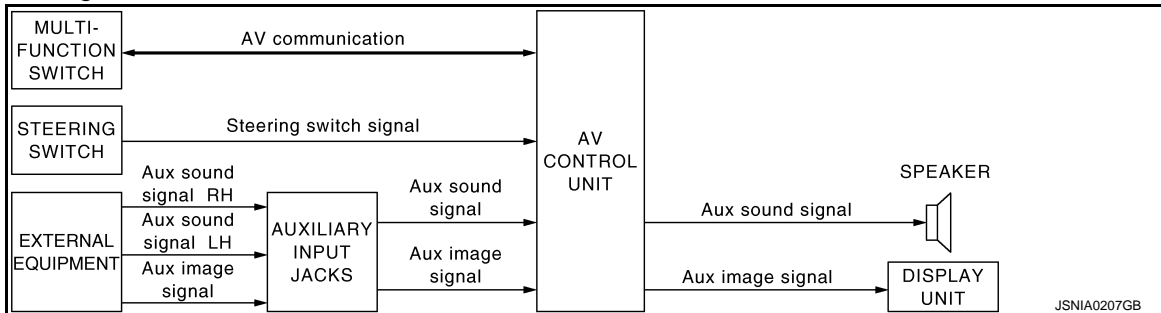
NOTE:

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

- CONSULT-III self-diagnosis: refer to [AV-33, "CONSULT-III Function \(MULTI AV\)"](#).
- On board self-diagnosis: refer to [AV-24, "Diagnosis Description"](#).

AUXILIARY INPUT SYSTEM

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



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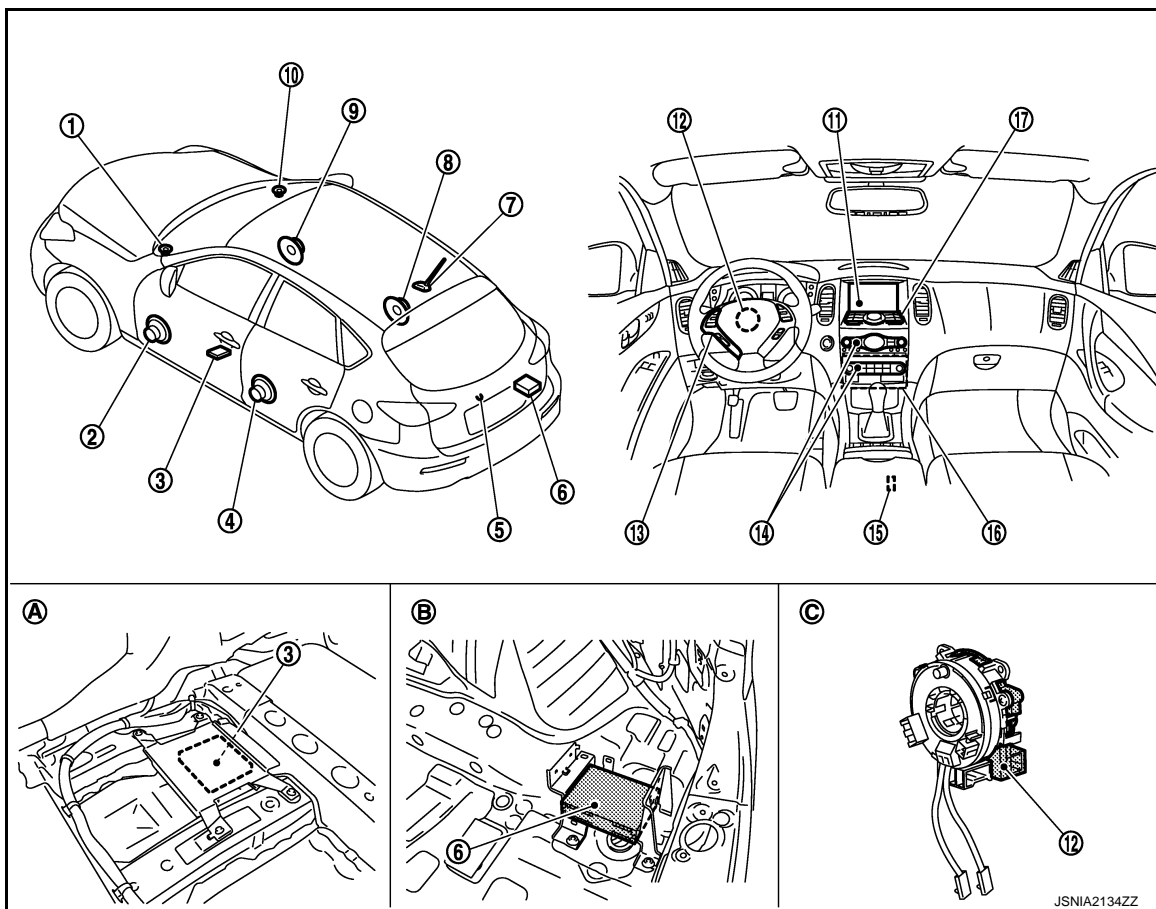
MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Component Parts Location

INFOID:000000004347464



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|---|----------------------------|---------------------------|
| 1. Front squawker LH | 2. Front door speaker LH | 3. Camera control unit |
| 4. Rear door speaker LH | 5. Rear view camera | 6. Satellite radio tuner |
| 7. Antenna base (antenna amp and satellite antenna) | 8. Rear door speaker RH | 9. Front door speaker RH |
| 10. Front squawker RH | 11. Display unit | 12. Steering angle sensor |
| 13. Steering switch | 14. Preset switch | 15. Auxiliary input jacks |
| 16. AV control unit | 17. Multifunction switch | |
| A. Under front seat (LH side) | B. Luggage floor (RH side) | C. Spiral cable part |

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MULTI AV SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

Component Description

INFOID:000000004347465

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from AV control unit. AV control unit includes audio function and vehicle information function. It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function. It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function. It inputs the illumination signals that are required for the display dimming control. It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake). Auxiliary image signal is input from the auxiliary input jacks. Camera image signal is input from camera control unit. AV control unit recognizes the presence of camera system with camera connection recognition signal.
DISPLAY UNIT	<ul style="list-style-type: none"> Display image is controlled by the serial communication from AV control unit. RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing). Synchronizing signal (HP, VP) is output to AV control unit. Composite image signal is input from AV control unit.
FRONT DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from AV control unit. Outputs sound (mid and low range).
REAR DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from AV control unit. Outputs sound (mid and low range).
FRONT SQUAWKER	<ul style="list-style-type: none"> Outputs sound signal from AV control unit. Outputs sound (high and mid range).
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> Operation panel is equipped with the centralized switch where audio and auxiliary input operations are integrated. Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication.
PRESET SWITCH	<ul style="list-style-type: none"> Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated. Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication. The disk ejection operating signal is performed by hardwire.
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> Camera image signal is input from rear view camera. Camera image signal is output to AV control unit. Power (camera ON signal) is transmitted to rear view camera. Superimpose the guiding line and predicted course line to the camera image that outputs to AV control unit. Input the sensor signal from steering angle sensor, and then control the predicted course line. Camera control unit is connected via AV communication.
REAR VIEW CAMERA	<ul style="list-style-type: none"> The image of vehicle rear view is transmitted to camera control unit. It receives power (camera ON signal) from camera control unit and operates.
STEERING ANGLE SENSOR	Steering signal necessary for predicted course line control is transmitted to camera control unit.
STEERING SWITCH	<ul style="list-style-type: none"> The operation of Audio, etc. can be performed. Steering switch signal (operation signal) is output to AV control unit.
AUXILIARY INPUT JACKS	The image signal of the auxiliary input is output via AV control unit to the display, and it outputs the sound signal to AV control unit.

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MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Part name	Description
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p>ANTENNA AMP.</p> <ul style="list-style-type: none">• Radio signal received by rod antenna is amplified and transmitted to AV control unit.• Power (antenna amp. ON signal) is supplied from AV control unit. <p>SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none">• Receives the satellite radio waves and outputs it to satellite radio tuner.
SATELLITE RADIO TUNER	<ul style="list-style-type: none">• Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to AV control unit.• It is controlled with AV control unit and serial communication (communication signal and request signal).

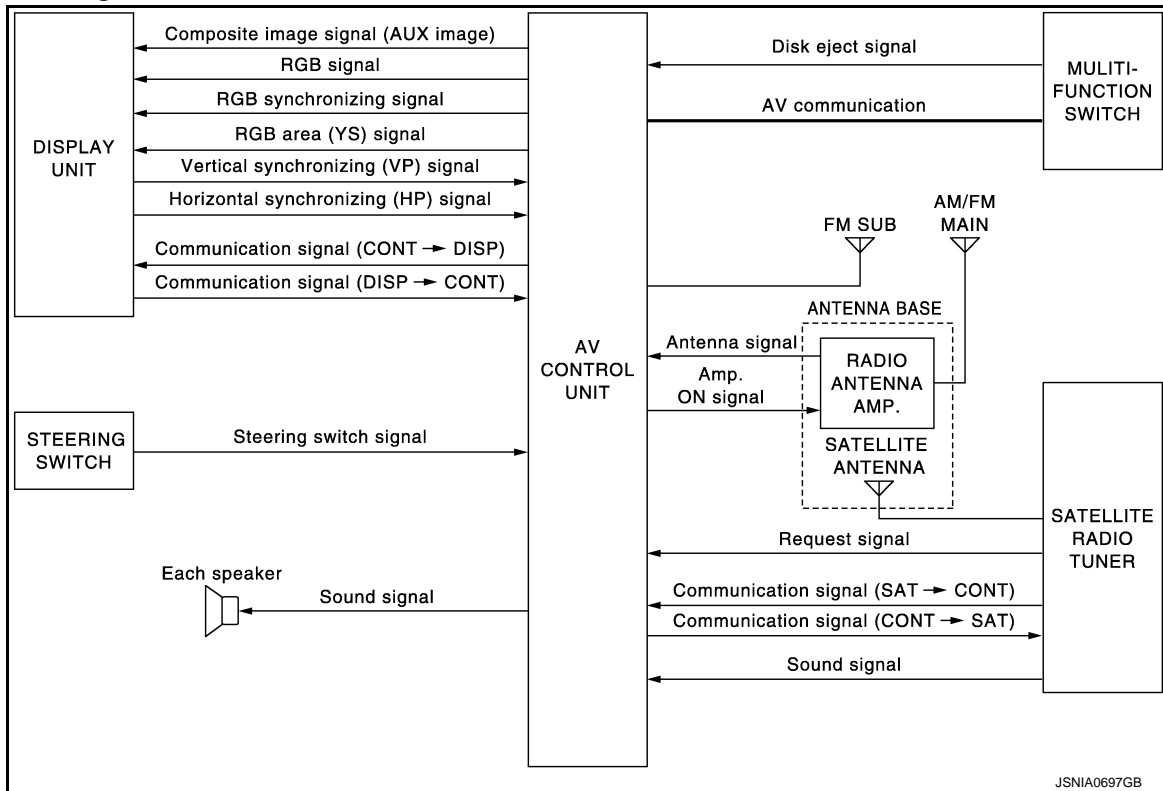
AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

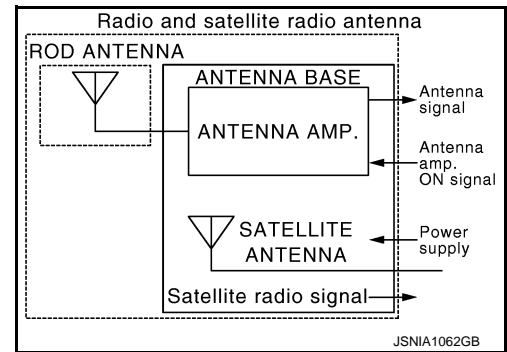
AUDIO SYSTEM

System Diagram



NOTE:

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



System Description

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

Function
AM/FM radio
Satellite radio
CD

FUNCTION DESCRIPTION

Operating Signal

Operation of the audio system can be performed with multifunction switch, preset switch or steering switch.

- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The disk ejection operating signal is performed by hardware.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.

AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Screen Display

- The display is switched by communication signal between display unit and AV control unit.
- The image signal to display operating condition is performed by the RGB signal, RGB area signal and RGB synchronizing signal.

AM/FM Radio Mode

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

Satellite Radio System

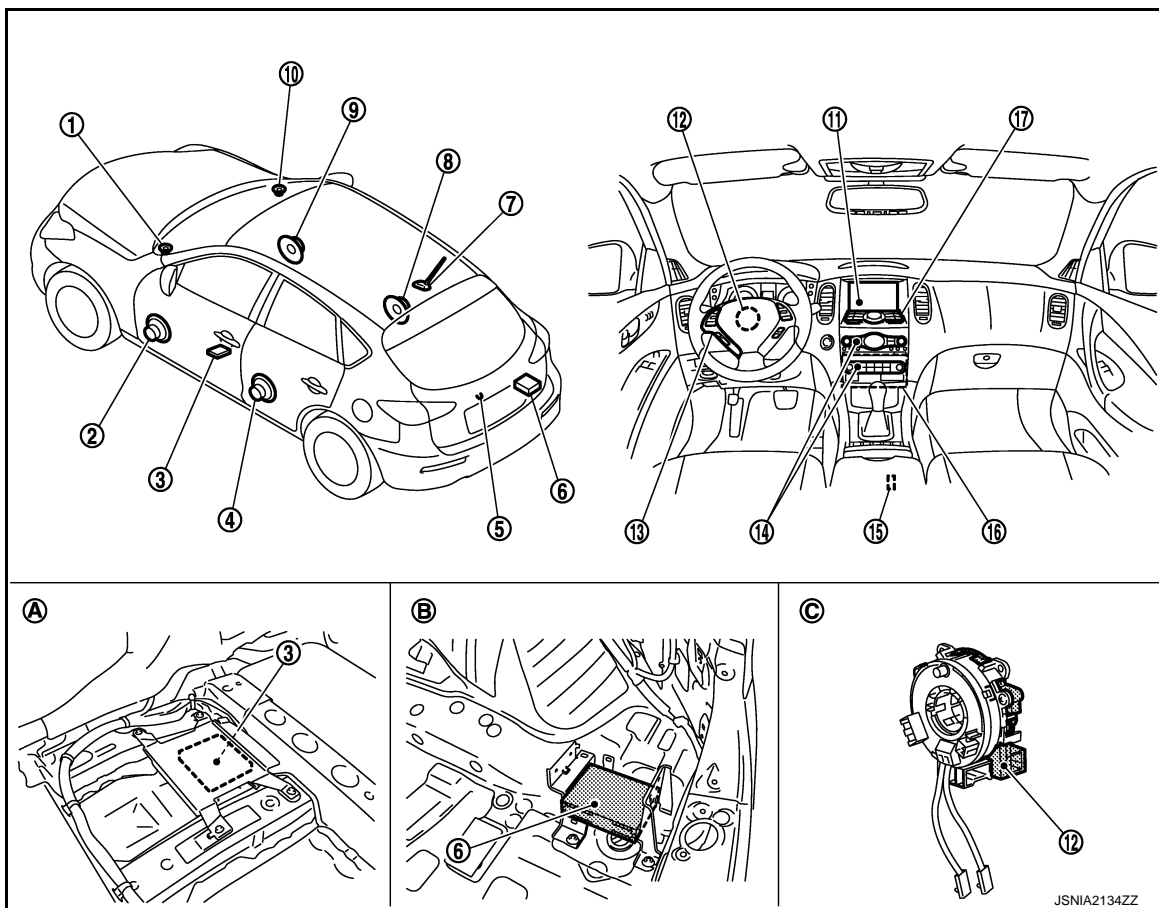
- Satellite radio tuner is controlled by communication and request signal from AV control unit.
- Satellite radio wave is received by satellite radio antenna and it is input to satellite radio tuner. Satellite radio tuner outputs satellite radio sound signal to AV control unit.
- AV control unit outputs satellite radio sound signal to each speaker.

CD Mode

- CD function is built into AV control unit.
- AV control unit outputs audio signals to each speaker when CD inserted into AV control unit.

Component Parts Location

INFOID:000000004921631



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|---|--------------------------|---------------------------|
| 1. Front squawker LH | 2. Front door speaker LH | 3. Camera control unit |
| 4. Rear door speaker LH | 5. Rear view camera | 6. Satellite radio tuner |
| 7. Antenna base (antenna amp and satellite antenna) | 8. Rear door speaker RH | 9. Front door speaker RH |
| 10. Front squawker RH | 11. Display unit | 12. Steering angle sensor |
| 13. Steering switch | 14. Preset switch | 15. Auxiliary input jacks |

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AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

16. AV control unit

17. Multifunction switch

A. Under front seat (LH side)

B. Luggage floor (RH side)

C. Spiral cable part

Component Description

INFOID:000000004347469

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> The AM/FM receiving function and the CD playing function are equipped. Outputs the audio signal to each speaker.
DISPLAY UNIT	<ul style="list-style-type: none"> Display image is controlled by the serial communication from AV control unit. RGB image signal (audio operation condition) is input from AV control unit.
FRONT DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from AV control unit. Outputs sound (mid and low range).
REAR DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from AV control unit. Outputs sound (mid and low range).
FRONT SQUAWKER	<ul style="list-style-type: none"> Outputs sound signal from AV control unit. Outputs sound (high and mid range).
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> Each audio operation can be operated. Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication.
PRESET SWITCH	<ul style="list-style-type: none"> Each audio and air conditioner operation can be operated. Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication. The disk ejection operating signal is performed by hardware
STEERING SWITCH	<ul style="list-style-type: none"> Each audio operation can be operated. Steering switch signal (operation signal) is output to AV control unit.
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p>ANTENNA AMP</p> <ul style="list-style-type: none"> Radio signal received by rod antenna is amplified and transmitted to AV control unit. Power (antenna amp. ON signal) is supplied from AV control unit. <p>SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none"> Receives the satellite radio waves and outputs it to satellite radio tuner.
SATELLITE RADIO TUNER	<ul style="list-style-type: none"> Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to AV control unit. It is controlled with AV control unit and serial communication (communication signal and request signal).

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REAR VIEW MONITOR SYSTEM

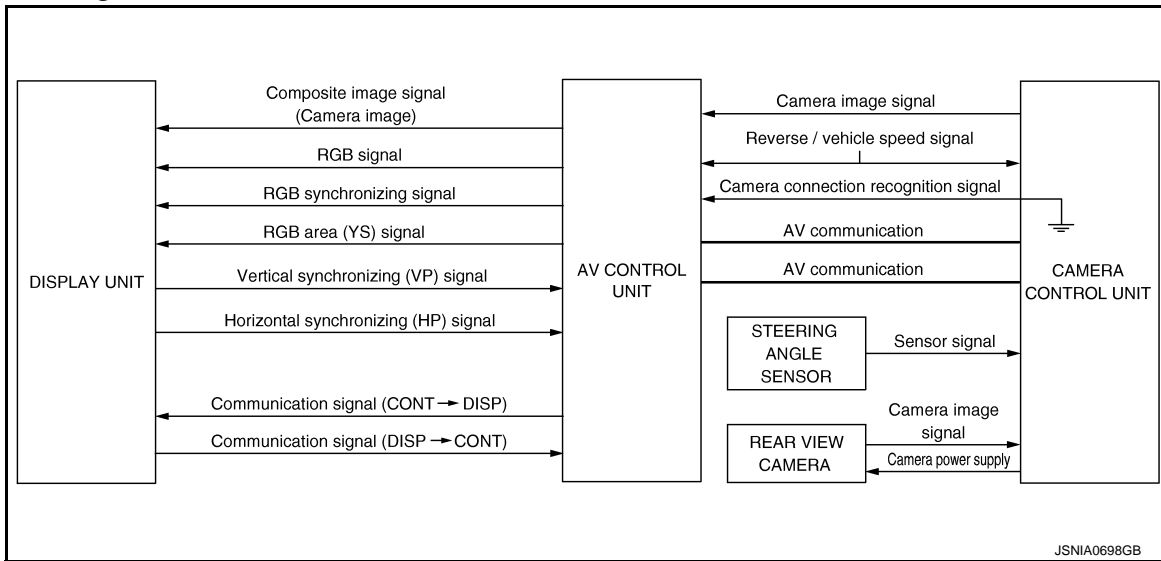
[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

REAR VIEW MONITOR SYSTEM

System Diagram

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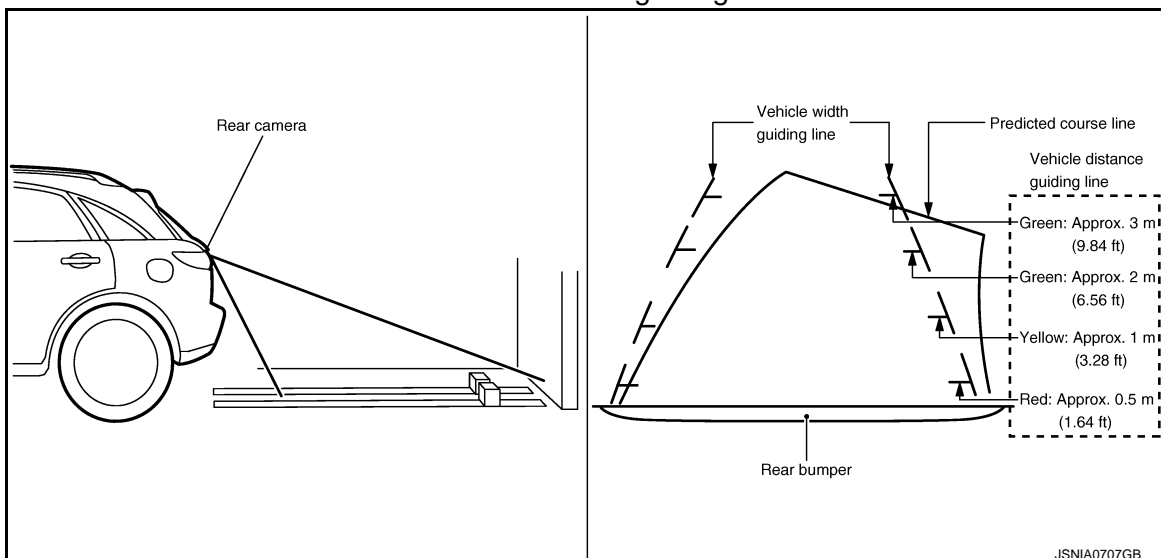
System Description

INFOID:000000004347471

CAMERA IMAGE OPERATION PRINCIPLE

- Power is supplied to rear view camera from camera control unit and the rear view camera outputs the camera image to camera control unit when selector lever is set to reverse position and the reverse signal on camera control unit is input.
- Camera control unit superimposes the guiding line and predicted course line to the image from rear view camera and outputs to display unit. In this case, the reverse signal is also input to AV control unit. Therefore, AV control unit recognizes the selector lever as in the reverse position. And then AV control unit switches the image displayed by the communication signal between AV control unit and display unit with the camera image.
- AV control unit outputs camera image signal that is inputted from camera control unit to display unit.
- Camera control unit controls the direction and distance of predicted course line according to the sensor signal from steering angle sensor.
- AV control unit determines whether rear view camera is equipped or not, based on the presence of camera connection recognition signal. It switches to rear view monitor image at the time of reverse signal input when rear view camera is equipped.
- Warning message under the rear view monitor display is described by AV control unit.

Rear view monitor guiding line



REAR VIEW MONITOR SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

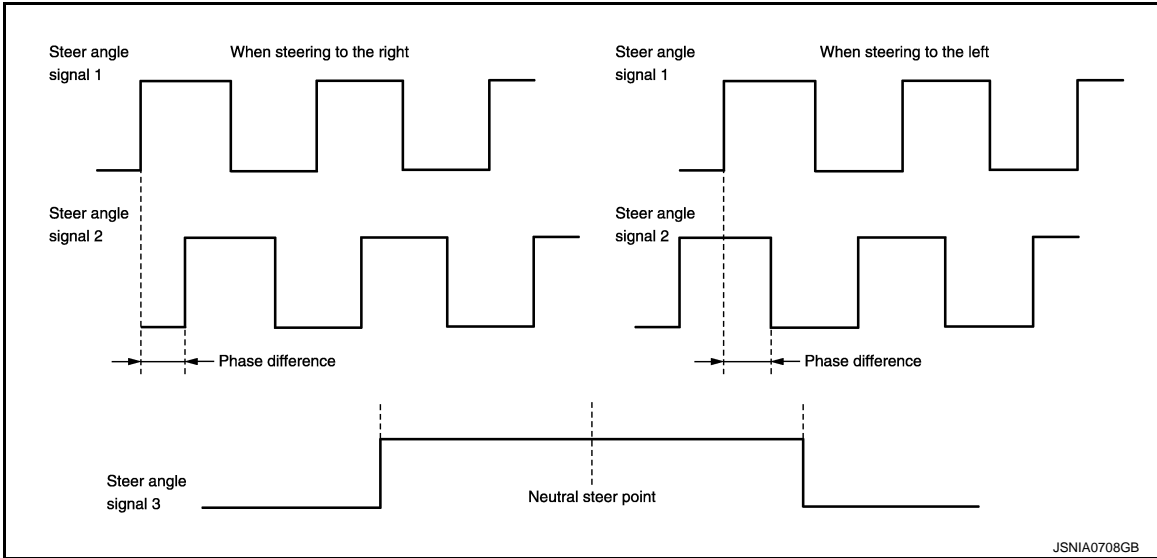
PREDICTED COURSE LINE OPERATION PRINCIPLE

Detection of Steering Rotation Direction

Camera control unit detects the rotation direction of steering according to the phase difference of two pairs of pulse signals (sensor signal 1 and sensor signal 2) input from steering angle sensor.

Detection of Steering Neutral Position

The sensor signal 3 input from steering angle sensor is generated at 1 pulse per 1 rotation of the steering wheel. Camera control unit detects the steering neutral position from this pulse.



Correction of Steering Neutral Position

Camera control unit corrects the steering neutral position during driving according to the vehicle speed signal and sensor signal.

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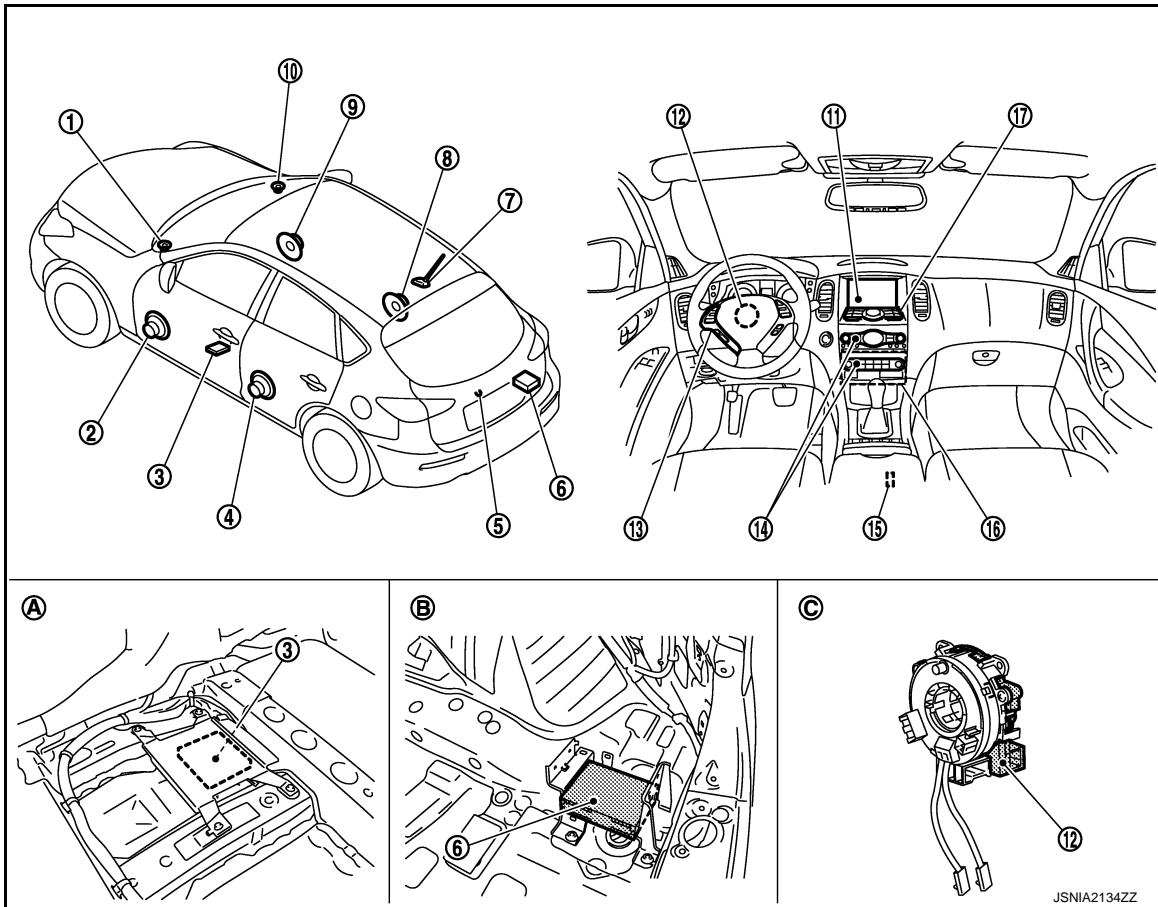
REAR VIEW MONITOR SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000004921632



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|---|----------------------------|---------------------------|
| 1. Front squawker LH | 2. Front door speaker LH | 3. Camera control unit |
| 4. Rear door speaker LH | 5. Rear view camera | 6. Satellite radio tuner |
| 7. Antenna base (antenna amp and satellite antenna) | 8. Rear door speaker RH | 9. Front door speaker RH |
| 10. Front squawker RH | 11. Display unit | 12. Steering angle sensor |
| 13. Steering switch | 14. Preset switch | 15. Auxiliary input jacks |
| 16. AV control unit | 17. Multifunction switch | |
| A. Under front seat (LH side) | B. Luggage floor (RH side) | C. Spiral cable part |

Component Description

INFOID:000000004347473

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> Image on display is transmitted to rear view monitor image by serial communication between AV control unit and display unit. Warning displayed on the rear view monitor image is illustrated. AV control unit recognizes the presence of camera system with camera connection recognition signal.
DISPLAY UNIT	<ul style="list-style-type: none"> Camera image signal is input from AV control unit. RGB signal for warning display is input from AV control unit. Rear view monitor image is changed by serial communication from AV control unit.

REAR VIEW MONITOR SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

Part name	Description
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> • Camera image signal is input from rear view camera. Camera image signal is output to AV control unit. • Power (camera ON signal) is transmitted to rear view camera. • Superimpose the guiding line and predicted course line to the camera image that outputs to AV control unit. • Inputs the sensor signal from steering angle sensor, and then controls the predicted course line. • Camera control unit is connected via AV communication.
REAR VIEW CAMERA	<ul style="list-style-type: none"> • The image of vehicle rear view is transmitted to camera control unit. • It receives power (camera ON signal) from camera control unit and operates.
STEERING ANGLE SENSOR	Steering signal necessary for predicted course line control is transmitted to camera control unit.

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DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

Diagnosis Description

INFOID:000000004347474

MULTIFUNCTION SWITCH AND PRESET SWITCH SELF-DIAGNOSIS FUNCTION

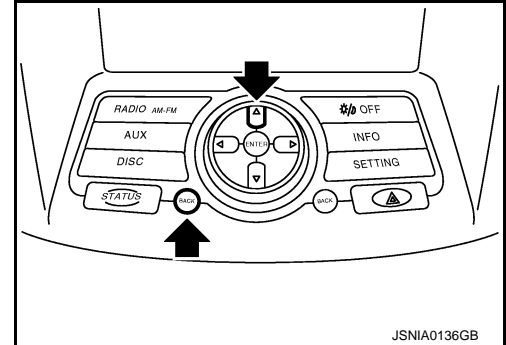
The ON/OFF operation (continuity) of each switch in the multifunction switch and preset switch can be checked.

Self-diagnosis Mode

- Press the “BACK” switch and the “UP” switch of the 4-direction switches within 10 seconds after turning the ignition switch from OFF to ACC and hold them for 3 seconds or more. The buzzer sounds, all indicators of the preset switch illuminate, and the self-diagnosis mode starts.
- The continuity of each switch in the ON position can be checked by pressing the switch. The buzzer sounds if the switch is normal.

CAUTION:

The hazard switch and CD eject switch cannot be checked.



Finishing Self-diagnosis Mode

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

MULTI AV SYSTEM ON BOARD DIAGNOSIS FUNCTION

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

ON BOARD DIAGNOSIS

Description

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

On Board Diagnosis Item

Mode	Description
Self Diagnosis	<ul style="list-style-type: none">• AV control unit diagnosis.• Perform the connection diagnosis between each of the units.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

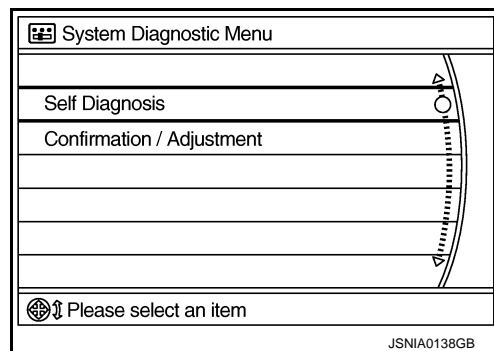
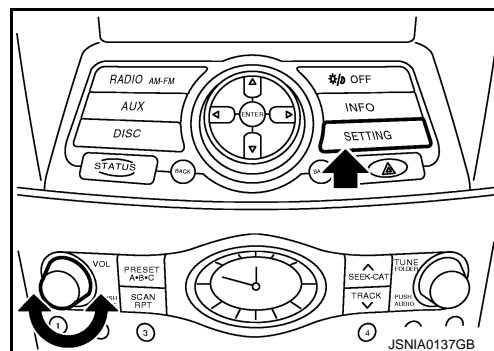
< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

	Mode	Description
Confirmation/ Adjustment	Display Diagnosis	The confirmations of the tint with the color spectrum bar display and shading of color with the gradation bar display can be performed.
	Vehicle Signals	Diagnosis of signals can be performed for vehicle speed, parking brake, lights, ignition switch, and reverse.
	Speaker Test	The connection of a speaker can be confirmed by test tone.
	Climate Control	Start auto air conditioner system self-diagnosis.
	Error History	The system malfunction and the frequency when occurring in the past are displayed. When the malfunctioning item is selected, the time and place that the selected malfunction last occurred are displayed.
	Vehicle CAN Diagnosis	The transmitting/receiving of CAN communication can be monitored.
	AV COMM Diagnosis	The communication condition of each unit of Multi AV system can be monitored.
	Camera Cont.	The signal connected to camera control unit can be checked and the guiding line position that overlaps rear view camera image can be adjusted.
	Delete Unit Connection Log	Erase the connection history of unit and error history
Initialize Settings	Initializes AV control unit memory.	

STARTING PROCEDURE

1. Start the engine.
2. Turn the audio system OFF.
3. While pressing the "SETTING" button, turn the volume control dial clockwise or counterclockwise for 40 clicks or more. (When the self-diagnosis mode starts, a short beep will sound.)
 - Shifting from the current screen to the previous screen is performed by pressing the "BACK" button.
4. The trouble diagnosis initial screen is displayed, and then the items of "Self Diagnosis" and "Confirmation/Adjustment" can be selected.



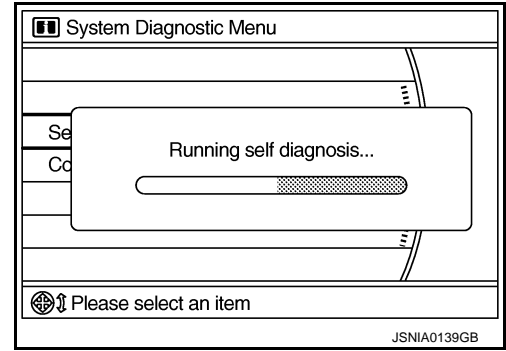
SELF-DIAGNOSIS MODE

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BASE AUDIO WITHOUT NAVIGATION]

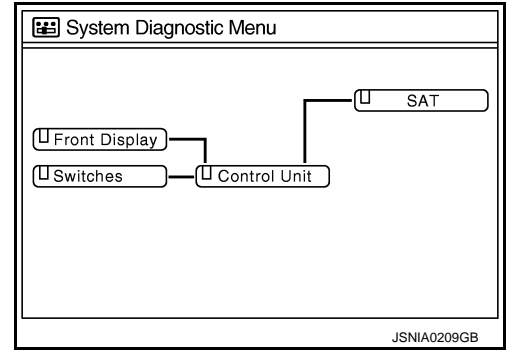
< SYSTEM DESCRIPTION >

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



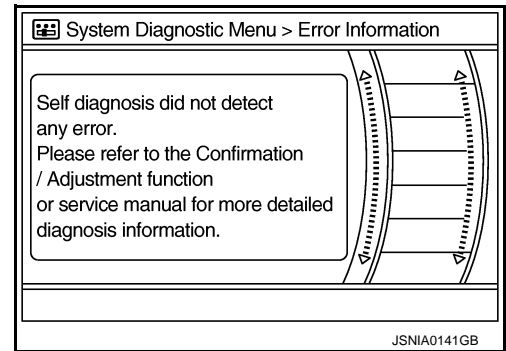
2. Diagnosis results are displayed after the self-diagnosis is completed. The unit names and the connection lines are color-coded according to the diagnostic results.

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



NOTE:

- Only the control unit (AV control unit) is displayed in red.
- Replace AV control unit if "Self-Diagnosis did not run because of a control unit malfunction" is indicated. The symptom is an AV control unit internal error. Refer to [AV-153, "Removal and Installation"](#).
- If multiple errors occur at the same time for a single unit, the screen switch colors are determined according to the following order of priority: red > gray.
- The comments of the self-diagnosis results can be viewed with a component in the diagnosis result screen.



SELF-DIAGNOSIS RESULTS

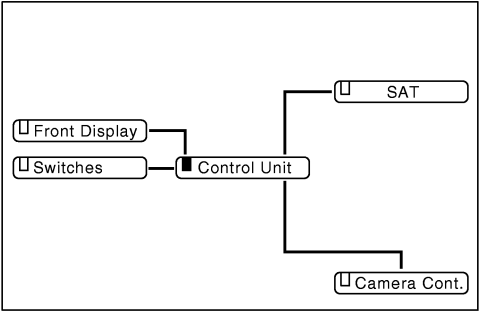
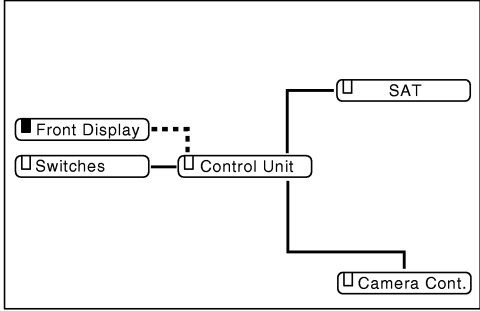
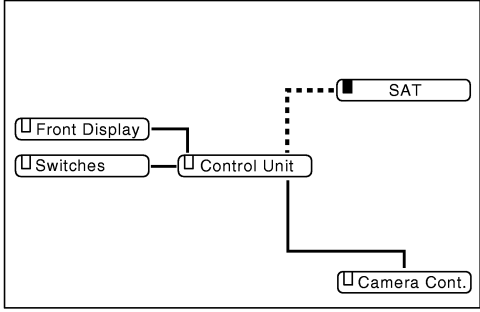
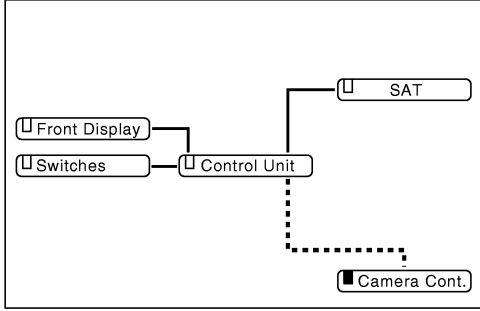
- The self-diagnosis mode allows the technician to diagnose the connection in the communication line between the AV control unit and each unit, and the internal operation of AV control unit.
- Because the start condition of the diagnosis function is a switch operation, the on board diagnosis function cannot be started up if any malfunction is detected in the communication circuit between AV control unit and multifunction switch.
- Check the applicable display in the following table, and then repair the malfunctioning parts.

Self-diagnosis Result Chart

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Diagnosis results	Description	Possible malfunction location / Action to take	
<p>"Self-Diagnosis did not run because of a control unit malfunction"</p>  <p>■ : Red JPNIA0829GB</p> <p>NOTE: When a control unit malfunction is detected (red in the unit display), connection malfunctions with other connection units may be displayed.</p>	<p>AV control unit malfunction is detected.</p> <p>Malfunction is detected in AV control unit power supply and ground circuits.</p>	<p>Replace AV control unit.</p> <p>Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.</p>	<p>A</p> <p>B</p> <p>C</p> <p>D</p> <p>E</p> <p>F</p>
 <p>■ : Gray - - - - : Yellow JPNIA0831GB</p>	<p>Malfunction is detected in the communication circuits between AV control unit and display unit.</p>	<p>Communication circuits between AV control unit and display unit.</p>	<p>G</p> <p>H</p> <p>I</p> <p>J</p>
 <p>■ : Gray - - - - : Yellow JPNIA0830GB</p>	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • satellite radio tuner power supply or ground circuits malfunction are detected. • malfunction is detected in the communication circuits between AV control unit and satellite radio tuner. • malfunction is detected in the request signal circuit between AV control unit and satellite radio tuner. 	<ul style="list-style-type: none"> • Satellite radio tuner power supply and ground circuits. • Communication circuits between AV control unit and satellite radio tuner. • Request signal circuit between AV control unit and satellite radio tuner. 	<p>K</p> <p>L</p> <p>M</p>
 <p>■ : Red - - - - : Yellow JPNIA0832GB</p>	<p>A malfunction is detected in the camera connection recognition circuit between AV control unit and camera control unit.</p>	<p>Camera connection recognition circuit between AV control unit and camera control unit.</p>	<p>AV</p> <p>O</p> <p>P</p>

CONFIRMATION/ADJUSTMENT MODE

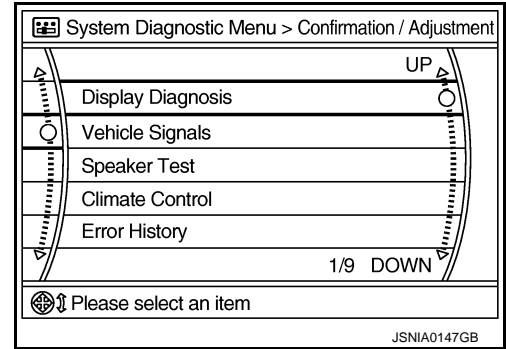
1. Start the diagnosis function and select "Confirmation/Adjustment". The confirmation/adjustment mode indicates where each item can be checked or adjusted.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

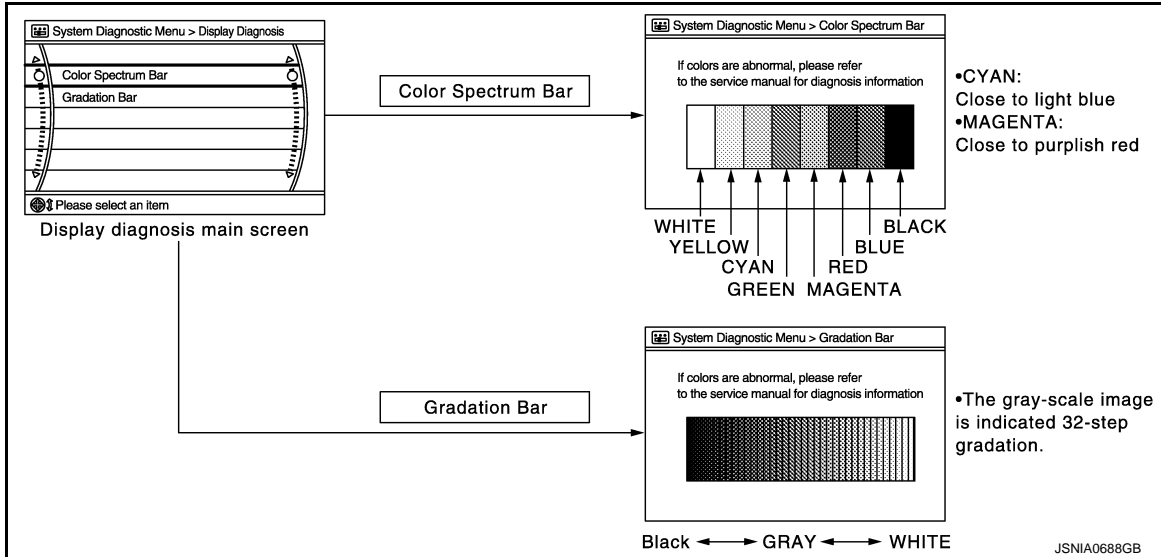
[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

- Select each switch on the "Inspection & Adjustment Mode" screen to display the relevant trouble diagnosis screen. Press the "RETURN" switch to return to the initial Inspection & Adjustment Mode screen.



Display Diagnosis

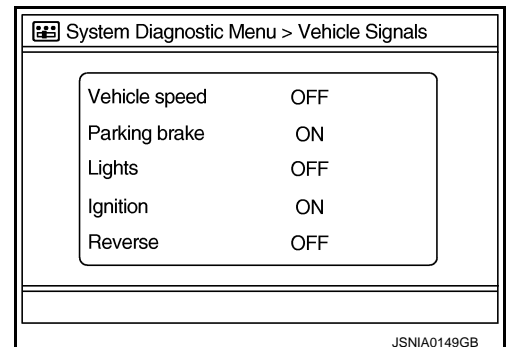


The tint of the color bar indication is as per the following list if a RGB signal error is detected.

- R (red) signal error** : Light blue (Cyan) tint
- G (green) signal error** : Purple (Magenta) tint
- B (blue) signal error** : Yellow tint

Vehicle Signals

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



Diagnosis item	Display	Vehicle status	Remarks
Vehicle speed	ON	Vehicle speed > 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
	OFF	Vehicle speed = 0 km/h (0 MPH)	
Parking brake	ON	Parking brake is applied.	
	OFF	Parking brake is released.	

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Diagnosis item	Display	Vehicle status	Remarks
Lights	ON	Light switch ON	—
	OFF	Light switch OFF	
Ignition	ON	Ignition switch ON	—
	OFF	Ignition switch in the ACC position	
Reverse	ON	Shift the selector lever to the "R" position	Changes in indication may be delayed. This is normal.
	OFF	Shift the selector lever to a position other than the "R" position	

Speaker Test

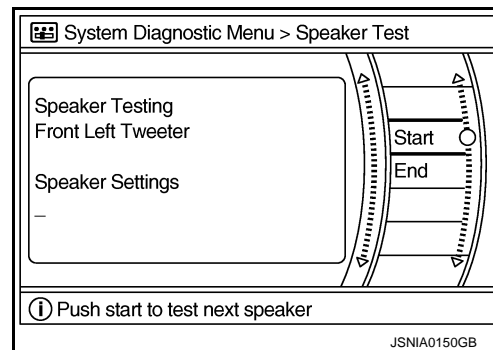
Select "SPEAKER DIAGNOSIS" to display the Speaker Diagnosis screen. Press "START and NEXT" to generate a test tone in a speaker. Press "Start" to generate a test tone in the next speaker. Press "End" to stop the test tones.

NOTE:

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

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

*: Squawker



Climate Control

Refer to "HEATER & AIR CONDITIONING CONTROL SYSTEM" for details.

Error History

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

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

Count up method A

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

Count up method B

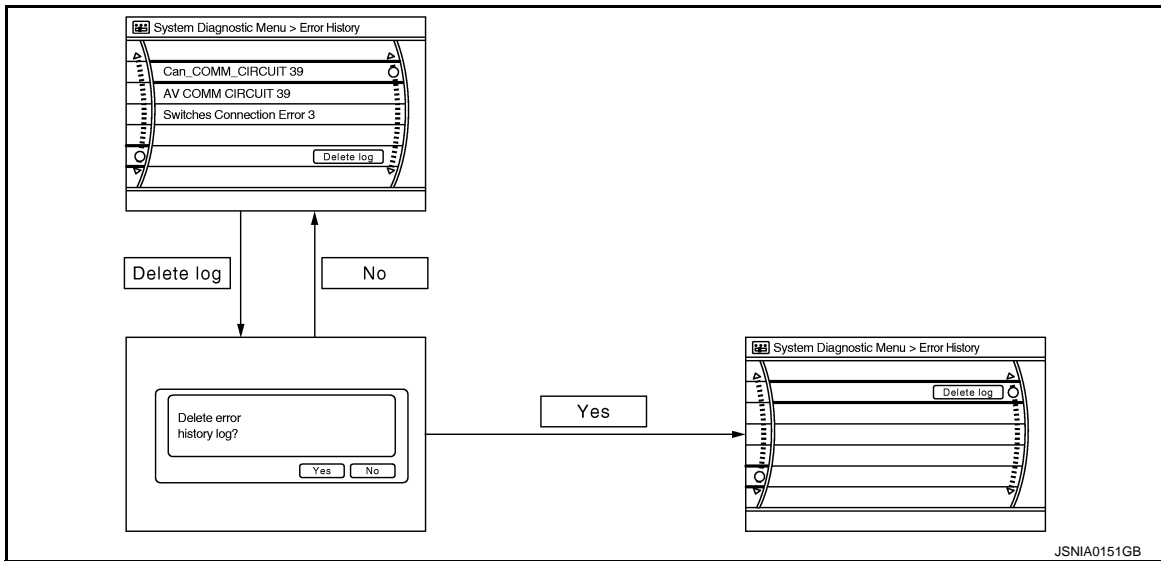
- The counter increases by 1 if an error occurs when the IGN switch is ON. The counter will not decrease even if the condition is normal at the next IGN ON cycle.
- The counter upper limit is 50. Any counts exceeding 50 are ignored. The counter can be reset (no error record display) with the "Delete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

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

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]



Error item

Error items may be displayed simultaneously according to the cause. If error items are displayed simultaneously, the cause can be detected by the combination of display items.

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to AV-33. "CONSULT-III Function (MULTI AV)".
CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	Replace AV control unit.
CONTROL UNIT (AV)	AV communication circuit initial diagnosis malfunction is detected.	
FLASH-ROM Error Of Control Unit CAN Controller Memory Error	AV control unit malfunction is detected.	
Front Display Connection Error	When either one of the following items are detected: <ul style="list-style-type: none"> display unit power supply or ground circuits malfunction are detected. malfunction is detected in the communication circuits between AV control unit and display unit. 	<ul style="list-style-type: none"> Display unit power supply and ground circuits. Communication circuits between AV control unit and display unit.
Camera Control Unit Connection Error	Malfunction is detected in the camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuits between AV control unit and camera control unit.
SAT Connection Error	When either one of the following items are detected: <ul style="list-style-type: none"> satellite radio tuner power supply or ground circuits malfunction are detected. malfunction is detected in the communication circuits between AV control unit and satellite radio tuner. malfunction is detected in the request signal circuits between AV control unit and satellite radio tuner. 	<ul style="list-style-type: none"> Satellite radio tuner power supply and ground circuits. Communication circuits between AV control unit and satellite radio tuner. Request signal circuit between AV control unit and satellite radio tuner.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

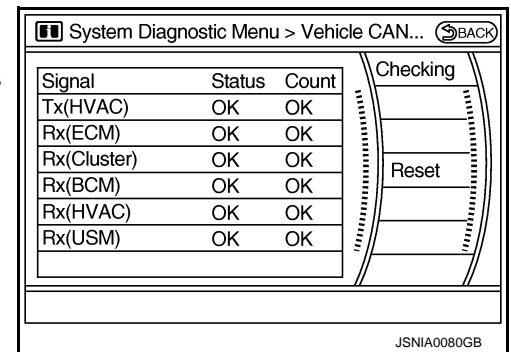
[BASE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
<ul style="list-style-type: none"> AV COMM CIRCUIT Switches Connection Error 	When either one of the following items are detected: <ul style="list-style-type: none"> multifunction switch power supply or ground circuits malfunction are detected. malfunction is detected in the AV communication circuits between AV control unit and multifunction switch. 	<ul style="list-style-type: none"> Multifunction switch power supply and ground circuits. AV communication circuits between AV control unit and multifunction switch.
<ul style="list-style-type: none"> AV COMM CIRCUIT Rear View Camera Connection Error 	When either one of the following items are detected: <ul style="list-style-type: none"> camera control unit power supply or ground circuits malfunction are detected. malfunction is detected in the AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch. 	<ul style="list-style-type: none"> Camera control unit power supply and ground circuits. AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch.
<ul style="list-style-type: none"> AV COMM CIRCUIT Switches Connection Error Rear View Camera Connection Error 	Malfunction is detected in the AV communication circuits between AV control unit and the junction between multifunction switch and camera control unit.	AV communication circuits between AV control unit and the junction between multifunction switch and camera control unit.

Vehicle CAN Diagnosis

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

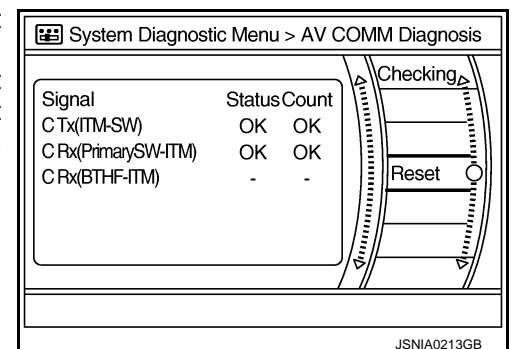
Items	Display (Current)	Malfunction counter (Past)
Tx(HVAC)	OK / UNKWN	OK / 0 – 39
Rx(ECM)	OK / UNKWN	OK / 0 – 39
Rx(Cluster)	OK / UNKWN	OK / 0 – 39
Rx(BCM)	OK / UNKWN	OK / 0 – 39
Rx(HVAC)	OK / UNKWN	OK / 0 – 39
Rx(USM)	OK / UNKWN	OK / 0 – 39



AV COMM Diagnosis

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

Items	Status (Current)	Counter (Past)
C Tx(ITM-SW)	OK / UNKWN	OK / 0 - 39
C Rx(PrimarySW-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(XM-ITM)	—	—



Camera Cont.

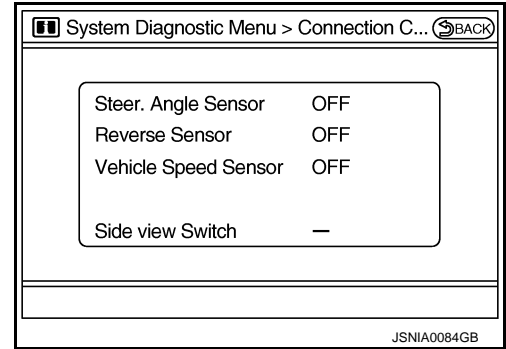
The two functions of “Connection Confirmation” and “Adjust Offset of Rear View Camera” are available.
CONNECTION CONFIRMATION

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

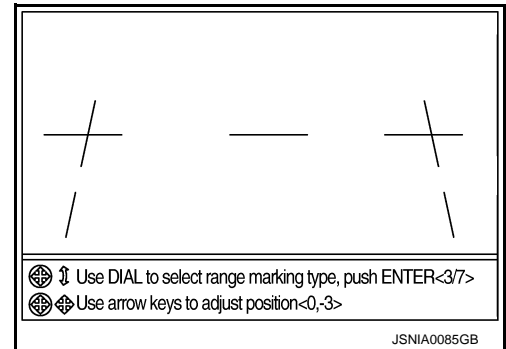
The steering angle sensor, reverse signal and vehicle speed sensor can be inspected.



Diagnosis item	Display	Vehicle status
Steer. Angle Sensor	ON	When steering the vehicle with ignition switch ON (remains ON until connection mode is stopped when it is turned ON)
	OFF	<ul style="list-style-type: none"> Ignition switch ACC No steering with ignition switch ON
	—	Malfunction detected in camera connection recognition signal
Reverse Sensor	ON	Shift the selector lever to the "R" position with ignition switch ON
	OFF	<ul style="list-style-type: none"> Ignition switch at ACC Shift the selector lever to a position other than the "R" position with ignition switch ON
	—	Malfunction detected in camera-connection recognition signal
Vehicle Speed Sensor	ON	Vehicle speed is more than 0 km/h (0 MPH) with ignition switch ON
	OFF	<ul style="list-style-type: none"> Ignition switch ACC Vehicle speed is 0 km/h (0 MPH) with ignition switch ON
	—	Malfunction detected in camera connection recognition signal
Side view Switch	—	Not used

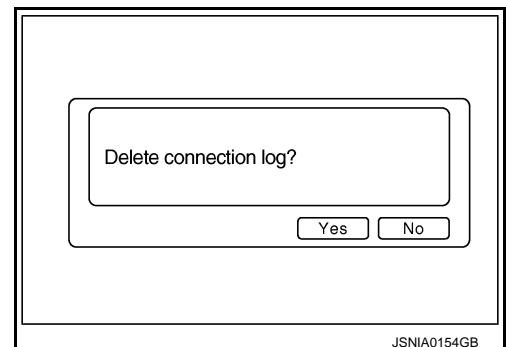
ADJUST OFFSET OF REAR VIEW CAMERA

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



Delete Unit Connection Log

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



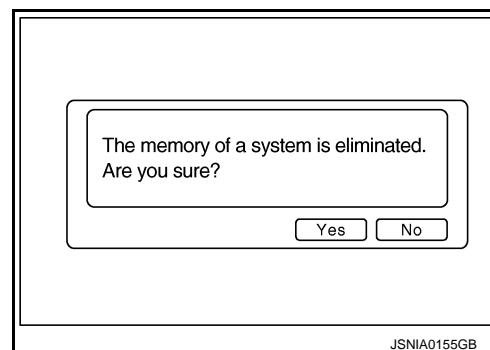
Initialize Settings

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Initializes AV control unit memory.



CONSULT-III Function (MULTI AV)

INFOID:000000004347475

CONSULT-III FUNCTIONS

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

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

AV COMMUNICATION

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

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

ECU IDENTIFICATION

The part number of AV control unit is displayed.

SELF DIAGNOSIS RESULT

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

Self-diagnosis Results Display Item

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT [U1000]	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to AV-36, "Diagnosis Procedure" .
CONTROL UNIT (CAN) [U1010]	CAN initial diagnosis malfunction is detected.	Replace AV control unit.
CONTROL UNIT (AV) [U1310]	AV communication circuit initial diagnosis malfunction is detected.	
Cont Unit FLASH-ROM [U1200] CAN CONT [U1216]	AV control unit malfunction is detected.	
FRONT DISP CONN [U1243]	When either one of the following items are detected: <ul style="list-style-type: none"> • display unit power supply or ground circuits malfunction are detected. • malfunction is detected in the communication circuits between AV control unit and display unit. 	<ul style="list-style-type: none"> • Display unit power supply and ground circuit. • Communication circuit between AV control unit and display unit.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
CAMERA CONT. CONN [U1250]	Malfunction is detected in the camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.
SAT CONN [U1255]	When either one of the following items are detected: <ul style="list-style-type: none"> • satellite radio tuner power supply or ground circuits malfunction are detected. • malfunction is detected in the communication circuits between AV control unit and satellite radio tuner. • malfunction is detected in the request signal circuits between AV control unit and satellite radio tuner. 	<ul style="list-style-type: none"> • Satellite radio tuner power supply and ground circuits. • Communication circuits between AV control unit and satellite radio tuner. • Request signal circuit between AV control unit and satellite radio tuner.
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] 	When either one of the following items are detected: <ul style="list-style-type: none"> • multifunction switch power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between AV control unit and multifunction switch. 	<ul style="list-style-type: none"> • Multifunction switch power supply and ground circuits. • AV communication circuits between AV control unit and multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • REAR CAMERA LAN CONN [U1252] 	When either one of the following items are detected: <ul style="list-style-type: none"> • camera control unit power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch. 	<ul style="list-style-type: none"> • Camera control unit power supply and ground circuits. • AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] • REAR CAMERA LAN CONN [U1252] 	Malfunction is detected in the AV communication circuits between AV control unit and the junction between camera control unit and multifunction switch.	AV communication circuits between AV control unit and the junction between camera control unit and multifunction switch.

DATA MONITOR

ALL SIGNALS

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

Display Item	Display	Vehicle status	Remarks	
VHCL SPD SIG	On	Vehicle speed > 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.	
	Off	Vehicle speed = 0 km/h (0 MPH)		
PKB SIG	On	Parking brake is applied.		
	Off	Parking brake is released.		
ILLUM SIG	On	Light switch ON		—
	Off	Light switch OFF		
IGN SIG	On	Ignition switch ON		
	Off	Ignition switch in the ACC position		
REV SIG	On	Shift the selector lever to the "R" position	Changes in indication may be delayed. This is normal.	
	Off	Shift the selector lever to a position other than the "R" position		

SELECTION FROM MENU

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

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

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

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DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:000000004347476

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

CAN Communication Signal Chart. Refer to [LAN-26, "CAN System Specification Chart"](#).

DTC Logic

INFOID:000000004347477

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:000000004347478

1. PERFORM SELF-DIAGNOSTIC

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

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to "LAN system". Refer to [LAN-17, "Trouble Diagnosis Flow Chart"](#).
- NO >> Refer to GI section. Refer to [GI-40, "Intermittent Incident"](#).

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1010 CONTROL UNIT (CAN)

Description

INFOID:000000004347479

Initial diagnosis of AV control unit.

DTC Logic

INFOID:000000004347480

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:000000004347481

1. REPLACE AV CONTROL UNIT

When DTC U1010 is detected, replace AV control unit.

>> INSPECTION END

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U1310 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1310 AV CONTROL UNIT

Description

INFOID:000000004347482

Replace the AV control unit if this DTC is displayed. Refer to [AV-153, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.• AV control unit includes audio function and vehicle information function.• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.• It inputs the illumination signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).• Auxiliary image signal is input from the auxiliary input jacks.

DTC Logic

INFOID:000000004347483

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

U1200 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1200 AV CONTROL UNIT

Description

INFOID:000000004347484

Replace the AV control unit if this DTC is displayed. Refer to [AV-153, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.• AV control unit includes audio function and vehicle information function.• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.• It inputs the illumination signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).• Auxiliary image signal is input from the auxiliary input jacks.

DTC Logic

INFOID:000000004347485

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

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U1216 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1216 AV CONTROL UNIT

Description

INFOID:000000004347486

Replace the AV control unit if this DTC is displayed. Refer to [AV-153, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.• AV control unit includes audio function and vehicle information function.• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.• It inputs the illumination signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).• Auxiliary image signal is input from the auxiliary input jacks.

DTC Logic

INFOID:000000004347487

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

U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1243 DISPLAY UNIT

Description

INFOID:000000004347488

Part name	Description
DISPLAY UNIT	<ul style="list-style-type: none">• Display image is controlled by the serial communication from AV control unit.• Inputs the RGB image signal (RGB, RGB area and RGB synchronizing) from AV control unit and the auxiliary image signal from the auxiliary input jacks.• Outputs the synchronizing signals (HP and VP) to the AV control unit.

DTC Logic

INFOID:000000004347489

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1243	FRONT DISP CONN [U1243]	<p>When either one of the following items is detected:</p> <ul style="list-style-type: none">• display unit power supply and ground circuits malfunction is detected.• malfunction is detected in communication circuits between AV control unit and display unit.	<ul style="list-style-type: none">• Display unit power supply and ground circuits.• Communication circuits between AV control unit and display unit.

Diagnosis Procedure

INFOID:000000004347490

1. CHECK DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check display unit power supply and ground circuits. Refer to [AV-47, "DISPLAY UNIT : Diagnosis Procedure"](#).
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

2. CHECK CONTINUITY COMMUNICATION CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
M71	11	M83	56	Existed
	22		44	

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

Display unit		Ground	Continuity
Connector	Terminals		
M71	11		Not existed
	22		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK COMMUNICATION SIGNAL (CONT→DISP)

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

U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	11	Ground	When adjusting display brightness.	<p style="text-align: right;">PKIB5039J</p>

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

4. CHECK COMMUNICATION SIGNAL (DISP→CONT)

Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	22	Ground	When adjusting display brightness.	<p style="text-align: right;">PKIB5039J</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace display unit.

U1250 CAMERA CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1250 CAMERA CONTROL UNIT

Description

INFOID:000000004347491

Part name	Description
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> • Camera image signal is input from rear view camera, and camera image is indicated on the display. • Power (camera ON signal) is sent to rear view camera. • Controlled by AV communication sent from AV control unit. • AV control unit recognizes the presence of camera system with camera connection recognition signal.

DTC Logic

INFOID:000000004347492

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

Diagnosis Procedure

INFOID:000000004347493

1. CHECK CAMERA-CONNECTION RECOGNITION SIGNAL CIRCUIT

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

AV control unit		Camera control unit		Continuity
Connector	Terminal	Connector	Terminal	
M84	68	B50	14	Existed

Is inspection result normal?

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

2. CHECK AV CONTROL UNIT VOLTAGE

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

(+)		(-)	Voltage (Approx.)
AV control unit			
Connector	Terminal		
M84	68	Ground	5.0 V

Is inspection result normal?

- YES >> Replace camera control unit.
 NO >> Replace AV control unit.

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AV

U1255 SATELLITE RADIO TUNER

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1255 SATELLITE RADIO TUNER

Description

INFOID:000000004347494

Part name	Description
SATELLITE RADIO TUNER	<ul style="list-style-type: none">Inputs the satellite radio signal from satellite radio antenna and outputs it to the AV control unit.It is controlled with the communication (communication signal, request signal) from AV control unit.

DTC Logic

INFOID:000000004347495

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1255	SAT CONN [U1255]	<p>When either one of the following items is detected:</p> <ul style="list-style-type: none">satellite radio tuner power supply and ground circuits malfunction is detected.malfunction is detected in communication circuits between AV control unit and satellite radio tuner.malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.	<ul style="list-style-type: none">Satellite radio tuner power supply and ground circuits.Communication circuits between AV control unit and satellite radio tuner.Request signal circuit between AV control unit and satellite radio tuner.

Diagnosis Procedure

INFOID:000000004347496

1. CHECK SATELLITE RADIO TUNER POWER SUPPLY AND GROUND CIRCUIT

Check satellite radio tuner power supply and ground circuit. Refer to [AV-50, "SATELLITE RADIO TUNER : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair malfunctioning parts.

2. CHECK CONTINUITY COMMUNICATION CIRCUIT AND REQUEST SIGNAL CIRCUIT

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

AV control unit		Satellite radio tuner		Continuity
Connector	Terminals	Connector	Terminals	
M82	28	B236	8	Existed
	29		9	
	30		10	

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

AV control unit		Ground	Continuity
Connector	Terminals		
M82	28		Not existed
	29		
	30		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair harness or connector.

U1255 SATELLITE RADIO TUNER

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

3. CHECK REQUEST SIGNAL

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

(+)		(-)	Reference value (Approx.)
AV control unit			
Connector	Terminals		
M82	28	Ground	<p style="text-align: right; font-size: small;">SKIA9299J</p>

Is the inspection result normal?

- YES >> GO TO 4.
 NO >> Replace AV control unit.

4. CHECK COMMUNICATION SIGNAL

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

(+)		(-)	Reference value (Approx.)
Satellite radio tuner			
Connector	Terminal		
M236	10	Ground	<p style="text-align: right; font-size: small;">SKIA9301J</p>

Is the inspection result normal?

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

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U1300 AV COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

U1300 AV COMM CIRCUIT

Description

INFOID:000000004347497

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

SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1300 U1240	<ul style="list-style-type: none">• AV COMM CIRCUIT [U1300]• SWITCH CONN [U1240]	When either one of the following items is detected: <ul style="list-style-type: none">• multifunction switch power supply and ground circuits malfunction is detected.• malfunction is detected in AV communication circuits between AV control unit and multifunction switch.	<ul style="list-style-type: none">• Multifunction switch power supply and ground circuits.• AV communication circuits between AV control unit and multifunction switch.
U1300 U1252	<ul style="list-style-type: none">• AV COMM CIRCUIT [U1300]• REAR CAMERA LAN CONN [U1252]	When either one of the following items is detected: <ul style="list-style-type: none">• camera control unit power supply and ground circuits malfunction is detected.• malfunction is detected in AV communication circuits between camera control unit and the junction of AV control unit and AV control unit and multifunction switch.	<ul style="list-style-type: none">• Camera control unit power supply and ground circuits.• AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch.
U1300 U1240 U1252	<ul style="list-style-type: none">• AV COMM CIRCUIT [U1300]• SWITCH CONN [U1240]• REAR CAMERA LAN CONN [U1252]	Malfunction is detected in AV communication circuits between AV control unit and the junction of camera control unit and multifunction switch.	AV communication circuits between AV control unit and the junction of camera control unit and multifunction switch.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

POWER SUPPLY AND GROUND CIRCUIT

AV CONTROL UNIT

AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000004347498

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19
Ignition switch ON or START	3

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	M81	19	OFF	Battery voltage
ACC power supply	M81	7	ACC	Battery voltage
Ignition signal	M85	104	ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M81	17	OFF	Existed
	M81	20		
	M85	85		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

DISPLAY UNIT

DISPLAY UNIT : Diagnosis Procedure

INFOID:000000004347499

1.CHECK POWER SUPPLY CIRCUIT (DISPLAY SIDE)

Check voltage between display unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Inverter VCC	M71	2	ACC	9.0 V
Signal VCC		3		

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

2.CHECK POWER SUPPLY CIRCUIT (CONTINUITY)

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

Signal name	Display unit (M71)	AV control unit (M83)	Continuity
Inverter VCC	2	59	Existed
Signal VCC	3	47	Existed

4. Check continuity between display unit harness connectors and ground.

Signal name	Display unit (M71)	—	Continuity
Inverter VCC	2	Ground	Not existed
Signal VCC	3	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

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

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Inverter VCC	M83	59	ACC	9.0 V
Signal VCC		47		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replacement of AV control unit.

4.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M71	1	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

MULTIFUNCTION SWITCH

MULTIFUNCTION SWITCH : Diagnosis Procedure

INFOID:000000004347500

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Check voltage between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
ACC power supply	M72	3	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between multifunction switch and fuse.

3.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M72	1	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

CAMERA CONTROL UNIT

CAMERA CONTROL UNIT : Diagnosis Procedure

INFOID:000000004347501

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	B50	32	OFF	Battery voltage
ACC power supply	B50	30	ACC	Battery voltage

Is inspection result normal?

YES >> GO TO 3.

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

3.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B50	31	OFF	Existed

Is inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

SATELLITE RADIO TUNER

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

SATELLITE RADIO TUNER : Diagnosis Procedure

INFOID:000000004347502

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between satellite radio tuner harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	B236	12	OFF	Battery voltage
ACC power supply	B236	16	ACC	Battery voltage

Is the inspection result normal?

YES >> INSPECTION END

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

RGB (R: RED) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

RGB (R: RED) SIGNAL CIRCUIT

Description

INFOID:000000004347503

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

Diagnosis Procedure

INFOID:000000004347504

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

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	17	M83	40	Existed

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

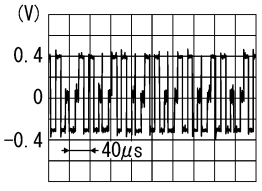
Display unit		Ground	Continuity
Connector	Terminal		
M71	17		Not existed

Is the inspection result normal?

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

2. CHECK RGB (R: RED) SIGNAL

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

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	17	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2238J</p>

Is the inspection result normal?

- YES >> Replace display unit.
 NO >> Replace AV control unit.

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RGB (G: GREEN) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

RGB (G: GREEN) SIGNAL CIRCUIT

Description

INFOID:000000004347505

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

Diagnosis Procedure

INFOID:000000004347506

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

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	6	M83	39	Existed

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

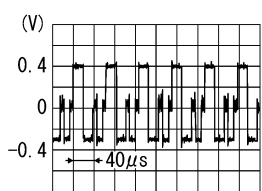
Display unit		Ground	Continuity
Connector	Terminal		
M71	6		Not existed

Is the inspection result normal?

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

2. CHECK RGB (G: GREEN) SIGNAL

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

(+) Display unit		(-)	Condition	Reference value
Connector	Terminal			
M71	6	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2236J</p>

Is the inspection result normal?

- YES >> Replace display unit.
NO >> Replace AV control unit.

RGB (B: BLUE) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

RGB (B: BLUE) SIGNAL CIRCUIT

Description

INFOID:000000004347507

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

Diagnosis Procedure

INFOID:000000004347508

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

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	18	M83	38	Existed

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

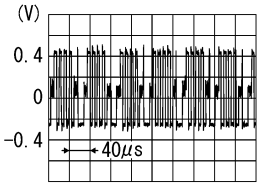
Display unit		Ground	Continuity
Connector	Terminal		
M71	18		Not existed

Is the inspection result normal?

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

2. CHECK RGB (B: BLUE) SIGNAL

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

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	18	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2237J</p>

Is the inspection result normal?

- YES >> Replace display unit.
 NO >> Replace AV control unit.

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RGB SYNCHRONIZING SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

RGB SYNCHRONIZING SIGNAL CIRCUIT

Description

INFOID:000000004347509

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

Diagnosis Procedure

INFOID:000000004347510

1. CHECK CONTINUITY RGB SYNCHRONIZING SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	19	M83	41	Existed

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

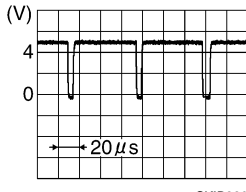
Display unit		Ground	Continuity
Connector	Terminal		
M71	19		Not existed

Is the inspection result normal?

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

2. CHECK RGB SYNCHRONIZING SIGNAL

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

(+) Display unit		(-)	Reference value
Connector	Terminal		
M71	19	Ground	

Is the inspection result normal?

- YES >> Replace display unit.
NO >> Replace AV control unit.

RGB AREA (YS) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

RGB AREA (YS) SIGNAL CIRCUIT

Description

INFOID:000000004347511

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

Diagnosis Procedure

INFOID:000000004347512

1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	9	M83	43	Existed

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

Display unit		Ground	Continuity
Connector	Terminal		
M71	9		Not existed

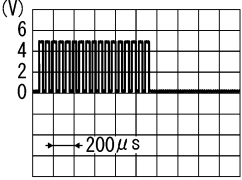
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK RGB AREA (YS) SIGNAL

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

(+)		(-)	Condition	Reference value (Approx.)
Display unit				
Connector	Terminal			
M71	9	Ground	At RGB image is displayed	5.0 V
			At AUX image is displayed	 <p style="text-align: right; font-size: small;">PKIB4948J</p>

Is the inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

Description

INFOID:000000004347513

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

Diagnosis Procedure

INFOID:000000004347514

1. CHECK CONTINUITY HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	8	M83	45	Existed

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

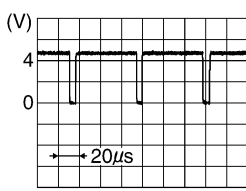
Display unit		Ground	Continuity
Connector	Terminal		
M71	8		Not existed

Is the inspection result normal?

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

2. CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

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

(+) Display unit		(-)	Reference value
Connector	Terminal		
M71	8	Ground	

Is the inspection result normal?

- YES >> Replace AV control unit.
NO >> Replace display unit.

VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

Description

INFOID:000000004347515

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

Diagnosis Procedure

INFOID:000000004347516

1. CHECK CONTINUITY VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	20	M83	57	Existed

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

Display unit		Ground	Continuity
Connector	Terminal		
M71	20		Not existed

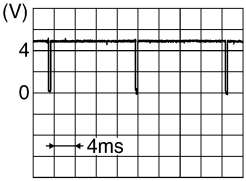
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

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

(+) Display unit		(-)	Reference value
Connector	Terminal		
M71	20	Ground	

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace display unit.

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AUX IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

AUX IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347517

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

Diagnosis Procedure

INFOID:000000004347518

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

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

Auxiliary input jacks		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M154	7	M84	66	Existed

4. Check continuity between auxiliary input jacks harness connector and ground.

Auxiliary input jacks		Ground	Continuity
Connector	Terminal		
M154	7		Not existed

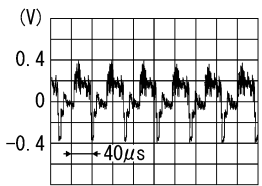
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

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

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between auxiliary input jacks harness connector and ground.

(+) Auxiliary input jacks		(-)	Condition	Reference value
Connector	Terminal			
M154	7	Ground	At AUX image is displayed.	 SKIB2251J

Is the inspection result normal?

YES >> GO TO 3.

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

3. CHECK CONTINUITY COMPOSITE IMAGE SIGNAL CIRCUIT (AV CONTROL UNIT AND DISPLAY UNIT)

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	15	M83	36	Existed

AUX IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

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

Display unit		Ground	Continuity
Connector	Terminal		
M71	15		Not existed

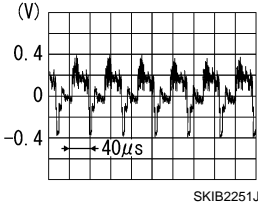
Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

4. CHECK COMPOSITE IMAGE SIGNAL

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

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	15	Ground	At AUX image is displayed.	

Is the inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

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AV

DISK EJECT SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

DISK EJECT SIGNAL CIRCUIT

Description

INFOID:000000004347519

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

Diagnosis Procedure

INFOID:000000004347520

1. CHECK CONTINUITY DISK EJECT SIGNAL CIRCUIT

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

Multifunction switch		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M72	14	M85	103	Existed

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

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	14		Not existed

Is the inspection result normal?

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

2. CHECK AV CONTROL UNIT VOLTAGE

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

(+) AV control unit		(-)	Voltage (Approx.)
Connector	Terminal		
M85	103	Ground	3.3 V

Is the inspection result normal?

- YES >> Replace preset switch.
NO >> Replace AV control unit.

REAR VIEW CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

REAR VIEW CAMERA IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347521

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

Diagnosis Procedure

INFOID:000000004347522

1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

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

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B50	6	D121	3	Existed

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

Camera control unit		Ground	Continuity
Connector	Terminal		
B50	6		Not existed

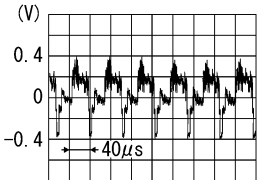
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK CAMERA IMAGE SIGNAL

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

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminal			
B50	6	Ground	At rear view camera image is displayed.	 <p>SKIB2251J</p>

Is inspection result normal?

YES >> Replace camera control unit.

NO >> Replace rear view camera.

REAR VIEW CAMERA POWER SUPPLY

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

REAR VIEW CAMERA POWER SUPPLY

Description

INFOID:000000004347523

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

Diagnosis Procedure

INFOID:000000004347524

1. CHECK CONTINUITY CAMERA ON SIGNAL CIRCUIT

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

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B50	8	D121	1	Existed

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

Camera control unit		Ground	Continuity
Connector	Terminal		
B50	8		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE CAMERA ON SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)
Camera control unit				
Connector	Terminal			
B50	8	Ground	Shift position is "R"	6.0 V

Is inspection result normal?

YES >> Replace rear view camera.

NO >> Replace camera control unit.

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

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

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

Description

INFOID:000000004347525

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

Diagnosis Procedure

INFOID:000000004347526

1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

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

Camera control unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
B50	12	M84	65	Existed

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

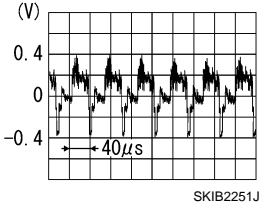
Camera control unit		Ground	Continuity
Connector	Terminal		
B50	12		Not existed

Is inspection result normal?

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

2. CHECK CAMERA IMAGE SIGNAL (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

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

(+)		(-)	Condition	Reference value
Connector	Terminal			
B50	12	Ground	At rear view camera image is displayed.	

Is inspection result normal?

- YES >> Replace AV control unit.
 NO >> Replace camera control unit.

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COMPOSITE IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

COMPOSITE IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347527

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

Diagnosis Procedure

INFOID:000000004347528

1. CHECK CONTINUITY COMPOSITE IMAGE SIGNAL CIRCUIT (AV CONTROL UNIT TO DISPLAY UNIT)

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

AV control unit		Display unit		Continuity
Connector	Terminal	Connector	Terminal	
M83	36	M71	15	Existed

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

AV control unit		Ground	Continuity
Connector	Terminal		
M83	36		Not existed

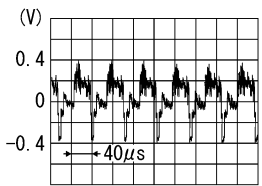
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK COMPOSITE IMAGE SIGNAL (AV CONTROL UNIT TO DISPLAY UNIT)

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

(+)		(-)	Condition	Reference value
AV control unit				
Connector	Terminal			
M83	36	Ground	At rear view camera or AUX image is displayed.	 SKIB2251J

Is inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

Description

INFOID:000000004347529

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

Diagnosis Procedure

INFOID:000000004347530

1. CHECK CONTINUITY COMMUNICATION SIGNAL CIRCUIT

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

Satellite radio tuner		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
B236	9	M82	29	Existed
	10		30	

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

Satellite radio tuner		Ground	Continuity
Connector	Terminals		
B236	9		Not existed
	10		

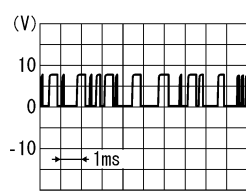
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK COMMUNICATION SIGNAL (SAT→CONT)

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

(+)		(-)	Condition	Reference value
Connector	Terminal			
B236	9	Ground	When satellite radio mode is selected.	 <p>SKIA9300J</p>

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace satellite radio tuner.

3. CHECK COMMUNICATION SIGNAL (CONT→SAT)

Check signal between satellite radio tuner harness connector and ground.

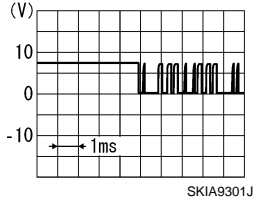
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COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Satellite radio tuner				
Connector	Terminal			
B236	10	Ground	When satellite radio mode is selected.	

Is the inspection result normal?

- YES >> Replace satellite radio tuner.
- NO >> Replace AV control unit.

REQUEST SIGNAL CIRCUIT (SAT→CONT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

REQUEST SIGNAL CIRCUIT (SAT→CONT)

Description

INFOID:000000004347531

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

Diagnosis Procedure

INFOID:000000004347532

1. CHECK CONTINUITY REQUEST SIGNAL CIRCUIT

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

Satellite radio tuner		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
B236	8	M82	28	Existed

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

Satellite radio tuner		Ground	Continuity
Connector	Terminal		
B236	8		Not existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK COMMUNICATION SIGNAL

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

(+)		(-)	Condition	Reference value
Connector	Terminal			
B236	8	Ground	When satellite radio mode is selected.	

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace satellite radio tuner.

AV

STEERING ANGLE SENSOR SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

STEERING ANGLE SENSOR SIGNAL CIRCUIT

Description

INFOID:000000004347533

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

Diagnosis Procedure

INFOID:000000004347534

1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL CIRCUIT

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

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B50	23	M37	3	Existed
	24		4	
	25		5	

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

Camera control unit		Ground	Continuity
Connector	Terminals		
B50	23	Ground	Not existed
	24		
	25		

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE CAMERA CONTROL UNIT

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

(+) Camera control unit		(-)	Voltage (Approx.)
Connector	Terminals		
B50	23	Ground	5.0 V
	24		
	25		

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

3. CHECK STEERING ANGLE SENSOR SIGNAL

1. Turn ignition switch OFF.
2. Connect steering angle sensor connector.

STEERING ANGLE SENSOR SIGNAL CIRCUIT

[BASE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Condition	Reference value
Connector	Terminals			
B50	23, 24	Ground	Turn the steering to the right	<p>A: Sensor signal 1 B: Sensor signal 2</p>
			Turn the steering to the left	<p>A: Sensor signal 1 B: Sensor signal 2</p>
	25	Ground	Turn the steering around the neutral position	<p>A: Sensor signal 3 B: Sensor signal 1</p>

Is inspection result normal?

- YES >> INSPECTION END
 NO >> Replace steering angle sensor.

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STEERING SWITCH SIGNAL A CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

STEERING SWITCH SIGNAL A CIRCUIT

Description

INFOID:000000004347535

Transmits the steering switch signal to AV control unit.

Diagnosis Procedure

INFOID:000000004347536

1. CHECK STEERING SWITCH SIGNAL A CIRCUIT

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

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	6	M36	24	Existed

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

AV control unit		Ground	Continuity
Connector	Terminal		
M81	6		Not existed

Is the inspection result normal?

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

2. CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

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

3. CHECK AV CONTROL UNIT VOLTAGE

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

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M81	6	M81	15	3.3 V

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace AV control unit.

4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-71, "Component Inspection"](#).

Is the inspection result normal?

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

STEERING SWITCH SIGNAL A CIRCUIT

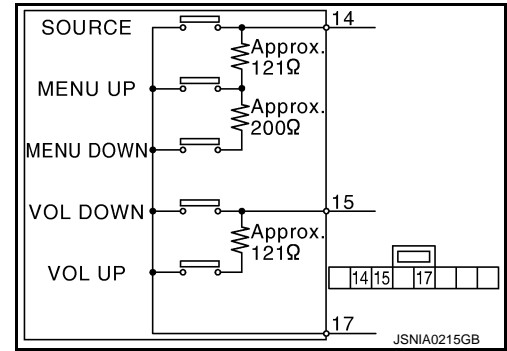
< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Component Inspection

INFOID:000000004347537

Measure the resistance between the steering switch connector.



Steering switch		Steering switch		Condition	Resistance value (Ω)
Connector	Terminals	Connector	Terminal		
M303	14	M303	17	SOURCE switch ON	0
				MENU UP switch ON	120 – 122
				MENU DOWN switch ON	318 – 324
	15			VOL DOWN switch ON	0
				VOL UP switch ON	120 – 122

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STEERING SWITCH SIGNAL B CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

STEERING SWITCH SIGNAL B CIRCUIT

Description

INFOID:000000004347538

Transmits the steering switch signal to AV control unit.

Diagnosis Procedure

INFOID:000000004347539

1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

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

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	16	M36	31	Existed

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

AV control unit		Ground	Continuity
Connector	Terminal		
M81	16		Not existed

Is the inspection result normal?

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

2. CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

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

3. CHECK AV CONTROL UNIT VOLTAGE

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

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M81	16	M81	15	3.3 V

Is the inspection result normal?

- YES >> GO TO 4.
 NO >> Replace AV control unit.

4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-73, "Component Inspection"](#).

Is the inspection result normal?

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

STEERING SWITCH SIGNAL B CIRCUIT

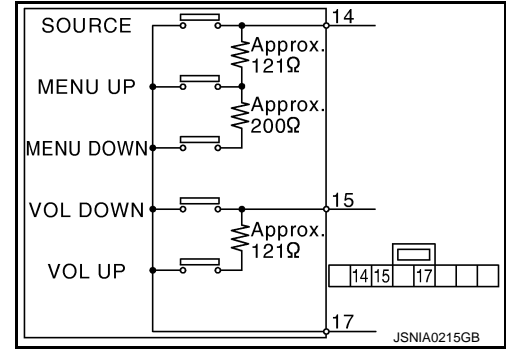
< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Component Inspection

INFOID:000000004347540

Measure the resistance between the steering switch connector.



Steering switch		Steering switch		Condition	Resistance value (Ω)
Connector	Terminals	Connector	Terminal		
M303	14	M303	17	SOURCE switch ON	0
				MENU UP switch ON	120 – 122
				MENU DOWN switch ON	318 – 324
	15			VOL DOWN switch ON	0
				VOL UP switch ON	120 – 122

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STEERING SWITCH SIGNAL GND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

STEERING SWITCH SIGNAL GND CIRCUIT

Description

INFOID:000000004347541

Transmits the steering switch signal to AV control unit.

Diagnosis Procedure

INFOID:000000004347542

1.CHECK STEERING SWITCH SIGNAL GND CIRCUIT

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

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	15	M36	33	Existed

3. Connect AV control unit connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2.CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace spiral cable.

3.CHECK GROUND CIRCUIT

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

AV control unit		Ground	Continuity
Connector	Terminal		
M81	15		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

4.CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-75, "Component Inspection"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering switch.

STEERING SWITCH SIGNAL GND CIRCUIT

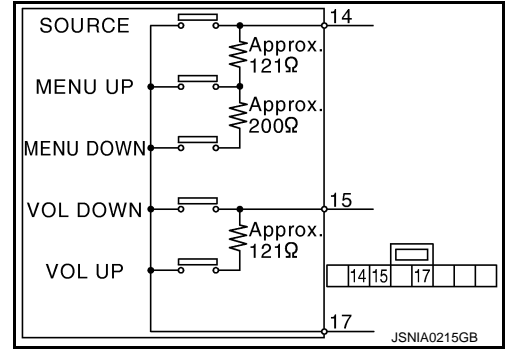
< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Component Inspection

INFOID:000000004347543

Measure the resistance between the steering switch connector.



Steering switch		Steering switch		Condition	Resistance value (Ω)
Connector	Terminals	Connector	Terminal		
M303	14	M303	17	SOURCE switch ON	0
				MENU UP switch ON	120 – 122
				MENU DOWN switch ON	318 – 324
	15			VOL DOWN switch ON	0
				VOL UP switch ON	120 – 122

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

ECU DIAGNOSIS INFORMATION

AV CONTROL UNIT

Reference Value

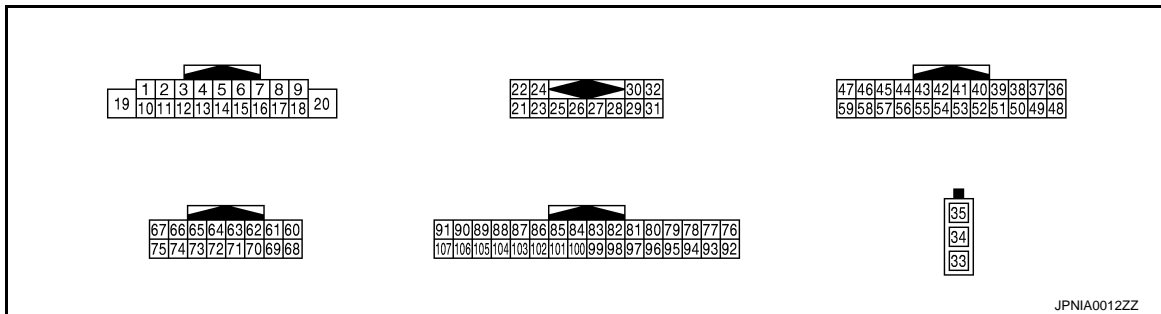
INFOID:000000004506712

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

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

TERMINAL LAYOUT



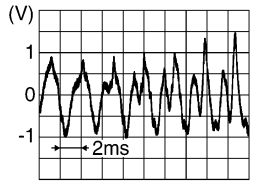
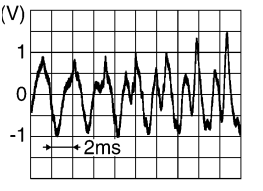
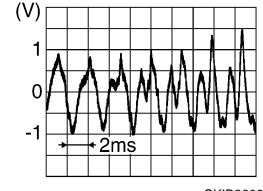
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/Output		
2 (L)	3 (W)	Sound signal front door speaker LH and front tweeter LH	Output	Ignition switch ON Audio output	<p>SKIB3609E</p>
4 (LG)	5 (SB)	Sound signal rear door speaker LH	Output	Ignition switch ON Audio output	<p>SKIB3609E</p>

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
6 (P)	15 (B)	Steering switch signal A	Input	Ignition switch ON	Keep pressing SOURCE switch.	0 V
					Keep pressing Δ switch.	0.7 V
					Keep pressing ∇ switch.	1.3 V
					Except for above.	3.3 V
7 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
9 (R)	Ground	Illumination signal	Input	Ignition switch OFF	Lighting switch is OFF.	0 V
					Lighting switch is ON.	12.0 V
11 (BR)	12 (R)	Sound signal front door speaker RH and front tweeter RH	Output	Ignition switch ON	Audio output	
13 (L)	14 (P)	Sound signal rear door speaker RH	Output	Ignition switch ON	Audio output	
15 (B)	Ground	Steering switch signal ground	—	Ignition switch ON	—	0 V
16 (L)	15 (B)	Steering switch signal B	Input	Ignition switch ON	Keep pressing VOL DOWN switch.	0 V
					Keep pressing VOL UP switch.	0.7 V
					Except for above.	3.3 V
17 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
20 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
22 (B)	21 (W)	Satellite radio sound signal LH	Input	Ignition switch ON	When satellite radio mode is selected	

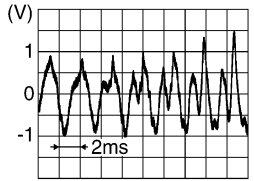
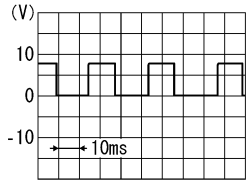
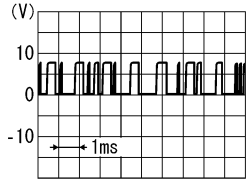
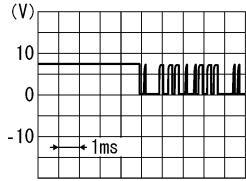
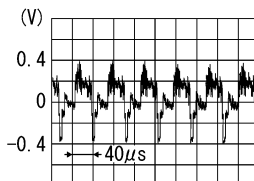
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AV

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
24 (G)	23 (R)	Satellite radio sound signal RH	Input	Ignition switch ON	When satellite radio mode is selected	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
25	—	Shield	—	—	—	—
26	—	Shield	—	—	—	—
28 (W)	Ground	Request signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected	 <p style="text-align: right; font-size: small;">SKIA9299J</p>
29 (B)	Ground	Communication signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected	 <p style="text-align: right; font-size: small;">SKIA9300J</p>
30 (R)	Ground	Communication signal (CONT→SAT)	Output	Ignition switch ON	When satellite radio mode is selected	 <p style="text-align: right; font-size: small;">SKIA9301J</p>
33	—	FM sub	Input	—	—	—
34	—	AM-FM main	Input	—	—	—
35	Ground	Antenna amp. ON signal	Output	Ignition switch ACC	—	12.0 V
36 (SB)	Ground	Composite image signal	Output	Ignition switch ON	At rear view camera or AUX image display	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
37 (V)	Ground	Composite image ground	—	Ignition switch ON	—	0 V

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
38 (P)	Ground	RGB signal (B: blue)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	
39 (L)	Ground	RGB signal (G: green)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	
40 (G)	Ground	RGB signal (R: red)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	
41 (W)	Ground	RGB synchronizing signal	Output	Ignition switch ON	—	
42	—	Shield	—	—	—	—
43 (B)	Ground	RGB area (YS) signal	Output	Ignition switch ON	At RGB image display	5.0 V
					At AUX image display	
44 (BR)	Ground	Communication signal (DISP→CONT)	Input	Ignition switch ON	When adjusting display brightness.	

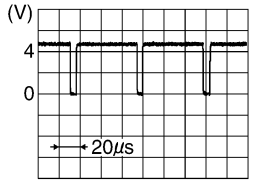
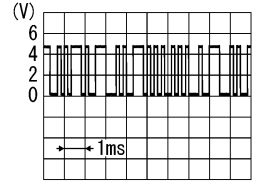
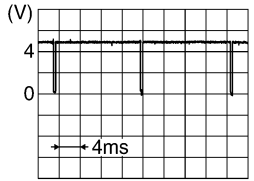
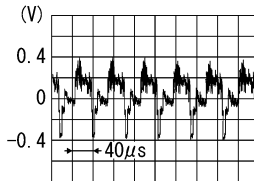
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

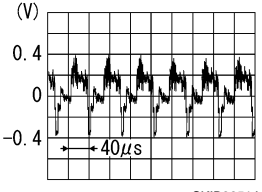
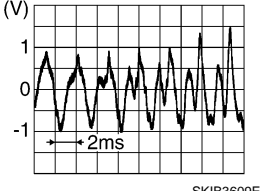
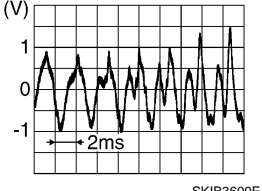
[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
45 (R)	Ground	Horizontal synchronizing (HP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3601E</p>
46 (LG)	Ground	Signal ground	—	Ignition switch ON	—	0 V
47 (O)	Ground	Signal VCC	Output	Ignition switch ACC	—	9.0 V
49	—	Shield	—	—	—	—
50	—	Shield	—	—	—	—
55	—	Shield	—	—	—	—
56 (Y)	Ground	Communication signal (CONT→DISP)	Output	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
57 (G)	Ground	Vertical synchronizing (VP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3598E</p>
58 (BR)	Ground	Inverter ground	—	Ignition switch ON	—	0 V
59 (Y)	Ground	Inverter VCC	Output	Ignition switch ACC	—	9.0 V
64	—	Shield	—	—	—	—
65 (W)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image display	 <p style="text-align: right; font-size: small;">SKIB2251J</p>

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
66 (G)	Ground	AUX image signal	Input	Ignition switch ON	When AUX mode is select- ed	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
68 (W)	Ground	Camera-connection recog- nition signal	—	Ignition switch ON	Connected to camera control unit connector	0 V
					Not connected to camera control unit connector	5.0 V
73	—	Shield	—	—	—	—
74 (R)	Ground	AUX image signal ground	—	Ignition switch ON	—	0 V
85 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
86 (L)	—	CAN-H	Input/ Output	—	—	—
87 (P)	—	CAN-L	Input/ Output	—	—	—
88 (LG)	—	AV communication signal (H)	Input/ Output	—	—	—
89 (V)	—	AV communication signal (L)	Input/ Output	—	—	—
90 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
91 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
95 (B)	Ground	AUX sound signal RH	Input	Ignition switch ON	When AUX mode is select- ed	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
96 (R)	Ground	AUX sound signal LH	Input	Ignition switch ON	When AUX mode is select- ed	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
97 (W)	Ground	AUX sound signal ground	—	Ignition switch ON	—	0 V
101 (BR)	Ground	SW ground	—	Ignition switch ON	—	0 V

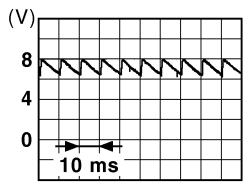
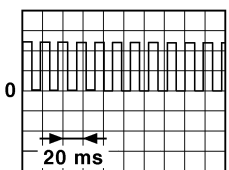
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
103 (SB)	Ground	Disk eject signal	Input	—	Pressing the eject switch	0 V
					Except for above	3.3 V
104 (G)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
105 (O)	Ground	Reverse signal	Input	Ignition switch ON	Shift position in R position	12.0 V
					Other than shift position in R position	0 V
106 (V)	Ground	Parking brake signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	 <p style="text-align: right; font-size: small;">JSNIA0007GB</p>
107 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25MPH)	<p>NOTE: The maximum voltage varies depending (destination unit)</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>

Wiring Diagram - BASE AUDIO AND REAR VIEW MONITOR -

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NOTE:

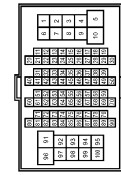
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-GS16-TM4

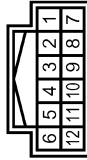


Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]

47	R	- [Without around view monitor]
48	V	-
90	O	-



Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



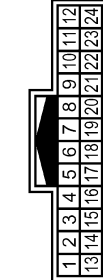
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSS



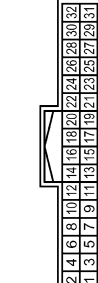
Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH4AMW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	W	- [Without around view monitor]
16	B	- [Without around view monitor]
17	R	- [Without around view monitor]

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (3-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY

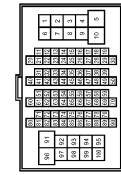
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	B201	99	P	- [Without BOSE audio]
Connector Name	WIRE TO WIRE	100	L	-
Connector Type	TH80FW-GS16-TM4			



Terminal No.	Color of Wire	Signal Name [Specification]
77	Y	-
78	L	-
79	G	-
83	V	-
84	SHIELD	-
85	P	-
86	SHIELD	-
87	G	-
88	W	-
89	R	-
90	B	-



Connector No.	B461
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	33	Color of Wire	-	Signal Name [Specification]	SATELLITE ANTENNA
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Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-N5S



Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	P	- [Without BOSE audio]

Connector No.	B491
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IPP-HU



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

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	L	REQUEST (SAT->CONT)
9	G	COMM (SAT->CONT)
10	P	COMM (CONT->SAT)
12	Y	BATTERY
16	V	ACC

Connector No.	B492
Connector Name	ANTENNA BASE
Connector Type	GT16C-IPP-HU



Terminal No.	3	Color of Wire	-	Signal Name [Specification]	SATELLITE ANTENNA
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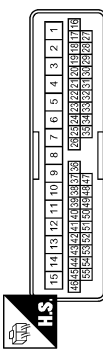
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



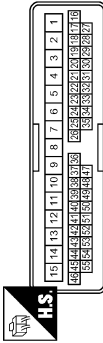
Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-
32	G	-

Connector No.	D6
Connector Name	FRONT DOOR SPEAKER LH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	D38
Connector Name	FRONT DOOR SPEAKER RH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



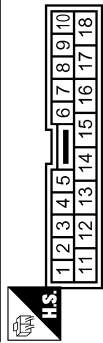
Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	D53
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FW-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



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

Connector No.	D73
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FW-CS



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

JCNWA1810GB

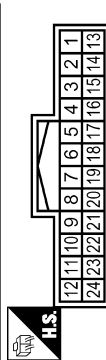
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



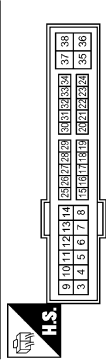
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH30MW-NH



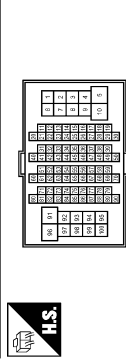
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	IPDM/E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



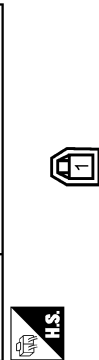
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FY-CS16-TM4



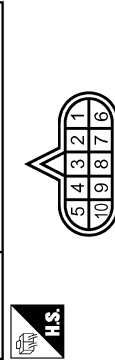
Terminal No.	Color of Wire	Signal Name [Specification]
59	O	-
84	G	-
83	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



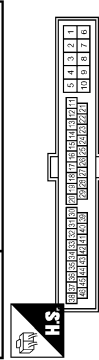
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



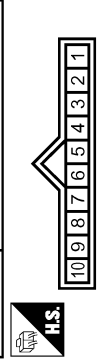
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10



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

Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

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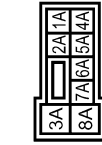
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

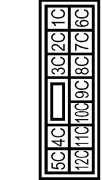
[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/E)
Connector Type	NS06FW-M2



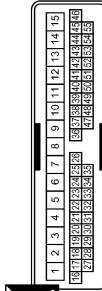
Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	5A	2A	1A
Color of Wire	V	G	G
Signal Name [Specification]	-	-	-

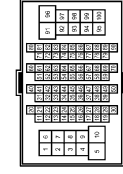
Terminal No.	12C
Color of Wire	O
Signal Name [Specification]	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



Terminal No.	31	32
Color of Wire	W	L
Signal Name [Specification]	-	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



Terminal No.	59	84	93
Color of Wire	V	G	Y
Signal Name [Specification]	-	-	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



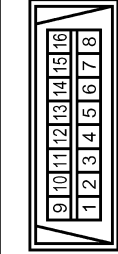
Terminal No.	1	2	31	32	33	41	42	43	44	45	46
Color of Wire	LG	SB	L	Y	V	BR	R	W	LG	V	G
Signal Name [Specification]	-	-	-	-	-	-	-	-	-	-	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	6	14
Color of Wire	L	P
Signal Name [Specification]	-	-

JCNWA1812GB

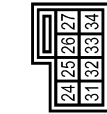
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

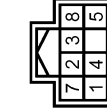
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M86
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TKGBGY-IV



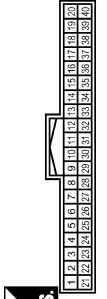
Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M87
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH88FW-NH



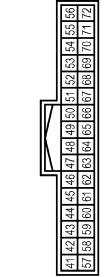
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M86
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



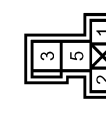
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M87
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



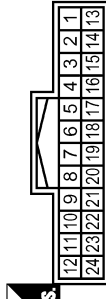
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

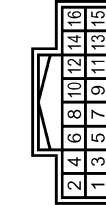
Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	INVERTER VCC
3	O	SIGNAL VCC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (S) SIGNAL
11	Y	COMM (CONT->DISP)
13	BR	INVERTER GND

14	LG	SIGNAL GND
15	SB	COMPOSITE IMAGE SIGNAL
17	G	RGB (R, RED) SIGNAL
18	P	RGB (B, BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	BR	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

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D
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F
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K
L
M
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O
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AV

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	FRONT DOOR SPEAKER LH (+)
3	W	FRONT DOOR SPEAKER LH (-)
4	LG	REAR DOOR SPEAKER LH (+)
5	SB	REAR DOOR SPEAKER LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	R	FRONT DOOR SPEAKER RH (-)
13	L	REAR DOOR SPEAKER RH (+)
14	P	REAR DOOR SPEAKER RH (-)

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-NH



47	O	SIGNAL_VCC
48	Y	SHIELD
50	SHIELD	SHIELD
55	Y	SHIELD
56	Y	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

15	B	STRG_SW_GND
16	L	STRG_SW_B
17	B	GND
19	Y	BATTERY
20	B	GND



Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	A12FW

Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SATELLITE SOUND SIGNAL LH (-)
22	B	SATELLITE SOUND SIGNAL LH (+)
23	R	SATELLITE SOUND SIGNAL RH (-)
24	G	SATELLITE SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	W	REQUEST (SAT->CONT)
29	B	COMM (SAT->CONT)
30	R	COMM (CONT->SAT)

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (B. BLUE) SIGNAL
39	L	RGB (G. GREEN) SIGNAL
40	G	RGB (R. RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	BR	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	W	CONNECTION RECOGNITION
73	SHIELD	SHIELD
74	R	AUX IMAGE GND

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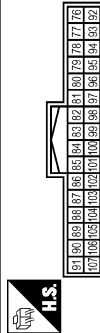
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

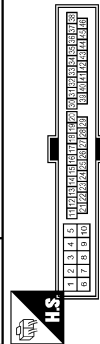
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	LG	AV COMM (H)
89	V	AV COMM (L)
90	G	AV COMM (L)
91	R	AV COMM (L)
95	B	AUX SOUND SIGNAL RH (+)
96	R	AUX SOUND SIGNAL LH (+)
97	W	AUX SOUND SIGNAL GND
101	BR	SW GND

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK58MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

103	SR	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	V	PARKING BRAKE
107	R	VEHICLE SPEED (8-PULSE)



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

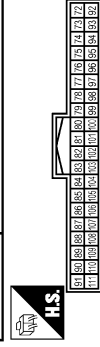
89	P	[Without BOSE audio]
100	L	[Without BOSE audio]

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	- [Without BOSE audio]
2	W	- [Without BOSE audio]

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

JCNWA1815GB

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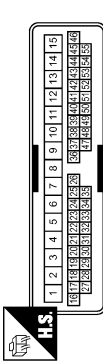
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	THROWW-C515



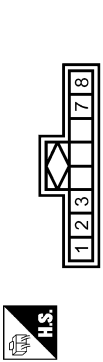
Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



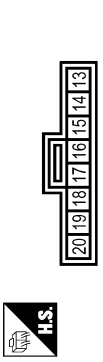
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



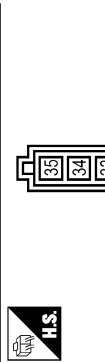
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	T03BFGY



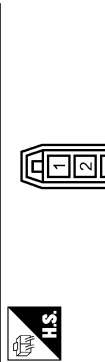
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/IS-HU



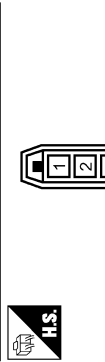
Terminal No.	Color of Wire	Signal Name [Specification]
33	-	FM SUB
34	-	AM-FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



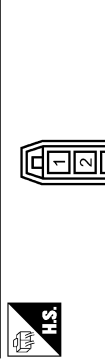
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

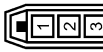
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M395
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



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

Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



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

Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	P01FB-A



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

DTC Index

SELF-DIAGNOSIS RESULTS DISPLAY ITEM

JCNWA1817GB

INFOID:000000004506714

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

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

DTC	Display item	Refer to
U1000	CAN COMM CIRCUIT [U1000]	AV-36, "Diagnosis Procedure"
U1010	CONTROL UNIT (CAN) [U1010]	AV-37, "Diagnosis Procedure"
U1310	CONTROL UNIT (AV) [U1310]	AV-38, "DTC Logic"
U1200	Cont Unit FLASH-ROM [U1200]	AV-39, "DTC Logic"
U1216	CAN CONT [U1216]	AV-40, "DTC Logic"
U1243	FRONT DISP CONN [U1243]	AV-41, "Diagnosis Procedure"
U1250	CAMERA CONT. CONN [U1250]	AV-43, "Diagnosis Procedure"
U1255	SAT CONN [U1255]	AV-44, "Diagnosis Procedure"
U1300 U1240	<ul style="list-style-type: none">• AV COMM CIRCUIT [U1300]• SWITCH CONN [U1240]	AV-46, "Description"
U1300 U1252	<ul style="list-style-type: none">• AV COMM CIRCUIT [U1300]• REAR CAMERA LAN CONN [U1252]	AV-46, "Description"
U1300 U1240 U1252	<ul style="list-style-type: none">• AV COMM CIRCUIT [U1300]• SWITCH CONN [U1240]• REAR CAMERA LAN CONN [U1252]	AV-46, "Description"

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

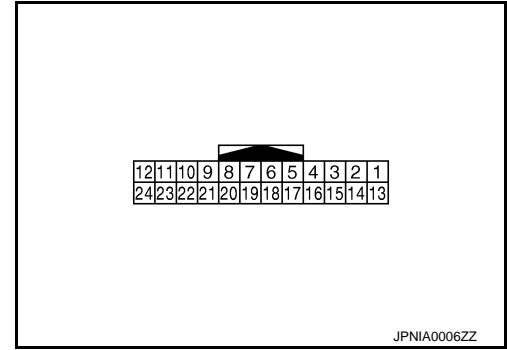
[BASE AUDIO WITHOUT NAVIGATION]

DISPLAY UNIT

Reference Value

INFOID:000000004506715

TERMINAL LAYOUT



PHYSICAL VALUES

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

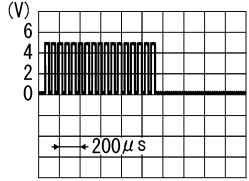
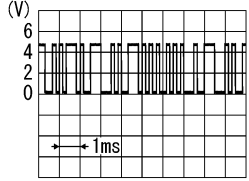
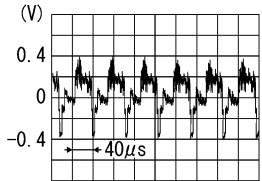
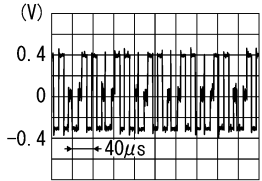
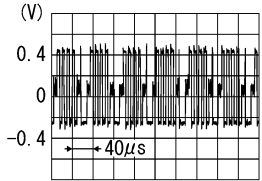
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AV

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

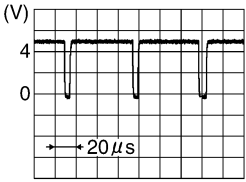
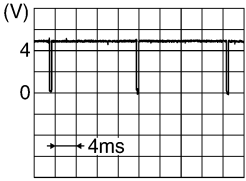
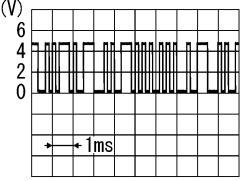
[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/ Output		
9 (B)	Ground	RGB area (YS) signal	Input	Ignition switch ON	At RGB image display 5.0 V
				Ignition switch ON	At AUX image display  PKIB4948J
11 (Y)	Ground	Communication signal (CONT→DISP)	Input	Ignition switch ON	When adjusting display brightness.  PKIB5039J
13 (BR)	Ground	Inverter ground	—	Ignition switch ON	— 0 V
14 (LG)	Ground	Signal ground	—	Ignition switch ON	— 0 V
15 (SB)	Ground	Composite image signal	Input	Ignition switch ON	At AUX image display  SKIB2251J
17 (G)	Ground	RGB signal (R: red)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.  SKIB2238J
18 (P)	Ground	RGB signal (B: blue)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.  SKIB2237J

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
19 (W)	Ground	RGB synchronizing signal	Input	Ignition switch ON	—	 <p>SKIB3603E</p>
20 (G)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch On	—	 <p>SKIB3598E</p>
21	—	Shield	—	—	—	—
22 (BR)	Ground	Communication signal (DISP→CONT)	Output	Ignition switch ON	When adjusting display brightness.	 <p>PKIB5039J</p>
23	—	Shield	—	—	—	—

Wiring Diagram - BASE AUDIO AND REAR VIEW MONITOR -

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NOTE:

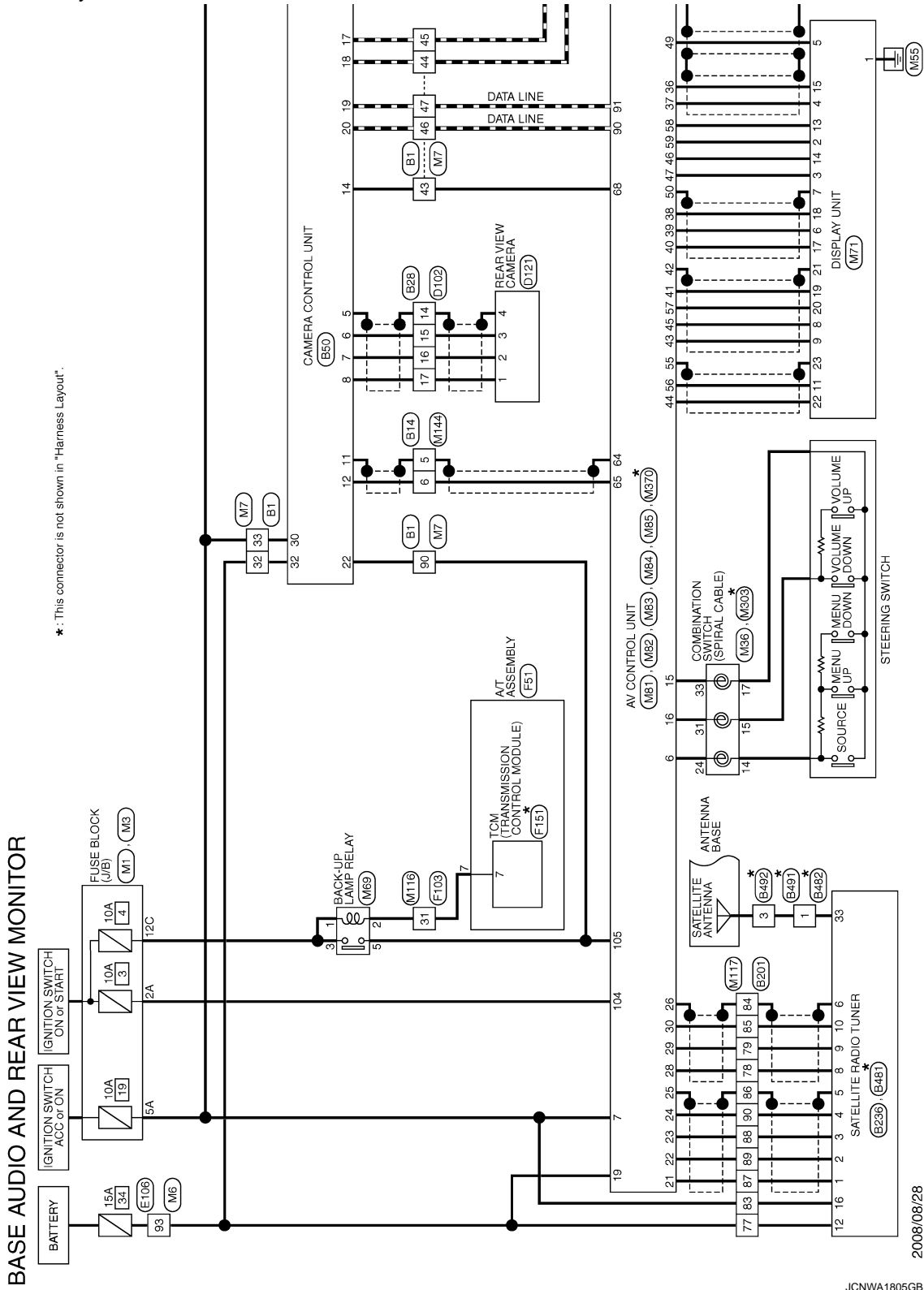
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DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

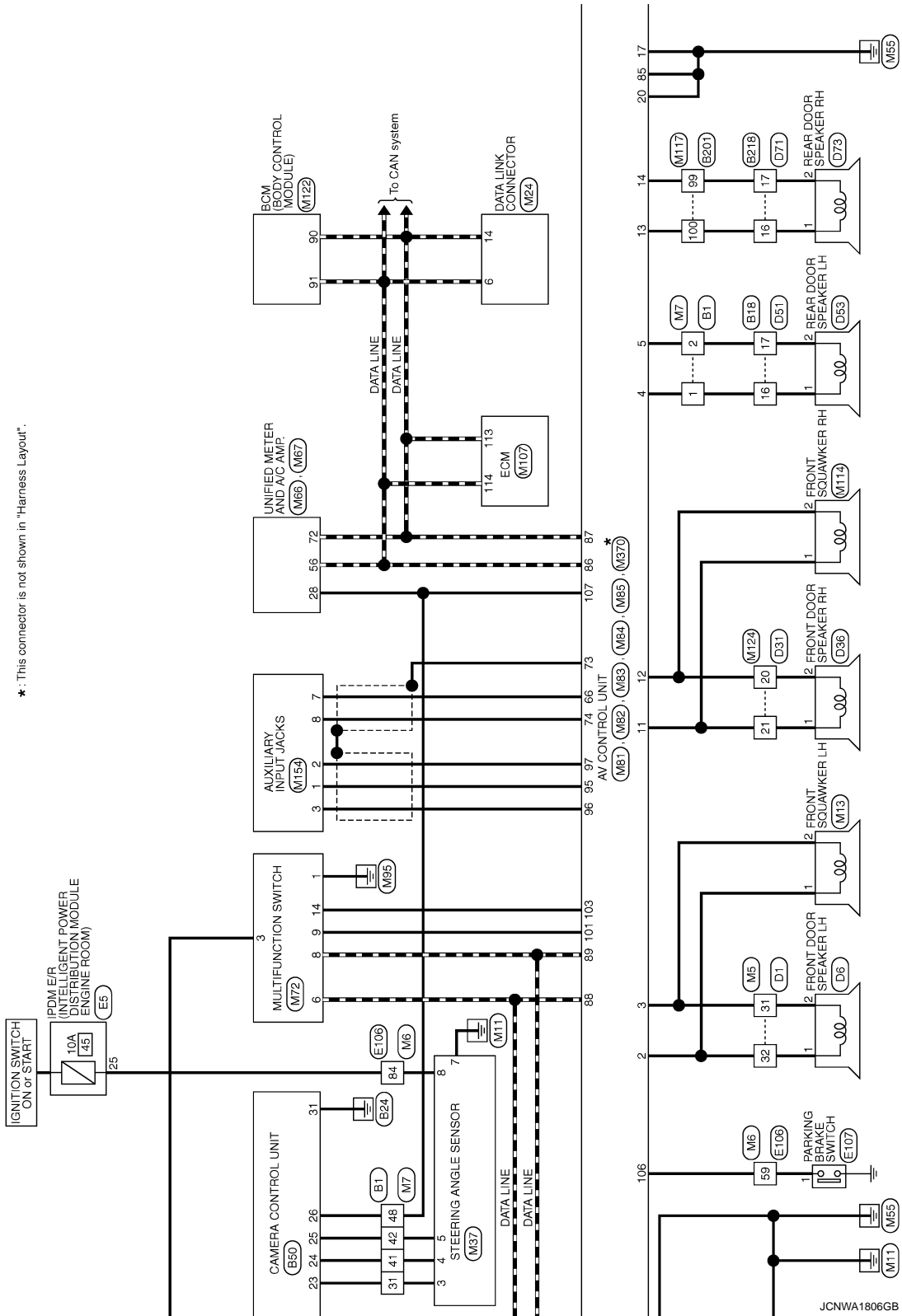
The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.



DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]



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

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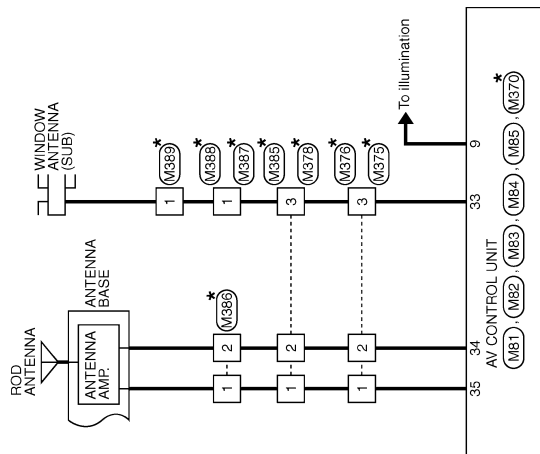
AV

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

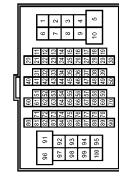
*: This connector is not shown in "Harness Layout".



JCNWA1807GB

BASE AUDIO AND REAR VIEW MONITOR

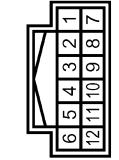
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]

47	R	- [Without around view monitor]
48	V	-
50	O	-

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



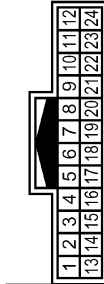
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSS



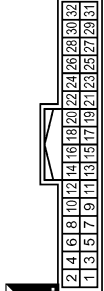
Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	W	- [Without around view monitor]
16	B	- [Without around view monitor]
17	R	- [Without around view monitor]

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (3-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY

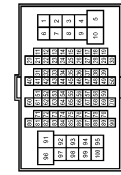
DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	THBDFW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
77	Y	-
78	L	-
79	G	-
83	V	-
84	SHIELD	-
85	P	-
86	SHIELD	-
87	G	-
88	W	-
89	R	-
90	B	-

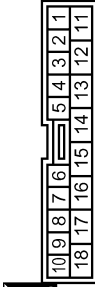
Connector No.	B481
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	33	Color of Wire	-	Signal Name [Specification]	SATELLITE ANTENNA
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99	P	-	[Without BOSE audio]
100	L	-	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	1K10FW-NSS



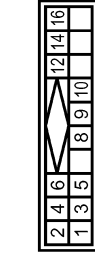
Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	P	- [Without BOSE audio]

Connector No.	B491
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



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

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	L	REQUEST (SAT->CONT)
9	G	COMM (SAT->SAT)
10	P	COMM (CONT->SAT)
12	Y	BATTERY
16	V	ACC

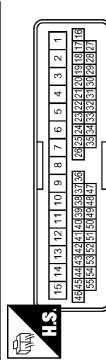
Connector No.	B492
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	3	Color of Wire	-	Signal Name [Specification]	SATELLITE ANTENNA
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BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



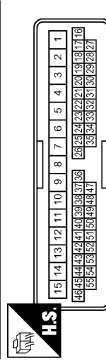
Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-
32	G	-

Connector No.	D6
Connector Name	FRONT DOOR SPEAKER LH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



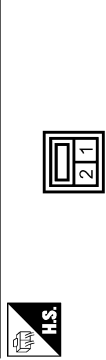
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	W	-

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



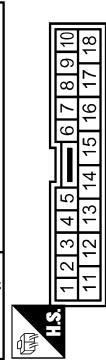
Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	D36
Connector Name	FRONT DOOR SPEAKER RH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



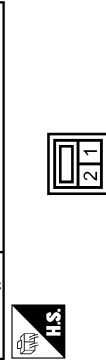
Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	R	-

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



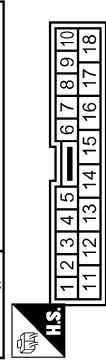
Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	D53
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FW-CS



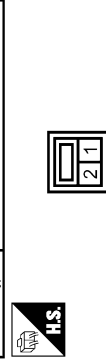
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



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

Connector No.	D73
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FW-CS



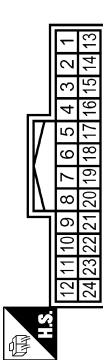
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	Y	-

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AV

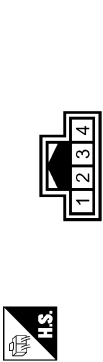
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



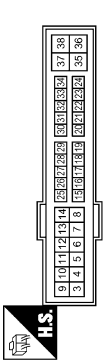
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH30MW-NH



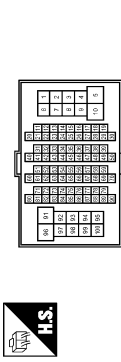
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	IPDM/E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS1Z-M4-1V



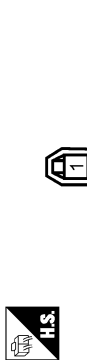
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FY-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	O	-
84	G	-
83	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



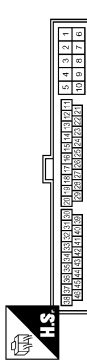
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



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

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10



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

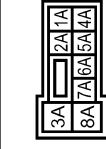
Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FEGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

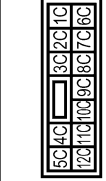
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



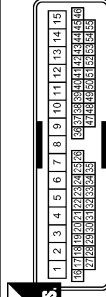
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



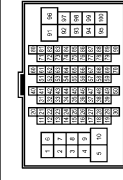
Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



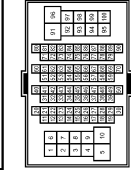
Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-
32	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
84	G	-
83	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	SB	-
31	L	-
32	Y	-
33	V	-
41	BR	-
42	R	-
43	W	-
44	LG	-
45	V	-
46	G	-

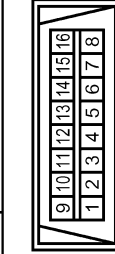
47	R	-
48	V	-
90	O	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

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DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

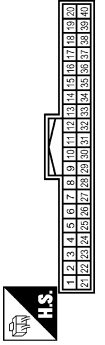
Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TKGBGY-IV



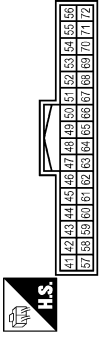
Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH38FW-NH



Connector No.	M36
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH432FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

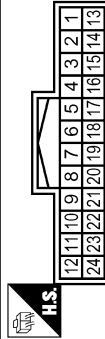
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC

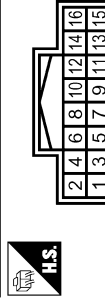


Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



14	LG	SIGNAL GND
15	SB	COMPOSITE IMAGE SIGNAL
17	G	RGB (R-RED) SIGNAL
18	P	RGB (B-BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	BR	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	INVERTER VCC
3	O	SIGNAL VCC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (G-GREEN) SIGNAL
7	SHIELD	SHIELD
8	B	HP
9	R	RGE AREA (VS) SIGNAL
11	Y	COMM (CONT->DISP)
13	BR	INVERTER GND

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

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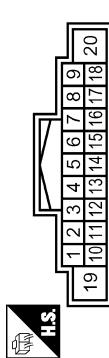
DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

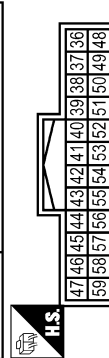
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-GS2



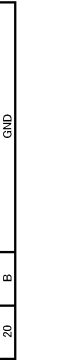
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	FRONT DOOR SPEAKER LH (+)
3	W	FRONT DOOR SPEAKER LH (-)
4	LG	REAR DOOR SPEAKER LH (+)
5	SB	REAR DOOR SPEAKER LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	R	FRONT DOOR SPEAKER RH (-)
13	L	REAR DOOR SPEAKER RH (+)
14	P	REAR DOOR SPEAKER RH (-)

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (B: BLUE) SIGNAL
39	L	RGB (G: GREEN) SIGNAL
40	G	RGB (R: RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	B	RGB AREA (YS) SIGNAL
45	BR	COMM (DISP->CONT)
46	R	HP
46	LG	SIGNAL GND

15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SATELLITE SOUND SIGNAL LH (-)
22	B	SATELLITE SOUND SIGNAL LH (+)
23	R	SATELLITE SOUND SIGNAL RH (-)
24	G	SATELLITE SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	W	REQUEST (SAT->CONT)
29	B	COMM (SAT->CONT)
30	R	COMM (CONT->SAT)

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	W	CONNECTION RECOGNITION
73	SHIELD	SHIELD
74	R	AUX IMAGE GND

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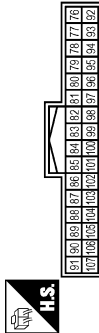
DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

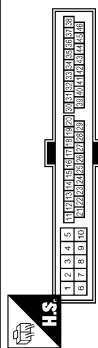
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	LG	AV COMM (H)
89	V	AV COMM (L)
90	G	AV COMM (H)
91	R	AV COMM (L)
95	B	AUX SOUND SIGNAL RH (+)
96	R	AUX SOUND SIGNAL LH (+)
97	W	AUX SOUND SIGNAL GND
101	BR	SW GND

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS1.0



Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

103	SB	DISK EJECT SIGNAL
104	G	IGNITION REVERSE
105	O	PARKING BRAKE
106	V	VEHICLE SPEED (8-PULSE)
107	R	VEHICLE SPEED (8-PULSE)



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

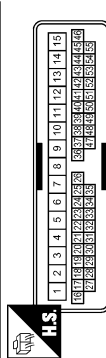
89	P	[Without BOSE audio]
100	L	[Without BOSE audio]

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FSY-E2Z-R-LH-Z



BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH20MW-CST5



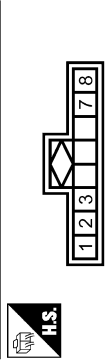
Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



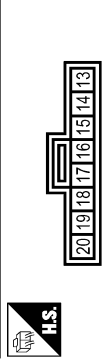
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



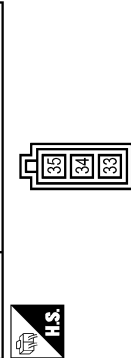
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



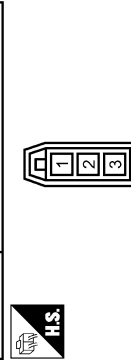
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/IS-HU



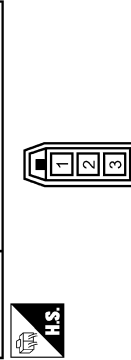
Terminal No.	Color of Wire	Signal Name [Specification]
33	-	FM SUB
34	-	AM FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



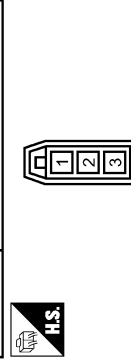
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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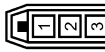
DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

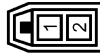
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



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

Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



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

Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	F01FB-A



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

CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

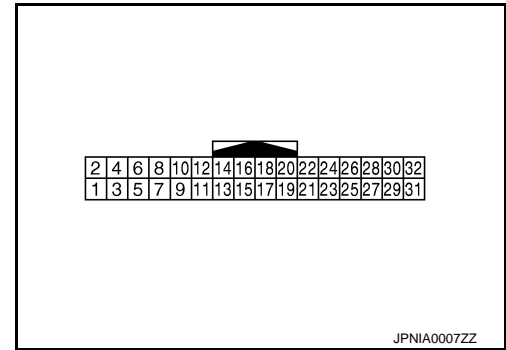
[BASE AUDIO WITHOUT NAVIGATION]

CAMERA CONTROL UNIT

Reference Value

INFOID:000000004506717

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
5	—	Shield	—	—	—	—
6 (W)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image display	<p style="text-align: right;">SKIB2251J</p>
7 (B)	Ground	Camera ground	—	Ignition switch ON	—	0 V
8 (R)	Ground	Camera power supply	Output	Ignition switch ON	R position	6.0 V
					Other than R position	0 V
11	—	Shield	—	—	—	—
12 (W)	Ground	Camera image signal	Output	Ignition switch ON	At rear view camera image display	<p style="text-align: right;">SKIB2251J</p>
14 (W)	Ground	Camera-connection recog- nition signal	—	Ignition switch ON	Connected to camera con- trol unit connector	0 V
					Not connected to camera control unit connector	5.0 V
17 (V)	—	AV communication signal (L)	Input/ Output	—	—	—
18 (LG)	—	AV communication signal (H)	Input/ Output	—	—	—
19 (R)	—	AV communication signal (L)	Input/ Output	—	—	—

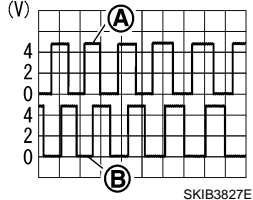
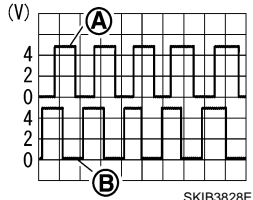
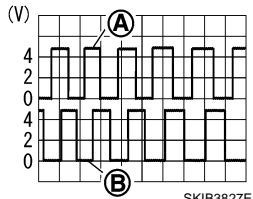
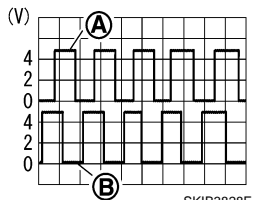
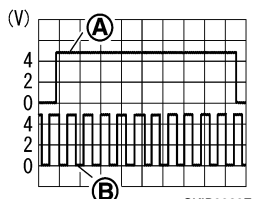
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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

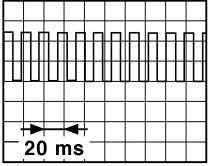
[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
20 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
22 (O)	Ground	Reverse signal	Input	Ignition switch ON	Shift position in R position	12.0 V
					Other than shift position in R position	0 V
23 (L)	Ground	Sensor signal 1	Input	Ignition switch ON	Turn the steering to the right	 <p style="text-align: right; font-size: small;">SKIB3827E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left	 <p style="text-align: right; font-size: small;">SKIB3828E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
24 (BR)	Ground	Sensor signal 2	Input	Ignition switch ON	Turn the steering to the right	 <p style="text-align: right; font-size: small;">SKIB3827E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left	 <p style="text-align: right; font-size: small;">SKIB3828E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
25 (R)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position	 <p style="text-align: right; font-size: small;">SKIB3829E</p> <p style="text-align: center;">A: Sensor signal 3 B: Sensor signal 1</p>

CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/ Output		
26 (V)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)
<p>NOTE: The maximum voltage varies de- pending (destination unit)</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>					
30 (LG)	Ground	ACC power supply	Input	Ignition switch ACC	—
31 (B)	Ground	Ground	—	Ignition switch ON	—
32 (L)	Ground	Battery power supply	Input	Ignition switch OFF	—

Wiring Diagram - BASE AUDIO AND REAR VIEW MONITOR -

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NOTE:

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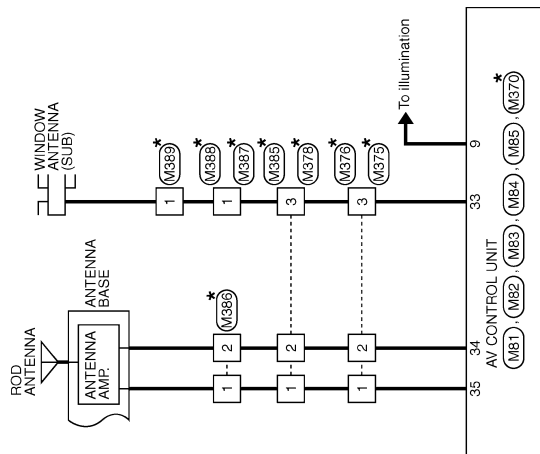
AV

CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

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



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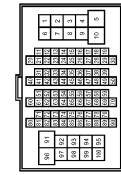
CAMERA CONTROL UNIT

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

BASE AUDIO AND REAR VIEW MONITOR

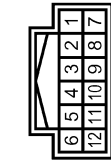
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]

47	R	- [Without around view monitor]
48	V	-
50	O	-

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



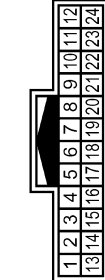
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSS



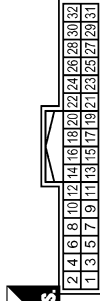
Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	W	- [Without around view monitor]
16	B	- [Without around view monitor]
17	R	- [Without around view monitor]

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (3-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY

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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	L	REQUEST (SAT->CONT)
9	G	COMM (SAT->CONT)
10	P	COMM (CONT->SAT)
12	Y	BATTERY
16	V	ACC

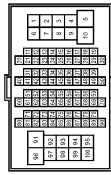
Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	1K10FW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	P	- [Without BOSE audio]

99	P	- [Without BOSE audio]
100	L	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	THBDFW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
77	Y	-
78	L	-
79	G	-
83	V	-
84	SHIELD	-
85	P	-
86	SHIELD	-
87	G	-
88	W	-
89	R	-
90	B	-

Connector No.	B492
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SATELLITE ANTENNA

Connector No.	B491
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



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

Connector No.	B492
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1S-HU



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

Connector No.	B481
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	SATELLITE ANTENNA

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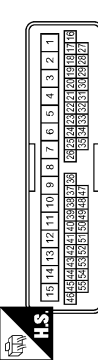
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



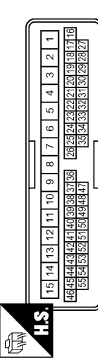
Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-
32	G	-

Connector No.	D6
Connector Name	FRONT DOOR SPEAKER LH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	D36
Connector Name	FRONT DOOR SPEAKER RH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	D53
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FW-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



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

Connector No.	D73
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FW-CS



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

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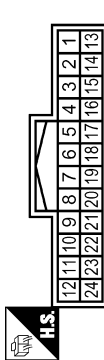
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



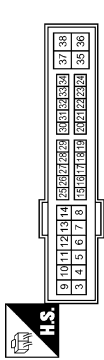
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH30MW-NH



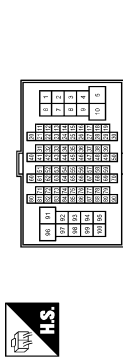
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS/2-M4-1V



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

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FY-CS/8-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	O	-
84	G	-
83	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



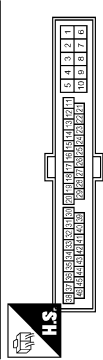
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



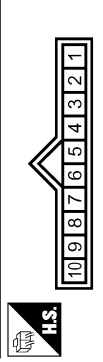
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10



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

Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FEGY



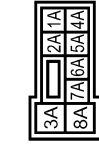
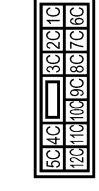
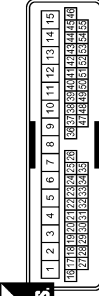

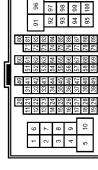

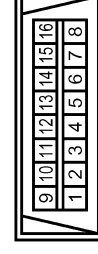
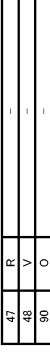
Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

CAMERA CONTROL UNIT

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

BASE AUDIO AND REAR VIEW MONITOR

<table border="1"> <tr><td>Connector No.</td><td>M1</td></tr> <tr><td>Connector Name</td><td>FUSE BLOCK (J/B)</td></tr> <tr><td>Connector Type</td><td>NS06FW-M2</td></tr> </table>  <p>H.S.</p> <table border="1"> <tr><td>Terminal No.</td><td>2A</td><td>5A</td></tr> <tr><td>Color of Wire</td><td>G</td><td>V</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Connector No.	M1	Connector Name	FUSE BLOCK (J/B)	Connector Type	NS06FW-M2	Terminal No.	2A	5A	Color of Wire	G	V	Signal Name [Specification]	-	-	<table border="1"> <tr><td>Connector No.</td><td>M3</td></tr> <tr><td>Connector Name</td><td>FUSE BLOCK (J/B)</td></tr> <tr><td>Connector Type</td><td>NS12FW-CS</td></tr> </table>  <p>H.S.</p> <table border="1"> <tr><td>Terminal No.</td><td>12C</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Connector No.	M3	Connector Name	FUSE BLOCK (J/B)	Connector Type	NS12FW-CS	Terminal No.	12C	Color of Wire	O	Signal Name [Specification]	-	<table border="1"> <tr><td>Connector No.</td><td>M5</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40MM-CS15</td></tr> </table>  <p>H.S.</p> <table border="1"> <tr><td>Terminal No.</td><td>31</td><td>32</td></tr> <tr><td>Color of Wire</td><td>W</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Connector No.	M5	Connector Name	WIRE TO WIRE	Connector Type	TH40MM-CS15	Terminal No.	31	32	Color of Wire	W	L	Signal Name [Specification]	-	-	<table border="1"> <tr><td>Connector No.</td><td>M6</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH80MM-CS16-TM4</td></tr> </table>  <p>H.S.</p> <table border="1"> <tr><td>Terminal No.</td><td>59</td><td>84</td><td>93</td></tr> <tr><td>Color of Wire</td><td>V</td><td>G</td><td>Y</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td></tr> </table>	Connector No.	M6	Connector Name	WIRE TO WIRE	Connector Type	TH80MM-CS16-TM4	Terminal No.	59	84	93	Color of Wire	V	G	Y	Signal Name [Specification]	-	-	-	<table border="1"> <tr><td>Connector No.</td><td>M7</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH80MM-CS16-TM4</td></tr> </table>  <p>H.S.</p> <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td><td>31</td><td>32</td><td>33</td><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td></tr> <tr><td>Color of Wire</td><td>LG</td><td>SB</td><td>L</td><td>Y</td><td>V</td><td>BR</td><td>R</td><td>W</td><td>LG</td><td>V</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Connector No.	M7	Connector Name	WIRE TO WIRE	Connector Type	TH80MM-CS16-TM4	Terminal No.	1	2	31	32	33	41	42	43	44	45	46	Color of Wire	LG	SB	L	Y	V	BR	R	W	LG	V	G	Signal Name [Specification]	-	-	-	-	-	-	-	-	-	-	-	<table border="1"> <tr><td>Connector No.</td><td>M13</td></tr> <tr><td>Connector Name</td><td>FRONT SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  <p>H.S.</p> <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Connector No.	M13	Connector Name	FRONT SQUAWKER LH	Connector Type	TK02FBR	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-	<table border="1"> <tr><td>Connector No.</td><td>M24</td></tr> <tr><td>Connector Name</td><td>DATA LINK CONNECTOR</td></tr> <tr><td>Connector Type</td><td>BD16FW</td></tr> </table>  <p>H.S.</p> <table border="1"> <tr><td>Terminal No.</td><td>6</td><td>14</td></tr> <tr><td>Color of Wire</td><td>L</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Connector No.	M24	Connector Name	DATA LINK CONNECTOR	Connector Type	BD16FW	Terminal No.	6	14	Color of Wire	L	P	Signal Name [Specification]	-	-	<table border="1"> <tr><td>Connector No.</td><td>M3</td></tr> <tr><td>Connector Name</td><td>FRONT SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  <table border="1"> <tr><td>Terminal No.</td><td>47</td><td>46</td><td>90</td></tr> <tr><td>Color of Wire</td><td>R</td><td>V</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td></tr> </table>	Connector No.	M3	Connector Name	FRONT SQUAWKER LH	Connector Type	TK02FBR	Terminal No.	47	46	90	Color of Wire	R	V	O	Signal Name [Specification]	-	-	-
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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TKGBGY-IV



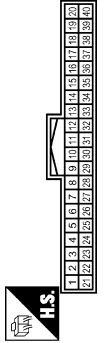
Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH38FW-NH



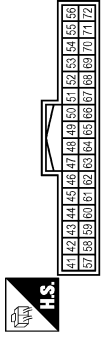
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M36
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



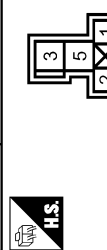
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



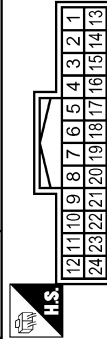
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

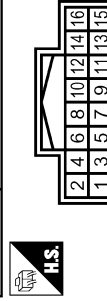
Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	INVERTER VCC
3	O	SIGNAL VCC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGE AREA (VS) SIGNAL
11	Y	COMM (CONT->DISP)
13	BR	INVERTER GND

14	LG	SIGNAL GND
15	SB	COMPOSITE IMAGE SIGNAL
17	G	RGB (R, RED) SIGNAL
18	P	RGB (B, BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	BR	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

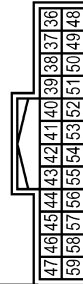
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	FRONT DOOR SPEAKER LH (+)
3	W	FRONT DOOR SPEAKER LH (-)
4	LG	REAR DOOR SPEAKER LH (+)
5	SB	REAR DOOR SPEAKER LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	R	FRONT DOOR SPEAKER RH (-)
13	L	REAR DOOR SPEAKER RH (+)
14	P	REAR DOOR SPEAKER RH (-)

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (B. BLUE) SIGNAL
39	L	RGB (G. GREEN) SIGNAL
40	G	RGB (R. RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	B	RGB AREA (YS) SIGNAL
45	BR	COMM (DISP->CONT)
46	R	HP
	LG	SIGNAL GND

15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SATELLITE SOUND SIGNAL LH (-)
22	B	SATELLITE SOUND SIGNAL LH (+)
23	R	SATELLITE SOUND SIGNAL RH (-)
24	G	SATELLITE SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	W	REQUEST (SAT->CONT)
29	B	COMM (SAT->CONT)
30	R	COMM (CONT->SAT)

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	W	CONNECTION RECOGNITION
73	SHIELD	SHIELD
74	R	AUX IMAGE GND

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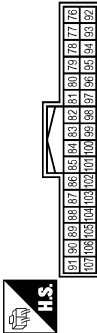
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	LG	AV COMM (H)
89	V	AV COMM (L)
90	G	AV COMM (H)
91	R	AV COMM (L)
95	B	AUX SOUND SIGNAL RH (+)
96	R	AUX SOUND SIGNAL LH (+)
97	W	AUX SOUND SIGNAL GND
101	BR	SW GND

103	SB	DISK EJECT SIGNAL
104	G	IGNITION REVERSE
105	O	PARKING BRAKE
106	V	VEHICLE SPEED (8-PULSE)
107	R	VEHICLE SPEED (8-PULSE)



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FSY-EZ8-R-LH-Z



Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	- [Without BOSE audio]
2	W	- [Without BOSE audio]

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS1.0



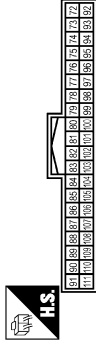
Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

89	P	- [Without BOSE audio]
100	L	- [Without BOSE audio]

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

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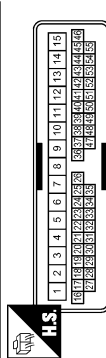
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH20MW-CST5



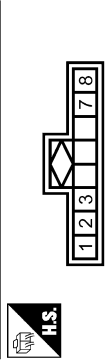
Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



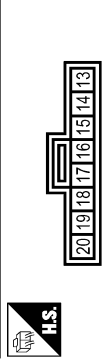
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



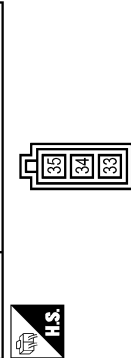
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



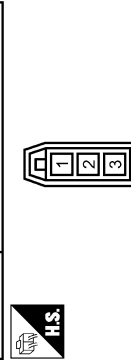
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/IS-HU



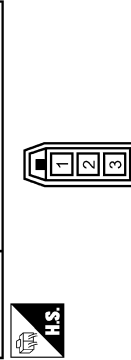
Terminal No.	Color of Wire	Signal Name [Specification]
33	-	FM SUB
34	-	AM FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



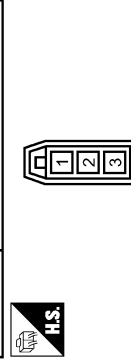
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



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

Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



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

Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	F01FB-A



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

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SATELLITE RADIO TUNER

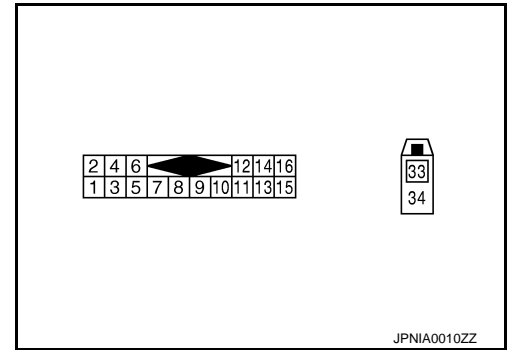
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[BASE AUDIO WITHOUT NAVIGATION]

SATELLITE RADIO TUNER

Reference Value

INFOID:000000004506719



PHYSICAL VALUES

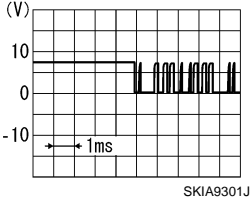
Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/Output			
2 (R)	1 (G)	Satellite radio sound signal LH	Output	Ignition switch ON	When satellite radio mode is selected	
4 (B)	3 (W)	Satellite radio sound signal RH	Output	Ignition switch ON	When satellite radio mode is selected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

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SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
10 (P)	Ground	Communication signal (CONT→SAT)	Input	Ignition switch ON	When satellite radio mode is selected	
12 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
16 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
33	—	Satellite antenna	Input	—	—	—

Wiring Diagram - BASE AUDIO AND REAR VIEW MONITOR -

INFOID:000000004506720

NOTE:

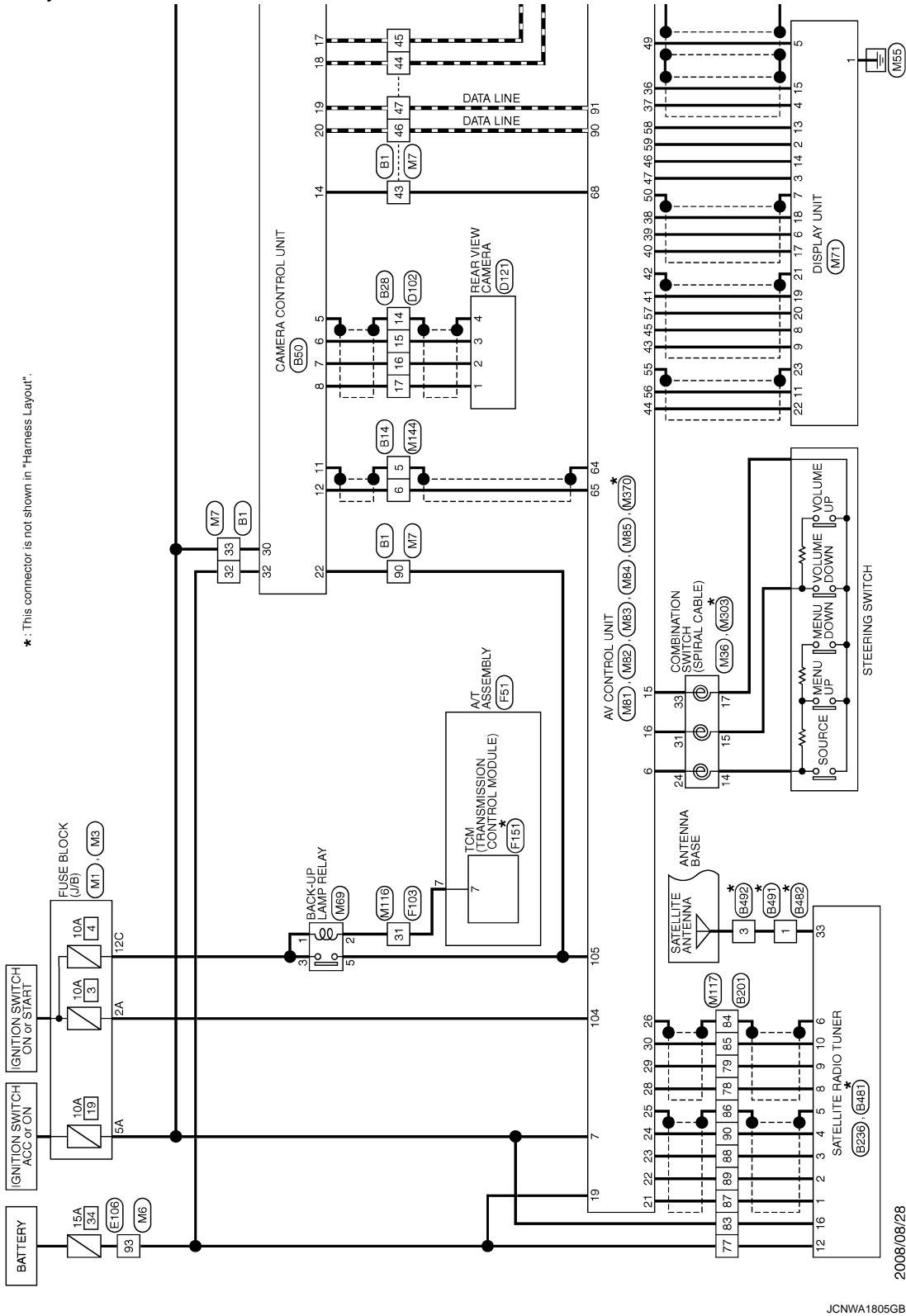
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BASE AUDIO AND REAR VIEW MONITOR



2008/08/28

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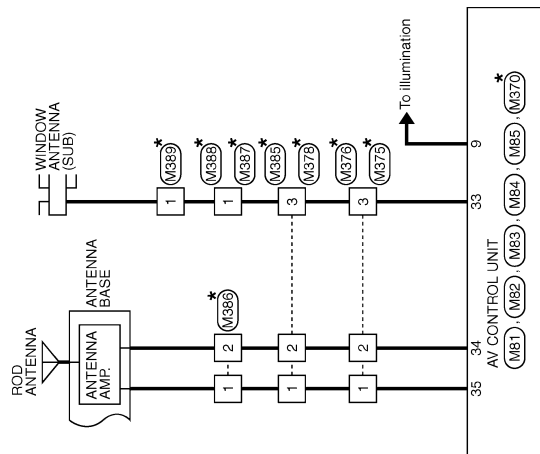
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SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

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



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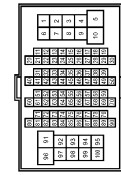
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

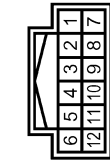
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]

47	R	- [Without around view monitor]
48	V	-
90	O	-

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSS



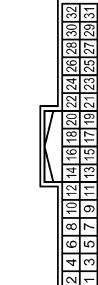
Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH4AMW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	W	- [Without around view monitor]
16	B	- [Without around view monitor]
17	R	- [Without around view monitor]

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (3-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY

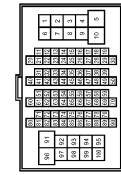
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	B201	P	L	- [Without BOSE audio]
Connector Name	WIRE TO WIRE			
Connector Type	TH80FW-GS16-TM4			



Terminal No.	Color of Wire	Signal Name [Specification]
77	Y	-
78	L	-
79	G	-
83	V	-
84	SHIELD	-
85	P	-
86	SHIELD	-
87	G	-
88	W	-
89	R	-
90	B	-

Connector No.	B461
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	33	-	-	SATELLITE ANTENNA
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Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-N5S



Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	P	- [Without BOSE audio]

Connector No.	B491
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



Terminal No.	1	-	-	-
Terminal No.	2	-	-	-

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	L	REQUEST (SAT->CONT)
9	G	COMM (SAT->CONT)
10	P	COMM (CONT->SAT)
12	Y	BATTERY
16	Y	ACC

Connector No.	B492
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	3	-	-	SATELLITE ANTENNA
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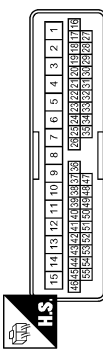
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



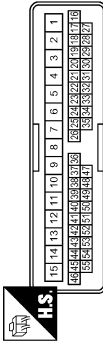
Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-
32	G	-

Connector No.	D6
Connector Name	FRONT DOOR SPEAKER LH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	D38
Connector Name	FRONT DOOR SPEAKER RH (WITHOUT BOSE SYSTEM)
Connector Type	NS02FW-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



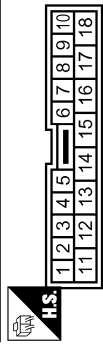
Terminal No.	Color of Wire	Signal Name [Specification]
16	LG	- [Without BOSE audio]
17	Y	- [Without BOSE audio]

Connector No.	D53
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FW-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



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

Connector No.	D73
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FW-CS



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

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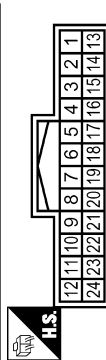
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

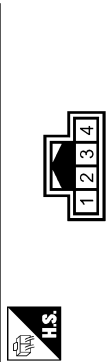
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



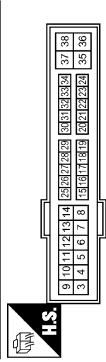
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH30MW-NH



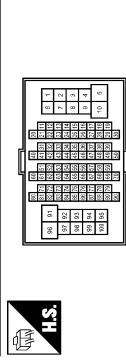
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



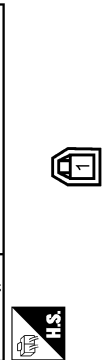
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FY-CS16-TM4



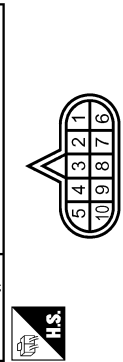
Terminal No.	Color of Wire	Signal Name [Specification]
59	O	-
84	G	-
83	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



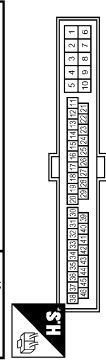
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



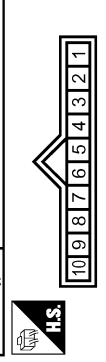
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10



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

Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

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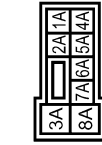
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

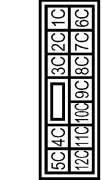
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/E)
Connector Type	NS06FW-M2



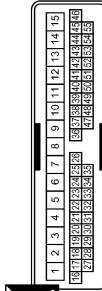
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



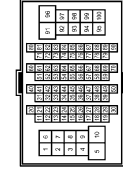
Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-
32	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	SB	-
31	L	-
32	Y	-
33	V	-
41	BR	-
42	R	-
43	W	-
44	LG	-
45	V	-
46	G	-

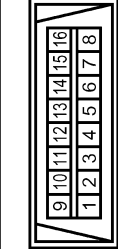
47	R	-
48	V	-
90	O	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

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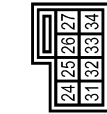
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

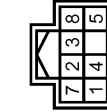
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M86
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TKGBGY-IV



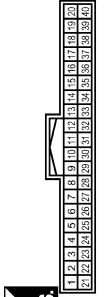
Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M87
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH88FW-NH



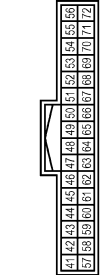
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M86
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



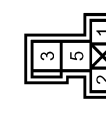
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M87
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



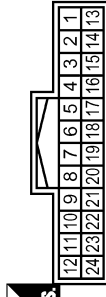
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

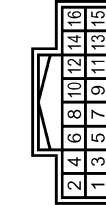
Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	INVERTER VCC
3	O	SIGNAL VCC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (G. GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (S) SIGNAL
11	Y	COMM. (CONT->DISP)
13	BR	INVERTER GND

14	LG	SIGNAL GND
15	SB	COMPOSITE IMAGE SIGNAL
17	G	RGB (R. RED) SIGNAL
18	P	RGB (B. BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	BR	COMM. (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

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SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

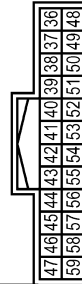
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GSZ



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	FRONT DOOR SPEAKER LH (+)
3	W	FRONT DOOR SPEAKER LH (-)
4	LG	REAR DOOR SPEAKER LH (+)
5	SB	REAR DOOR SPEAKER LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	R	FRONT DOOR SPEAKER RH (-)
13	L	REAR DOOR SPEAKER RH (+)
14	P	REAR DOOR SPEAKER RH (-)

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-NH



47	O	SIGNAL_VCC
48	Y	SHIELD
50	SHIELD	SHIELD
55	Y	SHIELD
56	Y	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER_VCC

15	B	STRG_SW_GND
16	L	STRG_SW_B
17	B	GND
18	Y	BATTERY
20	B	GND



Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH12FW

Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SATELLITE SOUND SIGNAL LH (-)
22	B	SATELLITE SOUND SIGNAL LH (+)
23	R	SATELLITE SOUND SIGNAL RH (-)
24	G	SATELLITE SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	W	REQUEST (SAT->CONT)
29	B	COMM (SAT->CONT)
30	R	COMM (CONT->SAT)

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (B. BLUE) SIGNAL
39	L	RGB (G. GREEN) SIGNAL
40	G	RGB (R. RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	BR	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	W	CONNECTION RECOGNITION
73	SHIELD	SHIELD
74	R	AUX IMAGE GND

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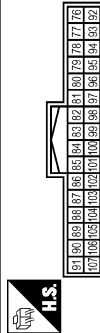
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

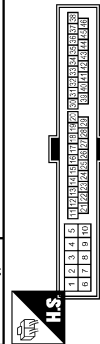
BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22TW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	LG	AV COMM (H)
89	V	AV COMM (L)
90	G	AV COMM (L)
91	R	AV COMM (L)
95	B	AUX SOUND SIGNAL RH (+)
96	R	AUX SOUND SIGNAL LH (+)
97	W	AUX SOUND SIGNAL GND
101	BR	SW GND

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK58MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

103	SR	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	V	PARKING BRAKE
107	R	VEHICLE SPEED (8-PULSE)



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

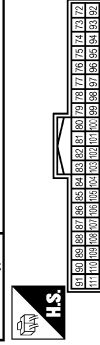
89	P	[Without BOSE audio]
100	L	[Without BOSE audio]

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	[Without BOSE audio]
2	W	[Without BOSE audio]

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

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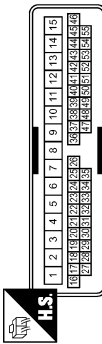
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	THROW-CSI5



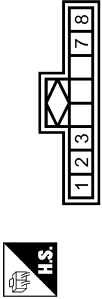
Terminal No.	Color of Wire	Signal Name [Specification]
20	R	- [Without around view monitor]
21	BR	- [Without around view monitor]

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	FM SUB
34	-	AM-FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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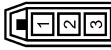
SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

BASE AUDIO AND REAR VIEW MONITOR

Connector No.	M395
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



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

Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



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

Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	P01FB-A



Terminal No.	Color of Wire	Signal Name [Specification]
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MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

SYMPTOM DIAGNOSIS

MULTI AV SYSTEM SYMPTOMS

Symptom Table

INFOID:000000004347553

OPERATION

Symptoms	Check items	Possible malfunction location / Action to take
Multifunction switch and preset switch operation does not work.	<ul style="list-style-type: none"> All switches cannot be operated. "MULTI AV" is displayed with CONSULT-III. 	<ul style="list-style-type: none"> Multifunction switch power supply and ground circuit. AV communication circuits between AV control unit and multifunction switch. Perform CONSULT-III self-diagnosis. Refer to AV-33, "CONSULT-III Function (MULTI AV)" .
	<ul style="list-style-type: none"> All switches cannot be operated. "MULTI AV" is not displayed on system selection screen the CONSULT-III is initialized. 	AV control unit power supply and ground circuit malfunction. Refer to AV-47, "AV CONTROL UNIT : Diagnosis Procedure" .
	Only specified switch cannot be operated.	Multifunction switch or preset switch malfunction. Perform multifunction switch and preset switch self-diagnosis function. Refer to AV-48, "MULTIFUNCTION SWITCH : Diagnosis Procedure" .

RELATED TO RGB IMAGE

Symptoms	Check items	Possible malfunction location / Action to take
RGB image is not shown.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-33, "CONSULT-III Function (MULTI AV)" .
	There is no malfunction in CONSULT-III self-diagnosis results.	<ul style="list-style-type: none"> Display unit power supply and ground circuit. Refer to AV-47, "DISPLAY UNIT : Diagnosis Procedure". Vertical synchronizing (VP) signal circuit. Refer to AV-57, "Diagnosis Procedure".
Color of RGB image is not proper.	Light blue (Cyan) tint.	RGB signal (R: red) circuit. Refer to AV-51, "Diagnosis Procedure" .
	Purple (Magenta) tint.	RGB signal (G: green) circuit. Refer to AV-52, "Diagnosis Procedure" .
	Screen looks yellowish.	RGB signal (B: blue) circuit. Refer to AV-53, "Diagnosis Procedure" .
RGB screen is rolling.	—	RGB synchronizing signal circuit. Refer to AV-54, "Diagnosis Procedure" .
Fuel economy display is malfunctioning.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-33, "CONSULT-III Function (MULTI AV)" .
	There is no malfunction in CONSULT-III self-diagnosis results.	Ignition signal circuit malfunction. Refer to AV-47, "AV CONTROL UNIT : Diagnosis Procedure" .

RELATED TO AUDIO

Symptoms	Check items	Possible malfunction location / Action to take
The CD cannot be removed.	—	Disk eject signal circuit. Refer to AV-60, "Diagnosis Procedure" .
Audio sound is not heard.	No sound from all speakers.	AV control unit malfunction. Refer to AV-153, "Exploded View" .
	Sound is not heard only from the specific places (RH front, RH rear, LH front and LH rear).	Sound signal circuit of malfunctioning system.

MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Possible malfunction location / Action to take
Satellite radio is not received.	"ANTENNA" is not displayed even when the channel is turned to 0 in Satellite radio mode.	Perform the following inspection procedure. 1. Check satellite radio antenna mounting nut for looseness. NOTE: Tightening torque: 6.5 N·m (0.66 kg·m, 58 in·lb.) 2. Visually check for satellite radio antenna feeder. 3. Replace the satellite radio antenna. Refer to AV-159, "Exploded View" . 4. Replace the satellite radio tuner. Refer to AV-158, "Exploded View" .
	"ANTENNA" is displayed when the channel is turned to 0 in Satellite radio mode.	Perform the following inspection procedure. 1. Check the connection between Satellite radio tuner and antenna feeder. 2. Check the connection between Satellite radio antenna and antenna feeder. 3. Check Antenna feeder for open circuit. 4. Replace the satellite radio antenna. Refer to AV-159, "Exploded View" . 5. Replace the satellite radio tuner. Refer to AV-158, "Exploded View" .
The sound of Satellite radio is not heard.	Other audio sounds are normal.	Satellite radio sound signal circuit malfunction between satellite radio tuner and AV control unit.
It does not change to Satellite radio mode.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-33, "CONSULT-III Function (MULTI AV)" .
AM/FM radio is not received.	Other audio sounds are normal.	<ul style="list-style-type: none"> Antenna amp. ON signal circuit. Antenna feeder.

RELATED TO STEERING SWITCH

Symptoms	Inspection location / Probable malfunction location
None of the steering switch operations work.	Steering switch signal GND circuit. Refer to AV-74, "Diagnosis Procedure" .
Only specified switch cannot be operated.	Steering switch.
"SOURCE", "MENU UP", "MENU DOWN" switches of steering switch are not operated.	Steering switch signal A circuit. Refer to AV-70, "Diagnosis Procedure" .
"VOL UP", "VOL DOWN" switches of steering switch are not operated.	Steering switch signal B circuit. Refer to AV-72, "Diagnosis Procedure" .

RELATED TO AUXILIARY INPUT

NOTE:

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

Symptoms	Check items	Probable malfunction location
No voice sound is heard when AUX mode is selected.	Voice sound is heard when other modes are selected.	AUX sound signal circuits malfunction between auxiliary input jacks and AV control unit.

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MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location
Image is not displayed when AUX mode is selected.	—	<ul style="list-style-type: none"> AUX image signal circuit malfunction between auxiliary input jacks and AV control unit. Refer to AV-58, "Diagnosis Procedure". Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to AV-56, "Diagnosis Procedure". Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-57, "Diagnosis Procedure". RGB area (YS) signal circuit malfunction between AV control unit and display unit. Refer to AV-55, "Diagnosis Procedure".
	Camera image is normal (with rear view monitor)	AUX image signal circuit malfunction between auxiliary input jacks and AV control unit. Refer to AV-58, "Diagnosis Procedure" .
	Camera image is not displayed. (with rear view monitor)	<ul style="list-style-type: none"> Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to AV-56, "Diagnosis Procedure". Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-57, "Diagnosis Procedure". RGB area (YS) signal circuit malfunction between AV control unit and display unit. Refer to AV-55, "Diagnosis Procedure".
It does not change from AUX mode to other modes.	—	<ul style="list-style-type: none"> Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-57, "Diagnosis Procedure". Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to AV-56, "Diagnosis Procedure".

RELATED TO REAR VIEW MONITOR

Symptoms	Check items	Probable malfunction location
Camera image is not displayed (displayed in black and nothing can be displayed)	AUX image is not displayed.	<ul style="list-style-type: none"> Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to AV-56, "Diagnosis Procedure". Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-57, "Diagnosis Procedure".
Camera image is not shown. (Guiding line is displayed.)	—	<ul style="list-style-type: none"> Camera image signal circuit between camera control unit and rear view camera. Refer to AV-61, "Diagnosis Procedure". Rear view camera power supply circuit. Refer to AV-62, "Diagnosis Procedure".
Camera image is not displayed. (Only warning message under area is displayed.)	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to AV-33, "CONSULT-III Function (MULTI AV)" .
	AUX image is normal.	Camera image signal circuit malfunction between camera control unit and AV control unit. Refer to AV-63, "Diagnosis Procedure" .
	AUX image is not displayed.	RGB area (YS) signal circuit malfunction between AV control unit and display unit. Refer to AV-55, "Diagnosis Procedure" .
	Select "Camera Cont." of "Confirmation/Adjustment" mode, Reverse Sensor is not turned ON at "Connection Confirmation".	Reverse signal circuit (camera control unit).
Camera image is rolling.	AUX image is also rolling.	Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-57, "Diagnosis Procedure" .

MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location
Camera image does not switch.	Malfunction of self-diagnosis result is indicated.	Camera-connection recognition signal circuit Refer to AV-33. "CONSULT-III Function (MULTI AV)".
	Malfunction of self-diagnosis result is not indicated.	Reverse signal circuit (AV control unit).
The predicted course line display is malfunctioning.	—	Sensor signal circuit malfunction. Refer to AV-68. "Diagnosis Procedure".

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NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

NORMAL OPERATING CONDITION

Description

INFOID:000000004347554

BASIC OPERATIONS

Symptom	Possible cause	Possible solution
No image is displayed.	The brightness is at the lowest setting.	Adjust the brightness of the display.
	The system in the video mode.	Press <DISC> to change the mode.
	The display is turned off.	Press <Day/Night> to turn on the display.
The screen is too dim. The movement is slow.	The temperature in the interior of the vehicle is low.	Wait until the interior of the vehicle has warmed up.
Some pixels in the display are darker or brighter than others.	This condition is an inherent characteristic of liquid crystal displays.	This is not a malfunction.
Some menu items cannot be selected.	Some menu items become unavailable while the vehicle is driven.	Park the vehicle in a safe location, and then operate the multi AV system.

RELATED TO AUDIO

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

NOTE:

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

Symptom	Cause and Counter measure
Cannot play	Check if the CD was inserted correctly.
	Check if the CD is scratched or dirty.
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than “.MP3”, “.WMA”, “.mp3”, or “.wma” cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.
	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.
	Check if the finalization process, such as session close and disc close, is done for the disc.
Poor sound quality	Check if the CD is scratched or dirty.
	Check if the CD is protected by copyright.
It takes a relatively long time before the music starts playing.	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.
Skipping with high bit rate files	Skipping may occur with large quantities if data such as for high bit rate data.

NORMAL OPERATING CONDITION

[BASE AUDIO WITHOUT NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptom	Cause and Counter measure
Move immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ".mp3", or ".wma", or when play is prohibited by copyright protection, the player will skip to the next song.
The songs do not play back in the desired order.	The playback order is the order in which the files were written by the software, so the files might not play in the desired order.

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

NOTE:

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

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PRECAUTION

PRECAUTIONS

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

INFOID:000000004347555

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

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

WARNING:

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

Precaution for Trouble Diagnosis

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AV COMMUNICATION SYSTEM

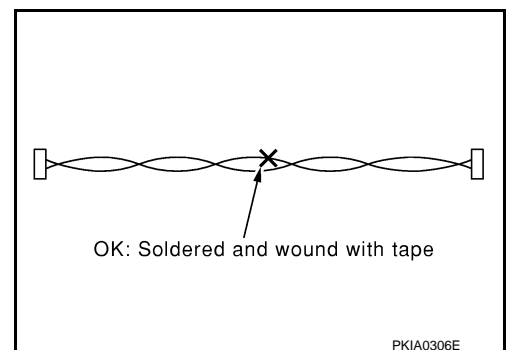
- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

Precaution for Harness Repair

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AV COMMUNICATION SYSTEM

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



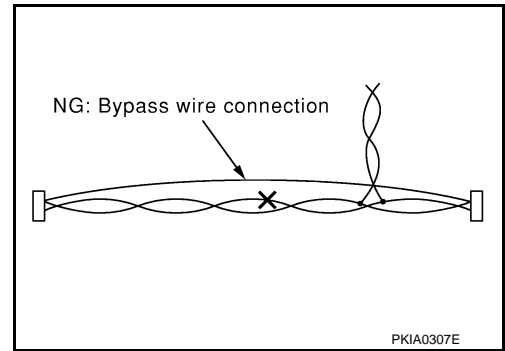
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PRECAUTIONS

< PRECAUTION >

[BASE AUDIO WITHOUT NAVIGATION]

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



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PREPARATION

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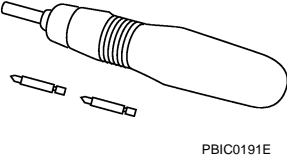
[BASE AUDIO WITHOUT NAVIGATION]

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:000000004347558

Tool name	Description
<p>Power tool</p>  <p>PBIC0191E</p>	<p>Loosening screws</p>

AV CONTROL UNIT

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

REMOVAL AND INSTALLATION

AV CONTROL UNIT

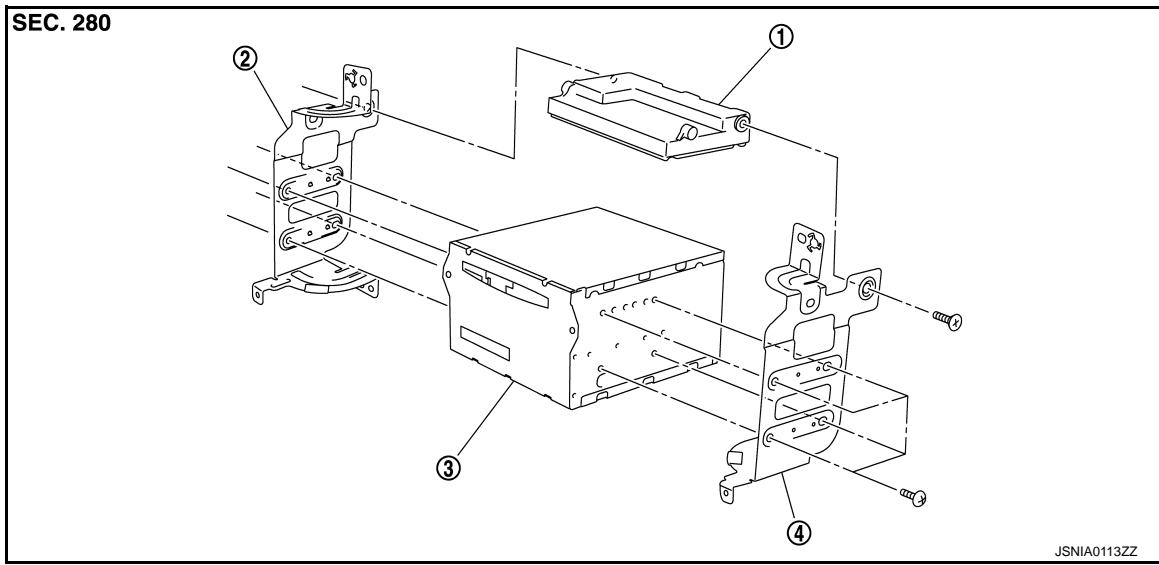
Exploded View

INFOID:000000004347559

REMOVAL

Refer to [IP-12, "Exploded View"](#).

DISASSEMBLY



1. Unified meter and A/C amp.
2. Bracket LH
3. AV control unit
4. Bracket RH

Removal and Installation

INFOID:000000004347560

REMOVAL

1. Remove display unit.
2. Remove AV control unit with a unified meter and A/C amp. as a single unit from the body.
3. Remove bracket screws, and then remove AV control unit.

INSTALLATION

Installation is the reverse order of removal.

CAUTION:

Since AV control unit connector and unified meter and A/C amp. connector have the same form, be careful not to insert them wrongly.

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AV

DISPLAY UNIT

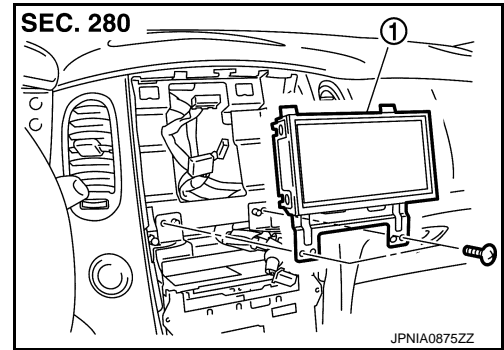
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

DISPLAY UNIT

Exploded View

INFOID:000000004347561



1. Display unit

Removal and Installation

INFOID:000000004347562

REMOVAL

1. Remove cluster lid D. Refer to [JP-12, "Exploded View"](#).
2. Remove display unit mounting screws.
3. Remove display unit.

INSTALLATION

Installation is the reverse order of removal.

FRONT DOOR SPEAKER

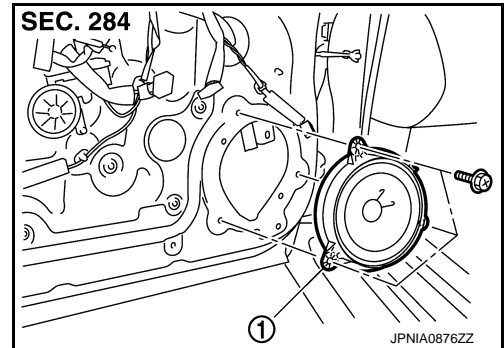
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

FRONT DOOR SPEAKER

Exploded View

INFOID:000000004347563



1. Front door speaker

Removal and Installation

INFOID:000000004347564

REMOVAL

1. Remove front door finisher. Refer to [INT-11. "DRIVER SIDE : Exploded View"](#) (driver side) or [INT-14. "PASSENGER SIDE : Exploded View"](#) (passenger side).
2. Remove front door speaker mounting bolts, disconnect the front door speaker connector.
3. Remove front door speaker.

INSTALLATION

Installation is the reverse order of removal.

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AV

REAR DOOR SPEAKER

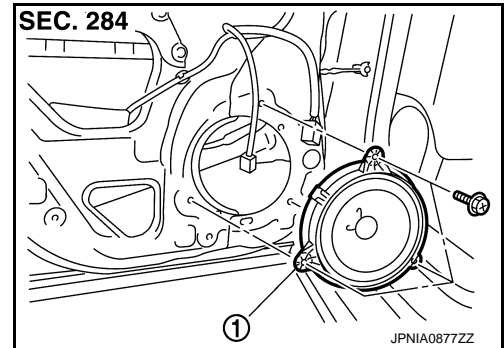
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

REAR DOOR SPEAKER

Exploded View

INFOID:000000004347565



1. Rear door speaker

Removal and Installation

INFOID:000000004347566

REMOVAL

1. Remove rear door finisher. Refer to [JNT-17. "Exploded View"](#).
2. Remove rear door speaker mounting bolts, disconnect the rear door speaker connector.
3. Remove rear door speaker.

INSTALLATION

Installation is the reverse order of removal.

FRONT SQUAWKER

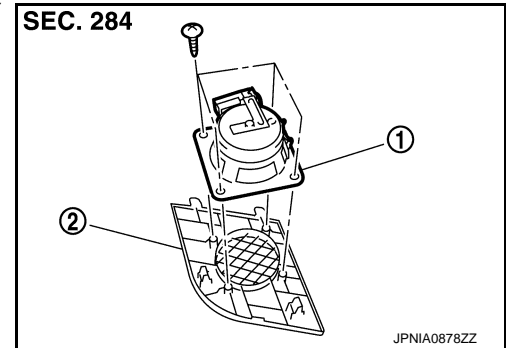
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

FRONT SQUAWKER

Exploded View

INFOID:000000004347567



1. Front squawker
2. Speaker grille

Removal and Installation

INFOID:000000004347568

REMOVAL

1. Lift up the speaker grille with squawker. Refer to [IP-12. "Exploded View"](#).
2. Disconnect the front squawker connector.
3. Remove front squawker mounting screws.
4. Remove front squawker.

INSTALLATION

Installation is the reverse order of removal.

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SATELLITE RADIO TUNER

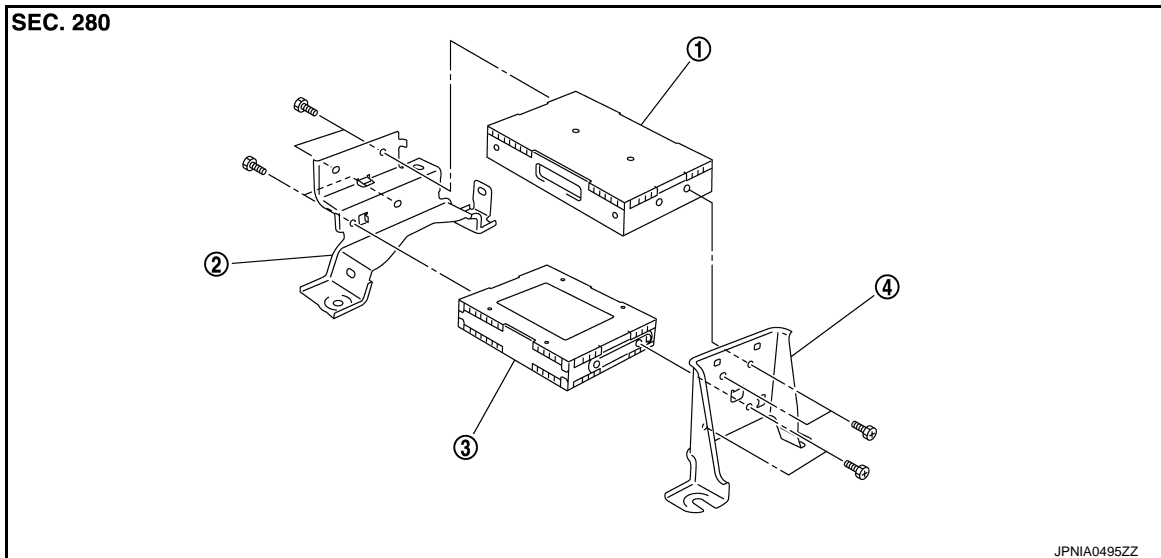
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

SATELLITE RADIO TUNER

Exploded View

INFOID:000000004347569



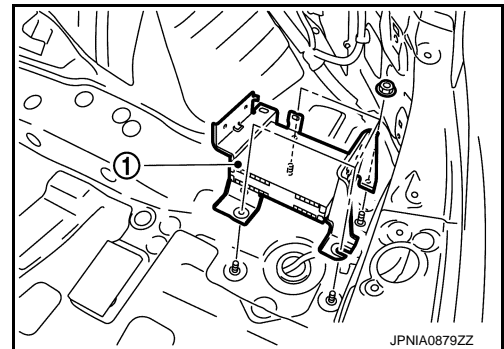
1. TEL adapter unit
2. Bracket (front)
3. Satellite radio tuner
4. Bracket (rear)

Removal and Installation

INFOID:000000004347570

REMOVAL

1. Remove luggage floor spacer (RH). Refer to [INT-34, "Exploded View"](#).
2. Remove nuts, and then satellite radio tuner (1).



INSTALLATION

Install in the reverse order of removal.

ANTENNA BASE

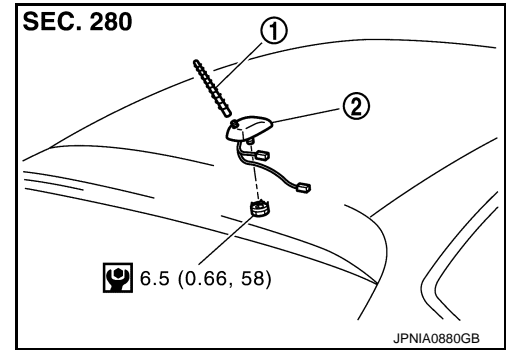
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

ANTENNA BASE

Exploded View

INFOID:000000004347571



1. Antenna rod
2. Antenna base

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000004347572

REMOVAL

1. Remove headlining (rear). Keep a service area. Refer to [INT-26, "NORMAL ROOF : Exploded View"](#) (normal roof) or [INT-30, "SUNROOF : Exploded View"](#) (sunroof).
2. Remove antenna base mounting nut.
3. Remove antenna base.

INSTALLATION

Installation is the reverse order of removal.

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

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.

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AV

MULTIFUNCTION SWITCH

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

MULTIFUNCTION SWITCH

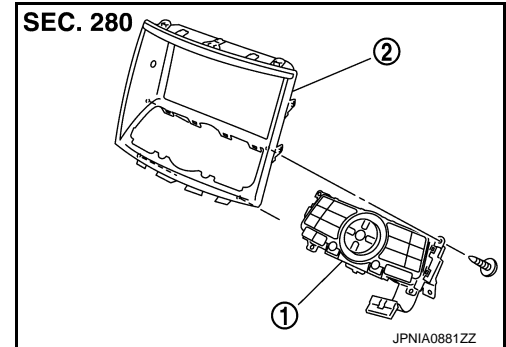
Exploded View

INFOID:000000004347573

REMOVAL

Refer to [IP-12, "Exploded View"](#).

DISASSEMBLY



1. Multifunction switch
2. Cluster lid D

Removal and Installation

INFOID:000000004347574

REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove multifunction switch mounting screws.
3. Remove multifunction switch.

INSTALLATION

Installation is the reverse order of removal.

PRESET SWITCH

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

PRESET SWITCH

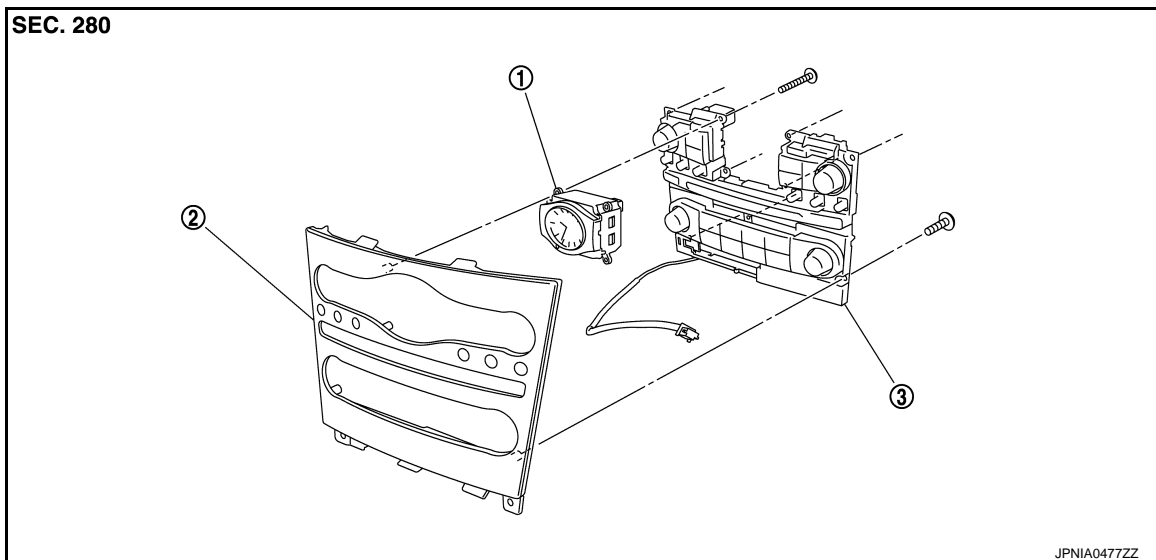
Exploded View

INFOID:000000004347575

REMOVAL

Refer to [IP-12, "Exploded View"](#).

DISASSEMBLY



1. Clock

2. Cluster lid C

3. Preset switch

Removal and Installation

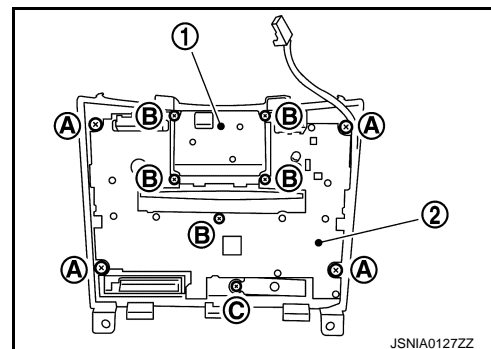
INFOID:000000004347576

REMOVAL

1. Remove cluster lid C. Refer to [IP-12, "Exploded View"](#).
2. Remove preset switch mounting screws (A), (B) and (C).

1. Clock

3. Remove preset switch (2).



INSTALLATION

Installation is the reverse order of removal.

NOTE:

When installing preset switch, do not allow the print wire that connects preset switch and multifunction switch to get caught in between AV control unit and preset switch.

AUXILIARY INPUT JACKS

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

AUXILIARY INPUT JACKS

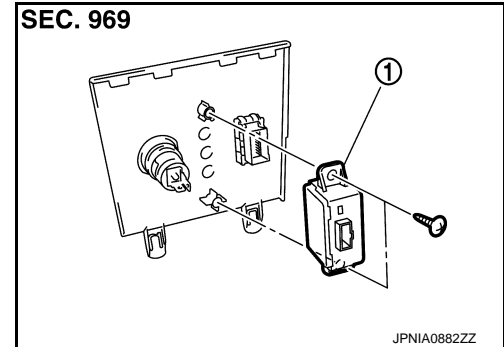
Exploded View

INFOID:000000004347577

REMOVAL

Refer to [IP-23, "Exploded View"](#).

DISASSEMBLY



1. Auxiliary input jacks

Removal and Installation

INFOID:000000004347578

REMOVAL

1. Remove console finisher. Refer to [IP-23, "Exploded View"](#).
2. Remove auxiliary mounting screws.
3. Remove auxiliary input jacks.

INSTALLATION

Installation is the reverse order of removal.

CAMERA CONTROL UNIT

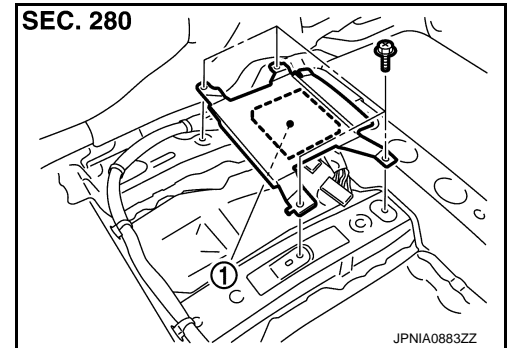
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

CAMERA CONTROL UNIT

Exploded View

INFOID:000000004347581



1. Camera control unit

Removal and Installation

INFOID:000000004347582

REMOVAL

1. Remove front seat (LH side). Refer to [SE-86. "Exploded View"](#).
2. Remove floor carpet. Keep a service area.
3. Remove camera control unit.

INSTALLATION

1. Installation is the reverse order of removal.
2. Perform predicted course line center position adjustment. Refer to [AV-11. "PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

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REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

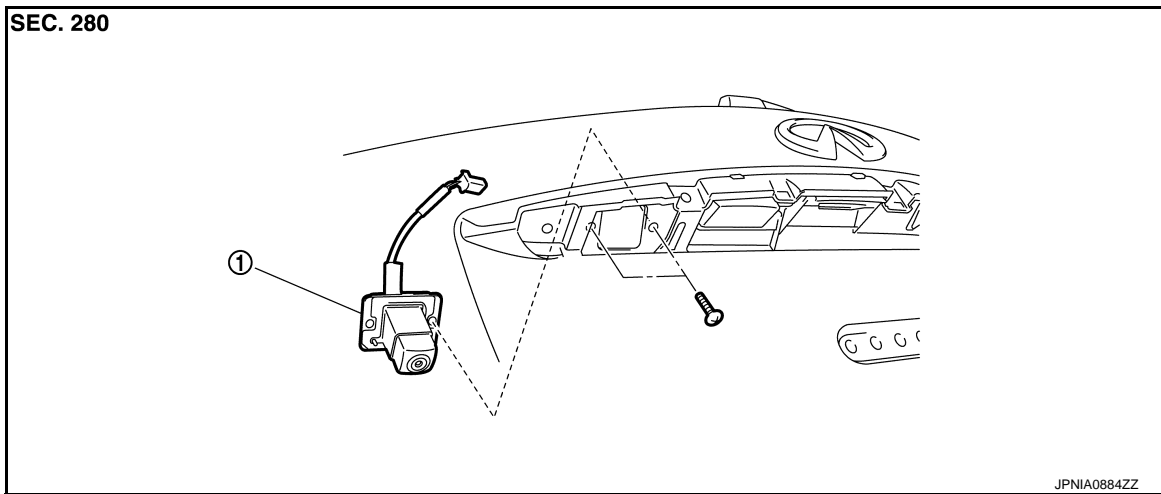
[BASE AUDIO WITHOUT NAVIGATION]

REAR VIEW CAMERA

Exploded View

INFOID:000000004347583

DISASSEMBLY



1. Rear view camera

Removal and Installation

INFOID:000000004347584

REMOVAL

1. Remove back door finisher inner. Refer to [INT-38, "Exploded View"](#).
2. Remove back door outside finisher upper. Refer to [EXT-48, "Exploded View"](#).
3. Remove back door outside finisher lower. Refer to [EXT-48, "Exploded View"](#).
4. Remove rear view camera mounting screws and rear view camera harness connector.
5. Remove rear view camera.

INSTALLATION

1. Installation is the reverse order of removal.
2. Adjust the guide line position if the guide line position is shifted after installing the rear view camera. Refer to [AV-165, "Adjustment"](#).

REAR VIEW CAMERA

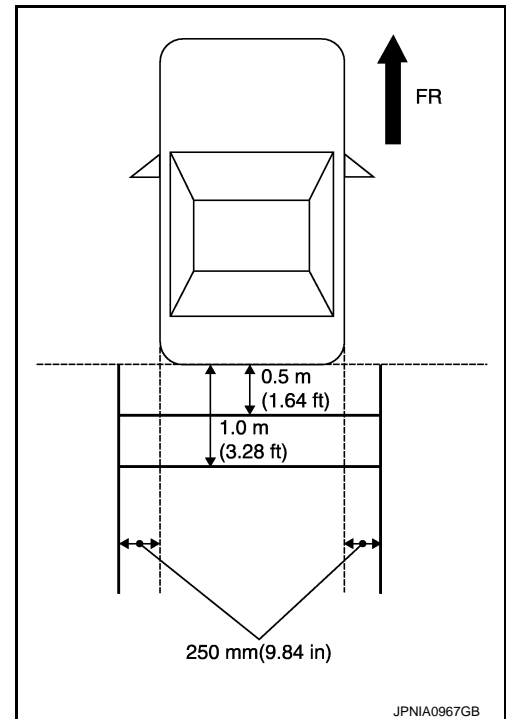
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

Adjustment

INFOID:000000004347585

1. Draw lines on rearward area of the vehicle passing through the following points: 250 mm (9.84 in) from both sides of the vehicle, and 0.5 m (1.64 ft), 1.0 m (3.28 ft) from the rear end of the bumper.
2. Set into "Adjust offset of rear view camera" mode of Confirmation/Adjustment mode.



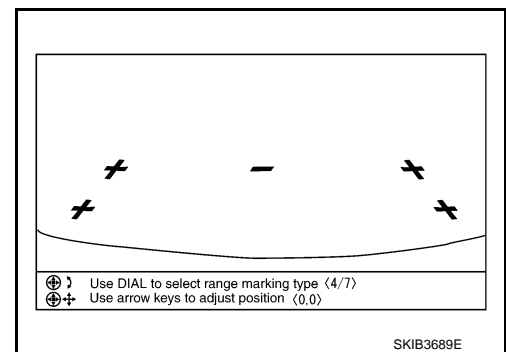
3. Rotate the center dial, and then select the guiding line pattern so that its angle is aligned with the correction line of the rear of the vehicle.

Selected pattern : 7

4. Make fine adjustment to the correction line of the rear of the vehicle with up/down/left/right switches so that its position is aligned with the guiding line. Press "OK" switch and record the adjusted guiding line position to the camera control unit.

Up/Down adjustment range : -20 - 20

Left/Right adjustment range : -20 - 20



CAUTION:

Never operate other function such as pressing BACK while writing index data.

If Confirmation/Adjustment mode does not function in the above procedure, perform one of the following service to adjust the index again.

- Remove battery for five min. Then reconnect battery.
- Remove camera control unit connector for five min. Then reconnect camera control unit connector.

STEERING ANGLE SENSOR

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

STEERING ANGLE SENSOR

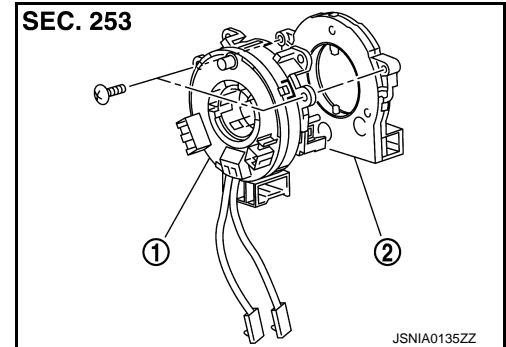
Exploded View

INFOID:000000004347586

REMOVAL

Refer to [SR-14](#), "Exploded View".

DISASSEMBLY



1. Spiral cable
2. Steering angle sensor

Removal and Installation

INFOID:000000004347587

REMOVAL

1. Remove spiral cable.
2. Remove steering angle sensor mounting screws.
3. Remove steering angle sensor.

INSTALLATION

Installation is the reverse order of removal.

ANTENNA FEEDER

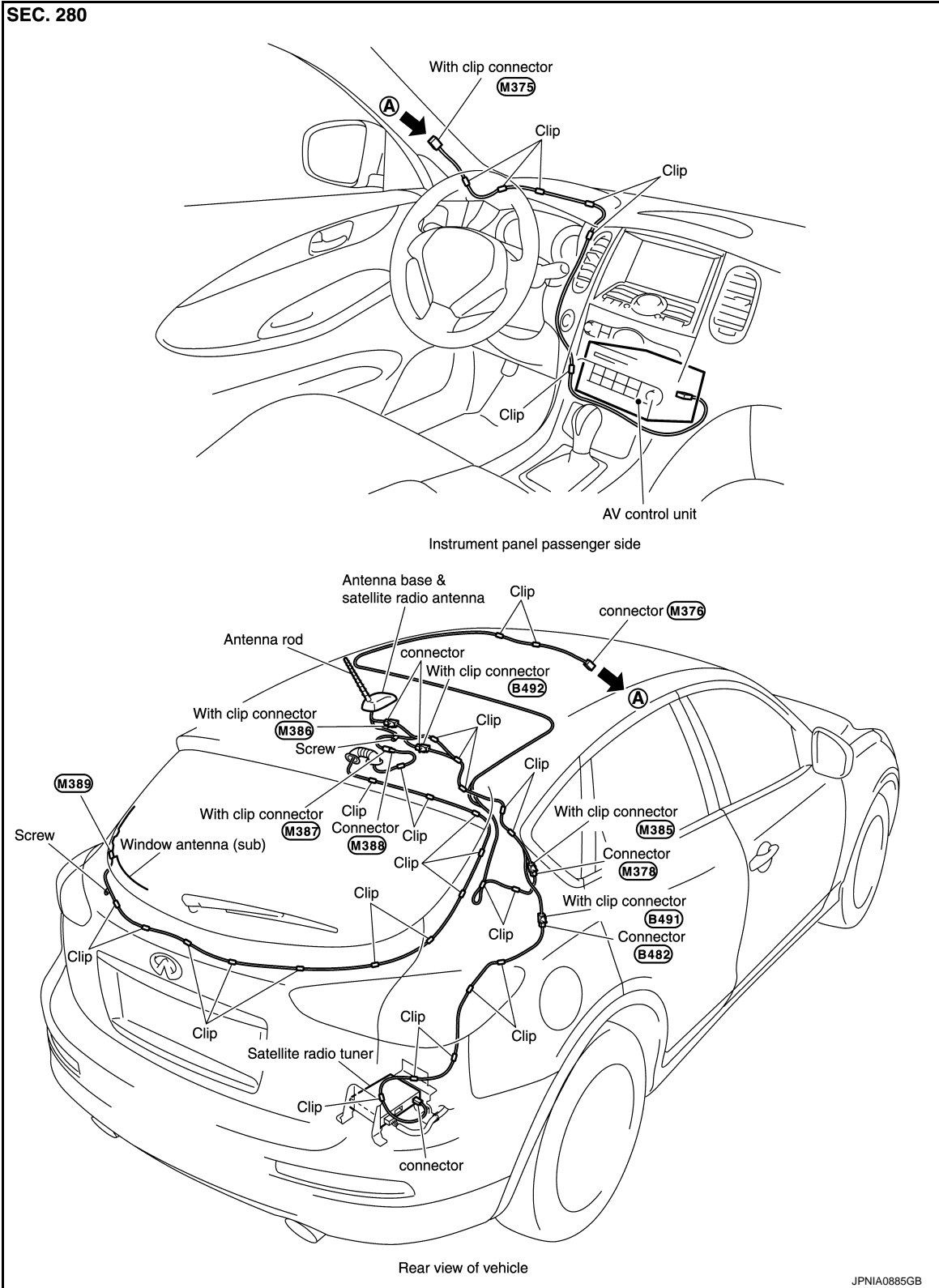
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

ANTENNA FEEDER

Harness Layout

INFOID:000000004347588



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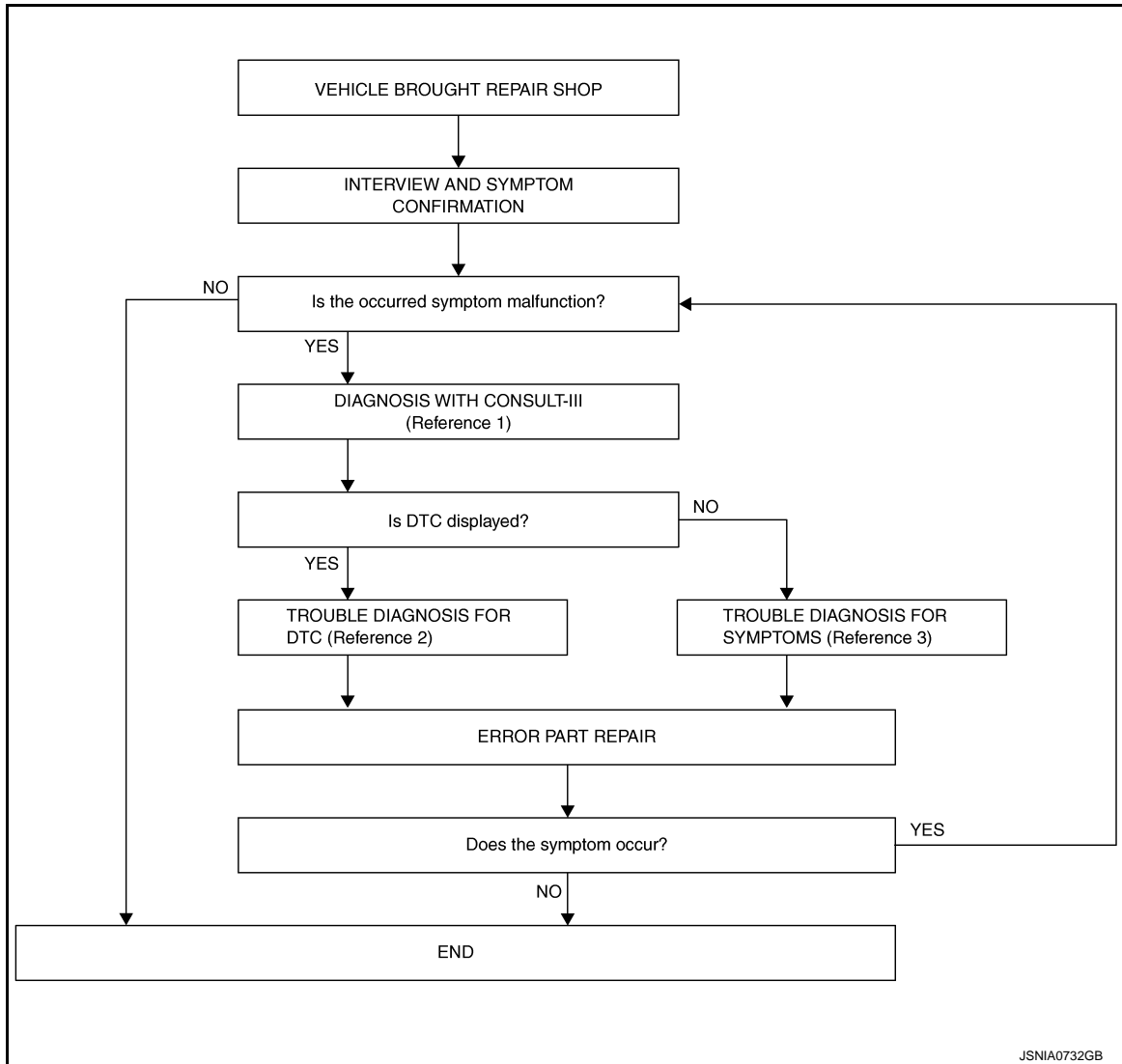
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow (Multi AV)

INFOID:000000004347757

OVERALL SEQUENCE



JSNIA0732GB

- Reference 1... Refer to [AV-233. "CONSULT-III Function \(MULTI AV\)".](#)
- Reference 2... Refer to [AV-369. "DTC Index".](#)
- Reference 3... Refer to [AV-560. "Symptom Table".](#)

DETAILED FLOW

1. INTERVIEW AND SYMPTOM CONFIRMATION

Check the malfunction symptoms by performing the following items.

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

Is the occurred symptom malfunction?

YES >> GO TO 2.

NO >> INSPECTION END

2. DIAGNOSIS WITH CONSULT-III

DIAGNOSIS AND REPAIR WORKFLOW

[BOSE AUDIO WITH NAVIGATION]

< BASIC INSPECTION >

1. Connect CONSULT-III and perform a self-diagnosis for "MULTI AV". Refer to [AV-233, "CONSULT-III Function \(MULTI AV\)"](#).

NOTE:

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

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

Is DTC displayed?

YES >> GO TO 3.

NO >> GO TO 4.

3. TROUBLE DIAGNOSIS FOR DTC

1. Check the DTC indicated in the self-diagnosis results.
2. Perform the relevant diagnosis referring to the DTC Index. Refer to [AV-369, "DTC Index"](#).

>> GO TO 5.

4. TROUBLE DIAGNOSIS FOR SYMPTOMS

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to [AV-560, "Symptom Table"](#).

>> GO TO 5.

5. ERROR PART REPAIR

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

NOTE:

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

3. Check that the symptom does not occur.

Does the symptom occur?

YES >> GO TO 1.

NO >> INSPECTION END

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DIAGNOSIS AND REPAIR WORKFLOW

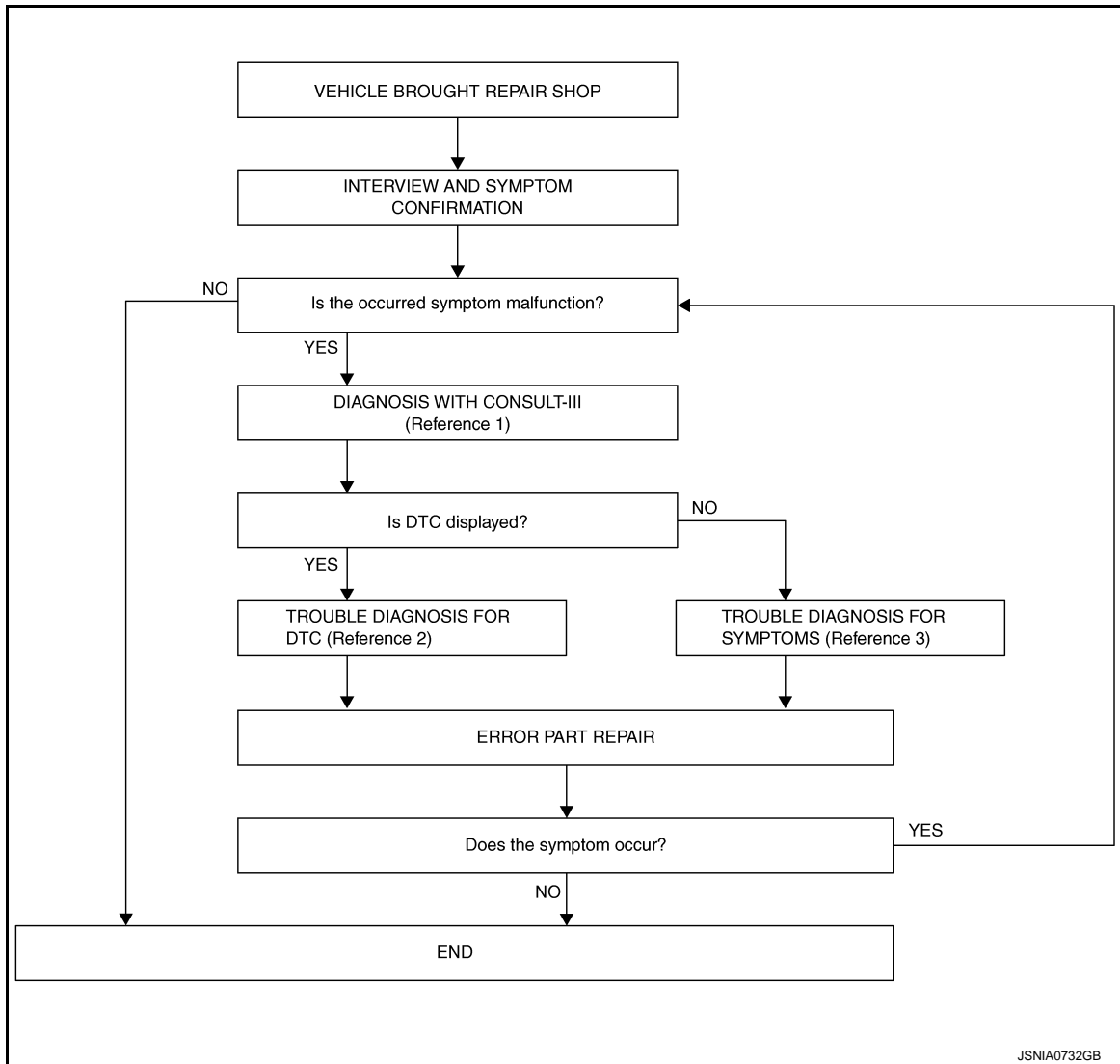
[BOSE AUDIO WITH NAVIGATION]

< BASIC INSPECTION >

Work Flow (Sonar)

INFOID:000000004507197

OVERALL SEQUENCE



- Reference 1... Refer to [AV-240, "CONSULT-III Function \(SONAR\)"](#).
- Reference 2... Refer to [AV-369, "DTC Index"](#).
- Reference 3... Refer to [AV-560, "Symptom Table"](#).

DETAILED FLOW

1. INTERVIEW AND SYMPTOM CONFIRMATION

Check the malfunction symptoms by performing the following items.

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

Is the occurred symptom malfunction?

YES >> GO TO 2.

NO >> INSPECTION END

2. DIAGNOSIS WITH CONSULT-III

1. Connect CONSULT-III and perform a self-diagnosis for "SONAR". Refer to [AV-240, "CONSULT-III Function \(SONAR\)"](#).

NOTE:

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

DIAGNOSIS AND REPAIR WORKFLOW

[BOSE AUDIO WITH NAVIGATION]

< BASIC INSPECTION >

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

Is DTC displayed?

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

3. TROUBLE DIAGNOSIS FOR DTC

1. Check the DTC indicated in the self-diagnosis results.
2. Perform the relevant diagnosis referring to the DTC Index. Refer to [AV-369. "DTC Index"](#).

>> GO TO 5.

4. TROUBLE DIAGNOSIS FOR SYMPTOMS

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to [AV-560. "Symptom Table"](#).

>> GO TO 5.

5. ERROR PART REPAIR

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

NOTE:

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

3. Check that the symptom does not occur.

Does the symptom occur?

- YES >> GO TO 1.
- NO >> INSPECTION END

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BOSE AUDIO WITH NAVIGATION]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000004347758

WITH REAR VIEW MONITOR OR AROUND VIEW MONITOR

Always correct the center position of the predicted course line after disconnecting the battery negative terminal.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:000000004347759

1. CORRECTION OF CENTER POSITION OF PREDICTED COURSE LINE

Refer to the following for details.

>> Refer to [AV-172, "PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000004347760

When camera control unit or around view monitor control unit is replaced, the center position of predicted course line shall be corrected.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000004347761

1. CORRECTION OF CENTER POSITION OF PREDICTED COURSE LINE

Refer to the following for details.

>> Refer to [AV-172, "PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT

PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Description

INFOID:000000004347762

Adjust the center position of the predicted course line of the rear view monitor if it is shifted.

PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement

INFOID:000000004347763

1. STEERING OPERATION

Steer the steering wheel to the leftmost and rightmost ends.

>> GO TO 2

2. DRIVING

Drive the vehicle straight ahead 100 m (328.1 ft) or more at a speed of 30 km/h (18.6 MPH) or more.

>> END

CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR)

CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Description

INFOID:000000004347764

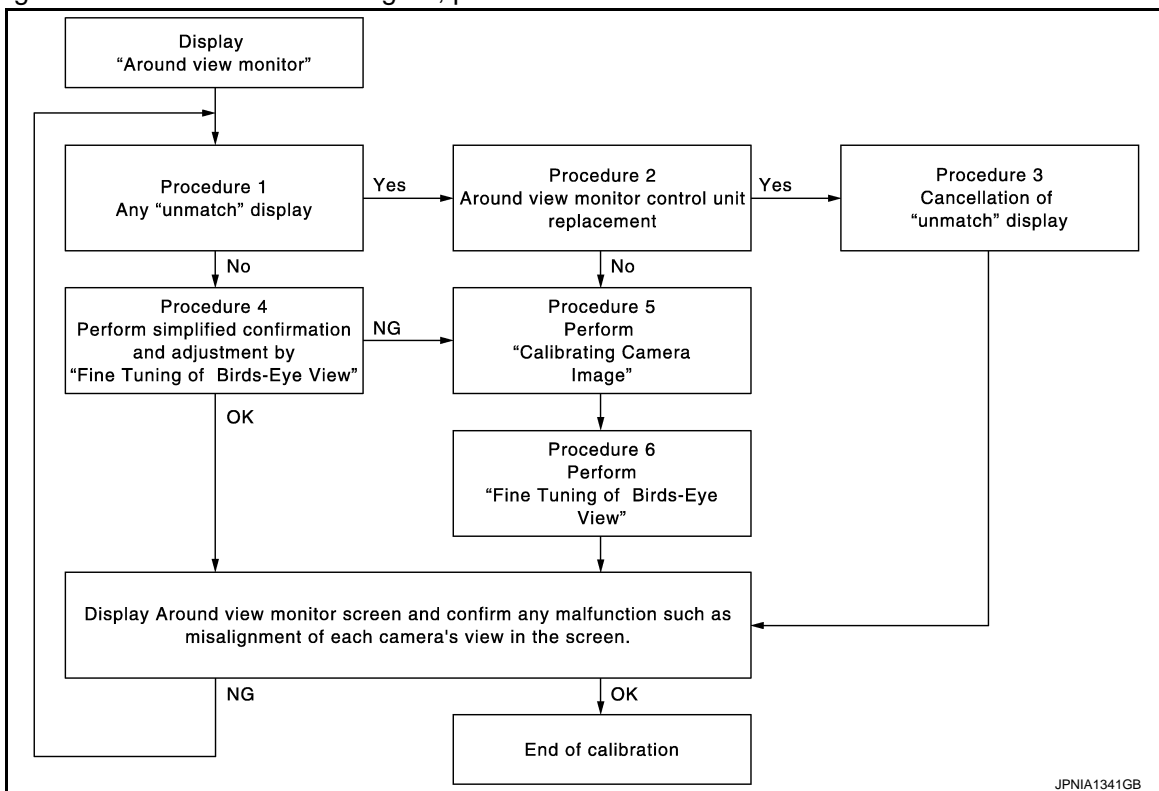
- Perform the calibration and perform the writing to the around view monitor control unit when removing and replacing each camera, removing the camera mounting parts (front grille, door mirror, etc.) and replacing the around view monitor control unit.
- Align the white lines on the road near the vehicle at the boundary of each camera image by this camera calibration. The white lines far from the vehicle may not be aligned at the boundary of each camera image. The farther the line, the greater the difference is.

CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Special Repair Requirement

INFOID:000000004347765

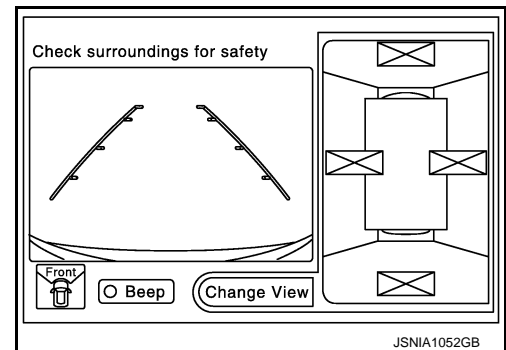
CALIBRATION FLOWCHART

Following the flowchart shown in the figure, perform the calibration.



NOTE:

In the un-match display, the un-match camera position is indicated as "⊠" on the birds-eye view.



CALIBRATION PROCEDURE

1. AROUND VIEW MONITOR SCREEN CONFIRMATION

INSPECTION AND ADJUSTMENT

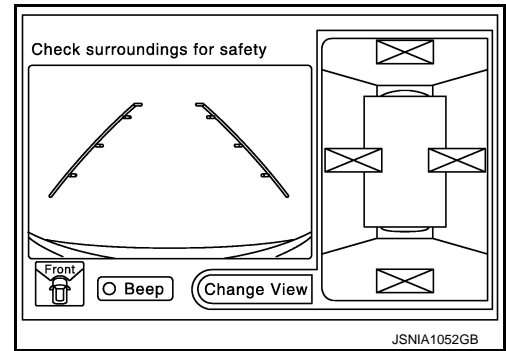
[BOSE AUDIO WITH NAVIGATION]

< BASIC INSPECTION >

Check that there is the un-match display in any camera.

Is the un-match display visible?

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



2. CHECK THAT AROUND VIEW MONITOR CONTROL UNIT IS REPLACED

Check that the around view monitor control unit is replaced.

Is the around view monitor control unit replaced?

- YES >> GO TO 3.
- NO >> GO TO 5.

3. RELEASE UN-MATCH DISPLAY (PERFORM ONLY WHEN THE AROUND VIEW MONITOR CONTROL UNIT IS REPLACED)

1. Select "Camera Cont." of Confirmation/ Adjustment mode, and then set to "Calibrating Camera Image" mode.
2. Press the "ENTER" switch of the multifunction switch on each screen of "Rear Camera", "Front Camera", "Dr-Side Camera", "Pass-Side Camera".

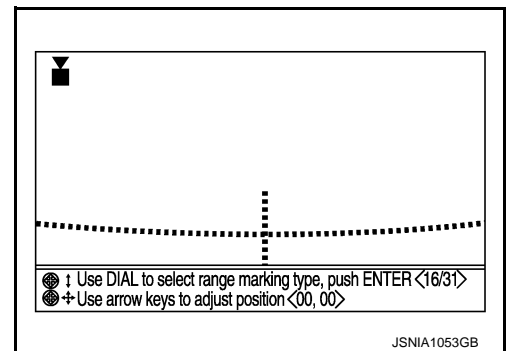
CAUTION:

- Do never operate the center dial and up/down/left/right switches. Only press the "ENTER" switch.
- Never perform "Initialize Camera Image Calibration".

3. Display the around view monitor screen, and check that there is no malfunction such as a difference between each camera image.

Is there a malfunction?

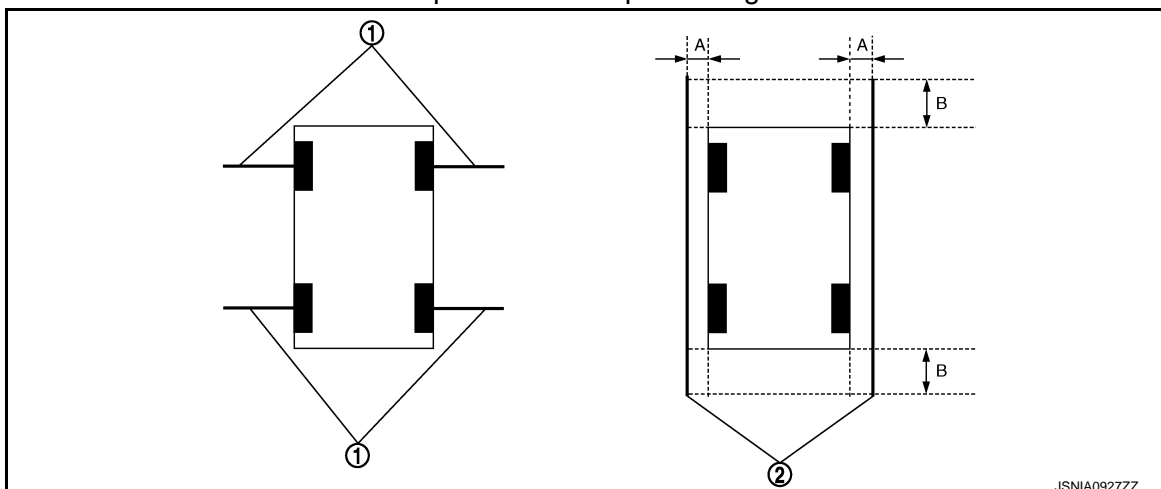
- YES >> Calibration end
- NO >> GO TO 1.



4. PERFORM SIMPLIFIED CONFIRMATION/ADJUSTMENT BY "FINE TUNING OF BIRDS-EYE VIEW"

1. Put target line 1 on the ground beside each axle using packing tape, etc.
2. Put target lines 2 equal to the vehicle total length + approximately 1.0 m (39.3 in) from the vehicle side (right and left) at approximately 30 cm (11.8 in) away from the vehicle (make the line as parallel with the vehicle as possible)

Preparation of simplified target line



INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

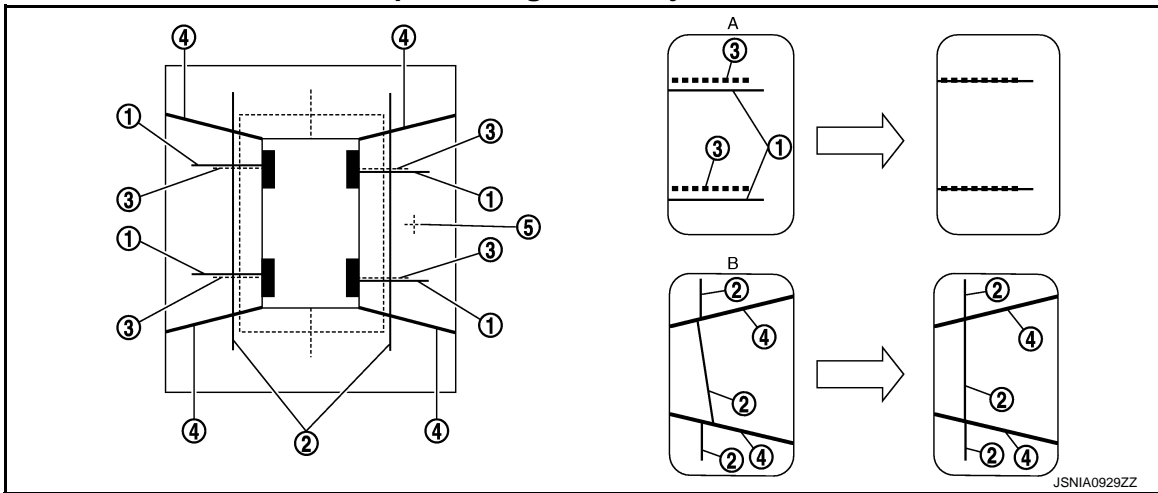
[BOSE AUDIO WITH NAVIGATION]

1. Target lines 1
2. Target lines 2
- A. Approx. 30 cm (11.8 in)
- B. Approx. 1.0 m (39.3 in)
3. Select "Camera Cont." of Confirmation/ Adjustment mode, and then set to "Fine Tuning of Birds-Eye View-mode."
4. Select left and right cameras by pressing the "CAMERA" switch, and perform the following confirmation.
 - Check that target line 1 is aligned with the marker on the screen. Overlap the line aligned to the marker with the upper/lower switches if necessary.
 - Check if there is a difference between target lines 2 between cameras. Adjust target lines 2 to be straight lines by operating the center dial and left/right switches if necessary.

CAUTION:

- Never adjust the front camera and rear camera. Only adjust the right and left cameras.
- Operate the center dial slowly because the changing of the screen takes approximately 1 second.

Simplified target line adjustment method



1. Target lines 1
2. Target lines 2
3. Marker for target line 1
4. Boundary between cameras
5. Crosshairs cursor (mark indicated the selected camera)
- A. Adjustment method for target lines 1 (right)
- B. Adjustment method for target lines 2 (right)

5. Adjust left and right cameras. Check that the difference between target line 1 and the marker on the screen, and between target lines 2 is solved.

NOTE:

- It can be initialized to the NISSAN factory default condition with "Initialize Camera Image Calibration" of "Calibrating Camera Image".
- The adjustment value is cancelled on this mode by performing "Initialize Camera Image Calibration".

Is the difference corrected?

- YES >> Finish the writing to around view monitor control unit by pressing "ENTER" switch.
- NO >> GO TO 5.

5.PERFORM "CALIBRATING CAMERA IMAGE"

Preparation of target line

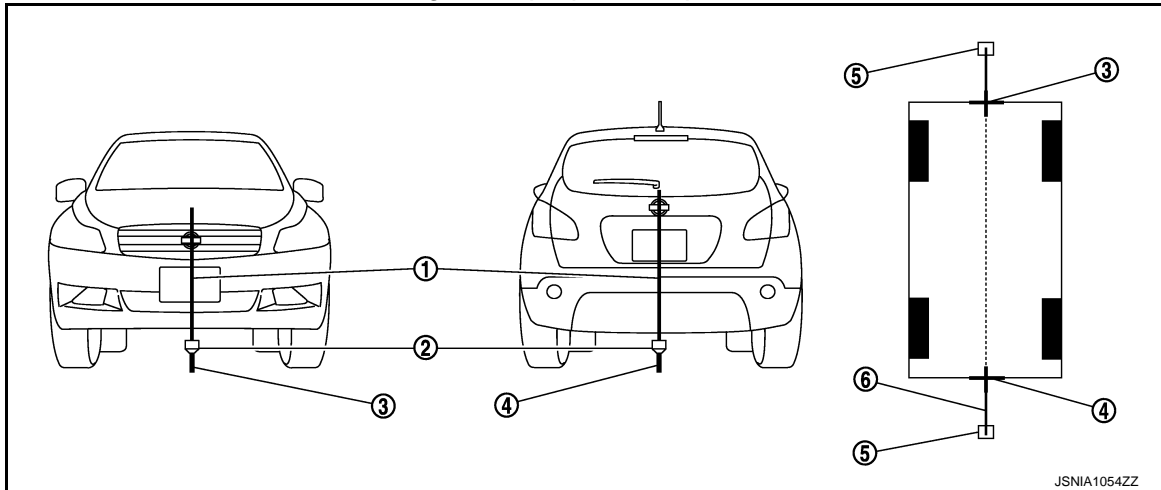
1. Hang a string with a weight as shown in the figure. Put the points FM0, RM0 (mark) on the ground at the center of the vehicle front end and rear end with white packing tape or a pen.
2. Route the vinyl string under the vehicle, and then pull and fix it on the point approximately 1.0 m (39.3 in) to the front and rear of the vehicle through the points FM0 and RM0 using packing tape.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BOSE AUDIO WITH NAVIGATION]

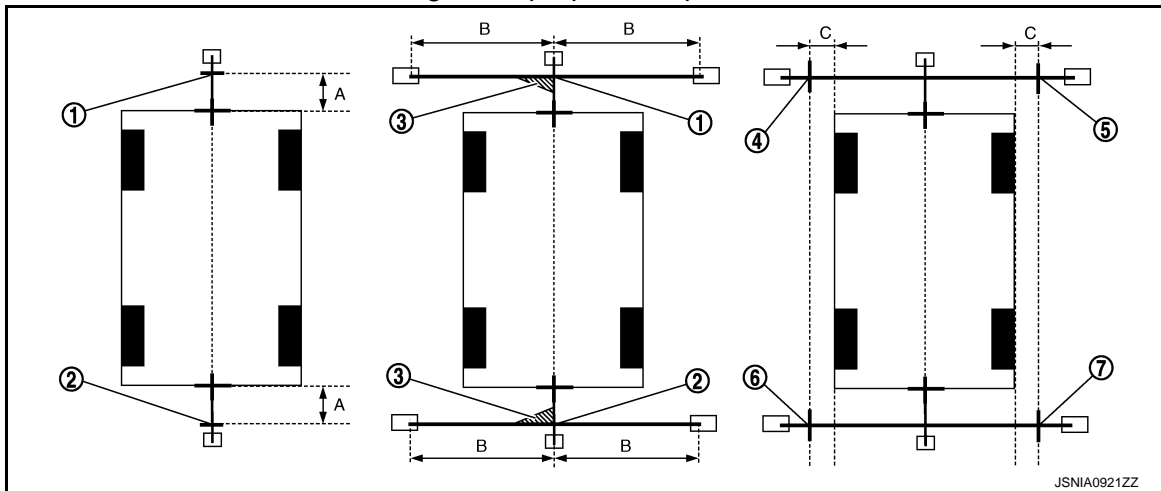
Target line preparation procedure 1



- | | | |
|---------------------|---|---------------------|
| 1. Thread | 2. Weight | 3. Point FM0 (mark) |
| 4. Point RM0 (mark) | 5. Packing tape (to fix the vinyl string) | 6. Vinyl string |

- Put the points FM and RM (mark) 75 cm (29.5 in) from the points FM0 and RM0 individually.
- Route the vinyl string through the points FM and RM using a triangle scale, and then fix it at approximately 1.5 m (59 in) on both sides with packing tape.
- Put the points FL, FR, RL, and RR (mark) to both right and left [vehicle width / 2 + 30 cm (11.8 in)] from the points FM and RM.

Target line preparation procedure 2



- | | | |
|--------------------|--------------------|--------------------|
| 1. Point FM | 2. Point RM | 3. Triangle scale |
| 4. Point FL (mark) | 5. Point FR (mark) | 6. Point RL (mark) |
| 7. Point RR (mark) | | |

- | | | |
|--------------------|--------------------------|---|
| A. 75 cm (29.5 in) | B. Approx. 1.5 m (59 in) | C. 30 cm (11.8 in) |
| | | [Vehicle width / 2 + 30 cm (11.8 in) from the points FM and RM] |

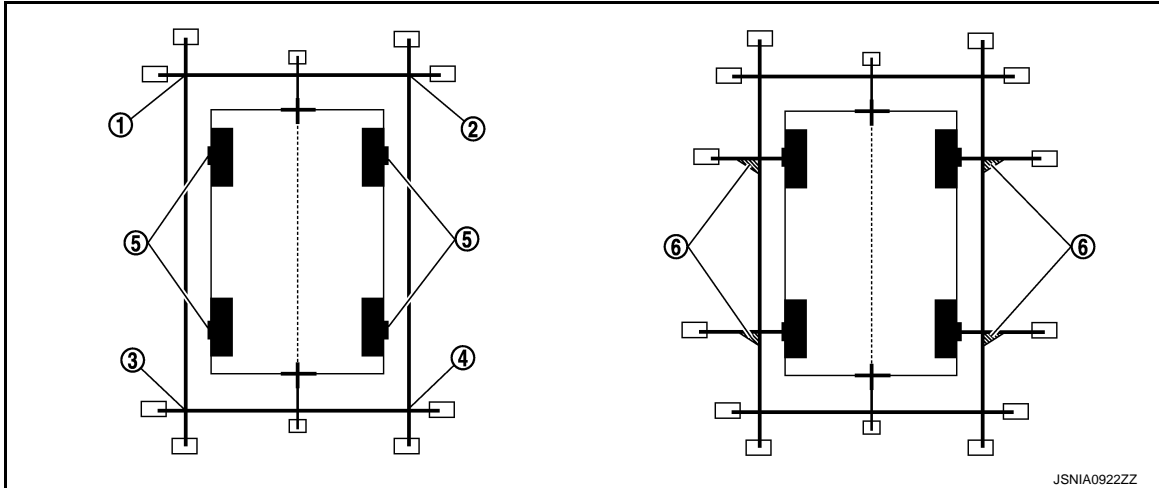
- Draw the lines of the points FL – RL and FR – RR with vinyl string, and fix it with packing tape.
- Put a mark on the center of each axle, draw vertical lines to the lines of the points FL – RL and FR – RR from the marks on the center of the axle using a triangle scale, and then fix the lines using packing tape.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BOSE AUDIO WITH NAVIGATION]

Target line preparation procedure 3



- | | | |
|-------------|----------------------------|-------------------|
| 1. Point FL | 2. Point FR | 3. Point RL |
| 4. Point RR | 5. Center position of axle | 6. Triangle scale |

Perform "Calibrating Camera Image"

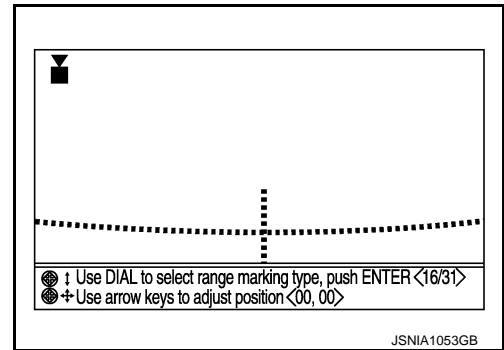
1. Select "Camera Cont." of "Confirmation/ Adjustment" mode, and then set to "Calibrating Camera Image" mode.
2. Overlap the target lines drawn on the ground with the calibration marker on the screen by operating the center dial and upper/lower/left/right switches of multifunction switch on each screen of "Rear Camera", "Pass-Side Camera", "Front Camera", "Dr-Side Camera".

Adjustment range

Rotation direction (Center dial) : 31 patterns (16 on the center)

Upper/lower direction (upper/lower switch) : -99 - 99

Left/right direction (left/right switch) : -99 - 99



3. "Writing..." is displayed by pressing the "ENTER" switch, and then the adjustment result is written to the around view monitor control unit.

CAUTION:

Check that "Writing..." is displayed. Do never perform other operations while "Writing..." is displayed.

>> GO TO 6.

6.PERFORM "FINE TUNING OF BIRDS-EYE VIEW"

This mode is designed to align the boundary between each camera image that could not be aligned in the "Calibrating Camera Image" mode.

1. Select "Camera Cont." of "Confirmation/ Adjustment" mode, and then set to "Fine Tuning of Birds-Eye View" mode.

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BOSE AUDIO WITH NAVIGATION]

2. Operate the center dial and upper/lower/left/right switch to overlap the marker on the screen and the target lines on the ground.
NOTE:
Move the “+”- mark on the camera position to adjustment by pressing the “CAMERA” switch.
3. When the target line is overlapped on the marker, press the “ENTER” switch to write the adjustment result to the around view monitor control unit.

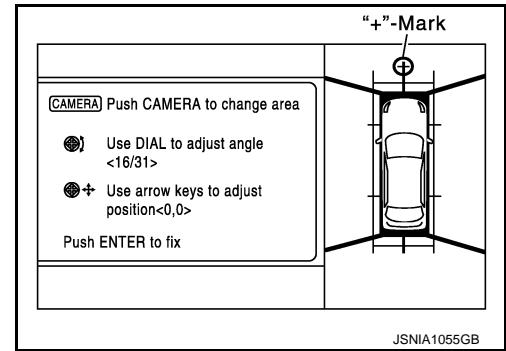
CAUTION:

Check that “Writing...” is displayed. Do never perform other operations while “Writing...” is displayed.

NOTE:

- It can be initialized to the NISSAN factory default condition with “Initialize Camera Image Calibration” of “Calibrating Camera Image”.
- The adjustment value is cancelled on this mode by performing “Initialize Camera Image Calibration”.

>> Calibration end



MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

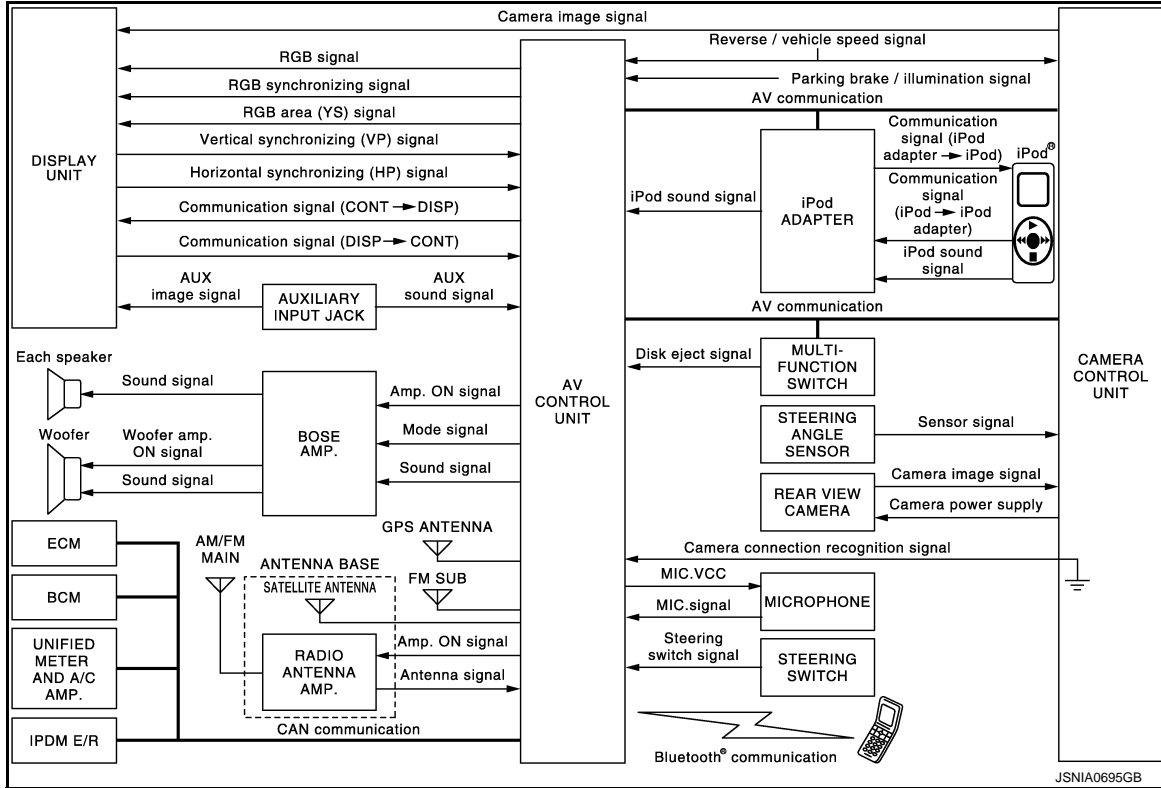
SYSTEM DESCRIPTION

MULTI AV SYSTEM

System Diagram

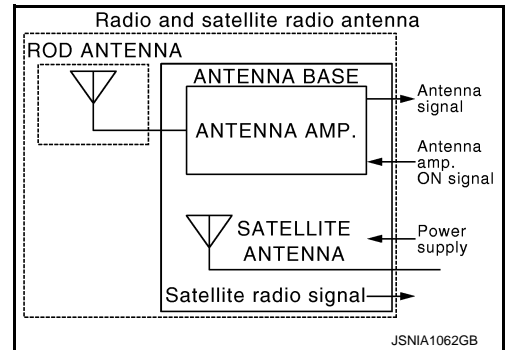
INFOID:000000004347766

WITH REAR VIEW MONITOR



NOTE:

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.

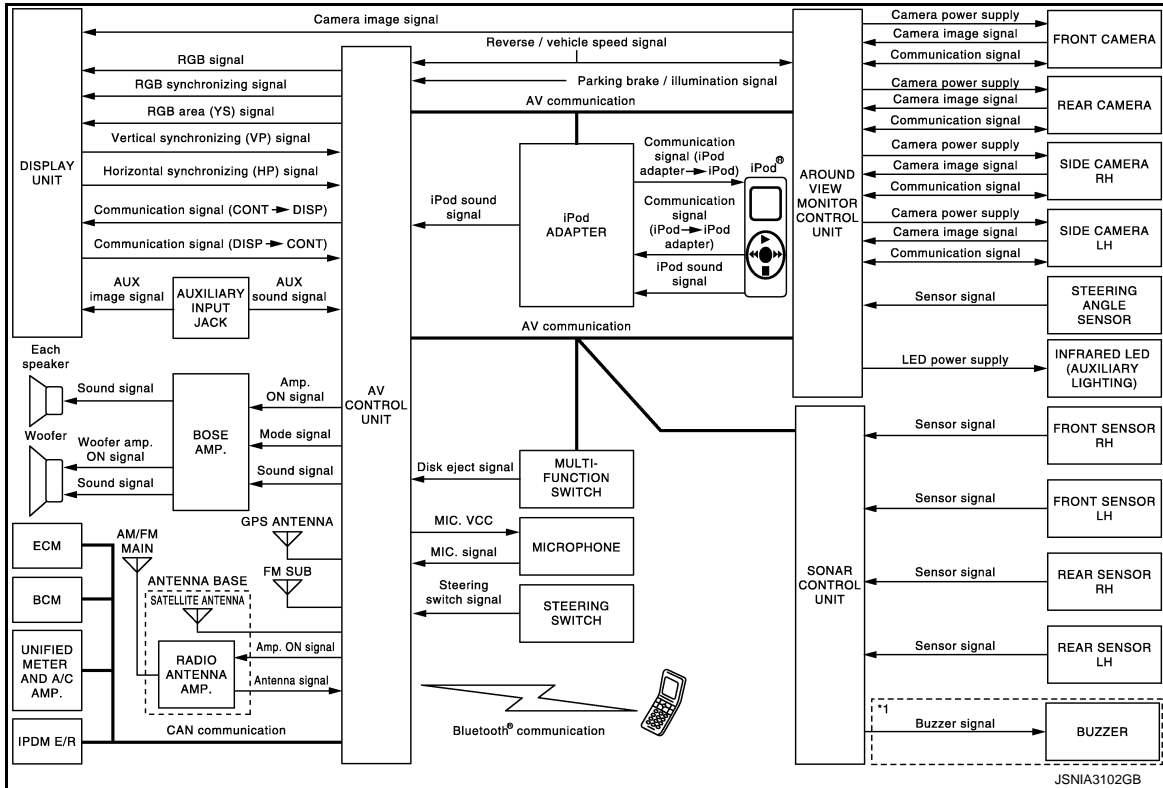


MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

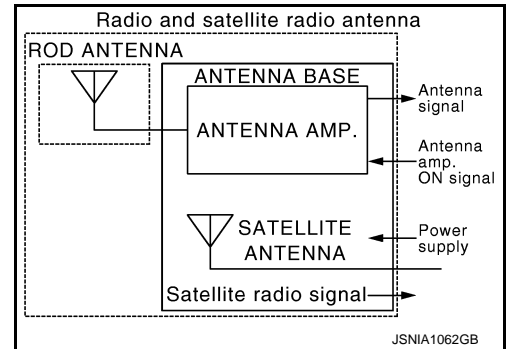
WITH AROUND VIEW MONITOR



*1: Up to vehicles manufactured on November 2008. A buzzer is included in the sonar control unit, starting from vehicles manufactured on December 2008.

NOTE:

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



System Description

INFOID:000000004347767

Multi AV system means that the following systems are integrated.

System name	System explanation
NAVIGATION SYSTEM	AV-192. "System Description"
AUDIO SYSTEM	AV-187. "System Description"
REAR VIEW MONITOR SYSTEM	AV-197. "System Description"
AROUND VIEW MONITOR SYSTEM	AV-201. "System Description"
VEHICLE INFORMATION SYSTEM	<ul style="list-style-type: none"> • Status of audio, climate control system, fuel economy, maintenance and navigation are displayed. • AV control unit displays the fuel consumption status while receiving data signal through CAN communication from ECM, unified meter and A/C amp. • AV control unit is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.

MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

System name	System explanation
HANDS-FREE PHONE SYSTEM	Refer to the following "HANDS-FREE PHONE SYSTEM".
AUXILIARY INPUT SYSTEM	Refer to the following "AUXILIARY INPUT SYSTEM".
VOICE RECOGNITION SYSTEM	Refer to the following "VOICE RECOGNITION SYSTEM".
TOUCH PANEL SYSTEM	Refer to the following "TOUCH PANEL SYSTEM".

- AV control unit function by transmitting/receiving data one by one with each unit (slave unit) that configures them completely as a master unit by connecting between units that configure MULTI AV system with two AV communication lines (H, L).
- Around view monitor control unit transmits/receives the data signal with sonar control unit and controls sonar control unit. Around view monitor control unit transmits the information received from sonar control unit to AV control unit. (With around view monitor)
- Two AV communication lines (H, L) adopt a twisted pair line that is resistant to noise.
- AV control unit is connected by CAN communication, and it receives data signals from ECM, unified meter and A/C amp. It computes and displays fuel economy information value with the obtained information. The transmitting/receiving of data signal is performed by BCM. In addition, it transmits the required signal of vehicle setting and receives the response signal.
- AV control unit is connected with display and serial communication, and it transmits the required signal of display and display control and receives the response signal from display. Also, it is connected with satellite radio by serial communication, and it transmits the operating signal and receives the display signal.

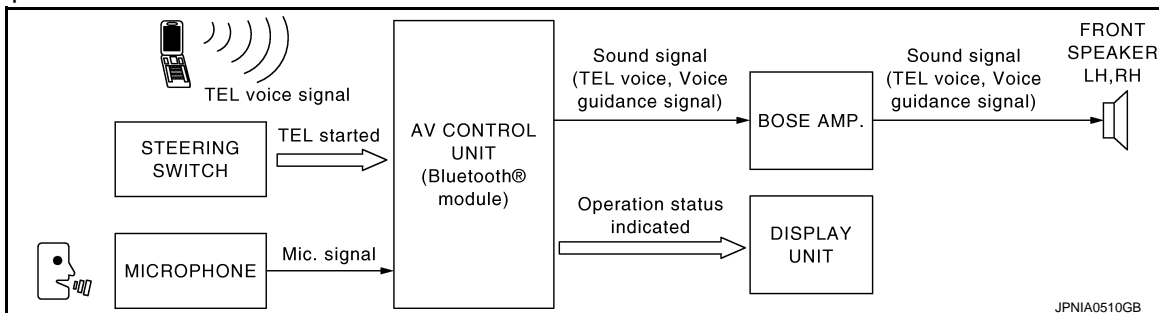
NOTE:

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

- CONSULT-III self diagnosis: Refer to [AV-233, "CONSULT-III Function \(MULTI AV\)"](#).
- On board self diagnosis: Refer to [AV-217, "Diagnosis Description"](#).

HANDS-FREE PHONE SYSTEM

- Hands-free communication can be operated by connecting using Bluetooth® with cellular phone.
- Operation is performed by steering switch, and operating condition is indicated on display.
- Guide sound that is heard during operation is input from AV control unit to BOSE amp. and is output from door speakers.



When A Call Is Originated

Spoken voice sound output from the microphone (Mic. Signal) is input into AV control unit. AV control unit outputs to cellular phone with Bluetooth communication as a TEL voice signal. Voice sound is then heard by the other party.

When Receiving A Call

Voice sound is input to one's own cellular phone from the other party. TEL voice signal is output to door speakers, and the signal is input to BOSE amp. via AV control unit by establishing Bluetooth communication from cellular phone.

AUXILIARY INPUT SYSTEM

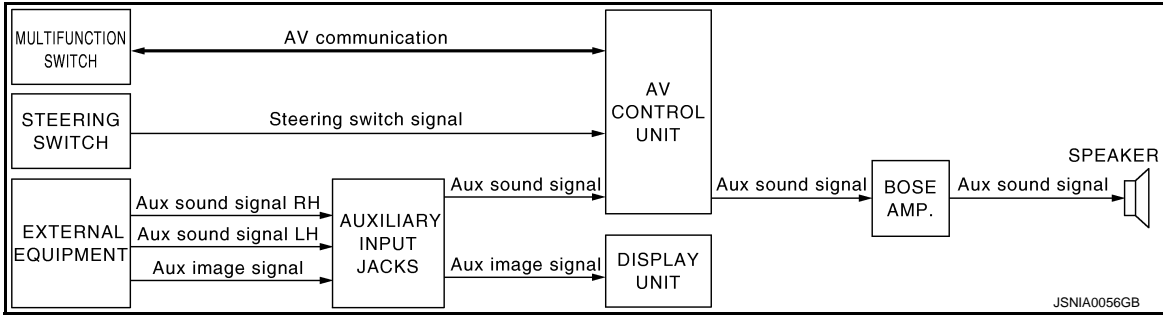
- Image and sound can be output from an external device by connecting a device with auxiliary input jacks.

MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

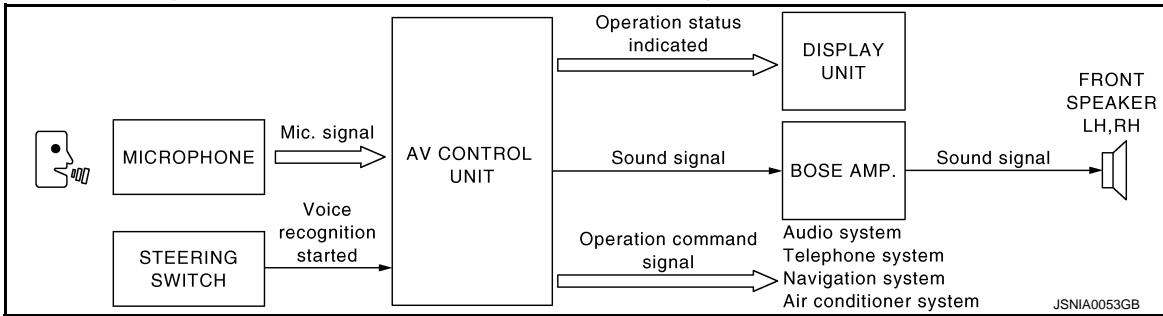
[BOSE AUDIO WITH NAVIGATION]

- Operation can be performed with multifunction switch and steering switch. Multifunction switch transmits operation signal to AV control unit by AV communication.



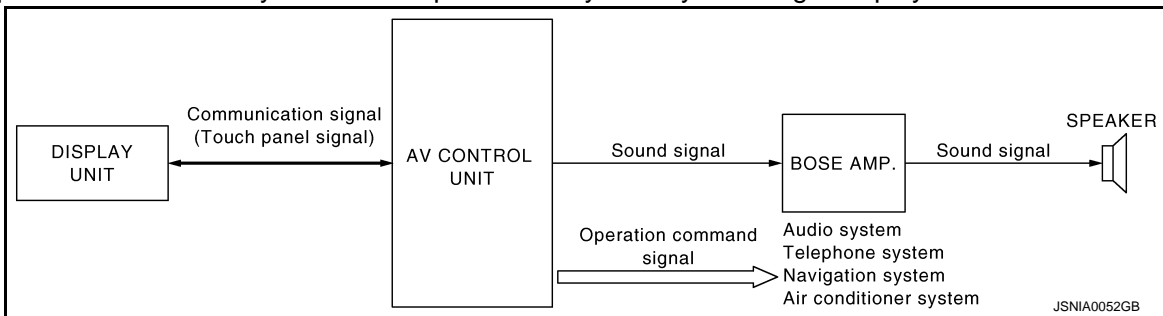
VOICE RECOGNITION SYSTEM

- Each operation of multi AV system can be performed by inputting sound to microphone.
- Start of sound recognition system can be performed by steering switch.



TOUCH PANEL SYSTEM

Each operation of multi AV system can be performed by directly touching a display.



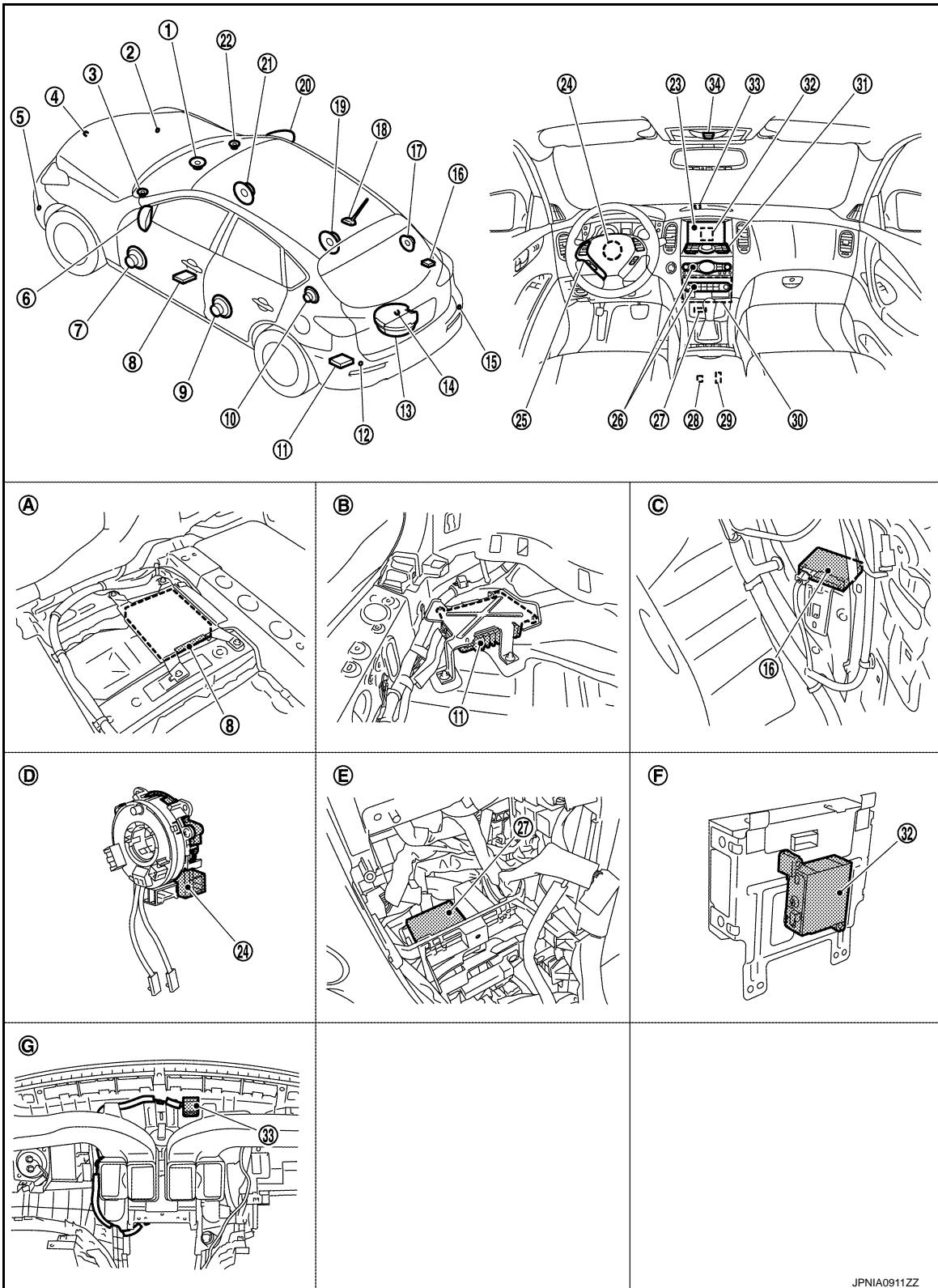
MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Component Parts Location

INFOID:000000004347768



- 1. Center speaker
- 4. Front camera

- 2. Corner sensor front RH
- 5. Corner sensor front LH

- 3. Front squawker LH
- 6. Side camera LH

MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

- | | | |
|-------------------------------|--|--|
| 7. Front door speaker LH | 8. • Around view monitor control unit (with around view monitor)
• Camera control unit (with rear view monitor) | 9. Rear door speaker LH |
| 10. Rear squawker LH | 11. BOSE amp. | 12. Corner sensor rear LH |
| 13. Woofer | 14. • Rear camera (with around view monitor)
• Rear view camera (with rear view monitor) | 15. Corner sensor rear RH |
| 16. Buzzer | 17. Rear squawker RH | 18. Antenna base (antenna amp and satellite antenna) |
| 19. Rear door speaker RH | 20. • Side camera RH
• Infrared LED (auxiliary lighting) | 21. Front door speaker RH |
| 22. Front squawker RH | 23. Display unit | 24. Steering angle sensor |
| 25. Steering switch | 26. Preset switch | 27. Sonar control unit (with around view monitor) |
| 28. iPod connector | 29. Auxiliary input jacks | 30. AV control unit |
| 31. Multifunction switch | 32. iPod adapter | 33. GPS antenna |
| 34. Microphone | | |
| A. Under front seat (LH side) | B. Luggage floor (LH side) | C. Luggage side RH |
| D. Spiral cable part | E. Cluster lid C removed condition | F. Rear view of the display unit |
| G. Instrument panel rear side | | |

Component Description

INFOID:000000004347769

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> Integrates hard disk drive (HDD) allowing map data and music data to be stored. It is the master unit of the MULTI AV system, and is connected to each control unit by communication. It operates each system according to communication signals from AV control unit. AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions. It is connected to ECM, unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function. It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function. It inputs the illumination signals that are required for the display dimming control. It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake). Update of map data is performed with the CONSULT-III and the applicable cable. AV control unit recognizes the presence of camera system with camera connection recognition signal.
DISPLAY UNIT	<ul style="list-style-type: none"> Display image is controlled by the serial communication from AV control unit. RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing). Auxiliary image signal is input from the auxiliary input jack. Camera image signal is input from camera control unit. Synchronize signal (HP, VP) is output to AV control unit. Touch panel function can be operated for each system by touching a display directly.
BOSE AMP.	<ul style="list-style-type: none"> Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to woofer and each speaker. Input "Driver's Audio Stage" mode change signal from AV control unit. Woofer amp. ON signal is transmitted to woofer.
FRONT DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (mid and low range).

MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Part name	Description	
REAR DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (mid and low range). 	A
FRONT SQUAWKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (high and mid range). 	B
REAR SQUAWKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (high and mid range). 	C
CENTER SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (high and mid range). 	
WOOFER	<ul style="list-style-type: none"> Inputs power (amp. ON) and sound signal from BOSE amp. Outputs low-frequency sound. 	D
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> Operation panel is equipped with the centralized switch where audio, auxiliary input and navigation operations are integrated. Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication. 	E
PRESET SWITCH	<ul style="list-style-type: none"> Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated. Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication. The disk ejection operating signal is performed by hardware. 	F
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> Camera image signal is input from rear view camera. Camera image signal output to display unit. Power (camera ON signal) is transmitted to rear view camera. Superimposes the guiding line, predicted course line and sonar indicator to camera image that outputs to display unit. Input the sensor signal from the steering angle sensor, and then control the predicted course line. Camera control unit is connected via AV communication. 	G
REAR VIEW CAMERA	<ul style="list-style-type: none"> The image from rear camera is transmitted to camera control unit. It receives power (camera ON signal) from camera control unit and operates. 	H
AROUND VIEW MONITOR CONTROL UNIT	<ul style="list-style-type: none"> It supplies power to front camera, rear camera, and side camera. And then it superimposes the images from each camera and outputs them to display unit. Superimpose the guiding line, predicted course line and sonar indicator to the camera image that outputs to display unit. It performs the reception/transmission of communication signal with each camera. Inputs the sensor signal from steering angle sensor, and then controls the predicted course line. It transmits the sonar operation signal from sonar control unit and receives the sonar information from sonar control unit via AV communication. It transmits the information received/transmitted with sonar control unit via AV communication to AV control unit. 	I
FRONT CAMERA	<ul style="list-style-type: none"> It inputs the power supply from around view monitor control unit and outputs the image of the vehicle front to around view monitor control unit. It performs the reception/transmission of the communication signal with around view monitor control unit. 	J
REAR CAMERA	<ul style="list-style-type: none"> It inputs the power supply from around view monitor control unit and outputs the image of the vehicle rear to around view monitor control unit. It performs the reception/transmission of the communication signal with around view monitor control unit. 	K
SIDE CAMERA LH	<ul style="list-style-type: none"> It inputs the power supply from around view monitor control unit and outputs the image of the vehicle LH to around view monitor control unit. It performs the reception/transmission of the communication signal with around view monitor control unit. 	L
SIDE CAMERA RH	<ul style="list-style-type: none"> It inputs the power supply from around view monitor control unit and outputs the image of the vehicle RH to around view monitor control unit. It performs the reception/transmission of the communication signal with around view monitor control unit. 	M

AV

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MULTI AV SYSTEM

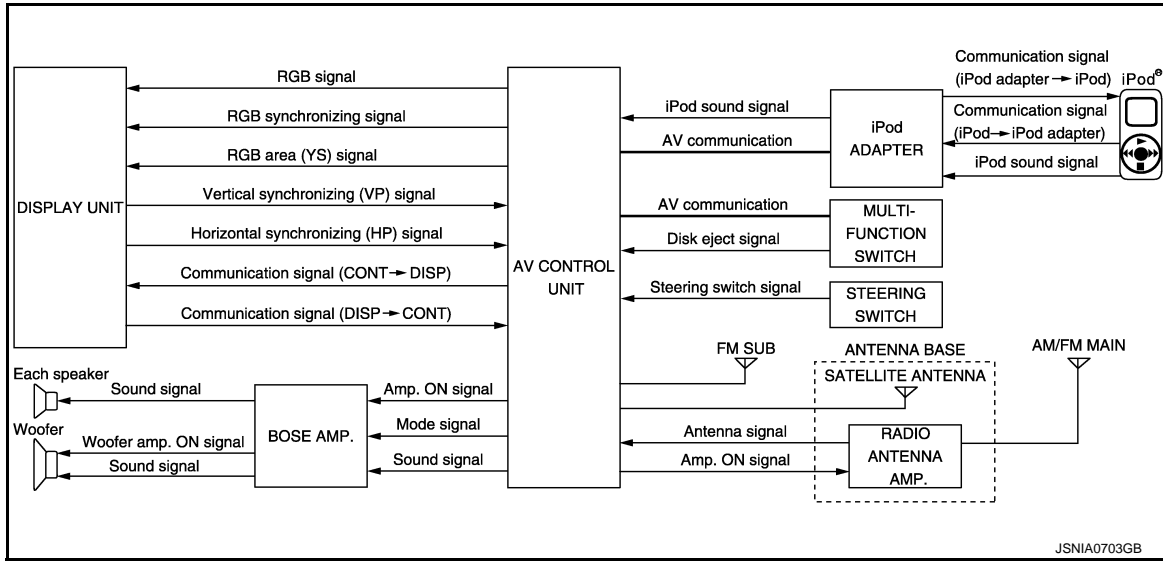
< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Part name	Description
INFRARED LED (AUXILIARY LIGHTING)	<ul style="list-style-type: none"> It illuminates around the front RH wheel by the power supply from around view monitor control unit to improve nighttime visibility of Front-Side view. The infrared LED is an invisible light ray.
STEERING SWITCH	<ul style="list-style-type: none"> Operations for audio, hands-free phone, audio response and navigation, etc. are possible. Steering switch signal (operation signal) is output to AV control unit.
STEERING ANGLE SENSOR	Steering signal necessary for predicted course line control is transmitted to camera control unit or around view monitor control unit.
MICROPHONE	<ul style="list-style-type: none"> Used for hands-free phone operation and voice recognition. Mic. signal is transmitted to AV control unit. Power (Mic. VCC) is supplied from AV control unit.
AUXILIARY INPUT JACKS	Image signal of auxiliary input is output to display, and sound signal is output to AV control unit.
GPS ANTENNA	GPS signal is received and transmitted to AV control unit.
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p>ANTENNA AMP.</p> <ul style="list-style-type: none"> Radio signal received by rod antenna is amplified and transmitted to AV control unit. Power (antenna amp. ON signal) is supplied from AV control unit. <p>SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none"> Receives satellite radio waves and outputs it to satellite radio tuner.
iPod ADAPTER	<ul style="list-style-type: none"> Inputs iPod sound signal from iPod[®], and outputs iPod sound signal to AV control unit. Receiving/transmitting of iPod[®] operation signals are performed as follows: <ul style="list-style-type: none"> between AV control unit and iPod adapter: AV communication. between iPod[®] and iPod adapter: serial communication.
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)	<ul style="list-style-type: none"> It is connected with around view monitor control unit via AV communication and receives the sonar operation signal from around view monitor control unit. It transmits the sonar detection status to around view monitor control unit via AV communication. It transmits a buzzer signal to the buzzer, based on a sonar operation signal received from the around view monitor control unit. (Up to vehicles manufactured on November 2008) It sounds the integral buzzer, based on a sonar operation signal received from the around view monitor control unit. (From vehicles manufactured on December 2008) Trouble diagnosis is supported with CONSULT-III (K-LINE).
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to sonar control unit.
BUZZER	The warning buzzer outputs with the signal from sonar control unit.

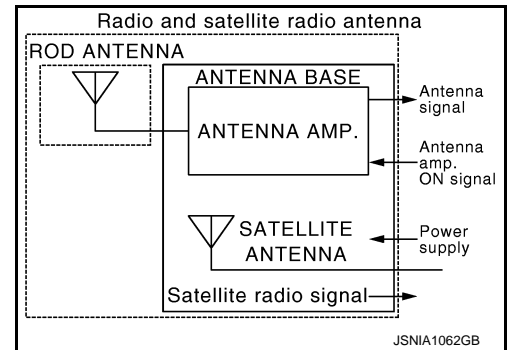
AUDIO SYSTEM

System Diagram



NOTE:

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



System Description

The audio system is equipped with the following functions. Each function is operated by multifunction switch, preset switch, touch panel, steering switch or audio recognition. Operation status of AUDIO is indicated at display.

Function
AM/FM radio
Satellite radio
CD
Music Box (Hard Disk Drive)
CF (Compact Flash)
iPod connection
Driver's Audio Stage

FUNCTION DESCRIPTION

Operating Signal

Audio system operation can be performed with multifunction switch, preset switch, steering switch, touch panel function or voice recognition function.

- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The disk ejection operating signal is performed by hardware.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.

AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

- Refer to [AV-180. "System Description"](#) for explanation of voice recognition function and touch panel function.

Screen Display

- The display is switched by communication signal between display unit and AV control unit.
- The image signal that displays operating status is performed by the RGB signal, RGB area signal and RGB synchronizing signal.

AM/FM Radio Mode

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

Satellite Radio Mode

- Satellite radio tuner is built into AV control unit.
- Audio signal (satellite radio) is received by satellite antenna, and it is input to AV control unit. AV control unit outputs audio signal to BOSE amp. The signal is also outputted from BOSE amp. to both woofer and each speaker.

CD Mode

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

Music Box Mode

- Music CD data is stored on HDD that is built into AV control unit, and it can be played.
- AV control unit outputs music (audio signal) that is stored on HDD to BOSE amp., and BOSE amp. outputs to woofer and each speaker.

CF Mode

- AV control unit has built in CF replay function.
- Music (audio signal) that is stored in CF outputs to BOSE amp. and BOSE amp. outputs to woofer and each speaker when CF is inserted into AV control unit.

iPod Connection

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

Driver's Audio Stage Mode

- Driver's Audio Stage controls the speaker's output characteristics by BOSE amp. so that the driver seat is the center of sound.
- ON/OFF signals of Driver's Audio Stage are transmitted from AV control unit to BOSE amp. using mode change signal.

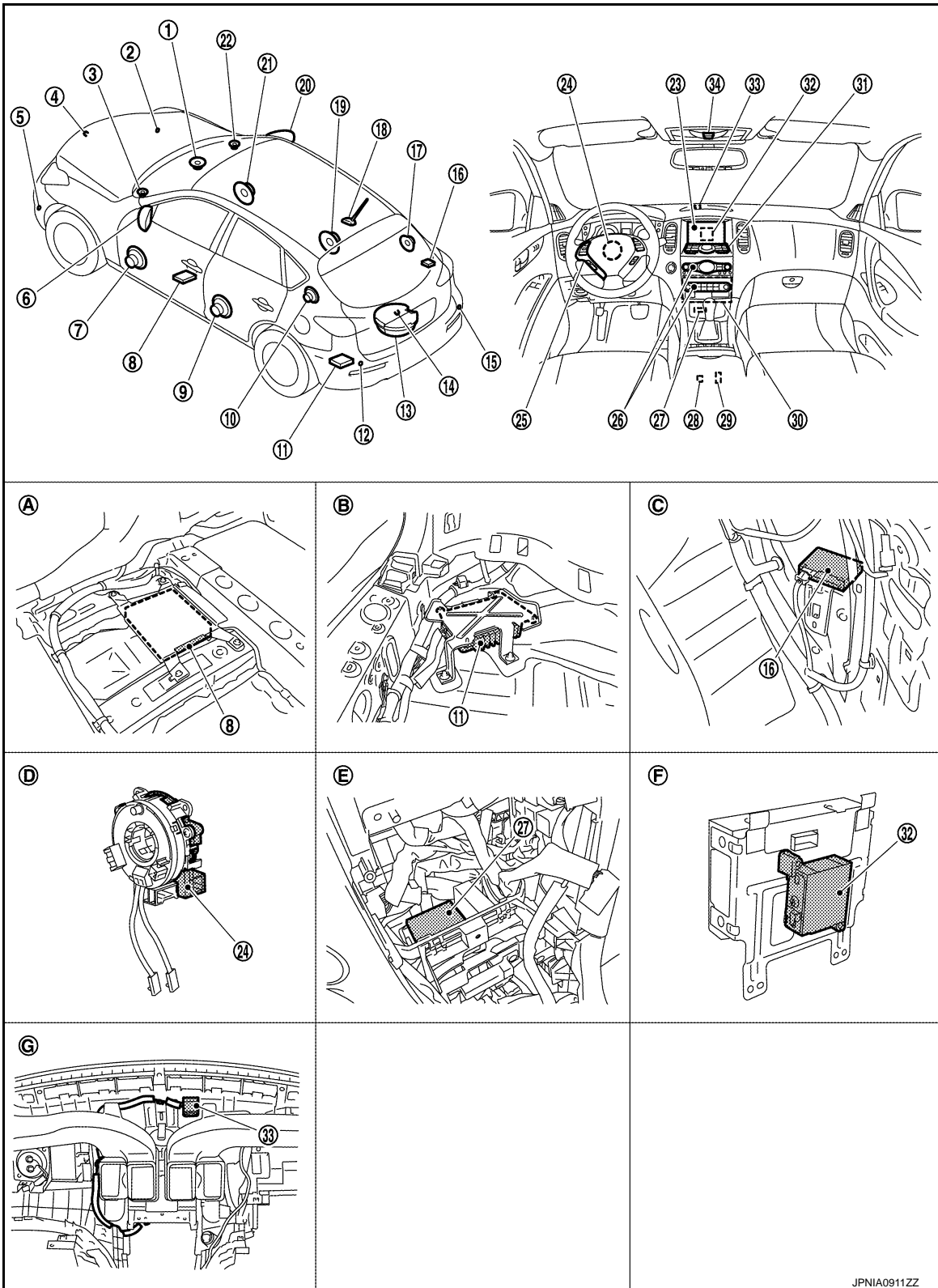
AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Component Parts Location

INFOID:000000004921661



- 1. Center speaker
- 4. Front camera

- 2. Corner sensor front RH
- 5. Corner sensor front LH

- 3. Front squawker LH
- 6. Side camera LH

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AV

AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

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| 7. Front door speaker LH | 8. • Around view monitor control unit (with around view monitor)
• Camera control unit (with rear view monitor) | 9. Rear door speaker LH |
| 10. Rear squawker LH | 11. BOSE amp. | 12. Corner sensor rear LH |
| 13. Woofer | 14. • Rear camera (with around view monitor)
• Rear view camera (with rear view monitor) | 15. Corner sensor rear RH |
| 16. Buzzer | 17. Rear squawker RH | 18. Antenna base (antenna amp and satellite antenna) |
| 19. Rear door speaker RH | 20. • Side camera RH
• Infrared LED (auxiliary lighting) | 21. Front door speaker RH |
| 22. Front squawker RH | 23. Display unit | 24. Steering angle sensor |
| 25. Steering switch | 26. Preset switch | 27. Sonar control unit (with around view monitor) |
| 28. iPod connector | 29. Auxiliary input jacks | 30. AV control unit |
| 31. Multifunction switch | 32. iPod adapter | 33. GPS antenna |
| 34. Microphone | | |
| A. Under front seat (LH side) | B. Luggage floor (LH side) | C. Luggage side RH |
| D. Spiral cable part | E. Cluster lid C removed condition | F. Rear view of the display unit |
| G. Instrument panel rear side | | |

Component Description

INFOID:000000004347773

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> Receiving function of AM/FM/satellite radio, replaying function of CD, replaying/saving functions of music box (HDD), replaying function of CF and voice recognition function are integrated. Audio signal is output to BOSE amp. from each function.
DISPLAY UNIT	<ul style="list-style-type: none"> Display image is controlled by the serial communication from AV control unit. RGB image signal (audio operation condition) is input from AV control unit. Touch panel function can be operated for each system by touching the display directly.
BOSE AMP.	<ul style="list-style-type: none"> Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to woofer and each speaker. Input "Driver's Audio Stage" mode change signal from AV control unit. Woofer amp. ON signal is transmitted to woofer.
FRONT DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (mid and low range).
REAR DOOR SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (mid and low range).
FRONT SQUAWKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (high and mid range).
REAR SQUAWKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (high and mid range).
CENTER SPEAKER	<ul style="list-style-type: none"> Outputs sound signal from BOSE amp. Outputs sound (high and mid range).
WOOFER	<ul style="list-style-type: none"> Inputs power (amp. ON) and sound signals from BOSE amp. Outputs low-frequency sound.
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> Each audio operation can be operated. Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication.
PRESET SWITCH	<ul style="list-style-type: none"> Each audio operation can be operated. Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication. The disk ejection operating signal is performed by hardwire.

AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

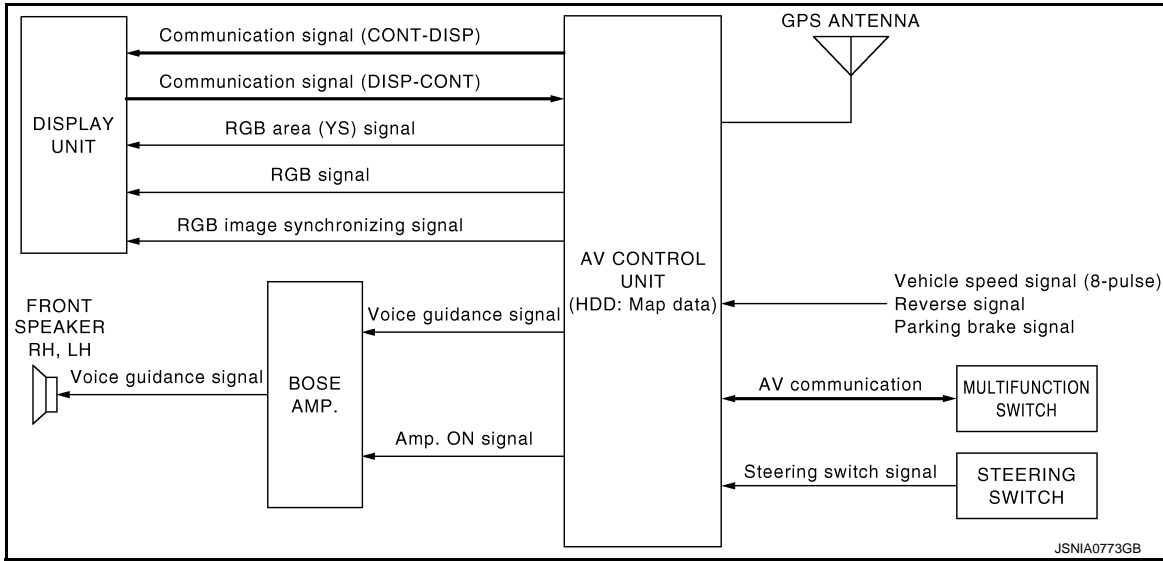
Part name	Description
STEERING SWITCH	<ul style="list-style-type: none"> • Each audio operation can be operated. • Steering switch signal (operation signal) is output to AV control unit.
ANTENNA AMP.	<ul style="list-style-type: none"> • Radio signal received by rod antenna is amplified and transmitted to AV control unit. • Power (antenna amp ON. signal) is supplied from AV control unit.
SATELLITE RADIO ANTENNA	Audio signal (satellite radio) is received and output to AV control unit.
iPod ADAPTER	<ul style="list-style-type: none"> • Inputs iPod sound signal from iPod[®], and outputs iPod sound signal to AV control unit. • Receiving/transmitting of iPod[®] operation signals are performed as follows: <ul style="list-style-type: none"> - between AV control unit and iPod adapter: AV communication. - between iPod[®] and iPod adapter: serial communication.

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AV

NAVIGATION SYSTEM

System Diagram



System Description

INFOID:000000004347775

DESCRIPTION

- AV control unit controls navigation function while GPS tuner has built-in map data, GYRO (angle speed sensor), on the HDD (Hard Disk Drive).
- AV control unit inputs operation signals with communication signals, through display (touch panel), multifunction switch and steering switch.
- Guide sound is output to front speaker through BOSE amp. from AV control unit when operating navigation system.
- The vehicle position is calculated through the GYRO (angle speed sensor), vehicle sensor, signal from GPS satellite and map data stored on HDD (Hard Disk Drive), and transmits the map image signal (RGB image, RGB area, RGB image synchronizing) to display.

POSITION DETECTION PRINCIPLE

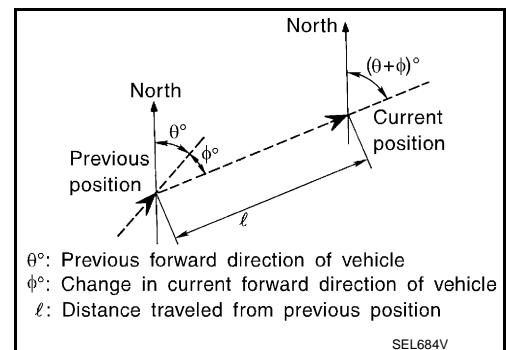
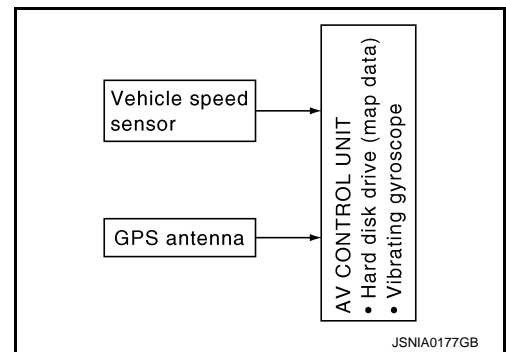
The navigation system periodically calculates the current vehicle position according to the following three types of signals.

- Travel distance of the vehicle as determined by the vehicle speed sensor
- Vehicle turning angle determined by the gyroscope (angular speed sensor)
- The travel direction of the vehicle determined by the GPS antenna (GPS information)

The current position of the vehicle is then identified by comparing the calculated vehicle position with map data, which is stored in the HDD (Hard Disk Drive) (map-matching), and indicated on the screen with the current location mark. More accurate data is used by comparing position detection results from GPS to map-matching.

The current position is calculated by detecting the travel distance from the previous calculation point, and its direction change.

- Travel distance
The travel distance is generated from the vehicle speed sensor input signal. The automatic distance correction function is adopted for preventing a miss-detection of the travel distance because of tire wear etc.
- Travel direction
The gyroscope (angular velocity sensor) and GPS antenna (GPS information) detect a change in travel direction. Both have advantages and disadvantages as per the following descriptions.

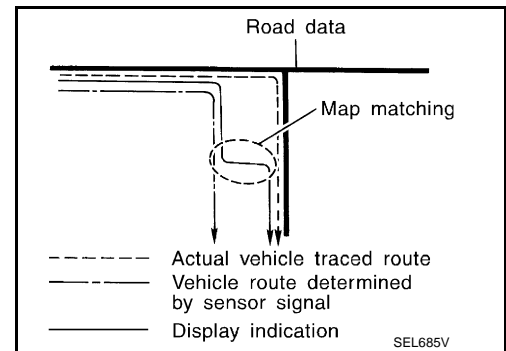


Type	Advantage	Disadvantage
Gyroscope (angular velocity sensor)	The turning angle is precisely detected.	Errors are accumulated when driving a long distance without stopping.
GPS antenna (GPS information)	The travel direction (North/South/East/West) is detected.	The travel direction is not precisely detected when driving slowly.

Input signals are prioritized in each situation. However, this order of priority may change in accordance with more detailed travel conditions so that the travel direction is detected more accurately.

MAP-MATCHING

Map-matching repositions the vehicle on the road map when a new location is judged to be more accurate. This is done by comparing the current vehicle position (calculated by the normal position detection method) from the map data stored in the HDD (Hard Disk Drive).

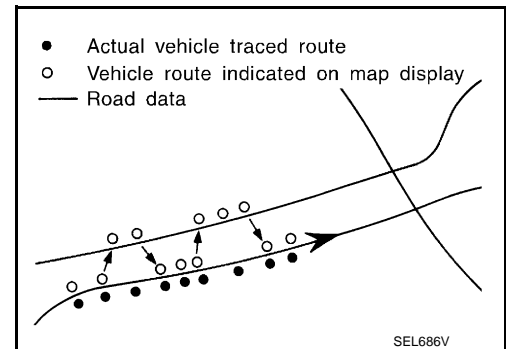


There is a possibility that the vehicle position may not be corrected in the following case, or when vehicle is driven over a certain distance or time in which GPS information is hard to receive. Manually correct the current location mark on the screen.

- In map-matching, several alternative routes are prepared and prioritized in addition to the road detected as currently being driven on.

Therefore, due to errors in the distance and/or direction, an incorrect road may be prioritized, and the current location mark may be repositioned to the incorrect road.

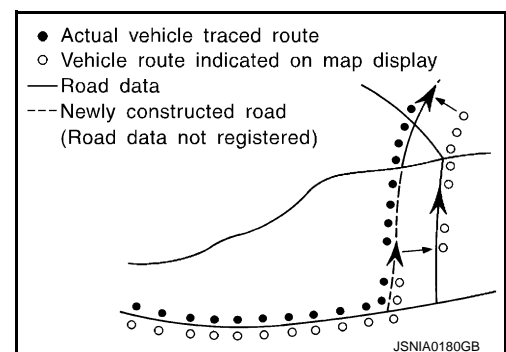
If two roads are running parallel, they are of the same priority. Therefore, the current location mark may appear on either of them alternately, depending on steering wheel movement and road configuration, etc.



- Map-matching does not function correctly when road that the vehicle is driving on new, etc, or not recorded in the map data. Also, map-matching does not function correctly when road patterns stored in the map data and the actual road pattern are different due to repair, etc.

Therefore, the map-matching function judges an other road as currently being driven on road if the road is not on the map, and displays the current location mark on it. Later, the current location mark may be repositioned if the correct road is detected.

- Effective range for comparing the vehicle position and travel direction calculated by the distance and direction with the road data is limited. Therefore, correction by map-matching is not possible when there is an excessive gap between current vehicle position and the position on the map.



GPS (GLOBAL POSITIONING SYSTEM)

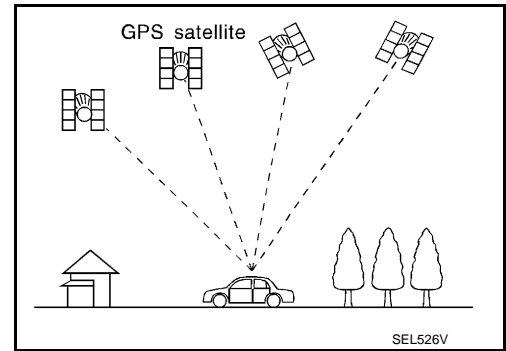
NAVIGATION SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

GPS (Global Positioning System) is developed for and is controlled by the US Department of Defense. The system utilizes GPS satellites (NAVSTAR), transmitting out radio waves while flying on an orbit around the earth at an altitude of approximately 21,000 km (13,048 mile).

The receiver calculates the travel position in three dimensions (latitude/longitude/altitude) according to the time lag of the radio waves that four or more GPS satellites transmit (three-dimensional positioning). The GPS receiver calculates the travel position in two dimensions (latitude/longitude) with the previous altitude data if the GPS receiver receives only three radio waves (two-dimensional positioning). GPS position correction is not performed while the vehicle is stopped.



Accuracy of the GPS will deteriorate under the following conditions:

- In two-dimensional positioning, GPS accuracy will deteriorate when altitude of the vehicle position changes.
- The position of GPS satellite affects GPS detection precision. The position detection may not be precisely performed.
- The position detection is not performed if GPS receiver does not receive radio waves from GPS satellites. (Inside a tunnel, parking in a building, under an elevated highway etc.) GPS receiver may not receive radio waves from GPS satellites if any object is placed on the GPS antenna.

NOTE:

- The detection result has an error of approximately 10 m (32.8 ft) even with a high-precision three dimensional positioning.
- There may be cases when the accuracy is lowered and radio waves are stopped intentionally because the GPS satellite signal is controlled by the US trace control center.

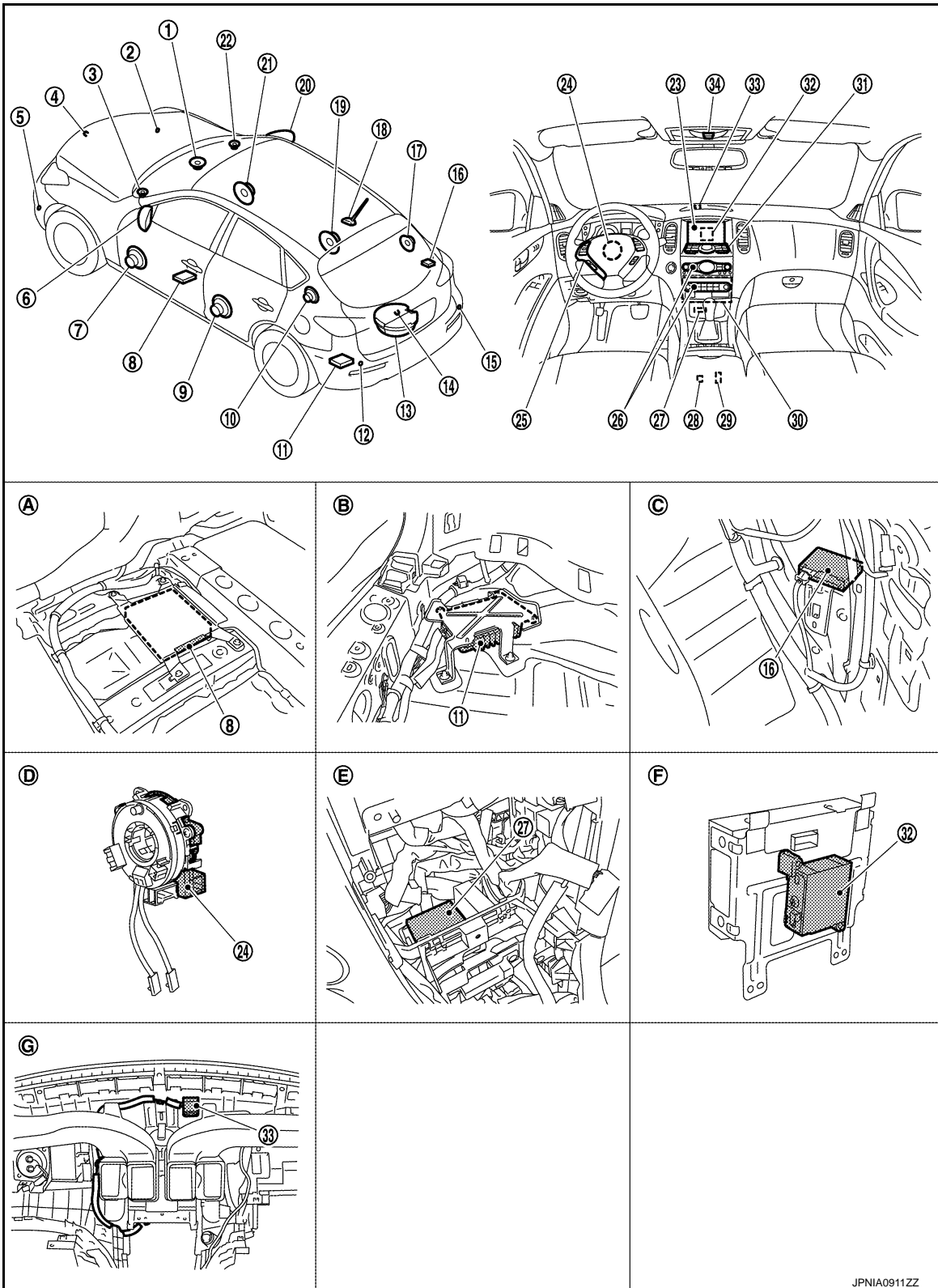
NAVIGATION SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Component Parts Location

INFOID:000000004921663



- 1. Center speaker
- 4. Front camera

- 2. Corner sensor front RH
- 5. Corner sensor front LH

- 3. Front squawker LH
- 6. Side camera LH

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NAVIGATION SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

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|---|--|---|
| <p>7. Front door speaker LH</p> <p>10. Rear squawker LH</p> <p>13. Woofer</p> <p>16. Buzzer</p> <p>19. Rear door speaker RH</p> <p>22. Front squawker RH</p> <p>25. Steering switch</p> <p>28. iPod connector</p> <p>31. Multifunction switch</p> <p>34. Microphone</p> <p>A. Under front seat (LH side)</p> <p>D. Spiral cable part</p> <p>G. Instrument panel rear side</p> | <p>8. • Around view monitor control unit (with around view monitor)</p> <p>• Camera control unit (with rear view monitor)</p> <p>11. BOSE amp.</p> <p>14. • Rear camera (with around view monitor)</p> <p>• Rear view camera (with rear view monitor)</p> <p>17. Rear squawker RH</p> <p>20. • Side camera RH</p> <p>• Infrared LED (auxiliary lighting)</p> <p>23. Display unit</p> <p>26. Preset switch</p> <p>29. Auxiliary input jacks</p> <p>32. iPod adapter</p> <p>B. Luggage floor (LH side)</p> <p>E. Cluster lid C removed condition</p> | <p>9. Rear door speaker LH</p> <p>12. Corner sensor rear LH</p> <p>15. Corner sensor rear RH</p> <p>18. Antenna base (antenna amp and satellite antenna)</p> <p>21. Front door speaker RH</p> <p>24. Steering angle sensor</p> <p>27. Sonar control unit (with around view monitor)</p> <p>30. AV control unit</p> <p>33. GPS antenna</p> <p>C. Luggage side RH</p> <p>F. Rear view of the display unit</p> |
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Component Description

INFOID:00000000434777

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> It is the master unit that controls each operation of the Navigation system. The HDD (Hard Disk Drive) is built in, and the map data is stored in HDD. The RGB signal (map information) is output to display. The voice guidance signal is output to BOSE amp.
DISPLAY UNIT	<ul style="list-style-type: none"> Map image signal is input from AV control unit, and it is indicated on display. Each operation of navigation can be performed by the touch panel function.
BOSE AMP.	Voice guidance signal is input from AV control unit, and it is output to front LH/RH speakers.
FRONT DOOR SPEAKER	Voice guidance signal from BOSE amp. is output.
FRONT SQUAWKER	
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> Each operation of navigation can be performed. Connected with preset switch via cables and operation signal is transmitted to AV control unit via AV communication.
STEERING SWITCH	<ul style="list-style-type: none"> Each operation of navigation, etc. can be performed. Switch operating signal is output to AV control unit.
GPS ANTENNA	GPS signal is received and is output to AV control unit.

REAR VIEW MONITOR SYSTEM

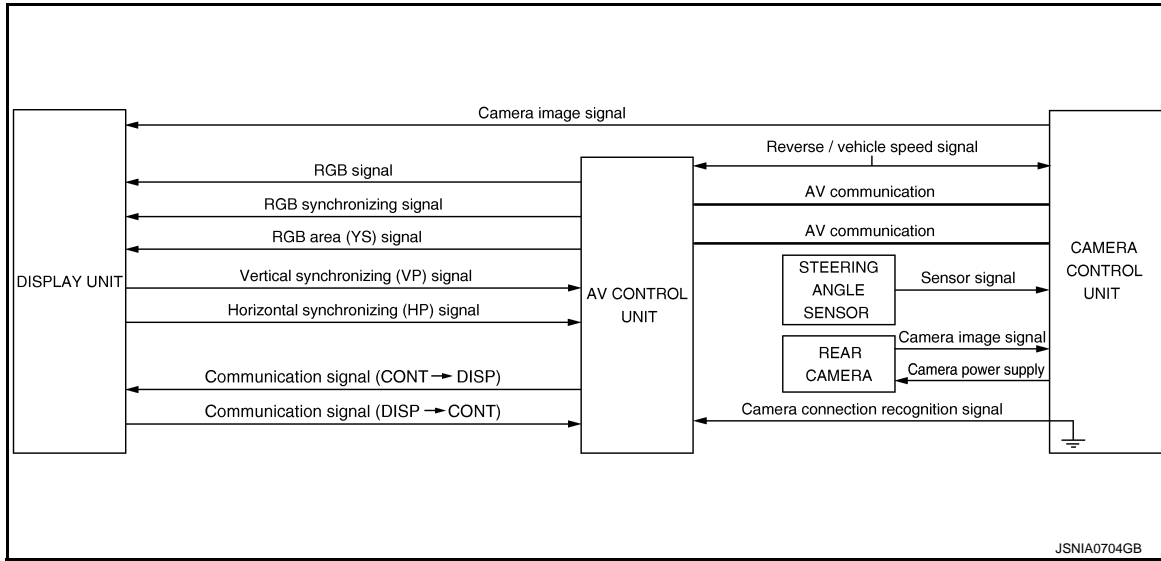
[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

REAR VIEW MONITOR SYSTEM

System Diagram

INFOID:000000004347778



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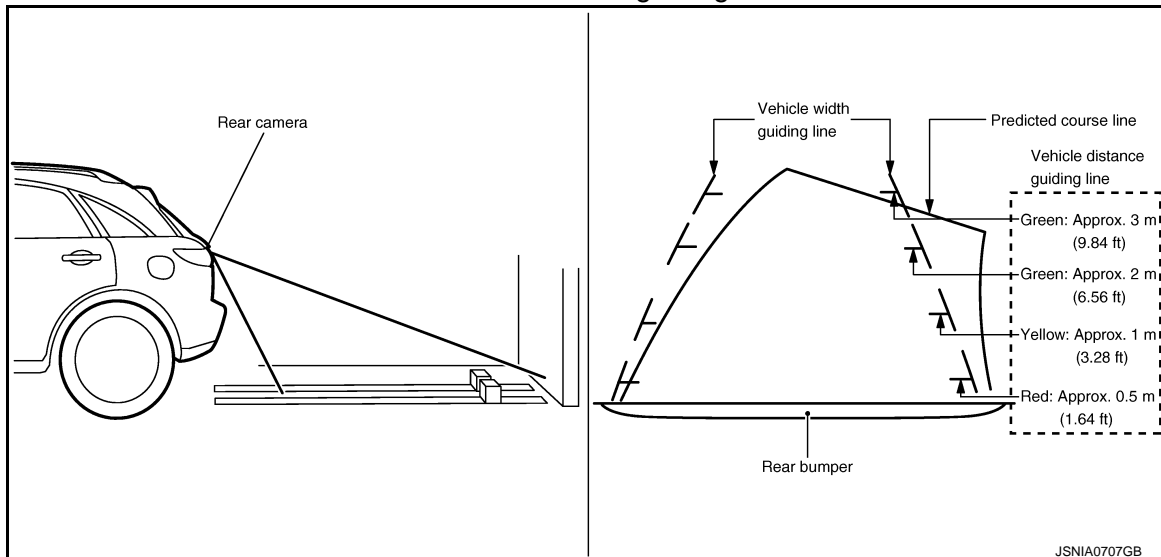
System Description

INFOID:000000004347779

CAMERA IMAGE OPERATION PRINCIPLE

- Power is supplied to rear view camera from camera control unit and the rear view camera outputs the camera image to the camera control unit when selector lever is set to reverse position and the reverse signal on camera control unit is input.
- Camera control unit superimposes the guiding line and predicted course line to the image from rear view camera and outputs to display unit. In this case, the reverse signal is also input to AV control unit. Therefore, AV control unit recognizes the selector lever as in the reverse position. And then AV control unit switches the image displayed by the communication signal between AV control unit and display unit with the camera image.
- Camera control unit controls the direction and distance of the predicted course line according to the sensor signal from steering angle sensor.
- AV control unit determines whether rear view camera is equipped or not, based on the presence of camera connection recognition signal. It switches to rear view monitor image at the time of reverse signal input when it is equipped.
- Warning message under the rear view monitor display is described by AV control unit.

Rear view monitor guiding line



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REAR VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

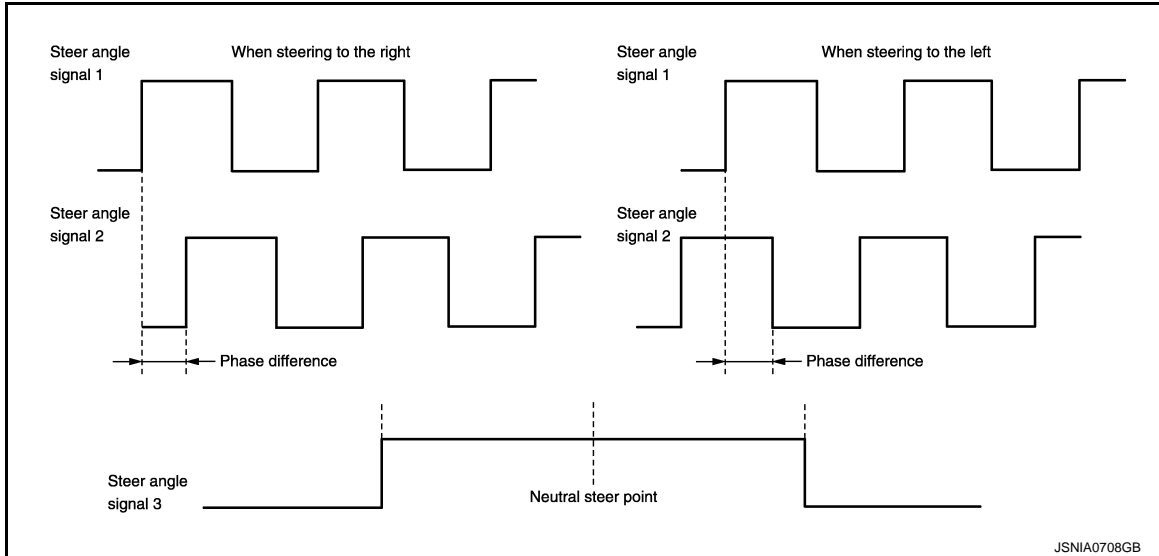
PREDICTED COURSE LINE OPERATION PRINCIPLE

Detection of Steering Rotation Direction

Camera control unit detects the rotation direction of steering according to the phase difference of two pairs of pulse signals (sensor signal 1 and sensor signal 2) input from steering angle sensor.

Detection of Steering Neutral Position

The sensor signal 3 input from steering angle sensor is generated at 1 pulse per 1 steering wheel rotation. Camera control unit detects the steering neutral position from this pulse.



Correction of Steering Neutral Position

Camera control unit corrects the steering neutral position during driving according to the vehicle speed signal and steering angle sensor signal.

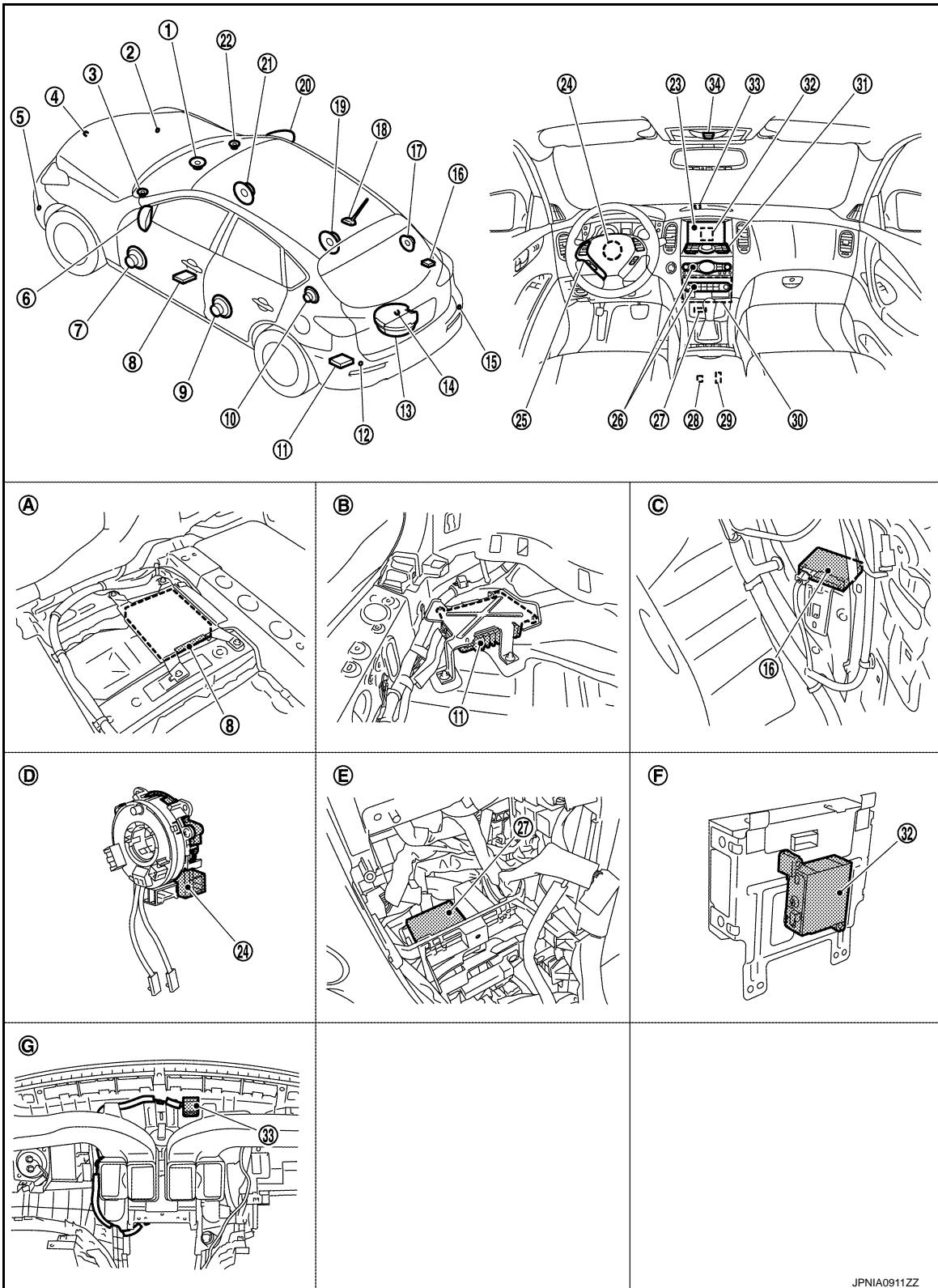
REAR VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000004921664



- 1. Center speaker
- 4. Front camera

- 2. Corner sensor front RH
- 5. Corner sensor front LH

- 3. Front squawker LH
- 6. Side camera LH

AV

REAR VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

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|-------------------------------|--|--|
| 7. Front door speaker LH | 8. • Around view monitor control unit (with around view monitor)
• Camera control unit (with rear view monitor) | 9. Rear door speaker LH |
| 10. Rear squawker LH | 11. BOSE amp. | 12. Corner sensor rear LH |
| 13. Woofer | 14. • Rear camera (with around view monitor)
• Rear view camera (with rear view monitor) | 15. Corner sensor rear RH |
| 16. Buzzer | 17. Rear squawker RH | 18. Antenna base (antenna amp and satellite antenna) |
| 19. Rear door speaker RH | 20. • Side camera RH
• Infrared LED (auxiliary lighting) | 21. Front door speaker RH |
| 22. Front squawker RH | 23. Display unit | 24. Steering angle sensor |
| 25. Steering switch | 26. Preset switch | 27. Sonar control unit (with around view monitor) |
| 28. iPod connector | 29. Auxiliary input jacks | 30. AV control unit |
| 31. Multifunction switch | 32. iPod adapter | 33. GPS antenna |
| 34. Microphone | | |
| A. Under front seat (LH side) | B. Luggage floor (LH side) | C. Luggage side RH |
| D. Spiral cable part | E. Cluster lid C removed condition | F. Rear view of the display unit |
| G. Instrument panel rear side | | |

Component Description

INFOID:000000004347781

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> Image on display is transmitted to rear view monitor image with serial communication between AV control unit and display unit. Warning displayed on the rear view monitor image is illustrated. AV control unit recognizes the presence of camera system with camera connection recognition signal.
DISPLAY UNIT	<ul style="list-style-type: none"> Camera image signal is transmitted from camera control unit, and RGB signal for warning display is transmitted from AV control unit. Rear view monitor image is changed by communication from AV control unit.
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> Camera image signal is input from rear view camera. Camera image signal is output to display. Power (camera ON signal) is transmitted to rear view camera. Superimpose the guiding line and predicted course line to the camera image that outputs to display unit. Input the sensor signal from steering angle sensor, and then control the predicted course line. Camera control unit is connected via AV communication.
REAR VIEW CAMERA	<ul style="list-style-type: none"> The image of vehicle rear view is transmitted to camera control unit. It receives power (camera ON signal) from camera control unit and operates.
STEERING ANGLE SENSOR	Steering signal necessary for predicted course line control is transmitted to camera control unit.

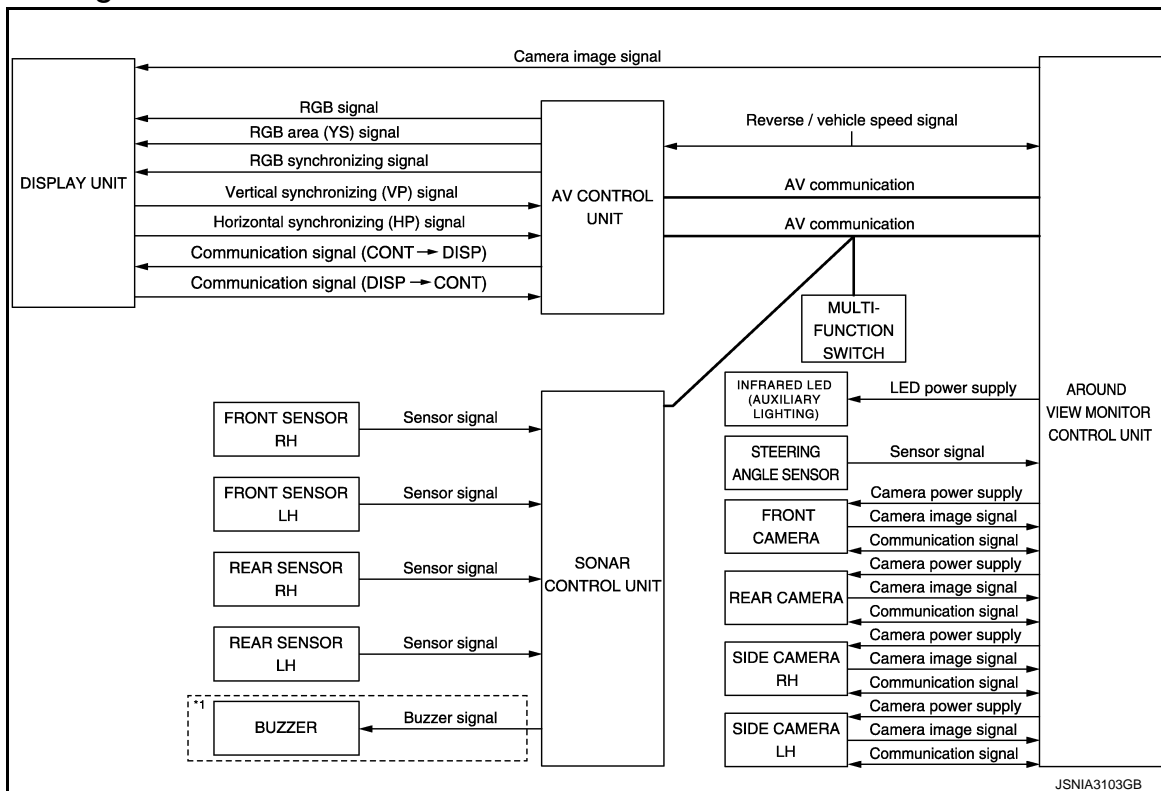
AROUND VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

AROUND VIEW MONITOR SYSTEM

System Diagram



*1: Up to vehicles manufactured on November 2008. A buzzer is included in the sonar control unit, starting from vehicles manufactured on December 2008.

System Description

INFOID:000000004347783

- This system is equipped with wide-angle high-resolution cameras on the front and rear of the vehicle and on both right and left door mirrors. The images from front view, rear view, Front-Side view (RH side), and Birds-Eye view that shows the view from the top of the vehicle are displayed to monitor the vehicle surroundings.
- Around view monitor control unit cuts out and expands the image received from each camera to create each view.
- The sonar indicator is displayed on display (superimposed on the camera image) in combination with the camera assistance sonar system to warn of the approach of an obstacle.
- In front view and rear view, the vehicle width, distance lines and predicted course lines are superimposed and displayed. In Front-Side view, the vehicle distance guiding line and vehicle width guiding line are displayed.
- The Birds-Eye view converts the images from 4 cameras into the overhead view and displays the status of the vehicle on display. The vehicle icon and sonar indicator that are displayed on the Birds-Eye view display are rendered by around view monitor control unit.

AROUND VIEW MONITOR SCREEN

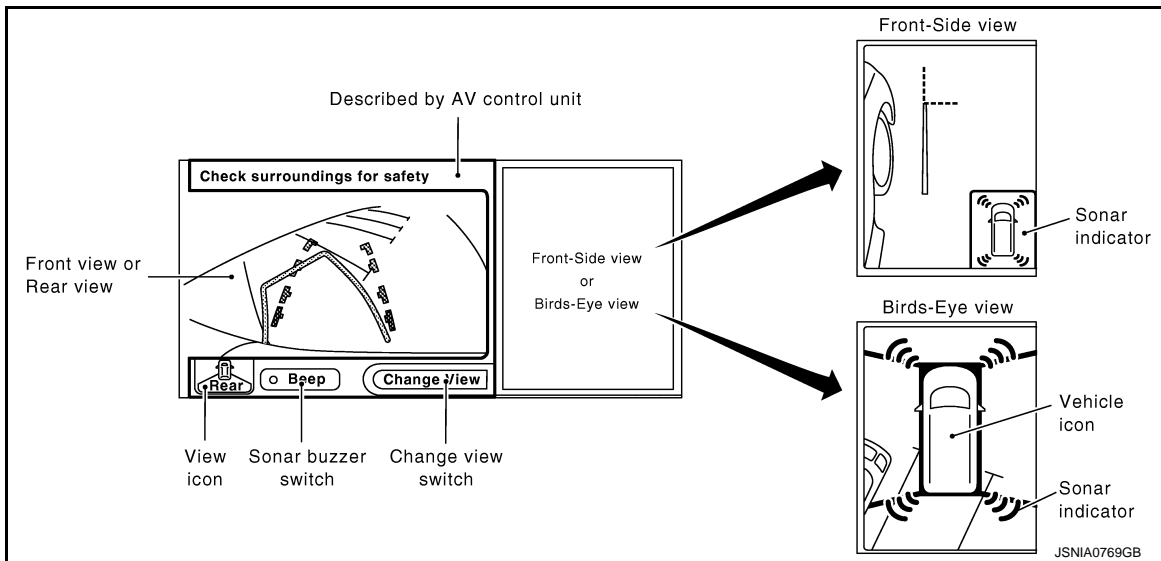
- Around view monitor combines and displays the travel direction view and "Birds-Eye view", "Front-Side view", and then it displays the sonar indicator on the "Birds-Eye view", "Front-Side view".
- AV control unit renders the "Change View", "BEEP" switch, view icon, warning message on display.

AROUND VIEW MONITOR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Screen constitution



OPERATION DESCRIPTION

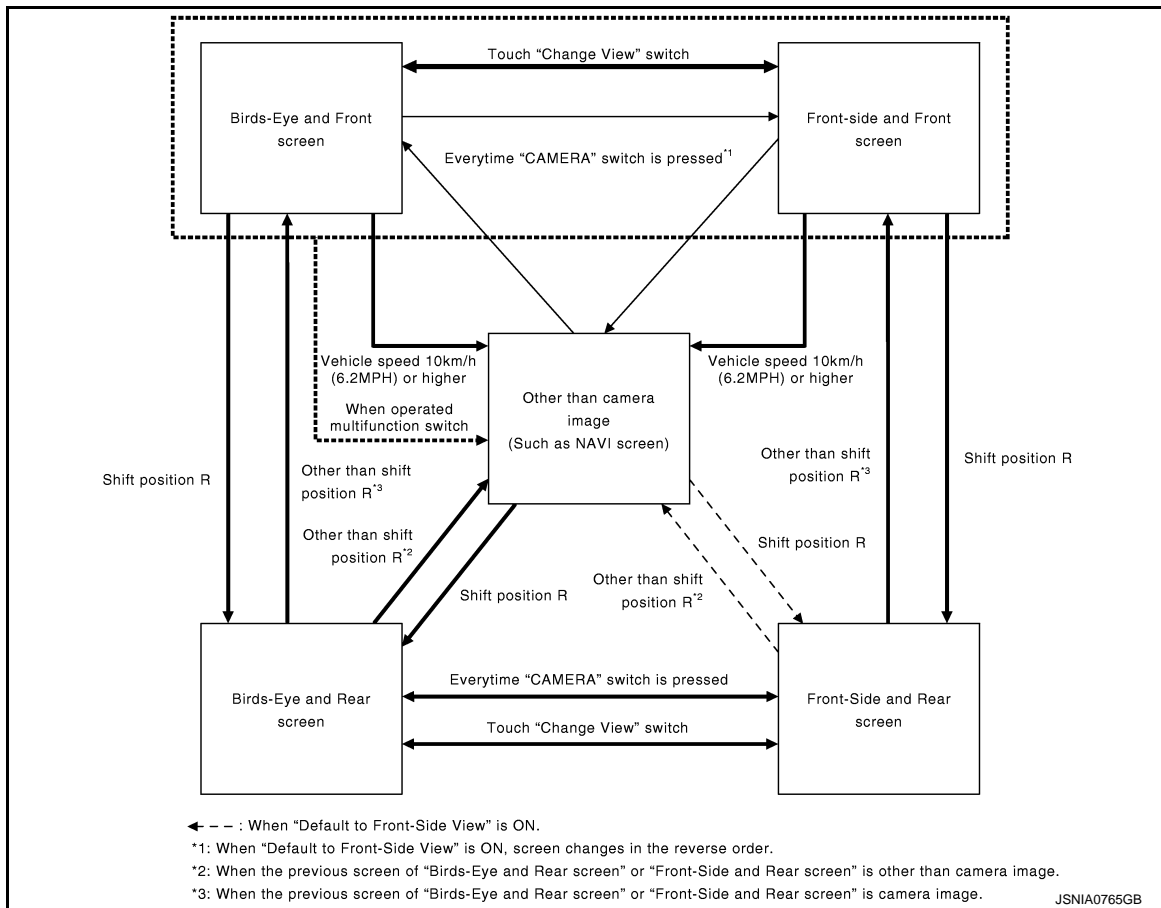
- Around view monitor operates by pressing the “CAMERA” switch of multifunction switch and shifting the selector switch to the reverse position.
- When the selector lever is in any position other than the reverse position, the screen is switched to the around view monitor by pressing the “CAMERA” switch.
- The screen is switched to the around view monitor by shifting the selector lever to the reverse position.
- In the around view monitor, Birds-Eye view and Front-side view can be switched by pressing the “CAMERA” switch or the touch switch of display.
- The “Front-Side and Front screen” are displayed as a priority when turning “Default to Front-Side View” ON.
- The around view monitor is cancelled 3 minutes after pressing the “CAMERA” switch, and then the screen returns to the screen before displaying the around view monitor when selector lever is in a position other than the “R” position.
- ON/OFF setting of sonar indicator display on the Front-Side view screen can be performed.
- In the Birds-Eye view, the invisible area is displayed on the image to specify the boundary of the 4 cameras. The invisible area is displayed in yellow in the Birds-Eye view after turning the ignition switch ON.
- The sonar (both of buzzer and indicator) operates only when the camera screen is displayed.

AROUND VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

Around view monitor screen transition



Front View

- The front view image is from the front camera.
- When the selector lever is in any position other than the reverse position, the front view is displayed by pressing the "CAMERA" switch. It improves the visibility of obstacles in front of the vehicle and helps driving by the images displayed from Birds-Eye view and Front-Side view.
- Display the vehicle width guiding line and vehicle distance guiding line in front view and display the predicted course line according to the steering angle.
- If the steering angle is within approximately 90 degrees, the predicted course lines on the left/right side are displayed. If the steering angle is exceeding approximately 90 degrees, only the predicted course line on the outside (in the opposite side of steering direction) is displayed.
- Around view monitor control unit controls the direction and distance of the predicted course line according to the sensor signal from steering angle sensor.

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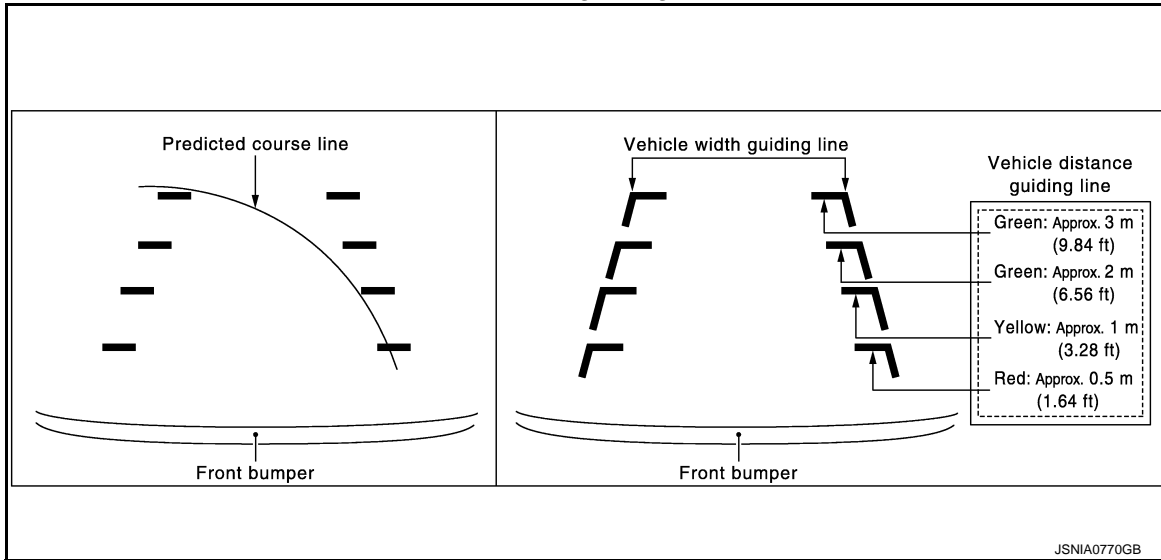
AV

AROUND VIEW MONITOR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

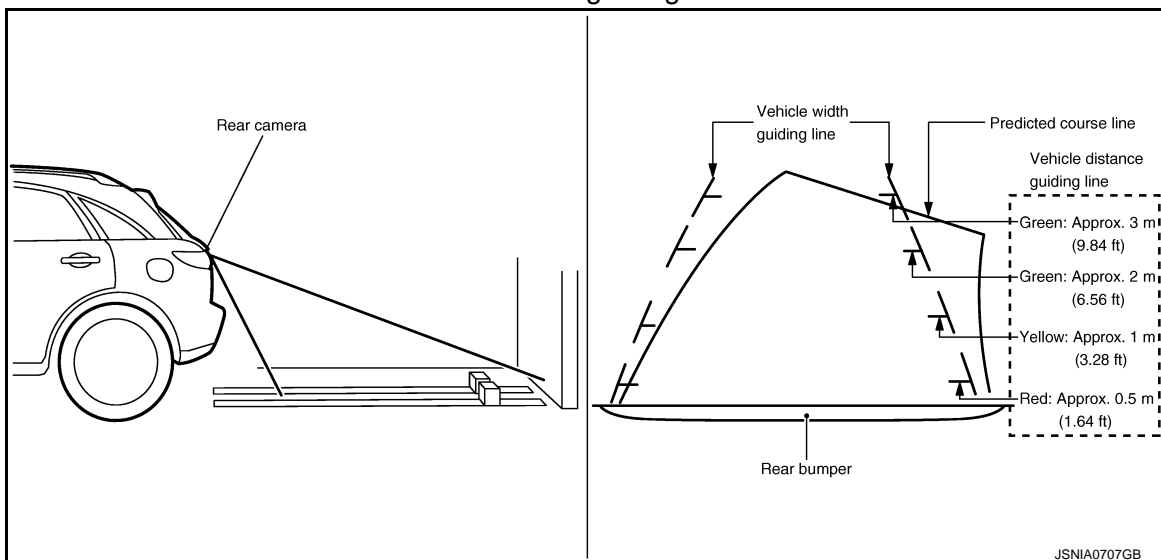
Front view guiding lines



Rear View

- The rear view image is from the rear camera.
- When the selector lever is in the reverse position, the rear view is displayed. Backing and parking are improved by the images from Birds-Eye view and Front-Side view.
- Display the vehicle width guiding line and vehicle distance guiding line in Rear view and display the predicted course line according to the steering angle.
- The predicted course line is not displayed at the steering neutral position. The predicted course line is displayed and the vehicle width guiding line is not displayed by turning the steering wheel.
- Around view monitor control unit controls the direction and distance of predicted course line according to the sensor signal from steering angle sensor.

Rear view guiding lines



Front-Side View

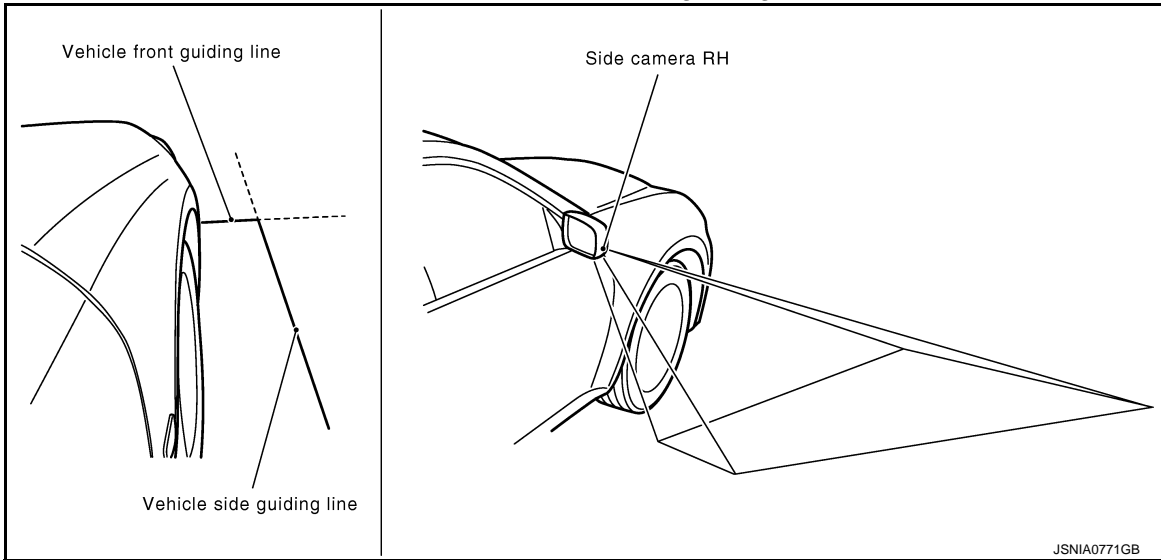
- The Front-Side view image is from the side camera RH.
- In Front-Side view, display the vehicle distance guiding line and vehicle width guiding line.
- The infrared LED illumination is installed on the door mirror RH to illuminate around the front wheels.

AROUND VIEW MONITOR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

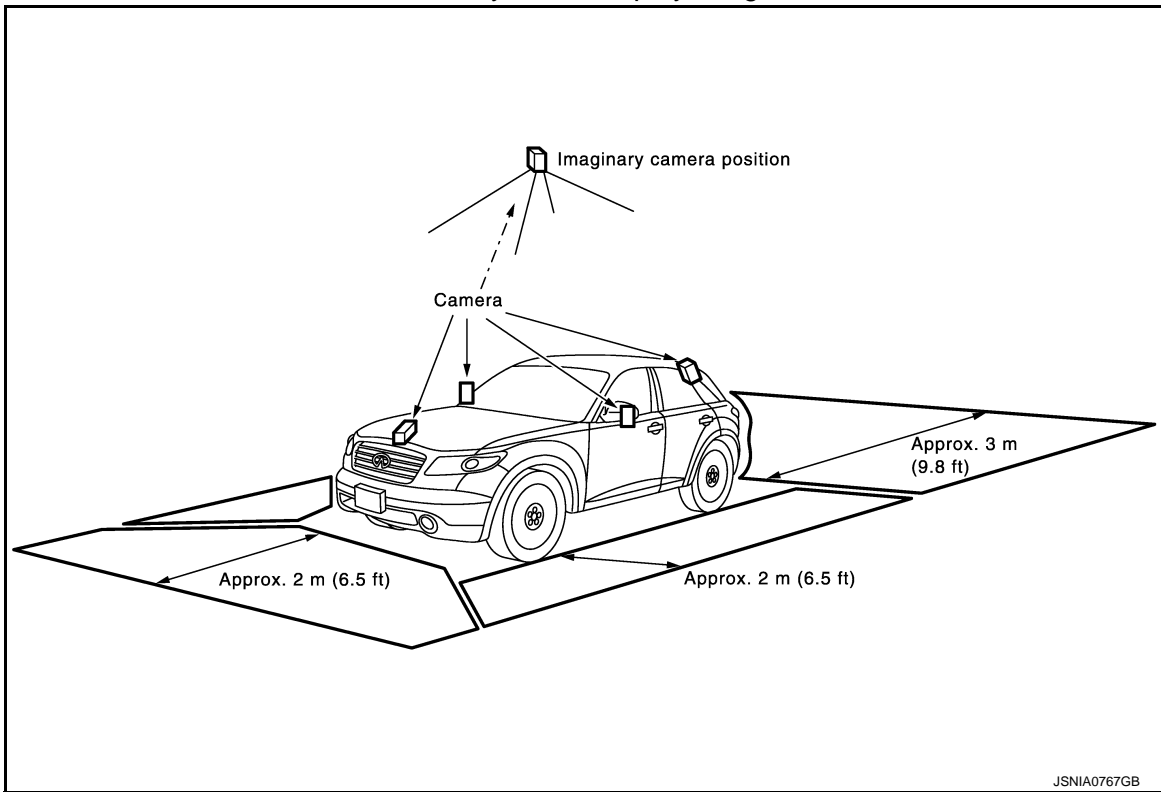
Front-Side view area and guiding line



Birds-Eye View

- The image from the 4 cameras is cut out and converted into the overhead view, and the surroundings of the vehicle is displayed in Birds-Eye view.
- In Birds-Eye view, the invisible area is displayed on the image to specify the boundary of the 4 cameras.
- The invisible area is displayed in yellow in the Birds-Eye view after turning the ignition switch ON as an information for the user. (OFF setting can be performed)

Birds-Eye view display image

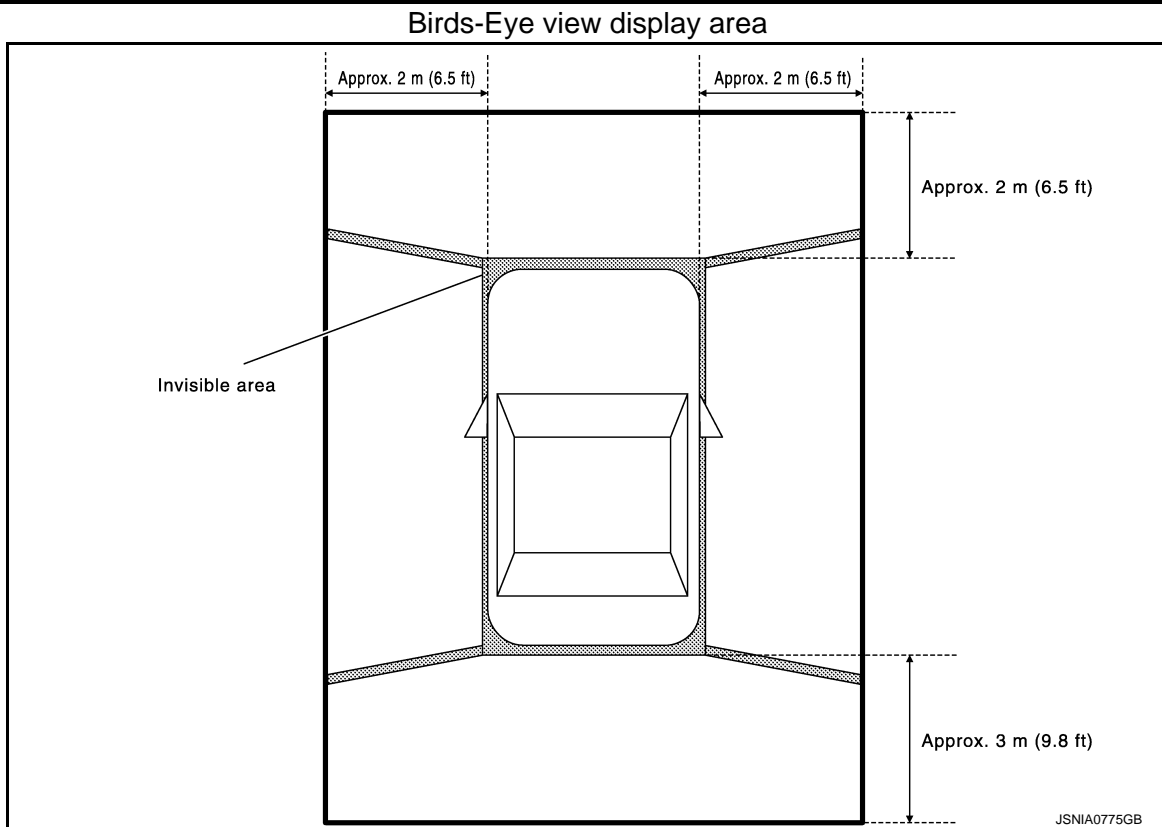


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AROUND VIEW MONITOR SYSTEM

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[BOSE AUDIO WITH NAVIGATION]



CAMERA IMAGE OPERATION PRINCIPLE

- If the information writing to around view monitor control unit and the information from the camera are not matched, the applicable camera position is indicated as an error on the Birds-Eye view display. (Calibration operation is necessary when replacing each camera or when replacing around view monitor control unit.)
- Around view monitor control unit receives the camera switch signal from AV control unit via AV communication by pressing the “CAMERA” switch of multifunction switch.
- Around view monitor control unit that receives the camera switch signal supplies the power to each camera and inputs the camera image from each camera.
- When the selector lever is in the reverse position, around view monitor control unit receives the reverse signal from AV control unit via AV communication, supplies the power to each camera, and inputs the camera image from each camera.
- Around view monitor control unit that receives the camera image signal from each camera cuts out the required screen for each view, superimposes the camera image, vehicle icon, guiding lines, sonar indicator, and outputs them to the display unit.

PREDICTED COURSE LINE OPERATION PRINCIPLE

Detection of Steering Rotation Direction

Around view monitor control unit detects the rotation direction of steering according to the phase difference of two pairs of pulse signals (sensor signal 1 and sensor signal 2) input from steering angle sensor.

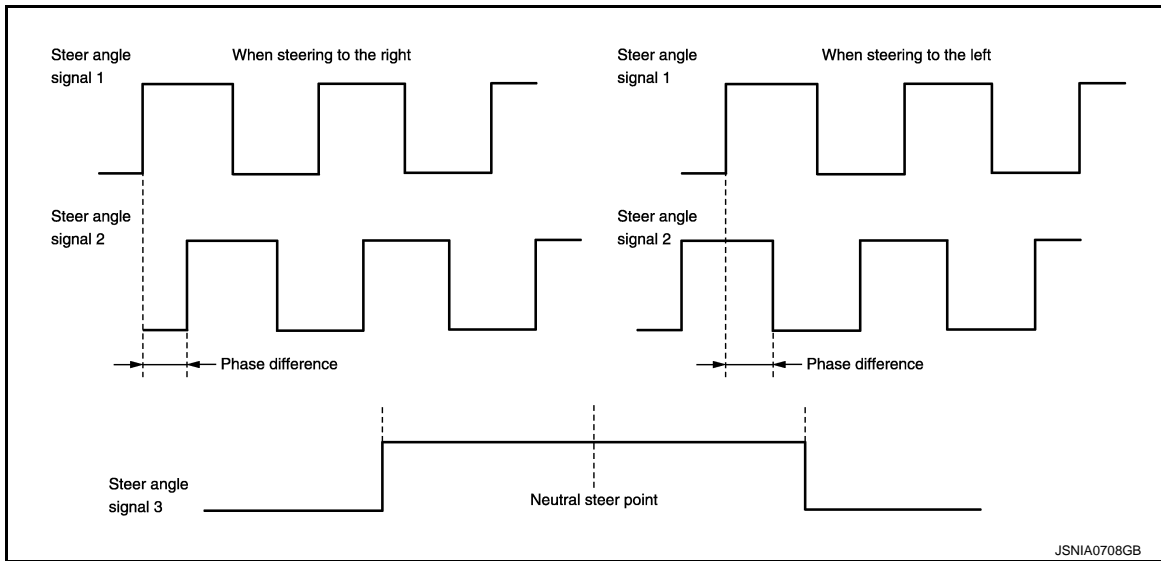
Detection of Steering Neutral Position

The sensor signal 3 input from the steering angle sensor is generated at 1 pulse per 1 rotation of the steering wheel. Around view monitor control unit detects the steering neutral position from this pulse.

AROUND VIEW MONITOR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]



Correction of Steering Neutral Position

Around view monitor control unit corrects the steering neutral position during driving according to the vehicle speed signal and steering angle sensor signal.

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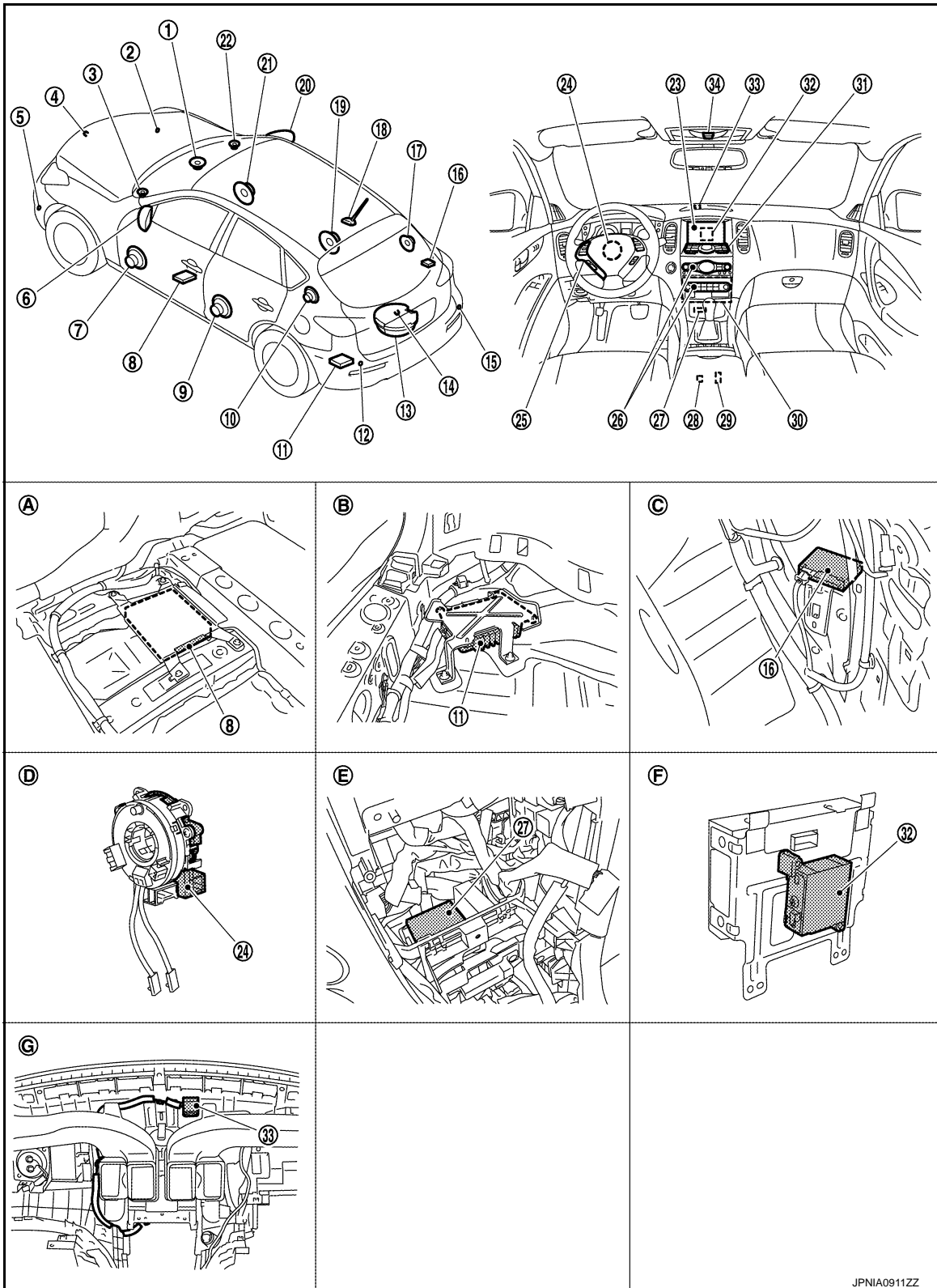
AROUND VIEW MONITOR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Component Parts Location

INFOID:000000004921665



- 1. Center speaker
- 4. Front camera

- 2. Corner sensor front RH
- 5. Corner sensor front LH

- 3. Front squawker LH
- 6. Side camera LH

AROUND VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

- | | | |
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| <p>7. Front door speaker LH</p> <p>10. Rear squawker LH</p> <p>13. Woofer</p> <p>16. Buzzer</p> <p>19. Rear door speaker RH</p> <p>22. Front squawker RH</p> <p>25. Steering switch</p> <p>28. iPod connector</p> <p>31. Multifunction switch</p> <p>34. Microphone</p> <p>A. Under front seat (LH side)</p> <p>D. Spiral cable part</p> <p>G. Instrument panel rear side</p> | <p>8. • Around view monitor control unit (with around view monitor)</p> <p>• Camera control unit (with rear view monitor)</p> <p>11. BOSE amp.</p> <p>14. • Rear camera (with around view monitor)</p> <p>• Rear view camera (with rear view monitor)</p> <p>17. Rear squawker RH</p> <p>20. • Side camera RH</p> <p>• Infrared LED (auxiliary lighting)</p> <p>23. Display unit</p> <p>26. Preset switch</p> <p>29. Auxiliary input jacks</p> <p>32. iPod adapter</p> <p>B. Luggage floor (LH side)</p> <p>E. Cluster lid C removed condition</p> | <p>9. Rear door speaker LH</p> <p>12. Corner sensor rear LH</p> <p>15. Corner sensor rear RH</p> <p>18. Antenna base (antenna amp and satellite antenna)</p> <p>21. Front door speaker RH</p> <p>24. Steering angle sensor</p> <p>27. Sonar control unit (with around view monitor)</p> <p>30. AV control unit</p> <p>33. GPS antenna</p> <p>C. Luggage side RH</p> <p>F. Rear view of the display unit</p> |
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Component Description

INFOID:000000004347785

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> • Image on display is switched to around view monitor by serial communication between AV control unit and display unit. • Warning displayed in around view monitor image is illustrated.
DISPLAY UNIT	<ul style="list-style-type: none"> • Camera image signal is transmitted from around view monitor control unit, and RGB signal for warning display is transmitted from AV control unit. • Around view monitor image is switched by serial communication between AV control unit and display unit.
MULTIFUNCTION SWITCH	It transmits the CAMERA switch signal via AV communication to AV control unit.
AROUND VIEW MONITOR CONTROL UNIT	<ul style="list-style-type: none"> • It supplies power to front camera, rear camera, and side camera, superimposes the images from each camera, and then outputs them to display unit. • It receives the CAMERA switch signal and reverse signal from AV control unit via AV communication. • Superimpose the guiding line, predicted course line and sonar indicator to the camera image that outputs to display unit. • It performs the reception/transmission of communication signal with each camera. • Input the sensor signal from steering angle sensor, and then control the predicted course line. • It transmits the information received/transmitted with sonar control unit via AV communication to AV control unit.
FRONT CAMERA	<ul style="list-style-type: none"> • It inputs the power supply from around view monitor control unit and outputs the image of the vehicle front to around view monitor control unit. • It performs the reception/transmission of the communication signal with around view monitor control unit.
REAR CAMERA	<ul style="list-style-type: none"> • It inputs the power supply from around view monitor control unit and outputs the image of the vehicle rear to around view monitor control unit. • It performs the reception/transmission of the communication signal with around view monitor control unit.
SIDE CAMERA LH	<ul style="list-style-type: none"> • It inputs the power supply from around view monitor control unit and outputs the image of the vehicle LH to around view monitor control unit. • It performs the reception/transmission of the communication signal with around view monitor control unit.

AROUND VIEW MONITOR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Part name	Description
SIDE CAMERA RH	<ul style="list-style-type: none">• It inputs the power supply from around view monitor control unit and outputs the image of the vehicle RH to around view monitor control unit.• It performs the reception/transmission of the communication signal with around view monitor control unit.
INFRARED LED (AUXILIARY LIGHTING)	It illuminates around the front RH wheel by the power supply from around view monitor control unit to improve nighttime visibility of Front-Side view.
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)	<ul style="list-style-type: none">• It is connected with around view monitor control unit via AV communication and receives the sonar operation signal from around view monitor control unit.• It transmits the sonar detection status to around view monitor control unit via AV communication.
STEERING ANGLE SENSOR	Steering signal necessary for predicted course line control is transmitted to around view monitor control unit.

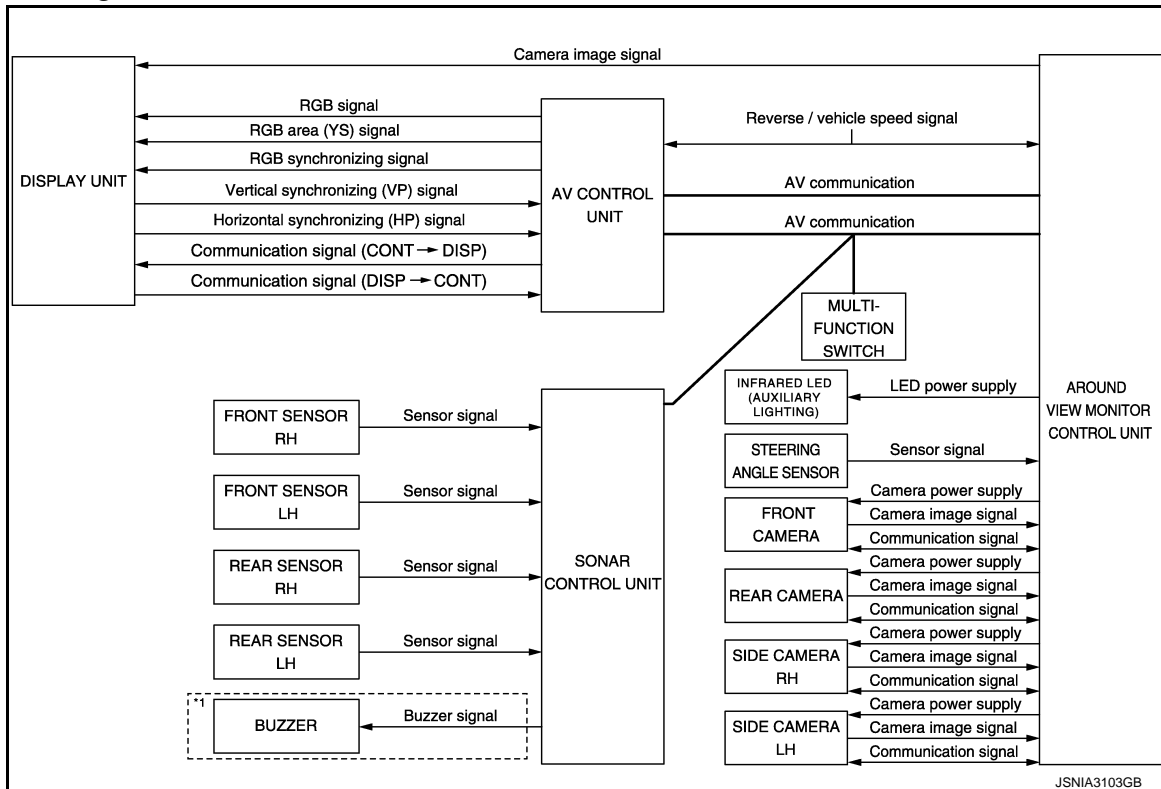
CAMERA ASSISTANCE SONAR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

CAMERA ASSISTANCE SONAR SYSTEM

System Diagram



*1: Up to vehicles manufactured on November 2008. A buzzer is included in the sonar control unit, starting from vehicles manufactured on December 2008.

System Description

INFOID:000000004347787

DESCRIPTION

- Install the corner sensor on the front bumper and rear bumper. It detects the obstacles around the vehicle when the around view monitor is displayed. It warns of the approach to the obstacles with the buzzer and indicator in the display linked with the around view monitor system.
- It displays the distance between the bumper and obstacle with the color of sonar indicator in the display and the blinking cycle of indicator in 3 stages.
- The buzzer warns of the distance to the obstacles with the cycle in 3 stages.

SYSTEM OPERATION DESCRIPTION

- Around view monitor control unit transmits the sonar operation signal via AV communication to sonar control unit to control the operation of sonar indicator and sonar buzzer.
- Sonar control unit that receives the sonar operation signal from around view monitor control unit transmits the detection signal and detection distance signal according to the signal from corner sensor via AV communication to around view monitor control unit. around view monitor control unit operates the applicable sonar indicator.
- The sonar control unit transmits a buzzer signal to the buzzer, based on a sonar operation signal received from the around view monitor control unit. (Up to vehicles manufactured on November 2008)
- The sonar control unit sounds the integral buzzer, based on a sonar operation signal received from the around view monitor control unit. (From vehicles manufactured on December 2008)
- Sonar control unit has the diagnosis function. It can detect the corner sensor malfunction or sensor harness open circuit. It transmits the diagnosis results to around view monitor control unit and always displays the sonar indicator in red to inform the user.

OBSTACLE DETECTION DISTANCE

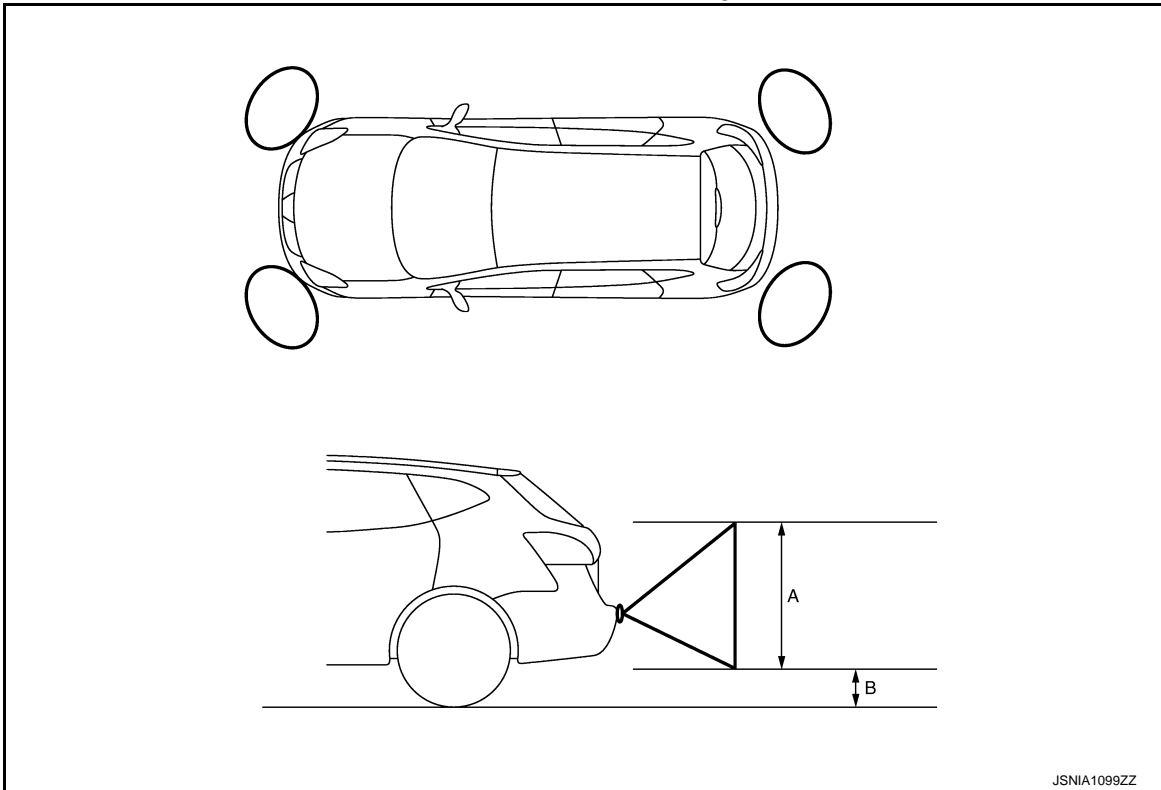
- Sonar control unit changes the outputs of the sonar indicator and warning buzzer in 3 stages according to the obstacle detection distance from the corner sensor.
- The sonar control unit can change the setting of obstacle detection distance in 4 stages.

CAMERA ASSISTANCE SONAR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Obstacle detection image



A. Approx. 50 cm (19.6 in)

B. Approx. 15 cm (5.9 in)

Detection distance

Warning item	Sensitivity level 1 (Faster warning)	Sensitivity level 2 (Default value)	Sensitivity level 3 (Slower warning)	Sensitivity level 4 (Slowest warning)
First stage warning	70 – 80 cm (27.5 – 31.4 in)	60 – 70 cm (23.6 – 27.5 in)	50 – 60 cm (19.6 – 23.6 in)	40 – 50 cm (15.7 – 19.6 in)
Second stage warning	50 – 70 cm (19.6 – 27.5 in)	40 – 60 cm (15.7 – 23.6 in)	30 – 50 cm (11.8 – 19.6 in)	30 – 40 cm (11.8 – 15.7 in)
Third stage warning	Less than 50 cm (19.6 in)	Less than 40 cm (15.7 in)	Less than 30 cm (11.8 in)	Less than 30 cm (11.8 in)

SONAR INDICATOR DISPLAY

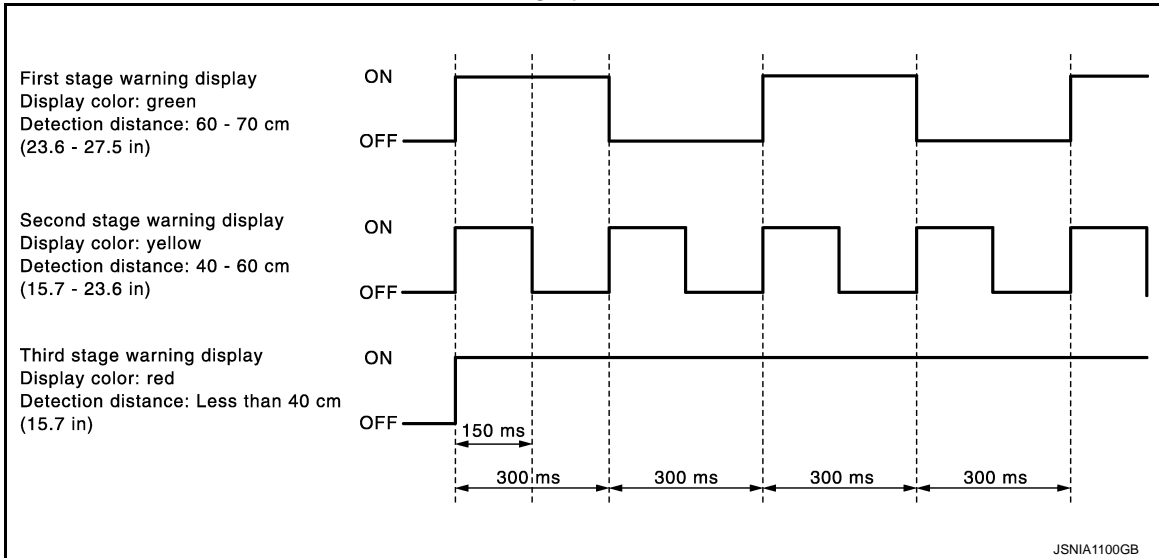
- Around view monitor control unit that receives the detection signal and detection distance signal from sonar control unit displays the sonar indicator on display.
- Around view monitor control unit changes the color or blinking cycle of the indicator according to the detection distance.

CAMERA ASSISTANCE SONAR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

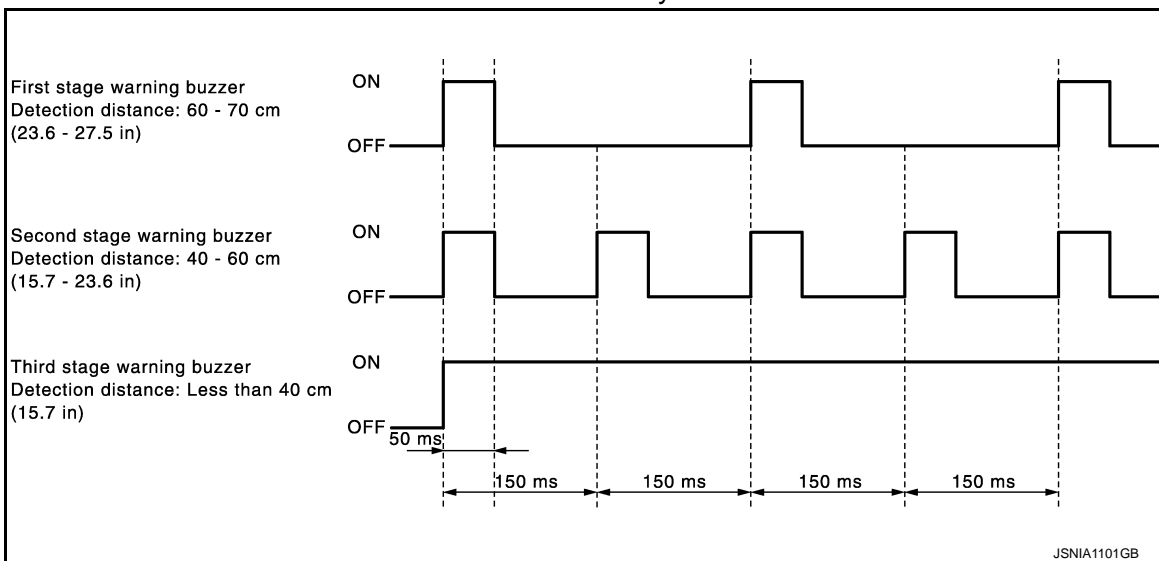
Color and blinking cycle of sonar indicator



SONAR BUZZER OPERATION (Up to vehicles manufactured on November 2008)

- Sonar control unit outputs the buzzer signal to other buzzers and operates the buzzer when the detection signal is input from the corner sensor.
- It changes the buzzer cycle in 3 stages according to the detection distance.

Sonar buzzer cycle



SONAR BUZZER OPERATION (From vehicles manufactured on December 2008)

- Each sonar sensor transmits a sensor signal to the sonar control unit when detecting an obstacle.
- The sonar control unit sounds the built-in buzzer according to detected distance signals from each corner sensor.
- The buzzer cycle changes in 3 stages according to the detection distance.

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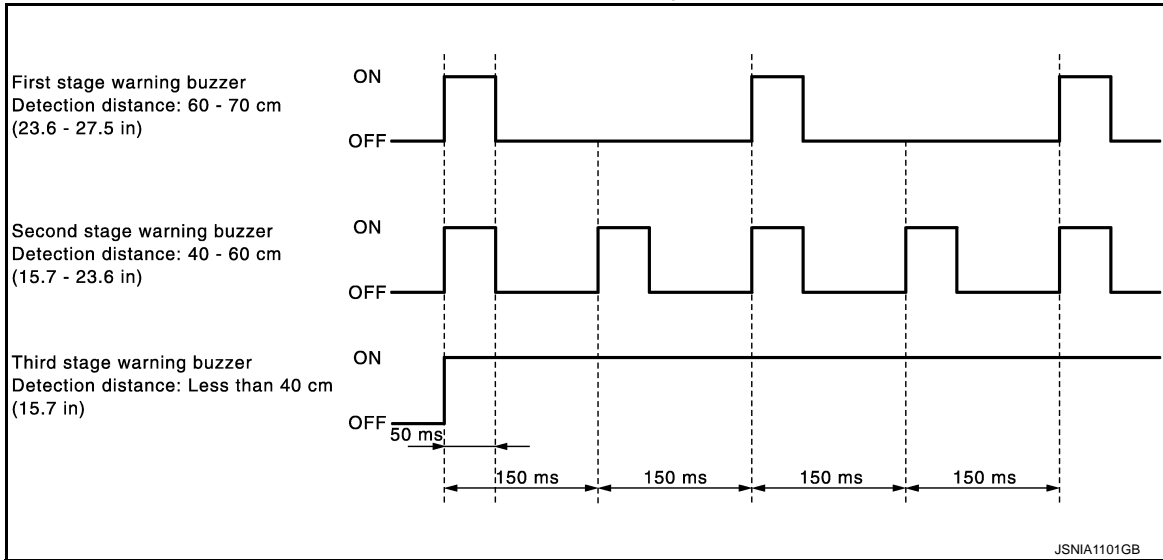
AV

CAMERA ASSISTANCE SONAR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

Sonar buzzer cycle



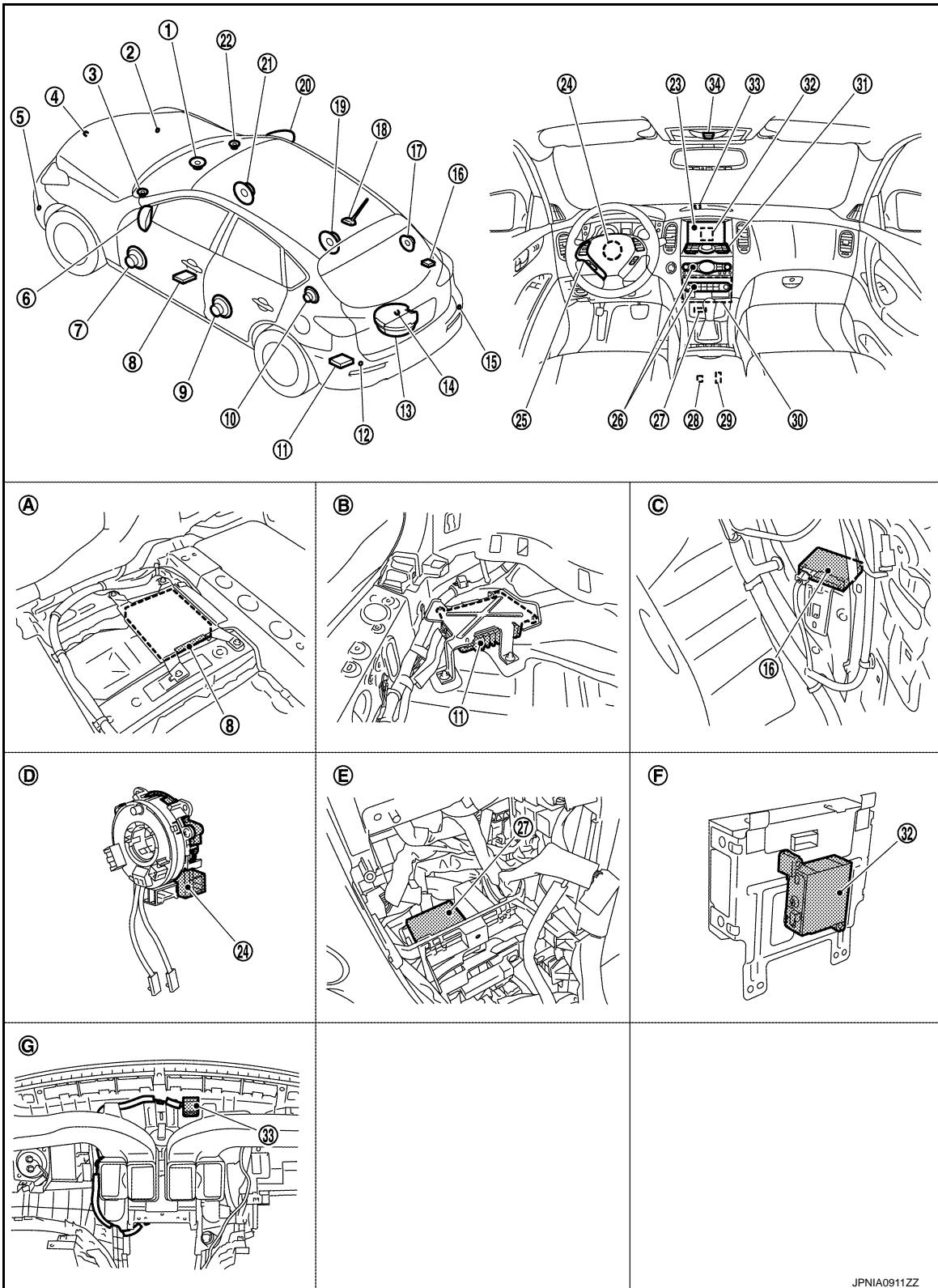
CAMERA ASSISTANCE SONAR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Component Parts Location

INFOID:000000004921666



- 1. Center speaker
- 4. Front camera

- 2. Corner sensor front RH
- 5. Corner sensor front LH

- 3. Front squawker LH
- 6. Side camera LH

CAMERA ASSISTANCE SONAR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

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| <p>7. Front door speaker LH</p> <p>10. Rear squawker LH</p> <p>13. Woofer</p> <p>16. Buzzer</p> <p>19. Rear door speaker RH</p> <p>22. Front squawker RH</p> <p>25. Steering switch</p> <p>28. iPod connector</p> <p>31. Multifunction switch</p> <p>34. Microphone</p> <p>A. Under front seat (LH side)</p> <p>D. Spiral cable part</p> <p>G. Instrument panel rear side</p> | <p>8. • Around view monitor control unit (with around view monitor)</p> <p>• Camera control unit (with rear view monitor)</p> <p>11. BOSE amp.</p> <p>14. • Rear camera (with around view monitor)</p> <p>• Rear view camera (with rear view monitor)</p> <p>17. Rear squawker RH</p> <p>20. • Side camera RH</p> <p>• Infrared LED (auxiliary lighting)</p> <p>23. Display unit</p> <p>26. Preset switch</p> <p>29. Auxiliary input jacks</p> <p>32. iPod adapter</p> <p>B. Luggage floor (LH side)</p> <p>E. Cluster lid C removed condition</p> | <p>9. Rear door speaker LH</p> <p>12. Corner sensor rear LH</p> <p>15. Corner sensor rear RH</p> <p>18. Antenna base (antenna amp and satellite antenna)</p> <p>21. Front door speaker RH</p> <p>24. Steering angle sensor</p> <p>27. Sonar control unit (with around view monitor)</p> <p>30. AV control unit</p> <p>33. GPS antenna</p> <p>C. Luggage side RH</p> <p>F. Rear view of the display unit</p> |
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Component Description

INFOID:000000004347789

Part name	Description
AROUND VIEW MONITOR CONTROL UNIT	<ul style="list-style-type: none"> It supplies power to front camera, rear camera, and side camera. And then it superimposes the images from each camera and outputs them to display unit. Superimposes the guiding line, predicted course line and sonar indicator to the camera image that outputs to display unit. It performs the reception/transmission of communication signal with each camera. Inputs the sensor signal from the steering angle sensor, and then controls the predicted course line. It transmits the sonar operation signal from sonar control unit and receives the sonar information from the sonar control unit via AV communication. It transmits the information received/transmitted with the sonar control unit via AV communication to AV control unit.
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)	<ul style="list-style-type: none"> It is connected with around view monitor control unit via AV communication and receives the sonar operation signal from around view monitor control unit. It transmits the sonar detection status to around view monitor control unit via AV communication. It transmits a buzzer signal to the buzzer, based on a sonar operation signal received from the around view monitor control unit. (Up to vehicles manufactured on November 2008). It sounds the integral buzzer, based on a sonar operation signal received from the around view monitor control unit. (From vehicles manufactured on December 2008) Trouble diagnosis is supported with CONSULT-III (K-LINE).
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to sonar control unit.
BUZZER*	The warning buzzer outputs with the signal from sonar control unit.

*: A buzzer is included in the sonar control unit, starting from vehicles manufactured on December 2008.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

Diagnosis Description

INFOID:000000004347790

MULTIFUNCTION SWITCH AND PRESET SWITCH SELF-DIAGNOSIS FUNCTION

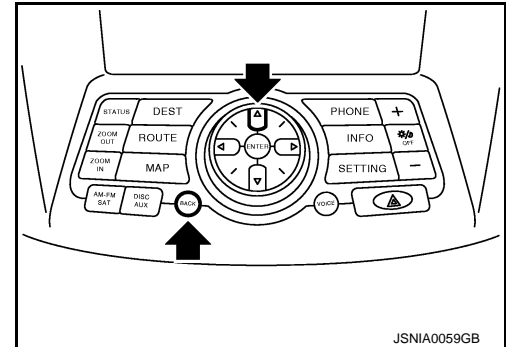
The ON/OFF operation (continuity) of each switch in multifunction switch and preset switch can be checked.

Self-diagnosis Mode

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

CAUTION:

The hazard switch and Disk eject switch cannot be checked.



Finishing Self-diagnosis Mode

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

MULTI AV SYSTEM ON BOARD DIAGNOSIS FUNCTION

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

ON BOARD DIAGNOSIS

Description

- The trouble diagnosis function has a self-diagnosis mode for conducting trouble diagnosis automatically and a confirmation/adjustment mode for operating manually.
- The self-diagnosis mode performs diagnoses on AV control unit, connections between system components, AV control unit and GPS antenna and between AV control unit and satellite radio antenna. Then it displays the diagnosis results on display.
- The confirmation/adjustment mode allows the technician to check, modify or adjust the vehicle signals and set values, as well as to monitor the system error records and system communication status. The checking, modifying or adjusting generally require human intervention and judgment (the system cannot make a judgment automatically).

On Board Diagnosis Item

Mode	Description
Self Diagnosis	<ul style="list-style-type: none">• AV control unit diagnosis• Diagnoses the connections across system components, between AV control unit and GPS antenna and between AV control unit and satellite radio antenna.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

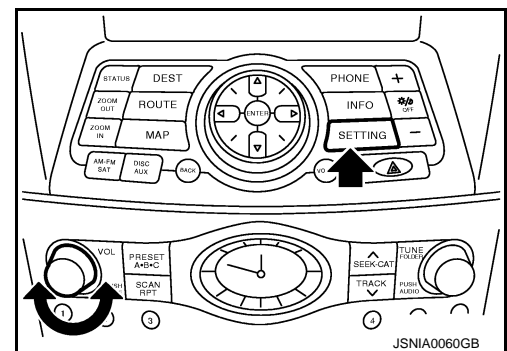
[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

Mode		Description	
Confirmation/ Adjustment	Display Diagnosis	The following check functions are available: color tone check by color bar display, light and shade check by gray scale display and touch panel calibration response check.	
	Vehicle Signals	Diagnosis of signals can be performed for vehicle speed, parking brake, lights, ignition switch, and reverse.	
	Speaker Test	The connection of a speaker can be confirmed by test tone.	
	Climate Control	Start auto air conditioner system self-diagnosis.	
	Navigation	Steering Angle Adjustment	When there is a difference between the actual turning angle and the vehicle mark turning angle, it can be adjusted.
		Speed Calibration	When there is a difference between the current location mark and the actual location, it can be adjusted.
		XM SAT Subscription Status	The XM NavTraffic subscription status can be checked.
	Error History	The system malfunction and the frequency when occurring in the past are displayed. When the malfunctioning item is selected, the time and place that the selected malfunction last occurred are displayed.	
	Synchronizer FES clock	—	
	Vehicle CAN Diagnosis	The transmitting/receiving of CAN communication can be monitored.	
	AV COMM Diagnosis	The communication condition of each unit of Multi AV system can be monitored.	
	Handsfree Phone	The received volume adjustment of hands-free phone, microphone speaker check, and erase memory can be performed.	
	Camera Cont.	With rear view monitor	The signal connected to camera control unit can be checked and the guiding line position that overlaps rear view camera image can be adjusted.
		With around view monitor	It can perform the confirmation of a signal connection to around view monitor control unit, the calibration of each camera, Correct Draw Line of Camera Image, and Fine Tuning of Birds-Eye View. Refer to AV-237 , "Diagnosis Description".
	Bluetooth	The passkey and the device name can be checked and changed.	
	SAT	Change Channel	Any necessary channels required to receive traffic information from the satellite radio system can be set.
		Change Application ID	Any application IDs required to receive traffic information from the satellite radio system can be set.
		Diag	Not used.
	Delete Unit Connection Log	Erase the connection history of unit and error history.	
	Initialize Settings	Initializes AV control unit memory.	

STARTING PROCEDURE

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

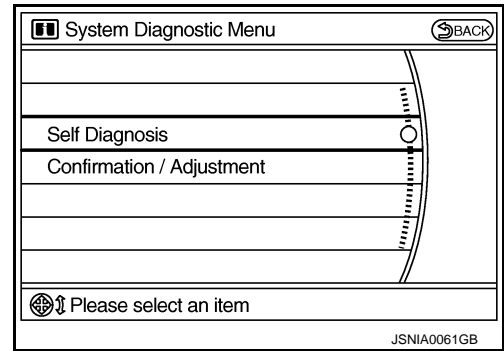


DIAGNOSIS SYSTEM (AV CONTROL UNIT)

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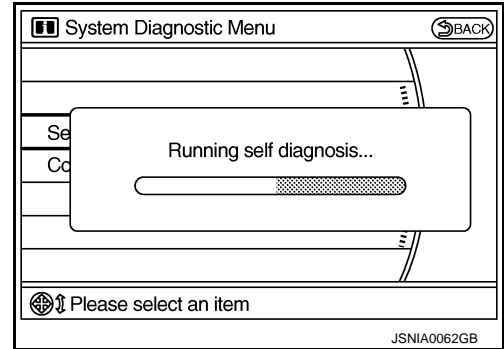
< SYSTEM DESCRIPTION >

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



SELF-DIAGNOSIS MODE

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

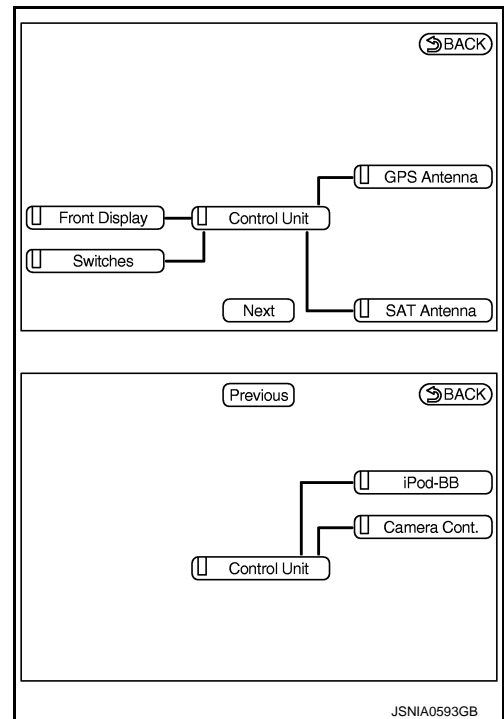


- Diagnosis results are displayed after the self-diagnosis is completed. The unit names and the connection lines are color-coded according to the diagnostic results.

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

NOTE:

- Only the control unit (AV control unit) is displayed in red.
 - Replace AV control unit if "Self-Diagnosis did not run because of a control unit malfunction" is indicated. The symptom is an AV control unit internal error. Refer to [AV-575. "Exploded View"](#).
- If multiple errors occur at the same time for a single unit, the screen switch colors are determined according to the following order of priority: red > gray.



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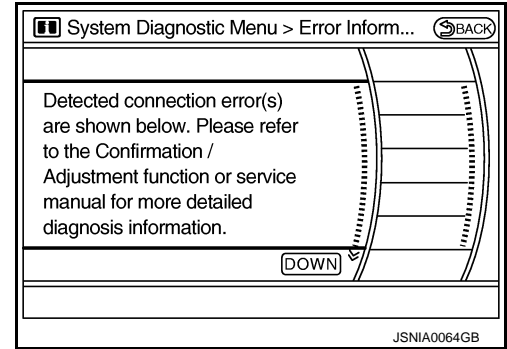
AV

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

- The comments of the self-diagnosis results can be viewed with a component in the diagnosis result screen.



Detection Range of Self-diagnosis Mode

- The self-diagnosis mode allows the technician to diagnose the connection in the communication line between AV control unit and each unit and the internal operation of AV control unit.
- Because the start condition of diagnosis function is switch operated, the on board diagnosis function cannot be started up if any malfunction is detected in the communication circuit between AV control unit and multi-function switch.

SELF-DIAGNOSIS RESULTS

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

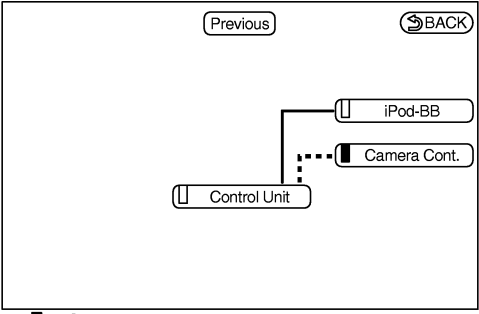
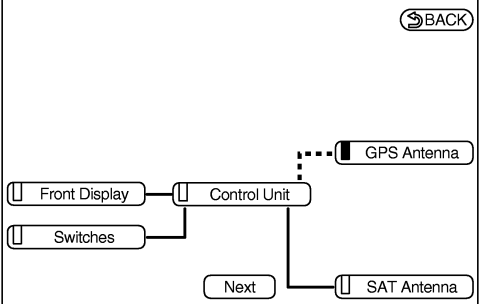
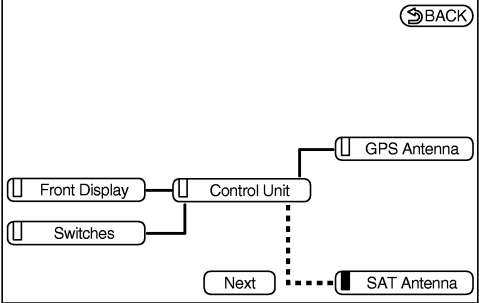
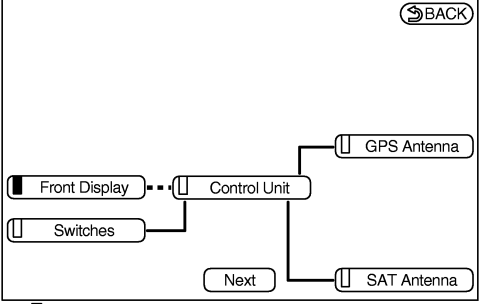
With Rear View Monitor, With Around View Monitor (common item)

Area with yellow connection lines	Detection logic	Possible malfunction location / Action to take
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> </div> <div style="border: 1px solid black; padding: 5px;"> </div> <p>■ : Red</p> <p style="text-align: right; font-size: small;">JSNIA0594GB</p> <p>NOTE: When a control unit malfunction is detected (red in unit display), connection malfunction with other connection unit may be displayed.</p> <p>“Self-Diagnosis did not run because of a control unit malfunction”</p>	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • AV control unit power supply or ground circuits malfunction are detected. • AV control unit malfunction is detected. 	<ul style="list-style-type: none"> • AV control unit power supply and ground circuits. • When there is no malfunction, AV control unit is malfunctioning.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Area with yellow connection lines	Detection logic	Possible malfunction location / Action to take
 <p>■ : Gray - - - - : Yellow JSNIA0596GB</p>	<p>Malfunction is detected in the Camera-connection recognition signal circuit.</p>	<p>Camera connection recognition signal circuit.</p>
 <p>■ : Gray - - - - : Yellow JSNIA0597GB</p>	<p>GPS antenna connection malfunction is detected.</p>	<p>GPS antenna.</p>
 <p>■ : Gray - - - - : Yellow JSNIA0598GB</p>	<p>Poor connection is detected in satellite radio antenna.</p>	<ul style="list-style-type: none"> • Satellite radio antenna feeder. • Satellite radio antenna.
 <p>■ : Gray - - - - : Yellow JSNIA0599GB</p>	<p>Malfunction are detected in the communication circuits between AV control unit and display unit.</p>	<p>Communication circuits between AV control unit and display unit.</p>

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DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

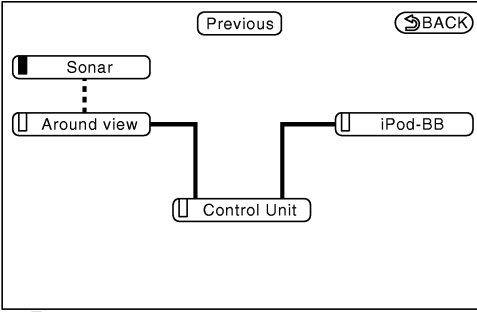
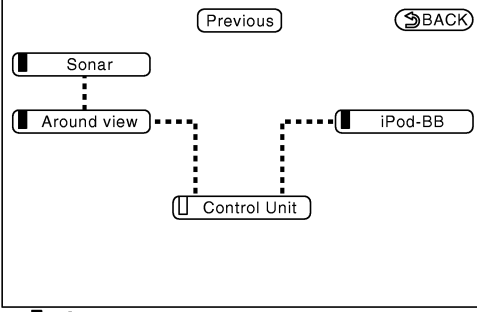
[BOSE AUDIO WITH NAVIGATION]

Area with yellow connection lines	Detection logic	Possible malfunction location / Action to take
<p style="font-size: small;">■ : Gray - - - - : Yellow JSNIA0600GB</p>	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • iPod adapter power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between camera control unit and iPod adapter. 	<ul style="list-style-type: none"> • iPod adapter power supply and ground circuits. • AV communication circuits between camera control unit and iPod adapter.
<p style="font-size: small;">■ : Gray - - - - : Yellow JPNIA1158GB</p>	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • iPod adapter power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between around view monitor control unit and iPod adapter. 	<ul style="list-style-type: none"> • iPod adapter power supply and ground circuits. • AV communication circuits between around view monitor control unit and iPod adapter.
<p style="font-size: small;">■ : Gray - - - - : Yellow JSNIA1102GB</p>	<p>Around view monitor control unit power supply or ground circuits malfunction are detected.</p>	<p>Around view monitor control unit power supply and ground circuits</p>

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

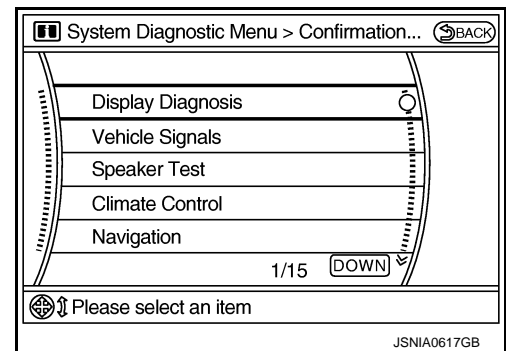
< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Area with yellow connection lines	Detection logic	Possible malfunction location / Action to take
 <p>■ : Gray - - - - : Yellow</p> <p>JSNIA1104GB</p>	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • sonar control unit power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between sonar control unit and the junction between AV control unit and multi-function switch. 	<ul style="list-style-type: none"> • Sonar control unit power supply and ground circuits. • AV communication circuits between sonar control unit and the junction between AV control unit and multi-function switch.
 <p>■ : Gray - - - - : Yellow</p> <p>JSNIA1103GB</p>	<p>Malfunction is detected in the AV communication circuits between around view monitor control unit and the junction between AV control unit and multifunction switch.</p>	<p>AV communication circuits between around view monitor control unit and the junction between AV control unit and multifunction switch.</p>

CONFIRMATION/ADJUSTMENT MODE

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



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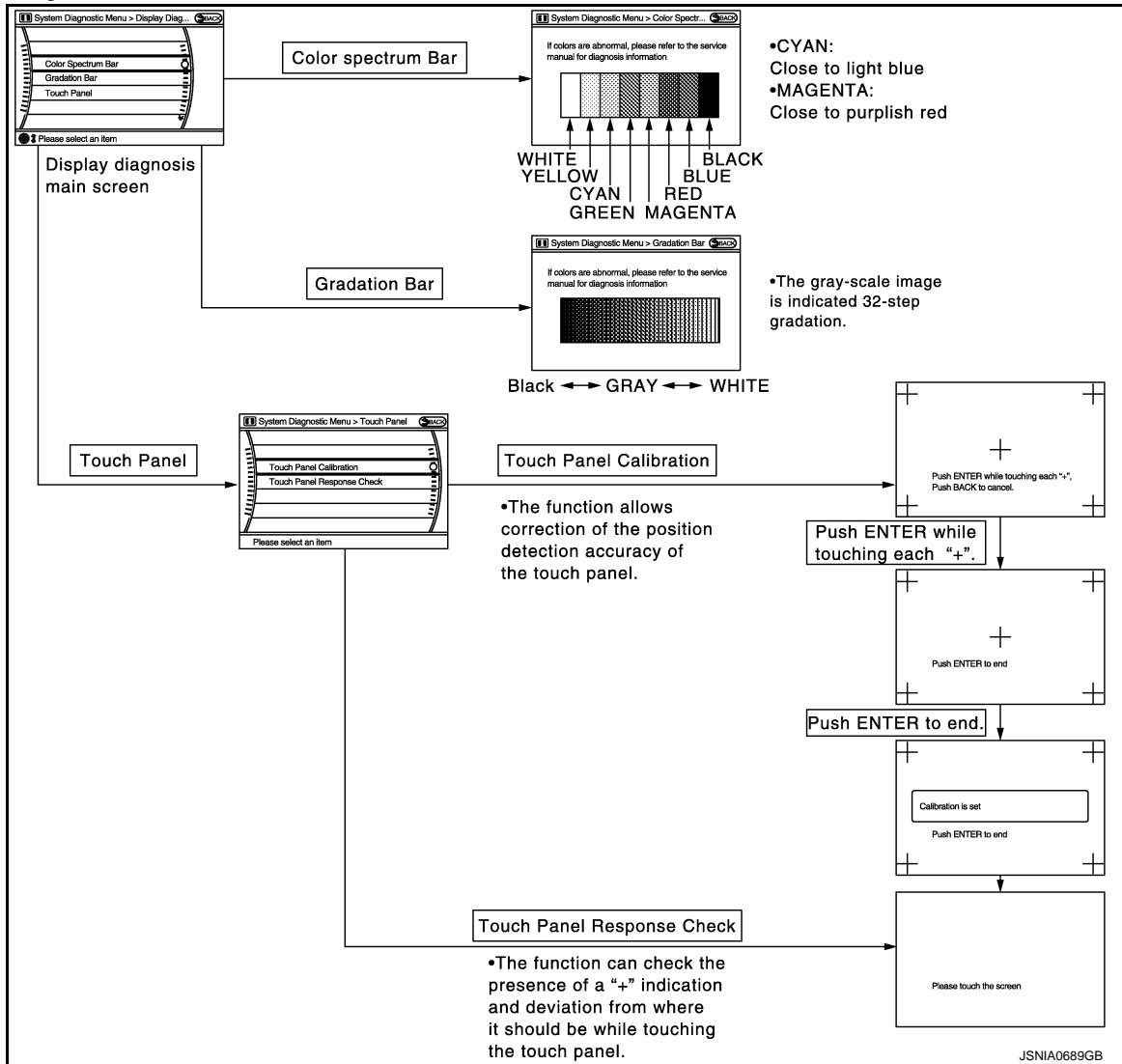
AV

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Display Diagnosis

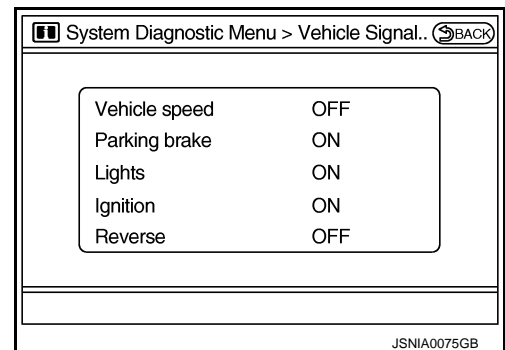


The tint of the color bar indication is as per the following list if a RGB signal error is detected.

- R (red) signal error** : Light blue (Cyan) tint
- G (green) signal error** : Purple (Magenta) tint
- B (blue) signal error** : Yellow tint

Vehicle Signals

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



DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

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

Speaker Test

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

NOTE:

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

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

*: Squawker

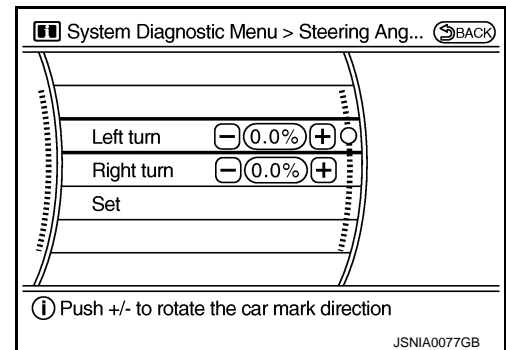
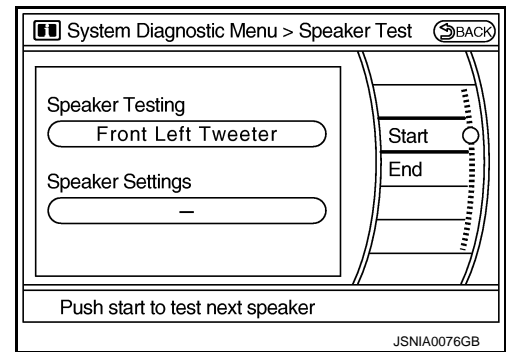
Climate Control

Refer to "HEATER & AIR CONDITIONING CONTROL SYSTEM" for details.

Navigation

STEERING ANGLE ADJUSTMENT

The steering angle output value detected with the gyroscope is adjusted.



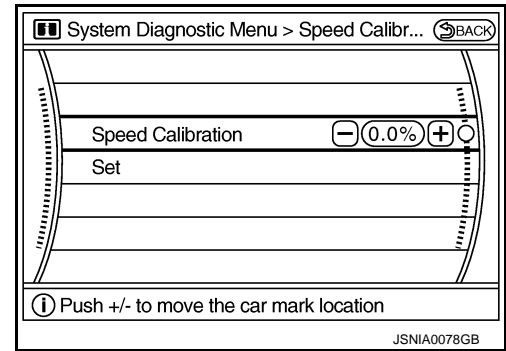
SPEED CALIBRATION

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

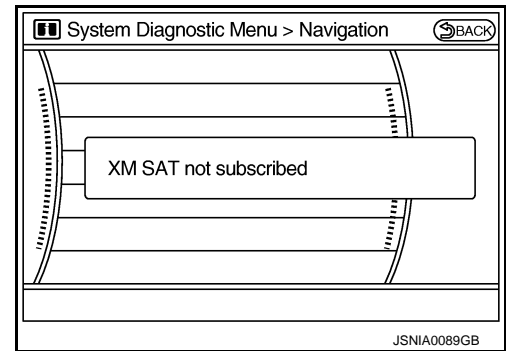
[BOSE AUDIO WITH NAVIGATION]

During normal driving, distance error caused by tire wear and tire pressure change is automatically adjusted for by the automatic distance correction function. This function, on the other hand, is for immediate adjustment, in cases such as driving with tire chains fitted on tires.



XM SAT SUBSCRIPTION STATUS

The XM NavTraffic subscription status can be checked.



Error History

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

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

The error record displays the time and place of the most recent occurrence of that error. However, take note of the following points.

- If there is a malfunction with the GPS antenna circuit board in AV control unit, the correct date and time of occurrence may not be displayed.
- Place of the error occurrence is represented by the position of the current location mark at the time an error occurred. If current location mark has deviated from the correct position, then the place of the error occurrence cannot be located correctly.
- The frequency of occurrence is displayed in a count up manner. The actual count up method differs depending on the error item.

Count up method A

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

Count up method B

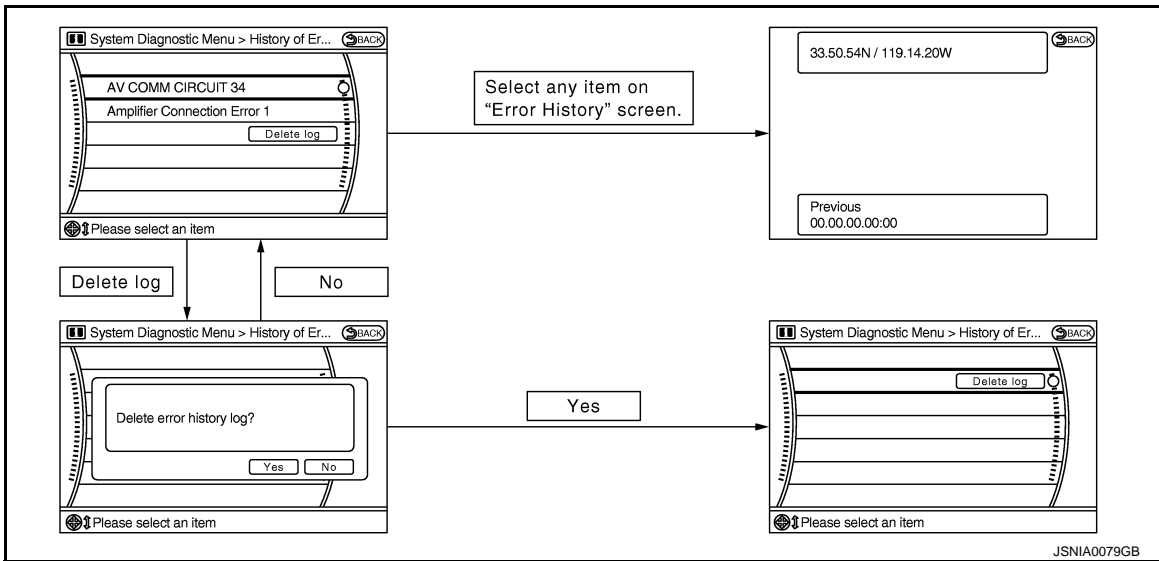
- The counter increases by 1 if an error occurs when IGN switch is ON. The counter will not decrease even if the condition is normal at the next IGN ON cycle.
- The counter upper limit is 50. Any counts exceeding 50 are ignored. The counter can be reset (no error record display) with the “Delete log”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

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

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]



Error item

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

Error item	Detection logic	Possible malfunction factor/Action to take
CAN COMM CIRCUIT	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to AV-233. "CONSULT-III Function (MULTI AV)".
CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	Replace AV control unit.
CONTROL UNIT (AV)	AV communication circuit initial diagnosis malfunction is detected.	
FLASH-ROM Error Of Control Unit	AV control unit malfunction is detected.	
Connection Of Gyro		
XM SERIAL COMM Error		
CAN Controller Memory Error		
Bluetooth Module Connection Error		
HDD CONN Error		
HDD READ Error		
HDD WRITE Error		
HDD COMM Error		
HDD ACCESS Error		
DSP CONN Error	When either one of the following items are detected:	<ul style="list-style-type: none"> AV control unit power supply and ground circuits. When there is no malfunction, AV control unit is malfunctioning.
DSP COMM Error		
Internal Communication Error		
GPS Communication Error	GPS malfunction is detected.	An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace AV control unit if the malfunction occurs constantly.
GPS ROM Error		
GPS RAM Error		
GPS RTC Error		

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AV

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Detection logic	Possible malfunction factor/Action to take
Front Display Connection Error	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> display unit power supply or ground circuits malfunction are detected. malfunction is detected in the communication circuits between AV control unit and display unit. 	<ul style="list-style-type: none"> Display unit power supply and ground circuits. Communication circuits between AV control unit and display unit.
GPS Antenna Error	GPS antenna connection malfunction is detected.	GPS antenna.
Camera Control Unit Connection Error	Malfunction is detected in the camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.
XM Antenna Connection Error	Poor connection is detected in satellite radio antenna.	<ul style="list-style-type: none"> Satellite radio antenna feeder. Satellite radio antenna.
<ul style="list-style-type: none"> AV COMM CIRCUIT Internal Communication Error 	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> AV control unit power supply or ground circuits malfunction are detected. AV control unit malfunction is detected. 	<ul style="list-style-type: none"> AV control unit power supply and ground circuits. When there is no malfunction, AV control unit is malfunctioning.
<ul style="list-style-type: none"> AV COMM CIRCUIT Switches Connection Error 	<p>WITH REAR VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> multifunction switch power supply or ground circuits malfunction are detected. malfunction is detected in the AV communication circuits between multifunction switch and the junction between AV control unit and camera control unit. 	<ul style="list-style-type: none"> Multifunction switch power supply and ground circuits. AV communication circuits between multifunction switch and the junction between AV control unit and camera control unit.
	<p>WITH AROUND VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> multifunction switch power supply or ground circuits malfunction are detected. malfunction is detected in the AV communication circuits between multifunction switch and the junction between AV control unit and around view monitor control unit. 	<ul style="list-style-type: none"> Multifunction switch power supply and ground circuits. AV communication circuits between multifunction switch and the junction between AV control unit and around view monitor control unit.
<ul style="list-style-type: none"> AV COMM CIRCUIT Rearview Camera Connection Error 	Camera control unit power supply or ground circuits malfunction is detected.	Camera control unit power supply and ground circuits.
<ul style="list-style-type: none"> AV COMM CIRCUIT iPod Connection Error 	<p>WITH REAR VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> iPod adapter power supply or ground circuits malfunction are detected. malfunction is detected in the AV communication circuits between camera control unit and iPod adapter. 	<p>WITH REAR VIEW MONITOR</p> <ul style="list-style-type: none"> iPod adapter power supply and ground circuits. AV communication circuits between camera control unit and iPod adapter.
	<p>WITH AROUND VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> iPod adapter power supply or ground circuits malfunction are detected. malfunction is detected in the AV communication circuits between around view monitor control unit and iPod adapter. 	<p>WITH AROUND VIEW MONITOR</p> <ul style="list-style-type: none"> iPod adapter power supply and ground circuits. AV communication circuits between around view monitor control unit and iPod adapter.
<ul style="list-style-type: none"> AV COMM CIRCUIT AVM Connection Error 	Around view monitor control unit power supply or ground circuits malfunction is detected.	Around view monitor control unit power supply and ground circuits.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

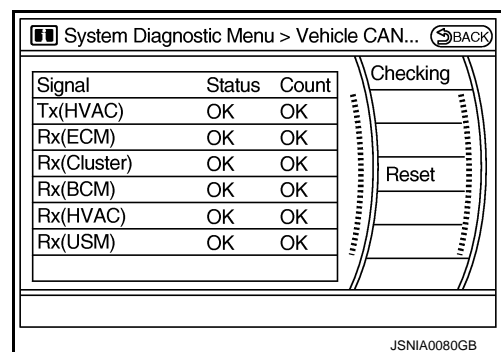
[BOSE AUDIO WITH NAVIGATION]

Error item	Detection logic	Possible malfunction factor/Action to take
<ul style="list-style-type: none"> • AV COMM CIRCUIT • AVM Sonar Connection Error 	When either one of the following items are detected: <ul style="list-style-type: none"> • sonar control unit power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between sonar control unit and the junction between AV control unit and multifunction switch. 	<ul style="list-style-type: none"> • Sonar control unit power supply and ground circuits. • AV communication circuits between sonar control unit and the junction between AV control unit multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT • Rearview Camera Connection Error • iPod Connection Error 	Malfunction is detected in the AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch.	AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT • Switches Connection Error • Rearview Camera Connection Error • iPod Connection Error 	Malfunction is detected in the AV communication circuits between AV control unit and the junction between camera control unit and multifunction switch.	AV communication circuits between AV control unit and the junction between camera control unit and multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT • iPod Connection Error • AVM Connection Error 	Malfunction is detected in the AV communication circuits between around view monitor control unit and the junction between AV control unit and multifunction switch.	AV communication circuits between around view monitor control unit and the junction between AV control unit and multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT • Switches Connection Error • iPod Connection Error • AVM Connection Error 	Malfunction is detected in the AV communication circuits between AV control unit and the junction between around view monitor control unit and multifunction switch.	AV communication circuits between AV control unit and the junction between around view monitor control unit and multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT • Internal Communication Error • Switches Connection Error • Rearview Camera Connection Error • iPod Connection Error 	Malfunction is detected in the AV communication circuits.	Check and repair the short circuit in AV communication circuits.
<ul style="list-style-type: none"> • AV COMM CIRCUIT • Internal Communication Error • Switches Connection Error • iPod Connection Error • AVM Connection Error 	Malfunction is detected in the AV communication circuits.	Check and repair the short circuit in AV communication circuits.

Vehicle CAN Diagnosis

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

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



AV COMM Diagnosis

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

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

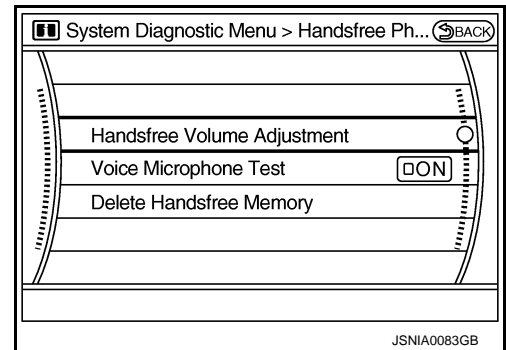
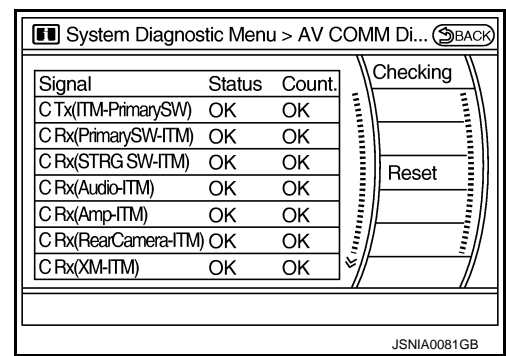
Items	Status (Current)	Counter (Past)
C Tx(ITM-PrimarySW)	OK / UNKWN	OK / 0 - 39
C Rx(PrimarySW-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(STRG SW-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(Audio-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(Amp-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(RearCamera-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(XM-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(iPod-ITM)	OK / UNKWN	OK / 0 - 39
C RX(AVM-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(Amp-Audio)	—	—
C Rx(iPod-Audio)	OK / UNKWN	OK / 0 - 39
C Rx(Sonar-AVM)	OK / UNKWN	OK / 0 - 39
C Tx(Audio-ITM)	OK / UNKWN	OK / 0 - 39

NOTE:

- Any units with “—” displayed have no history of vehicle connection.
- “Audio” and “Amp” indicate the same status because “Amp” indicates the status of the amplifier integrated in AV control unit.
- “STRG SW”, “Amp” and “XM” indicate the same status as “Audio”.

Hands-Free Phone

The hands-free phone reception volume adjustment, microphone and speaker test, and memory erase functions are also available.

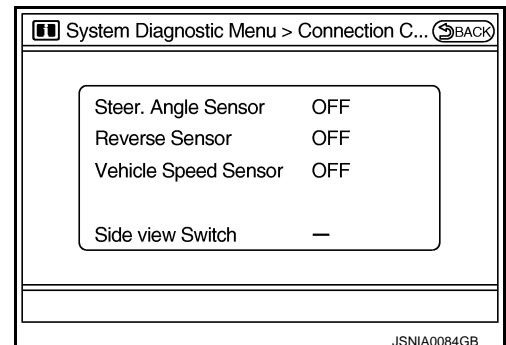


Camera Cont. (With Rear View Monitor)

The two functions of “Connection Confirmation” and “Adjust Offset of Rear View Camera” are available.

CONNECTION CONFIRMATION

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



DIAGNOSIS SYSTEM (AV CONTROL UNIT)

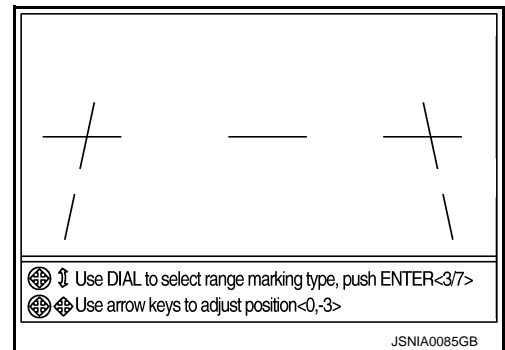
< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Diagnosis item	Display	Vehicle status
Steer. Angle Sensor	ON	When steering the vehicle with ignition switch ON (remains ON until connection mode is stopped when it is turned ON)
	OFF	<ul style="list-style-type: none"> Ignition switch at ACC No steering with ignition switch ON
	—	Malfunction detected in camera connection recognition signal
Reverse Sensor	ON	Selector lever is in "R" with ignition switch ON.
	OFF	<ul style="list-style-type: none"> Ignition switch at ACC Selector lever is in position other than "R" with ignition switch ON
	—	Malfunction detected in camera-connection recognition signal
Vehicle Speed Sensor	ON	Vehicle speed is more than 0 km/h (0 MPH) with ignition switch ON
	OFF	<ul style="list-style-type: none"> Ignition switch at ACC Vehicle speed is 0 km/h (0 MPH) with ignition switch ON
	—	Malfunction detected in camera connection recognition signal
Side view Switch	—	Not used

ADJUST OFFSET OF REAR VIEW CAMERA

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



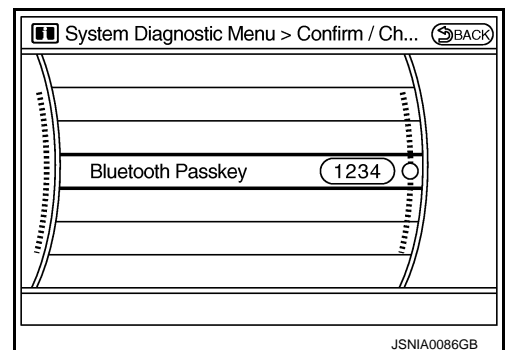
Camera Cont. (With Around View Monitor)

Refer to [AV-237. "Diagnosis Description"](#).

Bluetooth

Confirm / Change Passkey

- The passkey of Bluetooth can be confirmed and changed.
- The passkey can be changed by four digits within 0 to 9.



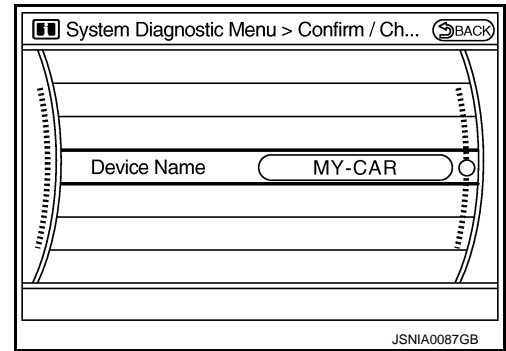
Confirm / Change Device Name

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITH NAVIGATION]

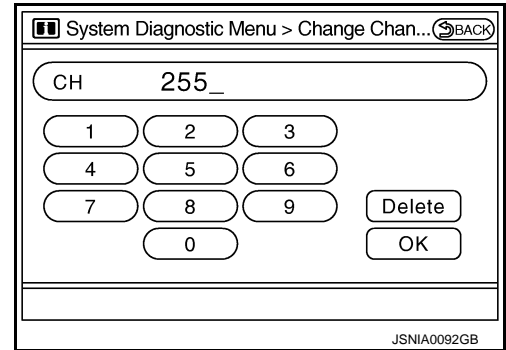
< SYSTEM DESCRIPTION >

- The device name of Bluetooth can be confirmed and changed.
- The device name can be changed by sixteen digits within A to Z (small character can be used) and - (hyphen).

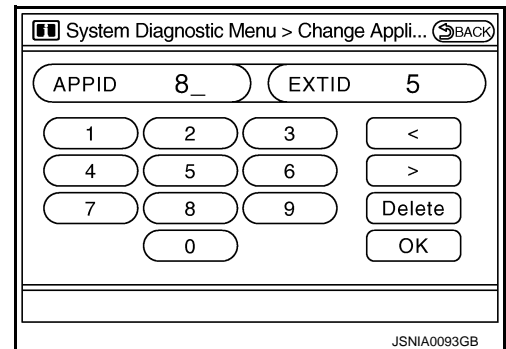


SAT

- Change Channel
- Any necessary channels required to receive traffic information from the satellite radio system can be set.

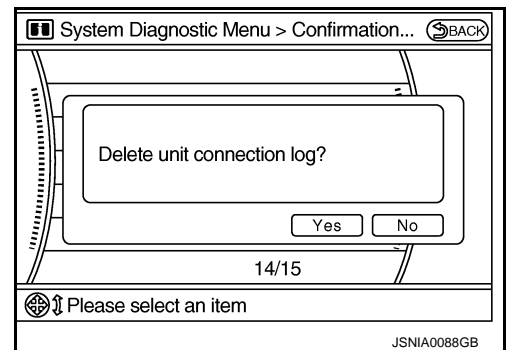


- Change Application ID
- Any application IDs required to receive traffic information from the satellite radio system can be set.



Delete Unit Connection Log

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



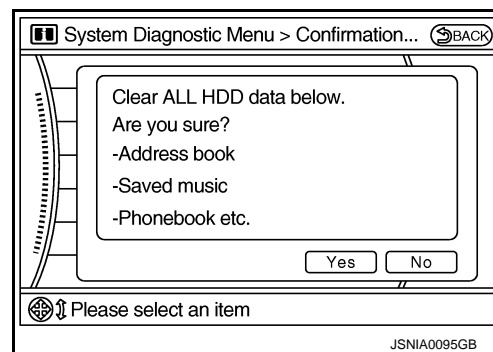
Initialize Settings

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Deletes data stored in HDD.



CONSULT-III Function (MULTI AV)

INFOID:000000004347791

CONSULT-III FUNCTIONS

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

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

AV COMMUNICATION

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

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

ECU IDENTIFICATION

The part number of AV control unit is displayed.

SELF DIAGNOSIS RESULT

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

Self-diagnosis Results Display Item

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT [U1000]	CAN communication malfunction is detected.	Refer to AV-242, "Diagnosis Procedure" .

AV

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
CONTROL UNIT (CAN) [U1010]	CAN initial diagnosis malfunction is detected.	
CONTROL UNIT (AV) [U1310]	AV communication circuit initial diagnosis malfunction is detected.	
Cont Unit FLASH-ROM [U1200]	AV control unit malfunction is detected.	Replace AV control unit.
Gyro NO CONN [U1201]		
CAN CONT [U1216]		
BLUETOOTH CONN [U1217]		
HDD CONN [U1218]		
HDD READ [U1219]		
XM SERIAL COMM [U1220]		
HDD WRITE [U121A]		
HDD COMM [U121B]		
HDD ACCESS [U121C]		
DSP CONN [U121D]		
DSP COMM [U121E]		
INTERNAL COMM [U121F]		
GPS COMM [U1204]	GPS malfunction is detected.	<p>An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs.</p> <p>Replace AV control unit if the malfunction occurs constantly.</p>
GPS ROM [U1205]		
GPS RAM [U1206]		
GPS RTC [U1207]		
FRONT DISP CONN [U1243]	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • display unit power supply or ground circuits malfunction are detected. • malfunction is detected in the communication circuits between AV control unit and display unit. 	<ul style="list-style-type: none"> • Display unit power supply and ground circuits. • Communication circuits between AV control unit and AV display unit.
GPS ANTENNA CONN [U1244]	GPS antenna connection malfunction is detected.	GPS antenna.
CAMERA CONT CONN [U1250]	Malfunction is detected in the camera connection recognition circuit between AV control unit and camera control unit.	Camera-connection recognition circuit between AV control unit and camera control unit.
XM ANTENNA CONN [U1258]	Poor connection is detected in satellite radio antenna.	<ul style="list-style-type: none"> • Satellite radio antenna feeder. • Satellite radio antenna.
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] 	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • AV control unit power supply or ground circuits malfunction are detected. • AV control unit malfunction are detected. 	<ul style="list-style-type: none"> • AV control unit power supply and ground circuits. • When there is no malfunction, AV control unit is malfunctioning.

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take	
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] 	<p>WITH REAR VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • multifunction switch power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between multifunction switch and the junction between AV control unit and camera control unit. 	<ul style="list-style-type: none"> • Multifunction switch power supply and ground circuits. • AV communication circuits between multifunction switch and the junction between AV control unit and camera control unit. 	A
	<p>WITH AROUND VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • multifunction switch power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between multifunction switch and the junction between AV control unit and around view monitor control unit. 	<ul style="list-style-type: none"> • Multifunction switch power supply and ground circuits. • AV communication circuits between multifunction switch and the junction between AV control unit and around view monitor control unit. 	B C D E F
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • REAR CAMERA LAN CONN [U1252] 	Camera control unit power supply or ground circuits malfunction is detected.	Camera control unit power supply and ground circuits.	G
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • IPOD CONN [U1254] 	<p>WITH REAR VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • iPod adapter power supply or ground circuits malfunction are detected. • malfunction is detected in the AV communication circuits between camera control unit and iPod adapter. 	<ul style="list-style-type: none"> • iPod adapter power supply and ground circuits. • AV communication circuits between camera control unit and iPod adapter. 	H I
	<p>WITH AROUND VIEW MONITOR</p> <p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • iPod adapter power supply or ground circuits malfunction is detected. • malfunction is detected in the AV communication circuits between around view monitor control unit and iPod adapter. 	<ul style="list-style-type: none"> • iPod adapter power supply and ground circuits. • AV communication circuits between around view monitor control unit and iPod adapter. 	J K
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • AROUND CAMERA CONN [U125B] 	Around view monitor control unit power supply or ground circuits malfunction is detected.	Around view monitor control unit power supply and ground circuits.	L
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SONAR CONN [U125C] 	<p>When either one of the following items are detected:</p> <ul style="list-style-type: none"> • sonar control unit power supply or ground circuit malfunction are detected. • malfunction is detected in the AV communication circuits between sonar control unit and the junction between AV control unit and multifunction switch. 	<ul style="list-style-type: none"> • Sonar control unit power supply and ground circuits. • AV communication circuits between sonar control unit and the junction between AV control unit and multifunction switch. 	M AV
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • REAR CAMERA LAN CONN [U1252] • IPOD CONN [U1254] 	Malfunction is detected in the AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch.	AV communication circuits between camera control unit and the junction between AV control unit and multifunction switch.	O
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] • REAR CAMERA LAN CONN [U1252] • IPOD CONN [U1254] 	Malfunction is detected in the AV communication circuits between AV control unit and the junction between camera control unit and multifunction switch.	AV communication circuits between AV control unit and the junction between camera control unit and multifunction switch.	P
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	Malfunction is detected in the AV communication circuits between around view monitor control unit and the junction between AV control unit and multifunction switch.	AV communication circuits between around view monitor control unit and the junction between AV control unit and multifunction switch.	

DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	Malfunction is detected in the AV communication circuits between AV control unit and the junction between around view monitor control unit and multifunction switch.	AV communication circuits between AV control unit and the junction between around view monitor control unit and multifunction switch.
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] • SWITCH CONN [U1240] • REAR CAMERA LAN CONN [U1252] • IPOD CONN [U1254] 	Malfunction is detected in the AV communication circuits.	Check and repair the short circuit in AV communication circuits.
<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] • SWITCH CONN [U1240] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	Malfunction is detected in the AV communication circuits.	Check and repair the short circuit in AV communication circuits.

DATA MONITOR

ALL SIGNALS

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

Display Item	Display	Vehicle status	Remarks
VHCL SPD SIG	On	Vehicle speed > 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
	Off	Vehicle speed = 0 km/h (0 MPH)	
PKB SIG	On	Parking brake is applied.	
	Off	Parking brake is released.	
ILLUM SIG	On	Block the light beam from the auto light optical sensor when the light SW is ON.	—
	Off	Expose the auto light optical sensor to light when the light SW is OFF or ON.	
IGN SIG	On	Ignition switch ON	
	Off	Ignition switch in the ACC position	
REV SIG	On	Shift the selector lever to the "R" position	Changes in indication may be delayed. This is normal.
	Off	Shift the selector lever to a position other than the "R" position	

SELECTION FROM MENU

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

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

DIAGNOSIS SYSTEM (AROUND VIEW MONITOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

DIAGNOSIS SYSTEM (AROUND VIEW MONITOR CONTROL UNIT)

Diagnosis Description

INFOID:000000004347792

The diagnosis function of around view monitor control unit is displayed when selecting “Camera Cont.” of Confirmation/Adjustment mode in the multi AV system.

Around view monitor control unit diagnosis item

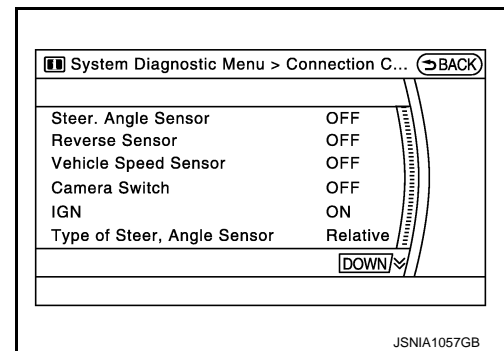
AV control unit Confirmation/Adjustment mode		Function	
Camera Cont.	Connection Confirmation	The status of signals input to around view monitor control unit can be checked.	
	Calibrating Camera Image	Rear Camera	Performs the calibration of rear camera.
		Pass-Side Camera	Performs the calibration of side camera LH.
		Front Camera	Performs the calibration of front camera.
		Dr-Side Camera	Performs the calibration of side camera.
		Initialize Camera Image Calibration*	The calibration can be initialized to NISSAN factory shipment condition.
	Correct Draw Line of Camera Image	Rear View	The position of rear view guiding line can be changed.
		Front-Side View	The position of Front-Side view guiding line can be changed.
		Front View	The position of front view guiding line can be changed.
	Fine Tuning of Birds-Eye View	<ul style="list-style-type: none"> The confirmation and adjustment of the difference between each camera can be performed. The system changes to the ZOOM function by the operation of shift and the ZOOM ratio of each camera can be changed. 	

CAUTION:

*: Never perform other operations for approximately 10 seconds after performing “Initialize Camera Image Calibration”.

CONNECTION CONFIRMATION

The status of signals inputted to around view monitor control unit can be checked.



Connection Confirmation item list

Diagnosis item	Display	Description
Steer. Angle Sensor	ON/OFF	<ul style="list-style-type: none"> Input status of steering angle sensor is displayed by ON/OFF. When all of steering signals 1, 2, and 3 are input, it is turned ON. It remains ON until connection confirmation mode is stopped.
Reverse Sensor	ON/OFF	Input status of reverse signal inputted to around view monitor control unit is displayed by ON/OFF in real time.
Vehicle Speed Sensor	ON/OFF	<ul style="list-style-type: none"> Input status of vehicle speed signal inputted to around view monitor control unit is displayed by ON/OFF. When the vehicle speed signal is input, it is turned ON. It remains ON until connection confirmation mode is stopped.
Camera Switch	ON/OFF	<ul style="list-style-type: none"> The status of camera switch signal received via AV communication from AV control unit is displayed by ON/OFF. When the camera switch signal is received once, it is turned ON. It remains ON until connection confirmation mode is stopped.
IGN	ON/OFF	Input status of ignition signal inputted to around view monitor control unit is displayed by ON/OFF in real time.

DIAGNOSIS SYSTEM (AROUND VIEW MONITOR CONTROL UNIT)

< SYSTEM DESCRIPTION >

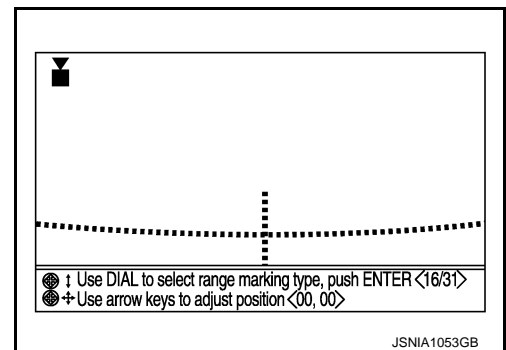
[BOSE AUDIO WITH NAVIGATION]

Diagnosis item	Display	Description
Type of Steer. Angle Sensor	Relative	The input type of steering angle sensor is displayed. ("Relative" is displayed on this model.)
Type of Steer. Gear ratio	1	The type of steering gear ratio is displayed. ("1" is displayed on this model.)
Left or Right Steer.	Left	The steering position is displayed. ("Left" is displayed on this model.)
Rear Camera Image Output signal	OK / NG	The input status of rear camera image signal is displayed by OK/NG in real time.
Rear Camera COMM Status	OK / NG	The communication status with rear camera is displayed by OK/NG in real time.
Rear Camera COMM Line	OK / NG	The status of communication line with rear camera is displayed by OK/NG in real time.
Front Camera Image Output signal	OK / NG	The input status of front camera image signal is displayed by OK/NG in real time.
Front Camera COMM Status	OK / NG	The communication status with front camera is displayed by OK/NG in real time.
Front Camera COMM Line	OK / NG	The status of communication line with front camera is displayed by OK/NG in real time.
Pass-Side Camera Image Output signal	OK / NG	The input status of side camera RH image signal is displayed by OK/NG in real time.
Pass-Side Camera COMM Status	OK / NG	The communication status with side camera RH is displayed by OK/NG in real time.
Pass-Side Camera COMM Line	OK / NG	The status of communication line with side camera RH is displayed by OK/NG in real time.
Dr-Side Camera Image Output signal	OK / NG	The input status of side camera LH image signal is displayed by OK/NG in real time.
Dr-Side Camera COMM Status	OK / NG	The communication status with side camera LH is displayed by OK/NG in real time.
Dr-Side Camera COMM Line	OK / NG	The status of communication line with side camera LH is displayed by OK/NG in real time.

CALIBRATING CAMERA IMAGE

- Perform the calibration of camera image caused by the incorrect mounting position of each camera, etc. Always perform calibration after performing the following work.
 - When each camera or each camera mount (door mirror, front grille, etc.) is removed
 - When replacing around view monitor control unit
- When performing the calibration initialization, it can be set to the NISSAN factory shipment condition.

Refer to [AV-173. "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Special Repair Requirement"](#) for the calibration procedure.



Adjustment range

Rotating direction : 31 patterns (16 on the center)

Upper/lower direction : -99 – 99

Left/right direction : -99 – 99

Calibrating Camera Image item

Items	Description
Rear Camera	Performs the calibration of rear camera.
Pass-Side Camera	Performs the calibration of side camera RH.
Front Camera	Performs the calibration of front camera.
Dr-Side Camera	Performs the calibration of side camera LH.
Initialize Camera Image Calibration*	The calibration can be initialized to the factory shipment setting.

CAUTION:

*: Never perform other operations for approximately 10 seconds after performing "Initialize Camera Image Calibration".

DIAGNOSIS SYSTEM (AROUND VIEW MONITOR CONTROL UNIT)

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

Correct Draw Line of Camera Image

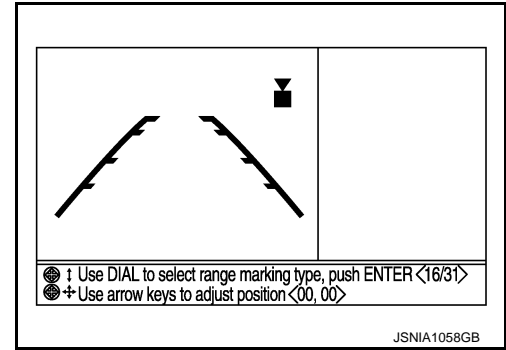
The display position of guiding lines when displayed on the rear view, front view, and front-side view can be changed.

Adjustment range

Rotating direction : 31 patterns

Upper/lower direction : -25 - 25

Left/right direction : -25 - 25



Correct Draw Line of Camera Image item

Items	Description
Rear View	The position of rear view guiding line can be changed.
Front-Side View	The position of Front-Side view guiding line can be changed.
Front View	The position of Front view guiding line can be changed.

FINE TUNING OF BIRDS-EYE VIEW

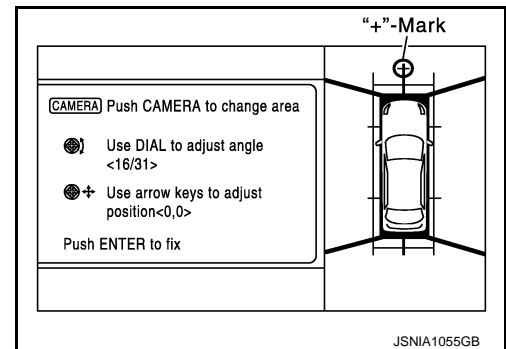
- The fine adjustment function of camera calibration can check and adjust the difference between each camera.
- Fine adjustments can be performed for each camera. Move the "+"-mark to select the camera by pressing the "CAMERA" switch.
- Perform the adjustment with the center dial and upper/lower/left/right switches.

CAUTION:

Operate the center dial slowly because the changing of the screen takes approximately 1 second.

NOTE:

- It can be initialized to the NISSAN factory shipment setting with "Initialize Camera Image Calibration" of "Calibrating Camera Image".
- The adjustment value is cancelled in this mode by performing "Initialize Camera Image Calibration".



Adjustment range

Rotating direction : 31 patterns (16 on the center)

Upper/lower direction : -99 - 99

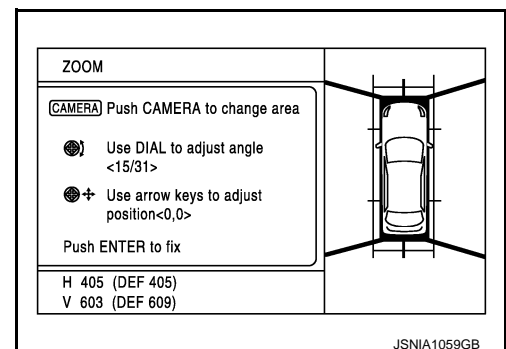
Left/right direction : -99 - 99

ZOOM FUNCTION

- The ZOOM ratio of camera can be changed when calibrating the camera.
- It shifts to ZOOM function mode by shifting the selector lever to a position other than the "R" position → "R" position → other than "R" position in the "Fine Tuning of Birds-Eye View" mode.
- The changing of ZOOM ratio can be performed for each camera. Move the "+"-mark to select the camera by pressing "CAMERA" switch and press the left/right switch to change the ZOOM ratio.

NOTE:

- When the position is not correct in "Fine Tuning of Birds-Eye View" mode, use this "ZOOM" function to adjust it.
- If this function is used, always adjust the upper/lower/left/right position again on the "Fine Tuning of Birds-Eye View" screen.



DIAGNOSIS SYSTEM [SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)]

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

DIAGNOSIS SYSTEM [SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)]

CONSULT-III Function (SONAR)

INFOID:000000004347793

DESCRIPTION

CONSULT-III can display each diagnostic item using the diagnostic test modes shown as follows:

Test mode	Function
Ecu Identification	Sonar control unit part number can be read.
Self Diagnostic Result	Sonar control unit checks the conditions and displays memorized error.
Data monitor	Sonar control unit input/output data in real time.
Active Test	Gives a drive signal to a load to check the operation.
Work support	Changes setting of each function.

ECU IDENTIFICATION

Displays the part number of sonar control unit.

SELF-DIAGNOSTIC RESULTS

For details, refer to [AV-559, "DTC Index"](#).

DATA MONITOR

Monitor Item	Display	Description
SONAR OPE	On	Around view monitor is ON. (sonar system is ON)
	Off	Around view monitor is OFF. (sonar system is OFF)
BUZZER OUTPUT	On	Buzzer is output condition.
	Off	Buzzer is not output condition.
CR SEN [FL] CR SEN [FR] CR SEN [RL] CR SEN [RR]	ERROR	When a sensor is abnormal.
	LV.0	When a sensor is not detection.
	LV.2	The distance between the corner sensor and an obstacle is 60 cm (23.6 in) or more and less than 70 cm (27.5 in).
	LV.3	The distance between the corner sensor and an obstacle is 40 cm (15.7 in) or more and less than 60 cm (23.6 in).
	LV.4	The distance between corner sensor and an obstacle less than 40 cm (15.7 in).

ACTIVE TEST

Active test item	Function
BUZZER	This test is able to check buzzer (forward/backward) operation.
SONAR SENSOR	This test is able to check each sonar sensor operation.

WORK SUPPORT

Work support item	Function
CORNER SEN DISTANCE SET	Corner sensor warning buzzer distance is adjustable to 4 phases.

CORNER SEN DISTANCE SET

Corner sensor warning buzzer distance can be set to 4 phases as follows.

Warning item	FARTHER	FAR	NORMAL	NEAR
Second warning	70 – 80 cm (27.5 – 31.4 in)	60 – 70 cm (23.6 – 27.5 in)	50 – 60 cm (19.6 – 23.6 in)	40 – 50 cm (15.7 – 19.6 in)

DIAGNOSIS SYSTEM [SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)]

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Warning item	FARTHER	FAR	NORMAL	NEAR
Third warning	50 – 70 cm (19.6 – 27.5 in)	40 – 60 cm (15.7 – 23.6 in)	30 – 50 cm (11.8 – 19.6 in)	30 – 40 cm (11.8 – 15.7 in)
Fourth warning	Less than 50 cm (19.6 in)	Less than 40 cm (15.7 in)	Less than 30 cm (11.8 in)	Less than 30 cm (11.8 in)

The default of this model is "FAR".

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AV

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:000000004347794

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

CAN Communication Signal Chart. Refer to [LAN-26, "CAN Communication Signal Chart"](#).

DTC Logic

INFOID:000000004347795

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:000000004347796

1. PERFORM SELF DIAGNOSTIC

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

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to "LAN system". Refer to [LAN-17, "Trouble Diagnosis Flow Chart"](#).
- NO >> Refer to GI section. Refer to [GI-40, "Intermittent Incident"](#).

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000004347797

Initial diagnosis of AV control unit.

DTC Logic

INFOID:0000000004347798

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000004347799

1. REPLACE AV CONTROL UNIT

When DTC U1010 is detected, replace AV control unit.

>> INSPECTION END

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AV

U1310 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1310 AV CONTROL UNIT

Description

INFOID:000000004347800

Replace the AV control unit if this DTC is displayed. Refer to [AV-575. "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347801

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

U1200 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1200 AV CONTROL UNIT

Description

INFOID:000000004347802

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">Integrates HDD (hard disk drive) allowing map data and music data to be stored.It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347803

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

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AV

U1201 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1201 AV CONTROL UNIT

Description

INFOID:000000004347804

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347805

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1201	GYRO NO CONN [U1201]	Internal malfunction of AV control unit (gyrocompass disconnection) is detected.	Replace AV control unit

U1216 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1216 AV CONTROL UNIT

Description

INFOID:000000004347806

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347807

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

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U1217 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1217 AV CONTROL UNIT

Description

INFOID:000000004347808

Replace the AV control unit if this DTC is displayed. Refer to [AV-575. "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347809

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1217	BLUETOOTH MODULE CONN [U1217]	Internal malfunction of AV control unit (Bluetooth module connection malfunction) is detected.	Replace AV control unit

U1218 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1218 AV CONTROL UNIT

Description

INFOID:000000004347810

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347811

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1218	HDD-CONN [U1218]	Internal malfunction of AV control unit (HDD connection malfunction) is detected.	Replace AV control unit

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U1219 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1219 AV CONTROL UNIT

Description

INFOID:000000004347812

Replace the AV control unit if this DTC is displayed. Refer to [AV-575. "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347813

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1219	HDD-READ [U1219]	Internal malfunction of AV control unit (HDD read malfunction) is detected.	Replace AV control unit

U1220 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1220 AV CONTROL UNIT

Description

INFOID:000000004347814

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">Integrates HDD (hard disk drive) allowing map data and music data to be stored.It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347815

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1220	XM SERIAL COMM [U1220]	Internal malfunction of AV control unit (satellite radio tuner communication error) is detected.	Replace AV control unit

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U121A AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U121A AV CONTROL UNIT

Description

INFOID:000000004347816

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347817

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121A	HDD-WRITE [U121A]	Internal malfunction of AV control unit (HDD write malfunction) is detected.	Replace AV control unit

U121B AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U121B AV CONTROL UNIT

Description

INFOID:000000004347818

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347819

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121B	HDD-COMM [U121B]	Internal malfunction of AV control unit (HDD communication error) is detected.	Replace AV control unit

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AV

U121C AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U121C AV CONTROL UNIT

Description

INFOID:000000004347820

Replace the AV control unit if this DTC is displayed. Refer to [AV-575. "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347821

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121C	HDD-ACCESS [U121C]	Internal malfunction of AV control unit (HDD access error) is detected.	Replace AV control unit

U121D AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U121D AV CONTROL UNIT

Description

INFOID:000000004347822

Replace the AV control unit if this DTC is displayed. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347823

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121D	DSP CONN [U121D]	Internal malfunction of AV control unit (DSP connection error) is detected.	Replace AV control unit

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U121E AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U121E AV CONTROL UNIT

Description

INFOID:000000004347824

Replace the AV control unit if this DTC is displayed. Refer to [AV-575. "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">• Integrates HDD (hard disk drive) allowing map data and music data to be stored.• It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.• The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.• It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347825

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121E	DSP COMM [U121E]	Internal malfunction of AV control unit (DSP communication error) is detected.	Replace AV control unit

U121F AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U121F AV CONTROL UNIT

Description

INFOID:000000004347826

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none">Integrates HDD (hard disk drive) allowing map data and music data to be stored.It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit.The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions.It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.It inputs the automatic brightness ON/OFF signals that are required for the display dimming control.It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347827

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121F	INTERNAL COMM [U121F]	Internal malfunction of AV control unit (internal communication error) is detected.	AV control unit power supply and ground circuit

Diagnosis Procedure

INFOID:000000004347828

1. CHECK AV CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check AV control unit power supply and ground circuit. Refer to [AV-277, "AV CONTROL UNIT : Diagnosis Procedure"](#).

Is inspection result normal?

- YES >> INSPECTION END
- NO >> Repair malfunctioning parts.

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AV

U1204 GPS

Description

INFOID:000000004347829

An intermittent error caused by strong radio interference may be detected unless any symptoms (GPS reception error, etc.) occur. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> Integrates HDD (hard disk drive) allowing map data and music data to be stored. It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit. The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions. It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function. It inputs the automatic brightness ON/OFF signals that are required for the display dimming control. It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347830

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1204	GPS CONN [U1204]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit

Diagnosis Procedure

INFOID:000000004347831

1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again.
- Check that the DTC is detected again.

Is any DTC detected?

- YES >> Replace AV control unit.
 NO >> The intermittent malfunction caused by strong radio interference can be detected.

U1205 GPS

Description

INFOID:000000004347832

An intermittent error caused by strong radio interference may be detected unless any symptoms (GPS reception error, etc.) occur. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-575](#), "[Removal and Installation](#)".

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> Integrates HDD (hard disk drive) allowing map data and music data to be stored. It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit. The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions. It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function. It inputs the automatic brightness ON/OFF signals that are required for the display dimming control. It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347833

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1205	GPS ROM [U1205]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit

Diagnosis Procedure

INFOID:000000004347834

1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again.
- Check that the DTC is detected again.

Is any DTC detected?

- YES >> Replace AV control unit.
 NO >> The intermittent malfunction caused by strong radio interference can be detected.

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U1206 GPS

Description

INFOID:000000004347835

An intermittent error caused by strong radio interference may be detected unless any symptoms (GPS reception error, etc.) occur. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-575, "Removal and Installation"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> • Integrates HDD (hard disk drive) allowing map data and music data to be stored. • It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit. • The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions. • It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function. • It inputs the automatic brightness ON/OFF signals that are required for the display dimming control. • It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347836

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1206	GPS RAM [U1206]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit

Diagnosis Procedure

INFOID:000000004347837

1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. Perform the self-diagnosis again.
3. Check that the DTC is detected again.

Is any DTC detected?

- YES >> Replace AV control unit.
 NO >> The intermittent malfunction caused by strong radio interference can be detected.

U1207 GPS

Description

INFOID:000000004347838

An intermittent error caused by strong radio interference may be detected unless any symptoms (GPS reception error, etc.) occur. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-575](#), "[Removal and Installation](#)".

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> Integrates HDD (hard disk drive) allowing map data and music data to be stored. It is the master unit of the MULTI AV system, and it is connected to each control unit by means of communication. It operates each system according to communication signals from the AV control unit. The AV control unit includes the audio, hands-free phone, voice control, navigation, and vehicle information functions. It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function. It inputs the automatic brightness ON/OFF signals that are required for the display dimming control. It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).

DTC Logic

INFOID:000000004347839

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1207	GPS RTC [U1207]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit

Diagnosis Procedure

INFOID:000000004347840

1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again.
- Check that the DTC is detected again.

Is any DTC detected?

- YES >> Replace AV control unit.
 NO >> The intermittent malfunction caused by strong radio interference can be detected.

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U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1243 DISPLAY UNIT

Description

INFOID:000000004347841

Part name	Description
DISPLAY UNIT	<ul style="list-style-type: none"> • Display image is controlled by the serial communication from AV control unit. • RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing). Auxiliary image signal is input from the auxiliary input jack. Camera image signal is input from the camera control unit. • Synchronizing signal (HP, VP) is output to AV control unit. • Touch panel function can be operated for each system by touching a display directly.

DTC Logic

INFOID:000000004347842

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1243	FRONT DISP CONN [U1243]	When either one of the following items is detected: <ul style="list-style-type: none"> • display unit power supply and ground circuit malfunction is detected • malfunction is detected in communication circuits between display unit and AV control unit 	<ul style="list-style-type: none"> • Display unit power supply and ground circuit • Communication circuits between display unit and AV control unit

Diagnosis Procedure

INFOID:000000004347843

1. CHECK DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUITS

Check display unit power supply and ground circuits. Refer to [AV-277, "DISPLAY UNIT : Diagnosis Procedure"](#).

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

2. CHECK CONTINUITY COMMUNICATION CIRCUITS

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

Display unit		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
M75	11	M88	70	Existed
	22		71	

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

Display unit		Ground	Continuity
Connector	Terminals		
M75	11		Not existed
	22		

Is inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK COMMUNICATION SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.

U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

3. Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M75	11	Ground	

Is inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

4. CHECK COMMUNICATION SIGNAL

Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M75	22	Ground	

Is inspection result normal?

YES >> INSPECTION END

NO >> Replace display unit.

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AV

U1244 GPS ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1244 GPS ANTENNA

Description

INFOID:000000004347844

Part name	Description
GPS ANTENNA	GPS signal is received and sent to AV control unit.

DTC Logic

INFOID:000000004347845

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1244	GPS ANTENNA CONN [U1244]	GPS antenna connection malfunction is detected	GPS antenna disconnection

Diagnosis Procedure

INFOID:000000004347846

1. GPS ANTENNA CHECK

Visually check GPS antenna and antenna feeder.

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

2. CHECK AV CONTROL UNIT VOLTAGE

1. Disconnect GPS antenna connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit terminal and ground.

(+)	(-)	Voltage (Approx.)
AV control unit		
Terminal		
110	Ground	5.0 V

Is inspection result normal?

YES >> INSPECTION END

NO >> Replace AV control unit.

U1250 CAMERA CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1250 CAMERA CONTROL UNIT

Description

INFOID:000000004347847

Part name	Description
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> • Camera image signal is input from rear view camera, and camera image is indicated on the display. • Power (camera ON signal) is sent to rear view camera. • Controlled by AV communication sent from AV control unit. • AV control unit recognizes the presence of camera system with camera connection recognition signal.

DTC Logic

INFOID:000000004347848

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

Diagnosis Procedure

INFOID:000000004347849

1. CHECK CAMERA-CONNECTION RECOGNITION SIGNAL CIRCUIT

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

AV control unit		Camera control unit		Continuity
Connector	Terminal	Connector	Terminal	
M87	40	B50	14	Existed

Is inspection result normal?

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

2. CHECK AV CONTROL UNIT VOLTAGE

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

(+) AV control unit		(-)	Voltage (Approx.)
Connector	Terminal		
M87	40	Ground	5.0 V

Is inspection result normal?

- YES >> Replace camera control unit.
 NO >> Replace AV control unit.

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AV

U1258 SATELLITE RADIO ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1258 SATELLITE RADIO ANTENNA

Description

INFOID:000000004347850

Part name	Description
SATELLITE RADIO ANTENNA	Satellite radio signal is received and sent to AV control unit.

DTC Logic

INFOID:000000004347851

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1258	XM ANTENNA CONN [U1258]	Satellite radio antenna connection malfunction is detected	Satellite radio antenna disconnection

Diagnosis Procedure

INFOID:000000004347852

1. SATELLITE RADIO ANTENNA CHECK

Visually check satellite radio antenna and antenna feeder.

Is inspection result normal?

- YES >> GO TO 2.
- NO >> Repair malfunctioning parts.

2. CHECK AV CONTROL UNIT VOLTAGE

1. Disconnect satellite radio antenna connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit terminal and ground.

(+)	(-)	Voltage (Approx.)
AV control unit		
Terminal		
108	Ground	5.0 V

Is inspection result normal?

- YES >> INSPECTION END
- NO >> Replace AV control unit.

U1300 AV COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

U1300 AV COMM CIRCUIT WITH REAR VIEW MONITOR

WITH REAR VIEW MONITOR : Description

INFOID:000000004347854

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

Self-diagnosis results display item

DTC	Display contents of CONSULT-III	Description	Possible malfunction factor/Action to take
U1300 U121F	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] INTERNAL COMM [U121F] 	When either one of the following items is detected: <ul style="list-style-type: none"> AV control unit power supply and ground circuits malfunction is detected. AV control unit malfunction is detected. 	<ul style="list-style-type: none"> AV control unit power supply and ground circuits. When there is no malfunction, AV control unit is malfunctioning.
U1300 U1240	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] SWITCH CONN [U1240] 	When either one of the following items is detected: <ul style="list-style-type: none"> multifunction switch power supply and ground circuits malfunction is detected. malfunction is detected in AV communication circuits between multifunction switch and the junction of AV control unit and camera control unit. 	<ul style="list-style-type: none"> Multifunction switch power supply and ground circuits. AV communication circuits between multifunction switch and the junction of AV control unit and camera control unit.
U1300 U1254	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] IPOD CONN [U1254] 	When either one of the following items is detected: <ul style="list-style-type: none"> malfunction is detected in iPod adapter power supply and ground circuits. malfunction is detected in AV communication circuits between camera control unit and iPod adapter. 	<ul style="list-style-type: none"> iPod adapter power supply and ground circuits. AV communication circuits between camera control unit and iPod adapter.
U1300 U1252	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] REAR CAMERA LAN CONN [U1252] 	Camera control unit power supply and ground circuits malfunction is detected.	Camera control unit power supply and ground circuits.
U1300 U1252 U1254	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] REAR CAMERA LAN CONN [U1252] IPOD CONN [U1254] 	Malfunction is detected in AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.	AV communication circuits between camera control unit and the junction of AV control unit and multifunction switch.
U1300 U1240 U1252 U1254	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] SWITCH CONN [U1240] REAR CAMERA LAN CONN [U1252] IPOD CONN [U1254] 	Malfunction is detected in AV communication circuits between AV control unit and the junction of camera control unit and multifunction switch.	AV communication circuits between AV control unit and the junction of camera control unit and multifunction switch.
U1300 U121F U1240 U1252 U1254	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] INTERNAL COMM [U121F] SWITCH CONN [U1240] REAR CAMERA LAN CONN [U1252] IPOD CONN [U1254] 	Malfunction is detected in AV communication circuits.	Check and repair the short circuit in AV communication circuits.

WITH AROUND VIEW MONITOR

WITH AROUND VIEW MONITOR : Description

INFOID:000000004347855

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

U1300 AV COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Self-diagnosis results display item

DTC	Display contents of CONSULT-III	Description	Possible malfunction factor/Action to take
U1300 U121F	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] 	When either one of the following items is detected: <ul style="list-style-type: none"> • AV control unit power supply and ground circuits malfunction is detected. • AV control unit malfunction is detected. 	<ul style="list-style-type: none"> • AV control unit power supply and ground circuits. • When there is no malfunction, AV control unit is malfunctioning.
U1300 U1240	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] 	When either one of the following items is detected: <ul style="list-style-type: none"> • multifunction switch power supply and ground circuits malfunction is detected. • malfunction detected in AV communication circuits between multifunction switch and the junction of AV control unit and around view monitor control unit. 	<ul style="list-style-type: none"> • Multifunction switch power supply and ground circuits. • AV communication circuits between multifunction switch and the junction of AV control unit and around view monitor control unit.
U1300 U1254	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • IPOD CONN [U1254] 	When either one of the following items is detected: <ul style="list-style-type: none"> • malfunction is detected in iPod adapter power supply and ground circuits. • malfunction is detected in AV communication circuits between around view monitor control unit and iPod adapter. 	<ul style="list-style-type: none"> • iPod adapter power supply and ground circuits. • AV communication circuits between around view monitor control unit and iPod adapter.
U1300 U125B	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • AROUND CAMERA CONN [U125B] 	Around view monitor control unit power supply and ground circuits malfunction is detected.	Around view monitor control unit power supply and ground circuits.
U1300 U125C	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SONAR CONN [U125C] 	When either one of the following items is detected: <ul style="list-style-type: none"> • sonar control unit power supply and ground circuits malfunction is detected. • malfunction is detected in AV communication circuits between sonar control unit and the junction of AV control unit and multifunction switch. 	<ul style="list-style-type: none"> • Sonar control unit power supply and ground circuits. • AV communication circuits between sonar control unit and the junction of AV control unit and multifunction switch.
U1300 U1254 U125B	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	Malfunction is detected in AV communication circuits between around view monitor control unit and the junction of AV control unit and multifunction switch.	AV communication circuits between around view monitor control unit and the junction of AV control unit and multifunction switch.
U1300 U1240 U1254 U125B	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	Malfunction is detected in AV communication circuits between AV control unit and the junction of around view monitor control unit and multifunction switch.	AV communication circuits between AV control unit and the junction of around view monitor control unit and multifunction switch.
U1300 U121F U1240 U1254 U125B	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] • SWITCH CONN [U1240] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	Malfunction is detected in AV communication circuits.	Check and repair the short circuit in AV communication circuits.

B2700 CORNER SENSOR [FL]

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

B2700 CORNER SENSOR [FL]

Description

INFOID:000000004347856

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347857

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2700	CORNER SENSOR [FL] [B2700]	Corner sensor front left is malfunctioning.	Replace corner sensor front LH.

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B2701 SENSOR HARNESS OPEN [CR-FL]

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

B2701 SENSOR HARNESS OPEN [CR-FL]

Description

INFOID:000000004347858

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347859

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2701	SENSOR HARNESS OPEN [CR-FL] [B2701]	Corner sensor front LH harness circuit is open.	Check corner sensor front LH circuit.

Diagnosis Procedure

INFOID:000000004347860

1. CHECK HARNESS CORNER SENSOR FRONT LH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sonar control unit connector and corner sensor connector.
3. Check continuity between sonar control unit harness connector and corner sensor (FL) harness connector.

Sonar control unit		Corner sensor (FL)		Continuity
Connector	Terminal	Connector	Terminal	
M47	3	E63	1	Existed

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

Sonar control unit		Ground	Continuity
Connector	Terminal		
M47	3		Not existed

Is the inspection result normal?

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

2. CHECK HARNESS CORNER SENSOR FRONT LH GROUND CIRCUIT

Check continuity between sonar control unit harness connector and corner sensor (FL) harness connector.

Sonar control unit		Corner sensor (FL)		Continuity
Connector	Terminal	Connector	Terminal	
M47	12	E63	2	Existed

Is the inspection result normal?

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

B2702 CORNER SENSOR [FR]

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

B2702 CORNER SENSOR [FR]

Description

INFOID:000000004347861

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347862

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2702	CORNER SENSOR [FR] [B2702]	Corner sensor front right is malfunctioning.	Replace corner sensor front RH.

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B2703 SENSOR HARNESS OPEN [CR-FR]

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

B2703 SENSOR HARNESS OPEN [CR-FR]

Description

INFOID:000000004347863

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347864

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2703	SENSOR HARNESS OPEN [CR-FR] [B2703]	Corner sensor front right harness circuit is open.	Check corner sensor front RH circuit.

Diagnosis Procedure

INFOID:000000004347865

1. CHECK HARNESS CORNER SENSOR FRONT RH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sonar control unit connector and corner sensor connector.
3. Check continuity between sonar control unit harness connector and corner sensor (FR) harness connector.

Sonar control unit		Corner sensor (FR)		Continuity
Connector	Terminal	Connector	Terminal	
M47	4	E152	1	Existed

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

Sonar control unit		Ground	Continuity
Connector	Terminal		
M47	4		Not existed

Is the inspection result normal?

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

2. CHECK HARNESS CORNER SENSOR FRONT RH GROUND CIRCUIT

Check continuity between sonar control unit harness connector and corner sensor (FR) harness connector.

Sonar control unit		Corner sensor (FR)		Continuity
Connector	Terminal	Connector	Terminal	
M47	12	E152	2	Existed

Is the inspection result normal?

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

B2704 CORNER SENSOR [RL]

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

B2704 CORNER SENSOR [RL]

Description

INFOID:000000004347866

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347867

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2704	CORNER SENSOR [RL] [B2704]	Corner sensor rear left is malfunctioning.	Replace corner sensor rear LH.

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B2705 SENSOR HARNESS OPEN [CR-RL]

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

B2705 SENSOR HARNESS OPEN [CR-RL]

Description

INFOID:000000004347868

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347869

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2705	SENSOR HARNESS OPEN [CR-RL] [B2705]	Corner sensor rear left harness circuit is open.	Check corner sensor rear LH circuit.

Diagnosis Procedure

INFOID:000000004347870

1. CHECK HARNESS CORNER SENSOR REAR LH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sonar control unit connector and corner sensor connector.
3. Check continuity between sonar control unit harness connector and corner sensor (RL) harness connector.

Sonar control unit		Corner sensor (RL)		Continuity
Connector	Terminal	Connector	Terminal	
M47	5	B259	1	Existed

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

Sonar control unit		Ground	Continuity
Connector	Terminal		
M47	5		Not existed

Is the inspection result normal?

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

2. CHECK HARNESS CORNER SENSOR REAR LH GROUND CIRCUIT

Check continuity between sonar control unit harness connector and corner sensor (RL) harness connector.

Sonar control unit		Corner sensor (RL)		Continuity
Connector	Terminal	Connector	Terminal	
M47	12	B259	2	Existed

Is the inspection result normal?

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

B2706 CORNER SENSOR [RR]

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

B2706 CORNER SENSOR [RR]

Description

INFOID:000000004347871

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347872

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2706	CORNER SENSOR [RR] [B2706]	Corner sensor rear right is malfunctioning.	Replace corner sensor rear RH.

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B2707 SENSOR HARNESS OPEN [CR-RR]

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

B2707 SENSOR HARNESS OPEN [CR-RR]

Description

INFOID:000000004347873

Component	Description
CORNER SENSOR	The obstacle distance is detected. The signal is transmitted to the sonar control unit.

DTC Logic

INFOID:000000004347874

DTC DETECTION LOGIC

DTC No.	CONSULT-III indication	DTC detection condition	Troubleshooting
B2707	SENSOR HARNESS OPEN [CR-RR] [B2707]	Corner sensor rear right harness circuit is open.	Check corner sensor rear RH circuit.

Diagnosis Procedure

INFOID:000000004347875

1. CHECK HARNESS CORNER SENSOR REAR RH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sonar control unit connector and corner sensor connector.
3. Check continuity between sonar control unit harness connector and corner sensor (RR) harness connector.

Sonar control unit		Corner sensor (RR)		Continuity
Connector	Terminal	Connector	Terminal	
M47	6	B256	1	Existed

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

Sonar control unit		Ground	Continuity
Connector	Terminal		
M47	6		Not existed

Is the inspection result normal?

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

2. CHECK HARNESS CORNER SENSOR REAR RH GROUND CIRCUIT

Check continuity between sonar control unit harness connector and corner sensor (RR) harness connector.

Sonar control unit		Corner sensor (RR)		Continuity
Connector	Terminal	Connector	Terminal	
M47	12	B256	2	Existed

Is the inspection result normal?

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

POWER SUPPLY AND GROUND CIRCUIT

AV CONTROL UNIT

AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000004347876

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19
Ignition switch ON or START	3

Is inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	M80	19	OFF	Battery voltage
	M87	22		
		24		
ACC power supply	M80	7	ACC	Battery voltage
	M87	25		
Ignition signal	M87	35	ON	Battery voltage

Is inspection result normal?

YES >> GO TO 3.

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

3.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M80	20	OFF	Existed
	M87	21		
		23		

Is inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

DISPLAY UNIT

DISPLAY UNIT : Diagnosis Procedure

INFOID:000000004347877

1.CHECK FUSE

Check for blown fuses.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between Display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	M75	2	OFF	Battery voltage
ACC power supply	M75	3	ACC	Battery voltage

Is inspection result normal?

YES >> GO TO 3.

NO >> Check harness between Display unit and fuse.

3.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M75	1	OFF	Existed
		13		

Is inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

MULTIFUNCTION SWITCH

MULTIFUNCTION SWITCH : Diagnosis Procedure

INFOID:000000004347878

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
ACC power supply	M72	3	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between multifunction switch and fuse.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect multifunction switch connector.

POWER SUPPLY AND GROUND CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M72	1	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

BOSE AMP.

BOSE AMP. : Diagnosis Procedure

INFOID:000000004347879

1.CHECK FUSE

Check for blown fuse.

Power source	Fuse No.
Battery	8

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between BOSE amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	B42	11	OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B42	12	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

iPod ADAPTER

iPod ADAPTER : Diagnosis Procedure

INFOID:000000004347880

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

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

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between iPod adapter harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	M111	5	OFF	Battery voltage
ACC power supply	M111	3	ACC	Battery voltage

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check harness between iPod adapter and fuse.

CAMERA CONTROL UNIT

CAMERA CONTROL UNIT : Diagnosis Procedure

INFOID:000000004347881

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	B50	32	OFF	Battery voltage
ACC power supply	B50	30	ACC	Battery voltage

Is inspection result normal?

YES >> GO TO 3.

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

3.CHECK GROUND CIRCUIT

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

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B50	31	OFF	Existed

Is inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

AROUND VIEW MONITOR CONTROL UNIT

AROUND VIEW MONITOR CONTROL UNIT : Diagnosis Procedure

INFOID:000000004347882

1.CHECK FUSE

Check for blown fuses.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Power source	Fuse No.
Battery	34
Ignition switch ACC	19
Ignition switch ON	3

Is inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUITS

Check voltage between around view monitor control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Voltage (Approx.)
Battery power supply	B46	2	OFF	Battery voltage
ACC power supply	B46	4	ACC	Battery voltage
Ignition power supply	B46	3	ON	Battery voltage

Is inspection result normal?

YES >> GO TO 3.

NO >> Check harness between around view monitor control unit and fuse.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector.
3. Check continuity between around view monitor control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B46	1	OFF	Existed

Is inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR) : Diagnosis Procedure

INFOID:000000004347883

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between sonar control unit harness connector and ground.

Sonar control unit		Ground	Voltage (Approx.)
Connector	Terminal		
M47	13		Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

POWER SUPPLY AND GROUND CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace sonar control unit power supply harness.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sonar control unit connector.
3. Check continuity between sonar control unit harness connector and ground.

Sonar control unit		Ground	Continuity
Connector	Terminal		
M47	24		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace sonar control unit ground harness.

RGB (R: RED) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

RGB (R: RED) SIGNAL CIRCUIT

Description

INFOID:000000004347884

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

Diagnosis Procedure

INFOID:000000004347885

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

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	17	M88	61	Existed

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

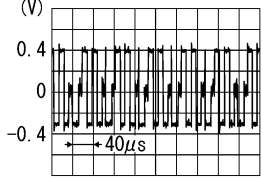
Display unit		Ground	Continuity
Connector	Terminal		
M75	17		Not existed

Is inspection result normal?

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

2. CHECK RGB (R: RED) SIGNAL

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

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	17	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2238J</p>

Is inspection result normal?

- YES >> Replace display unit.
 NO >> Replace AV control unit.

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RGB (G: GREEN) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

RGB (G: GREEN) SIGNAL CIRCUIT

Description

INFOID:000000004347886

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

Diagnosis Procedure

INFOID:000000004347887

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

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	6	M88	62	Existed

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

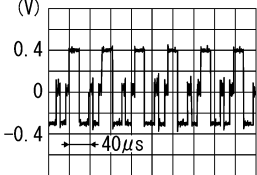
Display unit		Ground	Continuity
Connector	Terminal		
M75	6		Not existed

Is inspection result normal?

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

2. CHECK RGB (G: GREEN) SIGNAL

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

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	6	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2236J</p>

Is inspection result normal?

- YES >> Replace display unit.
 NO >> Replace AV control unit.

RGB (B: BLUE) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

RGB (B: BLUE) SIGNAL CIRCUIT

Description

INFOID:000000004347888

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

Diagnosis Procedure

INFOID:000000004347889

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

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	18	M88	63	Existed

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

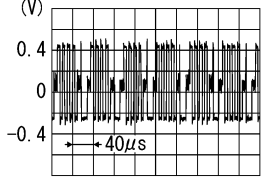
Display unit		Ground	Continuity
Connector	Terminal		
M75	18		Not existed

Is inspection result normal?

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

2. CHECK RGB (B: BLUE) SIGNAL

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

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	18	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>← 40µs</p> <p>SKIB2237J</p>

Is inspection result normal?

- YES >> Replace display unit.
 NO >> Replace AV control unit.

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RGB SYNCHRONIZING SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

RGB SYNCHRONIZING SIGNAL CIRCUIT

Description

INFOID:000000004347890

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

Diagnosis Procedure

INFOID:000000004347891

1. CHECK CONTINUITY RGB SYNCHRONIZING SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	19	M88	65	Existed

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

Display unit		Ground	Continuity
Connector	Terminal		
M75	19		Not existed

Is inspection result normal?

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

2. CHECK RGB SYNCHRONIZING SIGNAL

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

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	19	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	

Is inspection result normal?

- YES >> Replace display unit.
 NO >> Replace AV control unit.

RGB AREA (YS) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

RGB AREA (YS) SIGNAL CIRCUIT

Description

INFOID:000000004347892

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

Diagnosis Procedure

INFOID:000000004347893

1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	9	M88	67	Existed

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

Display unit		Ground	Continuity
Connector	Terminal		
M75	9		Not existed

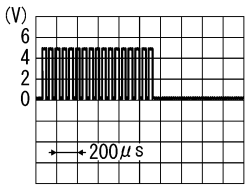
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK RGB SYNCHRONIZING SIGNAL

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

(+)		(-)	Condition	Reference value (Approx.)
Display unit				
Connector	Terminal			
M75	9	Ground	At RGB image displayed	5.0 V
			At AUX image displayed	 <p style="text-align: right;">PKIB4948J</p>

Is inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

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HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

Description

INFOID:000000004347894

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

Diagnosis Procedure

INFOID:000000004347895

1. CHECK CONTINUITY HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	8	M88	68	Existed

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

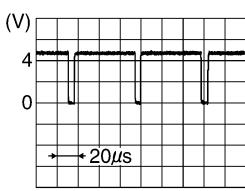
Display unit		Ground	Continuity
Connector	Terminal		
M75	8		Not existed

Is inspection result normal?

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

2. CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

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

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M75	8	Ground	 SKIB3601E

Is inspection result normal?

- YES >> Replace AV control unit.
NO >> Replace Display unit.

VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

Description

INFOID:000000004347896

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

Diagnosis Procedure

INFOID:000000004347897

1. CHECK CONTINUITY VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

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

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	20	M88	69	Existed

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

Display unit		Ground	Continuity
Connector	Terminal		
M75	20		Not existed

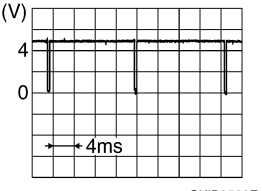
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

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

(+) Display unit		(-)	Reference value
Connector	Terminal		
M75	20	Ground	

Is inspection result normal?

YES >> Replace AV control unit.

NO >> Replace Display unit.

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AUX IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

AUX IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347898

Transmits the image signal of external device from auxiliary input jacks to display unit.

Diagnosis Procedure

INFOID:000000004347899

1. CHECK CONTINUITY AUX IMAGE SIGNAL CIRCUIT

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

Auxiliary input jacks		Display unit		Continuity
Connector	Terminal	Connector	Terminal	
M154	7	M75	15	Existed

4. Check continuity between auxiliary input jacks harness connector and ground.

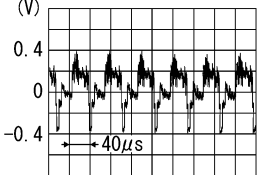
Auxiliary input jacks		Ground	Continuity
Connector	Terminal		
M154	7		Not existed

Is inspection result normal?

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

2. CHECK AUX IMAGE SIGNAL

1. Connect auxiliary input jacks connector and display unit connector.
2. Turn ignition switch ON.
3. Check signal between auxiliary input jacks harness connector and ground.

(+) Auxiliary input jacks		(-)	Condition	Reference value
Connector	Terminal			
M154	7	Ground	At AUX image displayed	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2251J</p>

Is inspection result normal?

- YES >> Replace display unit.
NO >> Check that there is no malfunction in the external device.

MODE CHANGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

MODE CHANGE SIGNAL CIRCUIT

Description

INFOID:000000004347900

- AV control unit transmits the mode change signal to BOSE amp.
- Driver's Audio Stage controls the speaker's output characteristic by BOSE amp. so that the driver's seat is to be the center of sounds.

Diagnosis Procedure

INFOID:000000004347901

1. CHECK CONTINUITY MODE CHANGE SIGNAL CIRCUIT

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

BOSE amp.		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
B41	17	M87	44	Existed

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

BOSE amp.		Ground	Continuity
Connector	Terminal		
B41	17		Not existed

Is the inspection result normal?

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

2. CHECK MODE CHANGE SIGNAL

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

(+) BOSE amp.		(-)	Voltage (Approx.)
Connector	Terminal		
B41	17	Ground	8.5 V

Is the inspection result normal?

- YES >> Replace AV control unit.
NO >> Replace BOSE amp.

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DISK EJECT SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

DISK EJECT SIGNAL CIRCUIT

Description

INFOID:000000004347902

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

Diagnosis Procedure

INFOID:000000004347903

1. CHECK CONTINUITY CD EJECT SIGNAL CIRCUIT

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

Multifunction switch		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M72	14	M89	85	Existed

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

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	14		Not existed

Is inspection result normal?

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

2. CHECK AV CONTROL UNIT VOLTAGE

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

(+)		(-)	Voltage (Approx.)
AV control unit			
Connector	Terminal		
M89	85	Ground	3.3 V

Is inspection result normal?

- YES >> Replace preset switch.
NO >> Replace AV control unit.

MICROPHONE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

MICROPHONE SIGNAL CIRCUIT

Description

INFOID:000000004347904

Supply power from AV control unit to microphone. The microphone transmits the sound voice to the AV control unit.

Diagnosis Procedure

INFOID:000000004347905

1. CHECK CONTINUITY BETWEEN AV CONTROL UNIT AND MICROPHONE CIRCUIT

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

AV control unit		Microphone		Continuity
Connector	Terminals	Connector	Terminals	
M87	26	R17	4	Existed
	27		2	
	28		1	

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

AV control unit		Ground	Continuity
Connector	Terminals		
M87	26		Not existed
	28		

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE MICROPHONE VCC

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

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M87	26	M87	27	5.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace AV control unit.

3. CHECK MICROPHONE SIGNAL

1. Turn ignition switch OFF.
2. Connect microphone connector.
3. Turn ignition switch ON.
4. Check signal between AV control unit harness connector.

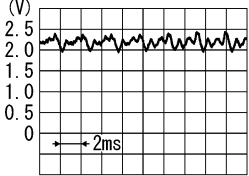
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MICROPHONE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

(+)		(-)		Condition	Reference value
AV control unit		AV control unit			
Connector	Terminal	Connector	Terminal		
M87	28	M87	27	give a voice.	 <p style="text-align: right; font-size: small;">PKIB5037J</p>

Is inspection result normal?

- YES >> Replace AV control unit.
- NO >> Replace microphone.

REAR VIEW CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

REAR VIEW CAMERA IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347906

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

Diagnosis Procedure

INFOID:000000004347907

1. CHECK CONTINUITY CAMERA POWER SUPPLY CIRCUIT

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

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B50	8	D121	1	Existed

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

Camera control unit		Ground	Continuity
Connector	Terminal		
B50	8		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE CAMERA POWER SUPPLY

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R"
4. Check voltage between camera control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
Camera control unit				
Connector	Terminal			
B50	8	Ground	Shift position is "R"	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

3. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

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

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B50	6	D121	3	Existed

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

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REAR VIEW CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

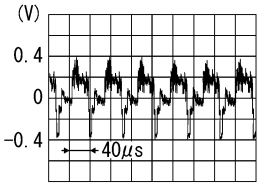
Camera control unit		Ground	Continuity
Connector	Terminal		
B50	6		Not existed

Is inspection result normal?

- YES >> GO TO 4.
 NO >> Repair harness or connector.

4. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R"
4. Check signal between camera control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminal			
B50	6	Ground	At rear view camera image display	 <p style="text-align: right; font-size: small;">SKIB2251J</p>

Is inspection result normal?

- YES >> Replace camera control unit.
 NO >> Replace rear view camera.

CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

CAMERA IMAGE SIGNAL CIRCUIT WITH REAR VIEW MONITOR

WITH REAR VIEW MONITOR : Description

INFOID:000000004347908

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

WITH REAR VIEW MONITOR : Diagnosis Procedure

INFOID:000000004347909

1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

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

Camera control unit		Display unit		Continuity
Connector	Terminal	Connector	Terminal	
B50	12	M75	12	Existed

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

Camera control unit		Ground	Continuity
Connector	Terminal		
B50	12		Not existed

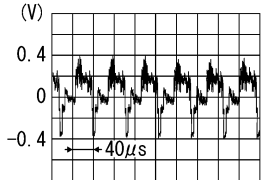
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and display unit connector.
2. Turn ignition switch ON.
3. Shift position is "R".
4. Check signal between camera control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminal			
B50	12	Ground	At rear view camera image display	

Is inspection result normal?

YES >> Replace display unit.

NO >> Replace camera control unit.

WITH AROUND VIEW MONITOR

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CAMERA IMAGE SIGNAL CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

INFOID:000000004347910

WITH AROUND VIEW MONITOR : Description

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

WITH AROUND VIEW MONITOR : Diagnosis Procedure

INFOID:000000004347911

1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and display unit connector.
3. Check continuity between around view monitor control unit harness connector and display unit harness connector.

Around view monitor control unit		display unit		Continuity
Connector	Terminal	Connector	Terminal	
B46	27	M75	12	Existed

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B46	27		Not existed

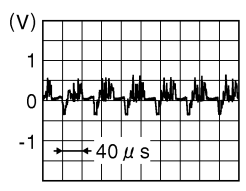
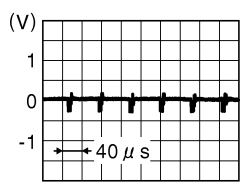
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK CAMERA IMAGE SIGNAL

1. Connect around view monitor control unit connector and display unit connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Around view monitor control unit				
Connector	Terminal			
B46	27	Ground	At camera image display	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>
			Other than camera image display	 <p style="text-align: right; font-size: small;">JSNIA0835GB</p>

CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Is inspection result normal?

YES >> Replace display unit.

NO >> Replace around view monitor control unit.

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STEERING ANGLE SENSOR SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

STEERING ANGLE SENSOR SIGNAL CIRCUIT WITH REAR VIEW MONITOR

WITH REAR VIEW MONITOR : Description

INFOID:000000004347912

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

WITH REAR VIEW MONITOR : Diagnosis Procedure

INFOID:000000004347913

1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL CIRCUIT

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

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B50	23	M37	3	Existed
	24		4	
	25		5	

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

Camera control unit		Ground	Continuity
Connector	Terminals		
B50	23	Ground	Not existed
	24		
	25		

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK SIGNAL SENSOR SIGNAL

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

(+) Camera control unit		(-)	Voltage (Approx.)
Connector	Terminals		
B50	23	Ground	5.0 V
	24		
	25		

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

3. CHECK SIGNAL SENSOR SIGNAL

STEERING ANGLE SENSOR SIGNAL CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Connect steering angle sensor connector.
3. Turn ignition switch ON.
4. Check signal between camera control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Connector	Terminals			
B50	23, 24	Ground	Turn the steering to the right	<p>A: Sensor signal 1 B: Sensor signal 2</p>
			Turn the steering to the left	<p>A: Sensor signal 1 B: Sensor signal 2</p>
	25	Ground	Turn the steering around the neutral position	<p>A: Sensor signal 3 B: Sensor signal 1</p>

Is inspection result normal?

- YES >> INSPECTION END
 NO >> Replace steering angle sensor.

WITH AROUND VIEW MONITOR

WITH AROUND VIEW MONITOR : Description

INFOID:000000004347914

AV

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

WITH AROUND VIEW MONITOR : Diagnosis Procedure

INFOID:000000004347915

1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and steering angle sensor connector.
3. Check continuity between around view monitor control unit harness connector and steering angle sensor harness connector.

STEERING ANGLE SENSOR SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Around view monitor control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B46	14	M37	3	Existed
	15		4	
	16		5	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminals		
B46	14	Ground	Not existed
	15		
	16		

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK SIGNAL SENSOR SIGNAL

1. Connect around view monitor control unit connector.
2. Turn ignition switch ON.
3. Check voltage between around view monitor control unit harness connector and ground.

(+)		(-)	Voltage (Approx.)
Around view monitor control unit			
Connector	Terminals		
B46	14	Ground	5.0 V
	15		
	16		

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace around view monitor control unit.

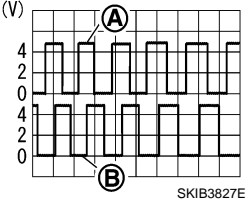
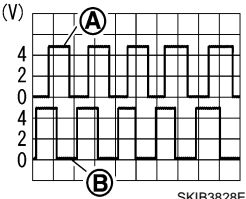
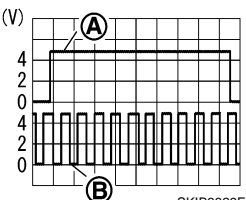
3. CHECK SIGNAL SENSOR SIGNAL

1. Turn ignition switch OFF.
2. Connect steering angle sensor connector.
3. Turn ignition switch ON.
4. Check signal between around view monitor control unit harness connector and ground.

STEERING ANGLE SENSOR SIGNAL CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Condition	Reference value
Around view monitor control unit				
Connector	Terminals			
B46	14, 15	Ground	Turn the steering to the right	 <p>SKIB3827E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
			Turn the steering to the left	 <p>SKIB3828E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
	16	Ground	Turn the steering around the neutral position	 <p>SKIB3829E</p> <p>A: Sensor signal 3 B: Sensor signal 1</p>

Is inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.

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STEERING SWITCH SIGNAL A CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

STEERING SWITCH SIGNAL A CIRCUIT

Description

INFOID:000000004347916

Transmits the steering switch signal to AV control unit.

Diagnosis Procedure

INFOID:000000004347917

1. CHECK STEERING SWITCH SIGNAL A CIRCUIT

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

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M80	6	M36	24	Existed

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

AV control unit		Ground	Continuity
Connector	Terminal		
M80	6		Not existed

Is inspection result normal?

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

2. CHECK SPIRAL CABLE

Check spiral cable.

Is inspection result normal?

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

3. CHECK AV CONTROL UNIT VOLTAGE

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

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M80	6	M80	15	5.0 V

Is inspection result normal?

- YES >> GO TO 4.
NO >> Replace AV control unit.

4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-305, "Component Inspection"](#).

Is inspection result normal?

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

STEERING SWITCH SIGNAL A CIRCUIT

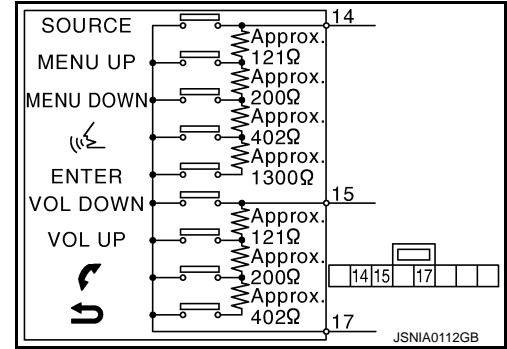
< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

INFOID:000000004347918

Component Inspection

Measure the resistance between the steering switch connector.



Steering switch		Steering switch		Condition	Resistance value (Ω)
Connector	Terminal	Connector	Terminal		
M303	14	M303	17	ENTER switch ON	2003 – 2043
				⏪ switch ON	716 – 730
				MENU DOWN switch ON	318 – 324
				MENU UP switch ON	120 – 122
				SOURCE switch ON	0
	15			⏩ switch ON	716 – 730
				⏴ switch ON	318 – 324
				VOL UP switch ON	120 – 122
				VOL DOWN switch ON	0

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STEERING SWITCH SIGNAL B CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

STEERING SWITCH SIGNAL B CIRCUIT

Description

INFOID:000000004347919

Transmits the steering switch signal to AV control unit.

Diagnosis Procedure

INFOID:000000004347920

1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

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

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M80	16	M36	31	Existed

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

AV control unit		Ground	Continuity
Connector	Terminal		
M80	16		Not existed

Is inspection result normal?

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

2. CHECK SPIRAL CABLE

Check spiral cable.

Is inspection result normal?

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

3. CHECK AV CONTROL UNIT VOLTAGE

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

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M80	16	M80	15	5.0 V

Is inspection result normal?

- YES >> GO TO 4.
NO >> Replace AV control unit.

4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-307, "Component Inspection"](#).

Is inspection result normal?

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

STEERING SWITCH SIGNAL B CIRCUIT

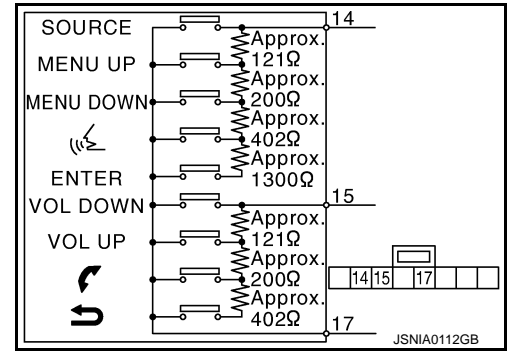
< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

INFOID:000000004347921

Component Inspection

Measure the resistance between the steering switch connector.



Steering switch		Steering switch		Condition	Resistance value (Ω)
Connector	Terminal	Connector	Terminal		
M303	14	M303	17	ENTER switch ON	2003 – 2043
				⏪ switch ON	716 – 730
				MENU DOWN switch ON	318 – 324
				MENU UP switch ON	120 – 122
				SOURCE switch ON	0
	15			⏩ switch ON	716 – 730
				⏴ switch ON	318 – 324
				VOL UP switch ON	120 – 122
				VOL DOWN switch ON	0

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STEERING SWITCH SIGNAL GND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

STEERING SWITCH SIGNAL GND CIRCUIT

Description

INFOID:000000004347922

Transmits the steering switch signal to AV control unit.

Diagnosis Procedure

INFOID:000000004347923

1. CHECK STEERING SWITCH SIGNAL GND CIRCUIT

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

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M80	15	M36	33	Existed

Is inspection result normal?

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

2. CHECK SPIRAL CABLE

Check spiral cable.

Is inspection result normal?

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

3. CHECK GROUND CIRCUIT

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

AV control unit		Ground	Continuity
Connector	Terminal		
M80	15		Not existed

Is inspection result normal?

- YES >> GO TO 4.
NO >> Replace AV control unit.

4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-308. "Component Inspection"](#).

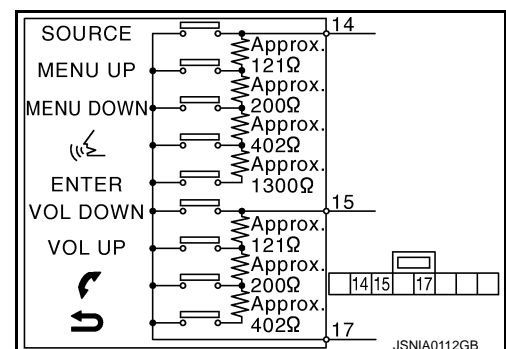
Is inspection result normal?

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

Component Inspection

INFOID:000000004347924




Measure the resistance between the steering switch connector.



STEERING SWITCH SIGNAL GND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Steering switch		Steering switch		Condition	Resistance value (Ω)
Connector	Terminal	Connector	Terminal		
M303	14	M303	17	ENTER switch ON	2003 – 2043
				 switch ON	716 – 730
				MENU DOWN switch ON	318 – 324
				MENU UP switch ON	120 – 122
				SOURCE switch ON	0
	15			 switch ON	716 – 730
				 switch ON	318 – 324
				VOL UP switch ON	120 – 122
				VOL DOWN switch ON	0

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AV

FRONT CAMERA COMMUNICATION SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

FRONT CAMERA COMMUNICATION SIGNAL CIRCUIT

Description

INFOID:000000004347925

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347926

1. CHECK CONTINUITY COMMUNICATION SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and front camera connector.
3. Check continuity between around view monitor control unit harness connector and front camera harness connector.

Around view monitor control unit		Front camera		Continuity
Connector	Terminal	Connector	Terminal	
B45	45	E73	6	Existed

4. Check continuity between around view monitor control unit harness connector and ground.

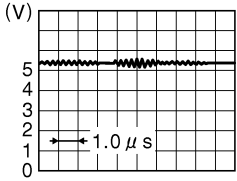
Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B45	45		Not existed

Is inspection result normal?

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

2. CHECK COMMUNICATION SIGNAL

1. Connect around view monitor control unit connector and front camera connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector and ground.

(+)		(-)	Reference value
Around view monitor control unit			
Connector	Terminal		
B45	45	Ground	 <p>JSNIA0836GB</p>

Is inspection result normal?

- YES >> Replace around view monitor control unit.
 NO >> Replace front camera.

FRONT CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

FRONT CAMERA IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347927

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347928

1. CHECK CONTINUITY FRONT CAMERA POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and front camera connector.
3. Check continuity between around view monitor control unit harness connector and front camera harness connector.

Around view monitor control unit		Front camera		Continuity
Connector	Terminals	Connector	Terminals	
B45	44	E73	2	Existed
	46		1	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B45	46		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE FRONT CAMERA POWER SUPPLY

1. Connect around view monitor control unit connector and front camera connector.
2. Turn ignition switch ON.
3. Check voltage between around view monitor control unit harness connector.

(+)		(-)	Condition	Voltage (Approx.)
Around view monitor control unit				
Connector	Terminal			
B45	46	Ground	"CAMERA" switch is ON or shift position is "R".	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace around view monitor control unit.

3. CHECK CONTINUITY FRONT CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and front camera connector.
3. Check continuity between around view monitor control unit harness connector and front camera harness connector.

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FRONT CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Around view monitor control unit		Front camera		Continuity
Connector	Terminals	Connector	Terminals	
B45	41	E73	3	Existed
	42		4	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminals		
B45	41, 42		Not existed

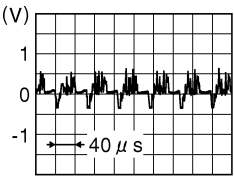
Is inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

4. CHECK FRONT CAMERA IMAGE SIGNAL

1. Connect around view monitor control unit connector and front camera connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector.

(+)		(-)		Condition	Reference value
Around view monitor control unit		Around view monitor control unit			
Connector	Terminal	Connector	Terminal		
B45	41	B45	42	“CAMERA” switch is ON or shift position is “R”.	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>

Is inspection result normal?

YES >> Replace around view monitor control unit.

NO >> Replace front camera.

REAR CAMERA COMMUNICATION SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

REAR CAMERA COMMUNICATION SIGNAL CIRCUIT

Description

INFOID:000000004347929

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347930

1. CHECK CONTINUITY COMMUNICATION SIGNAL CIRCUIT

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

Around view monitor control unit		Rear camera		Continuity
Connector	Terminal	Connector	Terminal	
B46	35	D111	4	Existed

4. Check continuity between around view monitor control unit harness connector and ground.

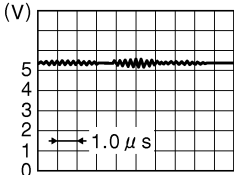
Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B46	35		Not existed

Is inspection result normal?

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

2. CHECK COMMUNICATION SIGNAL

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

(+)		(-)	Reference value
Around view monitor control unit			
Connector	Terminal		
B46	35	Ground	 <p>JSNIA0836GB</p>

Is inspection result normal?

- YES >> Replace around view monitor control unit.
 NO >> Replace rear camera.

REAR CAMERA IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

REAR CAMERA IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347931

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347932

1. CHECK CONTINUITY REAR CAMERA POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and rear camera connector.
3. Check continuity between around view monitor control unit harness connector terminals 36, 38 and rear camera harness connector terminals 8, 7.

Around view monitor control unit		Rear camera		Continuity
Connector	Terminals	Connector	Terminals	
B46	36	D111	8	Existed
	38		7	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B46	36		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE REAR CAMERA POWER SUPPLY

1. Connect around view monitor control unit connector and rear camera connector.
2. Turn ignition switch ON.
3. Check voltage between around view monitor control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
Around view monitor control unit	Terminal			
Connector	Terminal			
B46	36	Ground	"CAMERA" switch is ON or shift position is "R".	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace around view monitor control unit.

3. CHECK CONTINUITY REAR CAMERA IMAGE SIGNAL CIRCUIT

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

REAR CAMERA IMAGE SIGNAL CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

Around view monitor control unit		Rear camera		Continuity
Connector	Terminals	Connector	Terminals	
B46	39	D111	5	Existed
	40		1	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminals		
B46	39, 40		Not existed

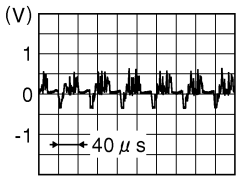
Is inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

4. CHECK REAR CAMERA IMAGE SIGNAL

1. Connect around view monitor control unit connector and rear camera connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector.

(+)		(-)		Condition	Reference value
Around view monitor control unit		Around view monitor control unit			
Connector	Terminal	Connector	Terminal		
B46	39	B46	40	"CAMERA" switch is ON or shift position is "R".	 <p>(V)</p> <p>1</p> <p>0</p> <p>-1</p> <p>40 µs</p> <p>JSNIA0834GB</p>

Is inspection result normal?

YES >> Replace around view monitor control unit.

NO >> Replace rear camera.

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SIDE CAMERA LH COMMUNICATION SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

SIDE CAMERA LH COMMUNICATION SIGNAL CIRCUIT

Description

INFOID:000000004347933

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347934

1. CHECK CONTINUITY COMMUNICATION SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and door mirror (driver side) connector.
3. Check continuity between around view monitor control unit harness connector and door mirror (driver side) harness connector.

Around view monitor control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
B45	47	D3	3	Existed

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B45	47		Not existed

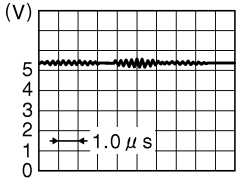
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK COMMUNICATION SIGNAL

1. Connect around view monitor control unit connector and door mirror (driver side) connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector and ground.

(+)		(-)	Reference value
Around view monitor control unit			
Connector	Terminal		
B45	47	Ground	 <p>JSNIA0836GB</p>

Is inspection result normal?

YES >> Replace around view monitor control unit.

NO >> Replace side camera LH.

SIDE CAMERA LH IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

SIDE CAMERA LH IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347935

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347936

1. CHECK CONTINUITY SIDE CAMERA LH POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and door mirror (driver side) connector.
3. Check continuity between around view monitor control unit harness connector and door mirror (driver side) harness connector.

Around view monitor control unit		Door mirror (driver side)		Continuity
Connector	Terminals	Connector	Terminals	
B45	48	D3	6	Existed
	50		18	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B45	48		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE SIDE CAMERA LH POWER SUPPLY

1. Connect around view monitor control unit connector and door mirror (driver side) connector.
2. Turn ignition switch ON.
3. Check voltage between around view monitor control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
Around view monitor control unit				
Connector	Terminal			
B45	48	Ground	"CAMERA" switch is ON or shift position is "R".	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace around view monitor control unit.

3. CHECK CONTINUITY SIDE CAMERA LH IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and door mirror (driver side) connector.
3. Check continuity between around view monitor control unit harness connector and door mirror (driver side) harness connector.

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SIDE CAMERA LH IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Around view monitor control unit		Door mirror (driver side)		Continuity
Connector	Terminals	Connector	Terminals	
B45	51	D3	5	Existed
	52		17	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminals		
B45	51, 52		Not existed

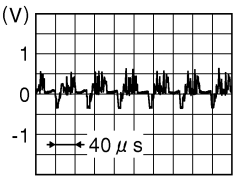
Is inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

4. CHECK SIDE CAMERA LH IMAGE SIGNAL

1. Connect around view monitor control unit connector and door mirror (driver side) connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector.

(+)		(-)		Condition	Reference value
Around view monitor control unit		Around view monitor control unit			
Connector	Terminal	Connector	Terminal		
B45	51	B45	52	“CAMERA” switch is ON or shift position is “R”.	

JSNIA0834GB

Is inspection result normal?

YES >> Replace around view monitor control unit.

NO >> Replace side camera LH.

SIDE CAMERA RH COMMUNICATION SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

SIDE CAMERA RH COMMUNICATION SIGNAL CIRCUIT

Description

INFOID:000000004347937

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347938

1. CHECK CONTINUITY COMMUNICATION SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and door mirror (passenger side) connector.
3. Check continuity between around view monitor control unit harness connector and door mirror (passenger side) harness connector.

Around view monitor control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
B46	33	D33	3	Existed

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B46	33		Not existed

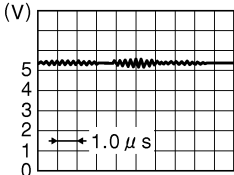
Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK COMMUNICATION SIGNAL

1. Connect around view monitor control unit connector and door mirror (passenger side) connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector and ground.

Around view monitor control unit (+)		(-)	Reference value
Connector	Terminal		
B46	33	Ground	 <p>JSNIA0836GB</p>

Is inspection result normal?

YES >> Replace around view monitor control unit.

NO >> Replace side camera RH.

SIDE CAMERA RH IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

SIDE CAMERA RH IMAGE SIGNAL CIRCUIT

Description

INFOID:000000004347939

- Around view monitor control unit supplies to the front camera, rear camera and side camera. And then it superimpose the images from each camera and outputs then to the display unit.
- Superimpose the guiding lines, predicted course line and sonar indicator to the camera image that outputs to the display unit.
- Around view monitor control unit performs the reception/transmission of communication signal with each camera.

Diagnosis Procedure

INFOID:000000004347940

1. CHECK CONTINUITY SIDE CAMERA RH POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect control unit connector and door mirror (passenger side) connector.
3. Check continuity between around view monitor control unit harness connector and door mirror (passenger side) harness connector.

Around view monitor control unit		Door mirror (passenger side)		Continuity
Connector	Terminals	Connector	Terminals	
B46	32	D33	18	Existed
	34		6	

4. Check continuity between around view monitor control unit harness connector and ground.

Around view monitor control unit		Ground	Continuity
Connector	Terminal		
B46	34		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK VOLTAGE SIDE CAMERA RH POWER SUPPLY

1. Connect around view monitor control unit connector and door mirror (passenger side) connector.
2. Turn ignition switch ON.
3. Check voltage between around view monitor control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
Around view monitor control unit				
Connector	Terminal			
B46	34	Ground	"CAMERA" switch is ON or shift position is "R".	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace around view monitor control unit.

3. CHECK CONTINUITY SIDE CAMERA RH IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect around view monitor control unit connector and door mirror (passenger side) connector.
3. Check continuity between around view monitor control unit harness connector and door mirror (passenger side) harness connector.

SIDE CAMERA RH IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Around view monitor control unit		Door mirror (passenger side)		Continuity
Connector	Terminals	Connector	Terminals	
B46	29	D33	5	Existed
	30		17	

4. Check continuity between around view monitor control unit harness connector and ground.

around view monitor control unit		Ground	Continuity
Connector	Terminals		
B46	29, 30		Not existed

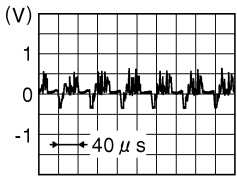
Is inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

4. CHECK SIDE CAMERA RH IMAGE SIGNAL

1. Connect around view monitor control unit connector and door mirror (passenger side) connector.
2. Turn ignition switch ON.
3. Check signal between around view monitor control unit harness connector.

(+)		(-)		Condition	Reference value
Around view monitor control unit		Around view monitor control unit			
Connector	Terminal	Connector	Terminal		
B46	29	B46	30	"CAMERA" switch is ON or shift position is "R".	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>

Is inspection result normal?

YES >> Replace around view monitor control unit.

NO >> Replace side camera RH.

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BUZZER CIRCUIT

Description

INFOID:000000004347941

The sonar control unit outputs the buzzer signal when the rear sonar detects the obstacle.

Component Function Check

INFOID:000000004347942

1. SONAR CONTROL UNIT ACTIVE TEST

1. Select "BUZZER" of sonar control unit active test item.
2. Check the buzzer operation.

BUZZER

Test item	Condition
On	: Buzzer is operation.
Off	: Buzzer is not operation.

>> INSPECTION END

Diagnosis Procedure

INFOID:000000004347943

1. CHECK BUZZER POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between buzzer harness connector and ground.

(+)		(-)	Voltage (Approx.)
Buzzer			
Connector	Terminal	Ground	Battery voltage
B240	1		

Is the inspection result normal?

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

2. CHECK HARNESS BUZZER SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sonar control unit connector and buzzer connector.
3. Check continuity between sonar control unit harness connector and buzzer harness connector.

Sonar control unit		Buzzer		Continuity
Connector	Terminal	Connector	Terminal	
M47	23	B240	2	Existed

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

Sonar control unit		Ground	Continuity
Connector	Terminal		
M47	23		Not existed

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Repair harness or connector.

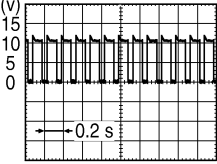
3. CHECK SIGNAL SONAR CONTROL UNIT

1. Connect sonar control unit connector and buzzer connector.
2. Check signal between sonar control unit harness connector and ground.

BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

(+)		(-)	Condition	Reference value
Sonar control unit				
Connector	Terminal			
M47	23	Ground	When buzzer operation	<p>NOTE: Waveform period changes due to the distance to an obstacle.</p>  <p style="text-align: right; font-size: small;">SKIB8943E</p>

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace sonar control unit.

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

ECU DIAGNOSIS INFORMATION

AV CONTROL UNIT

Reference Value

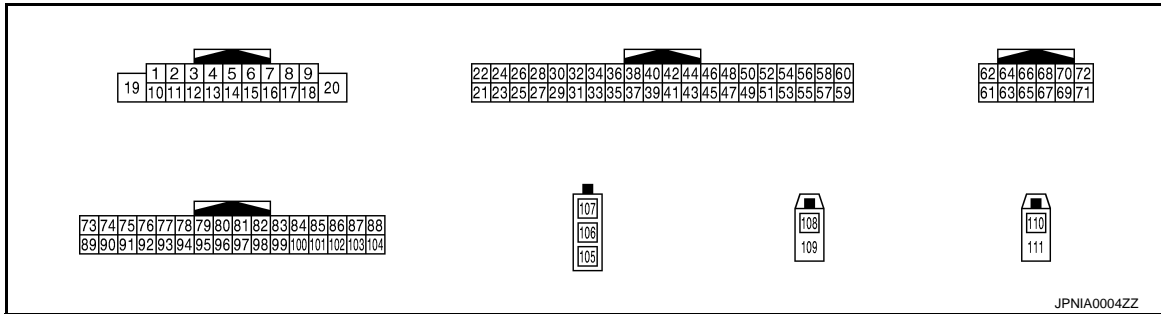
INFOID:000000004506721

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

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

TERMINAL LAYOUT



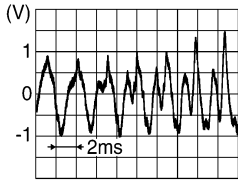

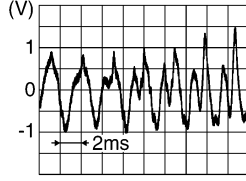
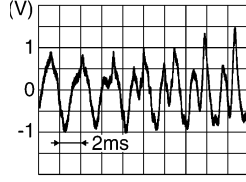
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/Output			
1 (V)	Ground	Amp. ON signal	Output	Ignition switch ON	—	12.0 V
2 (P)	3 (L)	Sound signal front LH	Output	Ignition switch ON	Audio output	

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
4 (V)	5 (LG)	Sound signal rear LH	Output	Ignition switch ON	Audio output	 SKIB3609E
6 (P)	15 (B)	Steering switch signal A	Input	Ignition switch ON	Keep pressing SOURCE switch.	0 V
					Keep pressing MENU UP switch.	1.0 V
					Keep pressing MENU DOWN switch.	2.0 V
					Keep pressing  switch	3.0 V
					Keep pressing ENTER switch.	4.0 V
					Except for above.	5.0 V
7 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
9 (R)	Ground	Illumination signal	Input	Ignition switch OFF	Lighting switch is OFF.	0 V
					Lighting switch is ON.	12.0 V
10 (V)	—	Shield	—	—	—	—
11 (R)	12 (G)	Sound signal front RH	Output	Ignition switch ON	Audio output	 SKIB3609E
13 (BR)	14 (Y)	Sound signal rear RH	Output	Ignition switch ON	Audio output	 SKIB3609E
15 (B)	Ground	Steering switch signal ground	—	Ignition switch ON	—	0 V



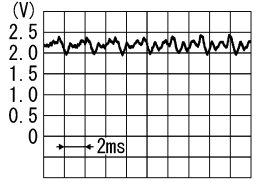
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AV CONTROL UNIT

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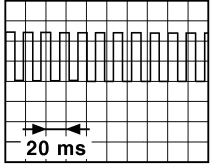
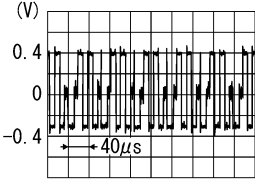
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)	
+	-	Signal name	Input/ Output			
16 (L)	15 (B)	Steering switch signal B	Input	Ignition switch ON	Keep pressing VOL DOWN switch.	0 V
					Keep pressing VOL UP switch.	1.0 V
					Keep pressing  switch.	2.0 V
					Keep pressing  switch.	3.0 V
					Except for above.	5.0 V
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
20 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
21 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
22 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
23 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
24 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
25 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
26 (G)	27	Microphone VCC	Output	Ignition switch ON	—	5.0 V
27	Ground	Microphone ground	—	ON	—	0 V
28 (R)	27	Microphone signal	Input	Ignition switch ON	Give a voice	 <p style="text-align: right; font-size: small;">PKIB5037J</p>
35 (G)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
36 (V)	Ground	Parking brake signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	12.0 V
37 (O)	Ground	Reverse signal	Input	Ignition switch ON	Shift position in R position	12.0 V
					Other than shift position in R position	0 V

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

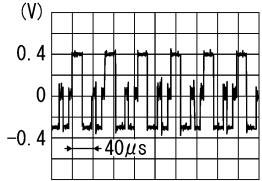
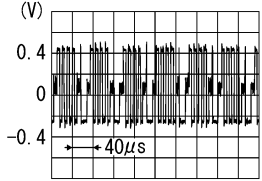
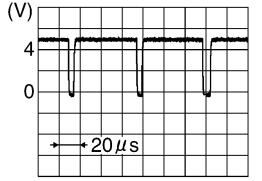
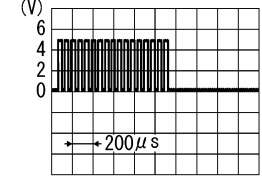
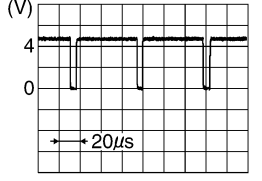
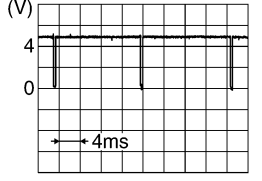
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
38 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25MPH)	NOTE: The maximum voltage varies depending (destination unit)  <small>JSNIA0012GB</small>
40 (W)	Ground	Camera-connection recognition signal	Input	Ignition switch ON	Connected to camera control unit connector	0 V
					Not connected to camera control unit connector	5.0 V
41 (B)	Ground	Control signal 1	—	Ignition switch ON	—	0 V
42 (B)	Ground	Control signal 2	—	Ignition switch ON	—	0 V
43 (GR)	Ground	Control signal 3	—	Ignition switch ON	—	0 V
44 (SB)	Ground	Mode change signal	Output	Ignition switch ON	Driver's Audio Stage ON	0 V
					Driver's Audio Stage OFF	8.5 V
48 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
49 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
50 (LG)	—	AV communication signal (H)	Input/ Output	—	—	—
51 (V)	—	AV communication signal (L)	Input/ Output	—	—	—
52 (L)	—	CAN-H	Input/ Output	—	—	—
53 (P)	—	CAN-L	Input/ Output	—	—	—
61 (B)	Ground	RGB signal (R: red)	Output	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <small>SKIB2236J</small>

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AV CONTROL UNIT

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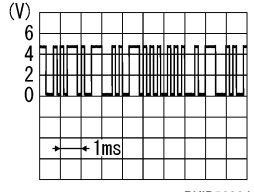
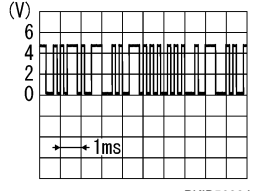
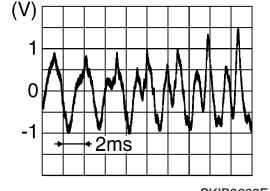
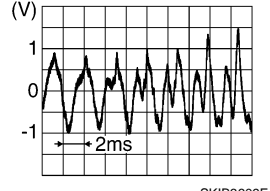
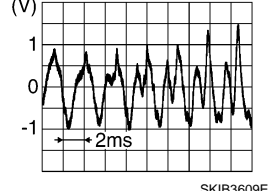
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
62 (W)	Ground	RGB signal (G: green)	Output	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p style="text-align: right; font-size: small;">SKIB2236J</p>
63 (R)	Ground	RGB signal (B: blue)	Output	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p style="text-align: right; font-size: small;">SKIB2237J</p>
64	—	Shield	—	—	—	—
65 (G)	Ground	RGB synchronizing signal	Output	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3603E</p>
66	—	Shield	—	—	—	—
67 (B)	Ground	RGB area (YS) signal	Output	Ignition switch ON	At RGB image display	5.0 V
					At camera image or AUX image display	 <p style="text-align: right; font-size: small;">PKIB4948J</p>
68 (R)	Ground	Horizontal synchronizing (HP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3601E</p>
69 (W)	Ground	Vertical synchronizing (VP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3598E</p>

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
70 (BR)	Ground	Communication signal (CONT→DISP)	Output	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
71 (Y)	Ground	Communication signal (DISP→CONT)	Input	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
72	—	Shield	—	—	—	—
79 (R)	95 (W)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is select- ed	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
80 (B)	96 (G)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is select- ed	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
85 (SB)	Ground	Eject signal	Input	—	Pressing the eject switch Except for above	0 V 3.3 V
86	—	Shield	—	—	—	—
87 (R)	88 (W)	AUX sound signal LH	Input	Ignition switch ON	When AUX mode is select- ed	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
102 (BR)	Ground	SW ground	—	Ignition switch ON	—	0 V

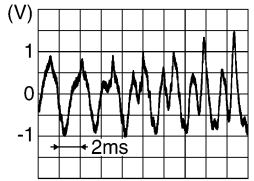
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
103 (B)	88 (B)	AUX sound signal RH	Input	Ignition switch ON	When AUX mode is select- ed	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
105	—	FM sub	Input	—	—	—
106	—	AM-FM main	Input	—	—	—
107	Ground	Antenna amp. ON signal	Output	Ignition switch ACC	—	120. V
108	Ground	Satellite antenna signal	Input	Ignition switch ACC	Not connected to satellite antenna connector	5.0 V
109	—	Shield	—	—	—	—
110	Ground	GPS antenna signal	Input	Ignition switch ACC	Not connected to GPS an- tenna connector	5.0 V
111	—	Shield	—	—	—	—

Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -

INFOID:000000004506723

NOTE:

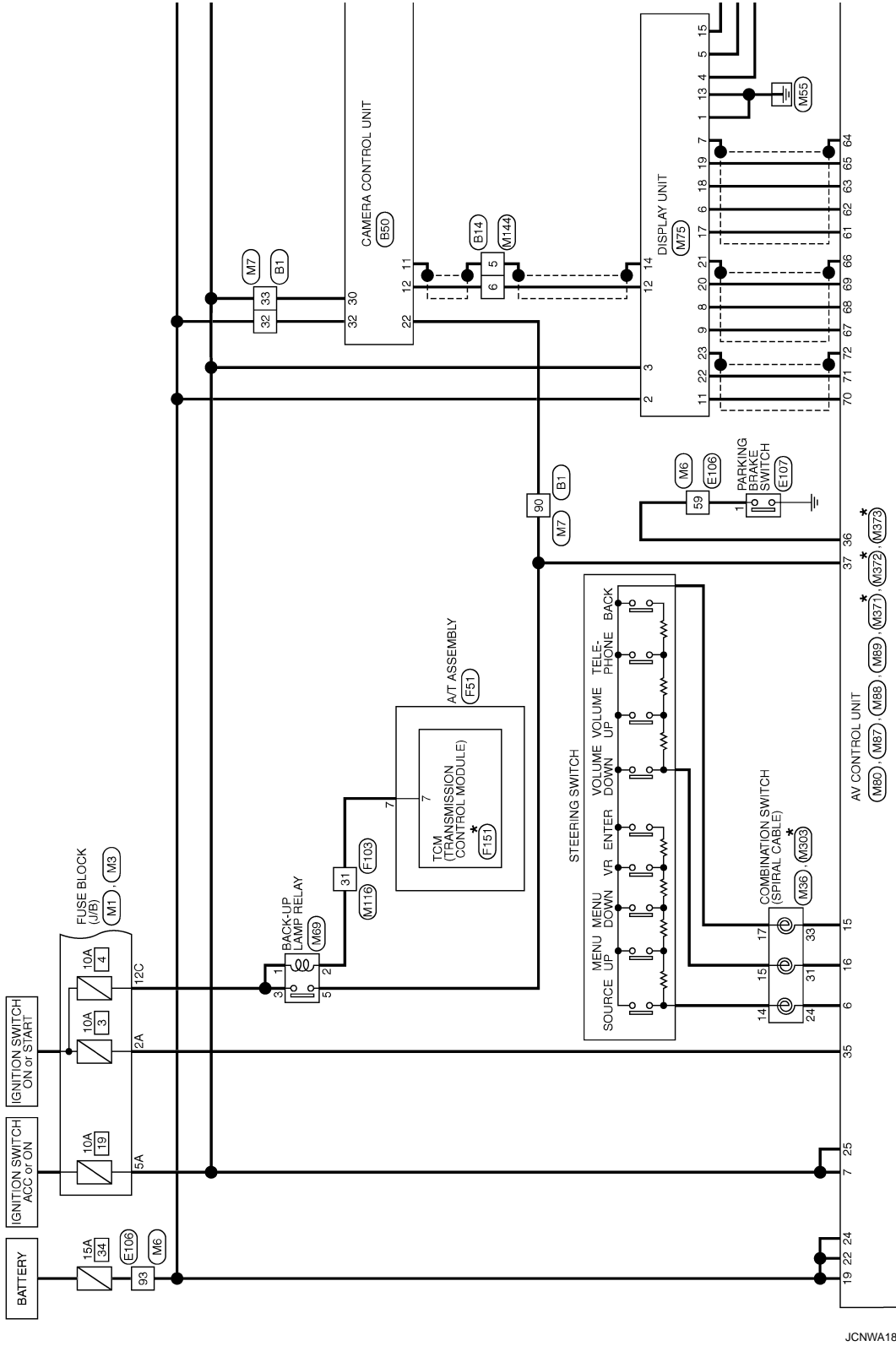
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR



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

2008/08/28

JCNWA1818GB

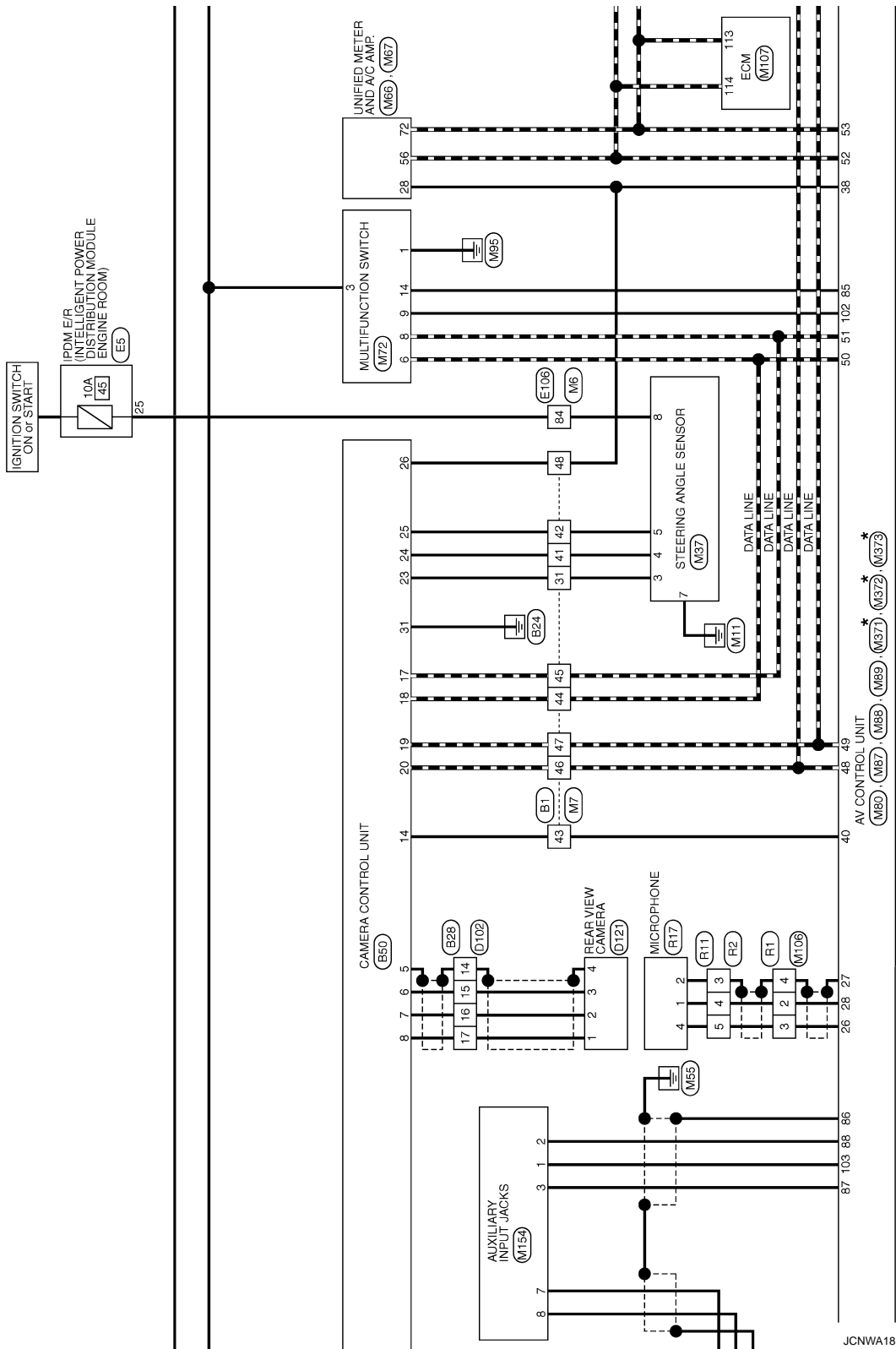
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



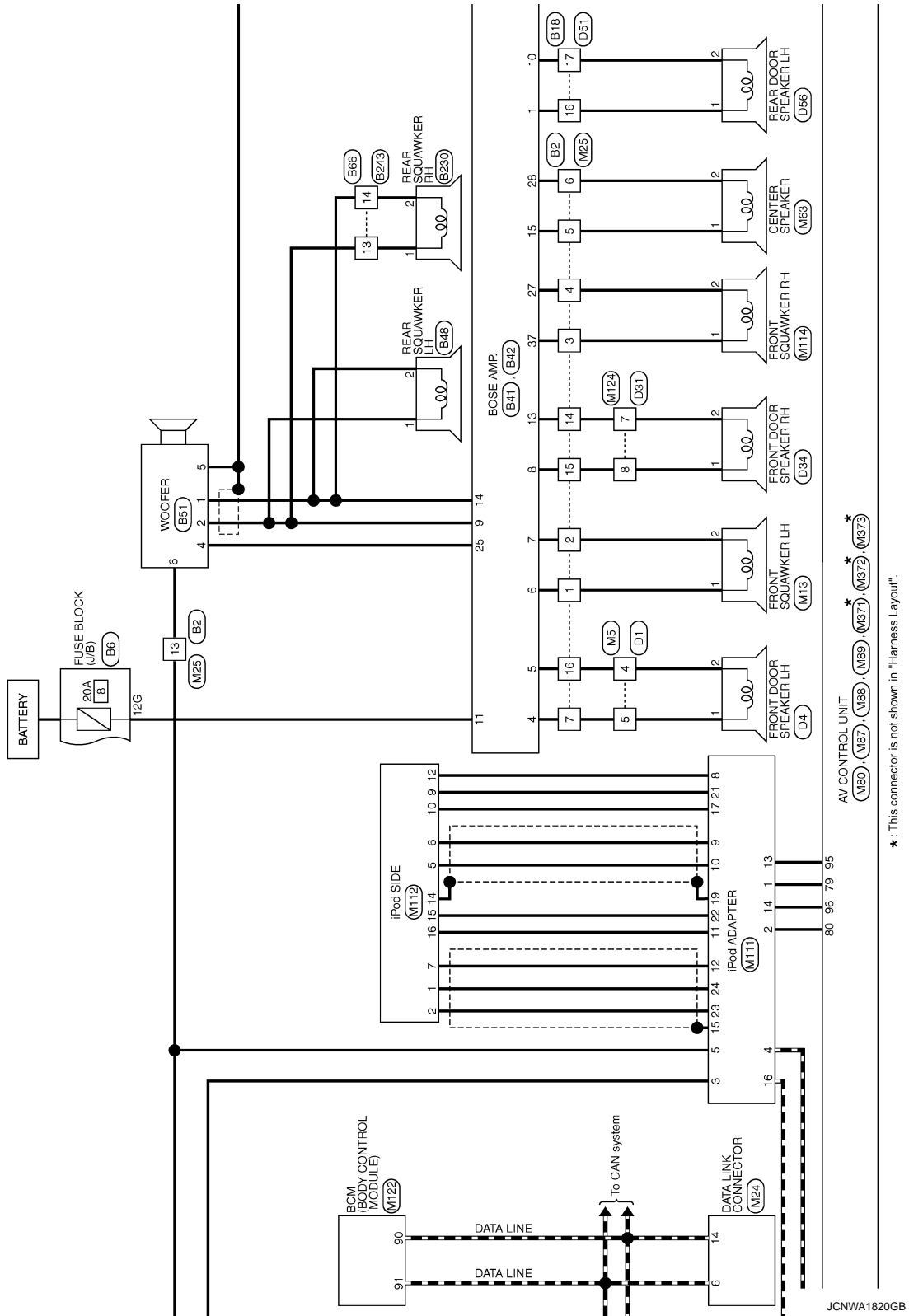
*: This connector is not shown in "Harness Layout".

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



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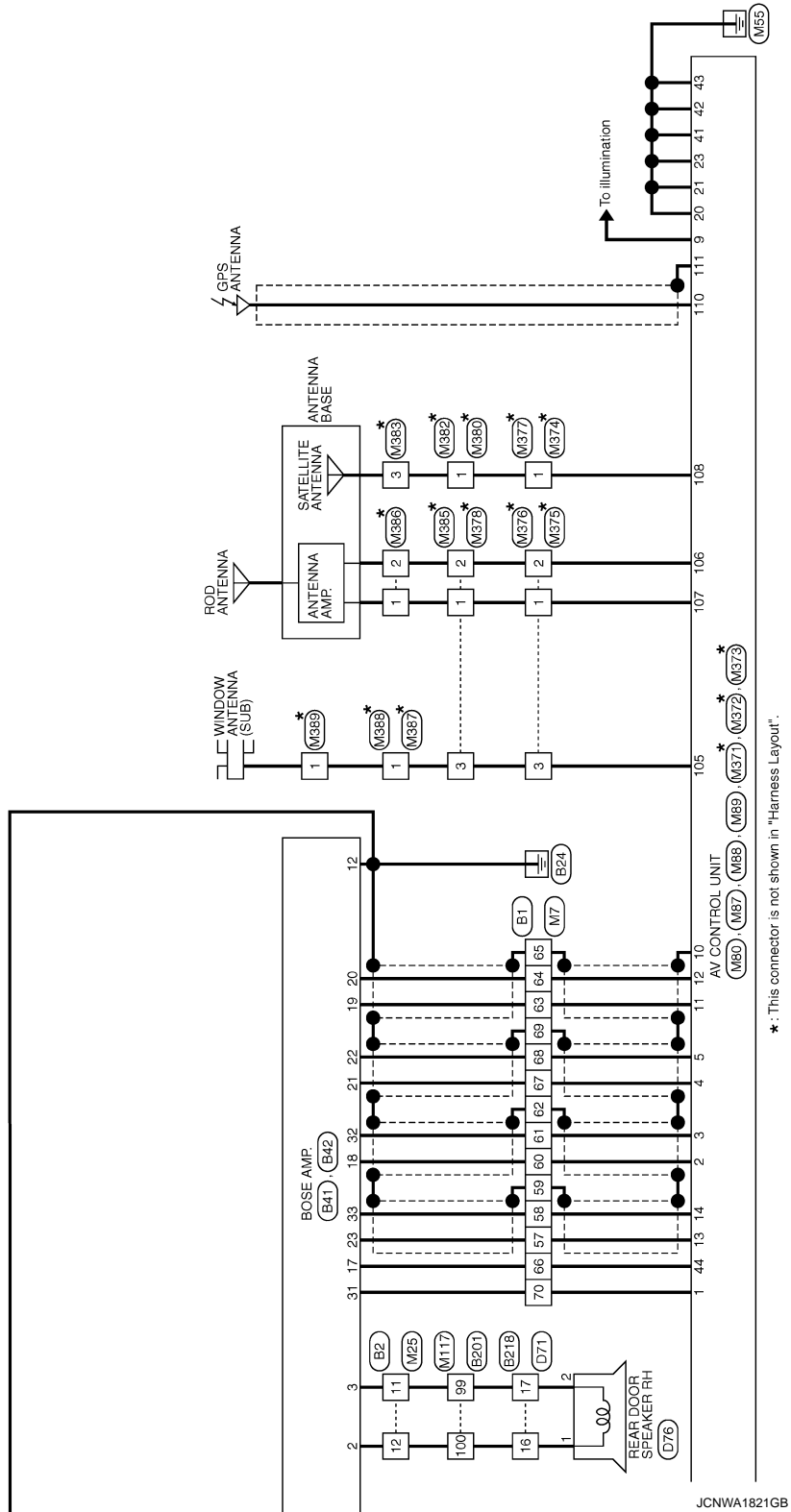
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



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

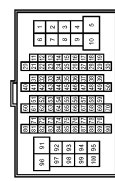
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]
47	R	- [Without around view monitor]
48	V	- [Without around view monitor]

57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	O	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

15	LG	-
16	P	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FB-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TR10FW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH28MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	W	- [Without around view monitor]
16	B	- [Without around view monitor]
17	R	- [Without around view monitor]

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SG44



Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (+)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL REAR LH (+)
21	V	SOUND SIGNAL REAR RH (+)
22	SB	SOUND SIGNAL REAR LH (-)
23	BR	SOUND SIGNAL REAR RH (-)
25	GR	WOOFER AMP. ON SIGNAL
27	R	SOUND SIGNAL FRONT SOLAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

Connector No.	B48
Connector Name	REAR SOLAWKER LH
Connector Type	TK02FBR



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

31	W	AMP. ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SOLAWKER RH (+)



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

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SJA2



22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL WOOFER (-)
2	G	SOUND SIGNAL WOOFER (+)
4	GR	WOOFER AMP. ON SIGNAL
5	B	GND
6	W	BATTERY

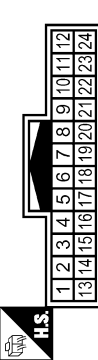
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

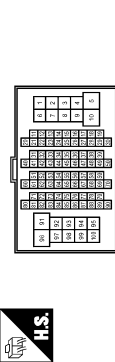
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B166
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



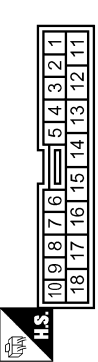
Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-N5S



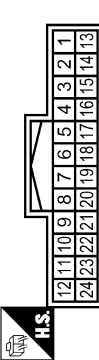
Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR



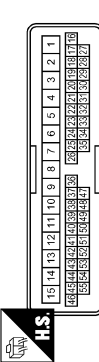
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



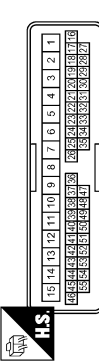
Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
5	L	-

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FBR-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FBR-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



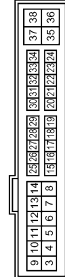
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH103MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	FRONT-REAR INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20PFW-CS12-NH-T1V



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

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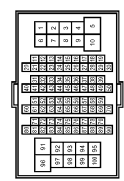
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
59	O	-
84	G	-
93	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



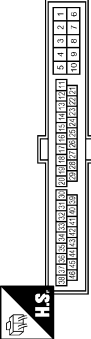
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DG1




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

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10




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

Connector No.	F151
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBCY




Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



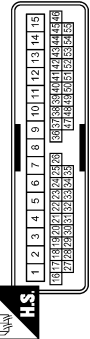
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



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

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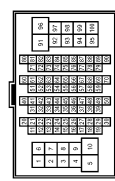
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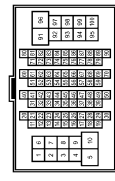
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	Y	-
33	V	-
41	BR	-
42	R	-
43	W	-
44	LG	-
45	V	-
46	G	-
47	R	-
48	V	-

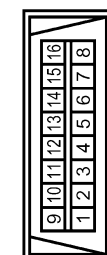
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FER



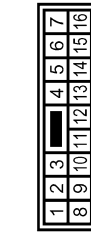
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	MS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	V	-
14	Y	-

15	LG	-
16	P	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-1V



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

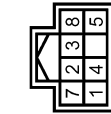
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH88FW-NH



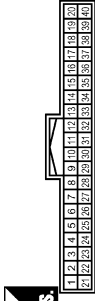
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



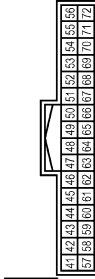
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	G	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



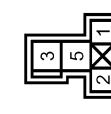
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



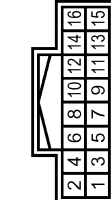
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



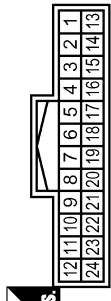
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G. GREEN) SIGNAL
7	SHIELD	SHIELD
8	B	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT- DISP)
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
13	B	GND
14	SHIELD	COMP2 GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R. RED) SIGNAL
18	R	RGB (B. BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

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

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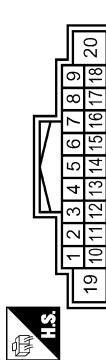
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

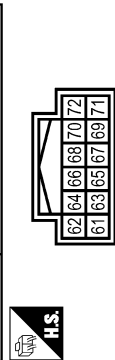
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-GSZ



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP_ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



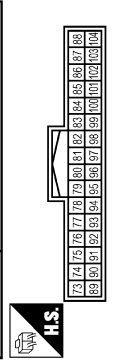
Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R: RED) SIGNAL
62	W	RGB (G: GREEN) SIGNAL
63	R	RGB (B: BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA(Y) SIGNAL
68	R	HP
68	W	HP
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)

13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
18	Y	BATTERY
20	B	GND



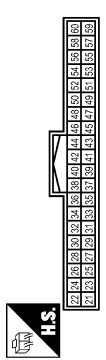
Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE YCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH132PW-NH



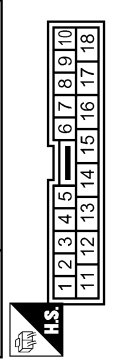
Terminal No.	Color of Wire	Signal Name [Specification]
79	R	IPod SOUND SIGNAL LH (+)
80	B	IPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	IPod SOUND SIGNAL LH (-)
96	G	IPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH140FW-NH



38	R	VEHICLE SPEED (8-PULSE)
40	W	CONNECTION RECOGNITION
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
46	G	AV COMM (P)
49	R	AV COMM (L)
50	LG	AV COMM (R)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10AMP-HSB



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

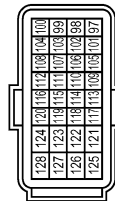
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

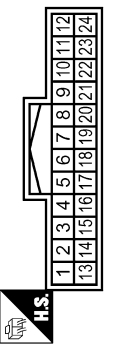
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M107
Connector Name	ECM
Connector Type	RHE4FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	R	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (+)

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

14	G	iPod SOUND SIGNAL RH (+)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

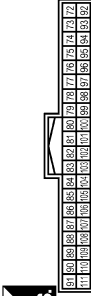
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	W	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	R	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-7M4



Terminal No.	Color of Wire	Signal Name [Specification]
99	V	- [With BOSE audio]
100	SB	- [With BOSE audio]

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

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AV

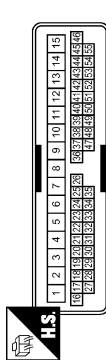
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	THROW-CSI5



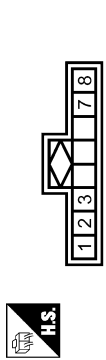
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	
8	LG	

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



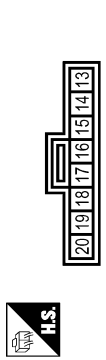
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	
6	W	

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



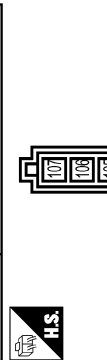
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	T03BFGY



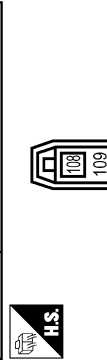
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	
15	L	
17	BR	

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FAKRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M273
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/IPP-HU



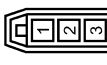
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IPP-HU




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

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-IS-HU




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

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IPP-HU



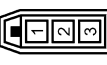
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAETLITE ANTENNA

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

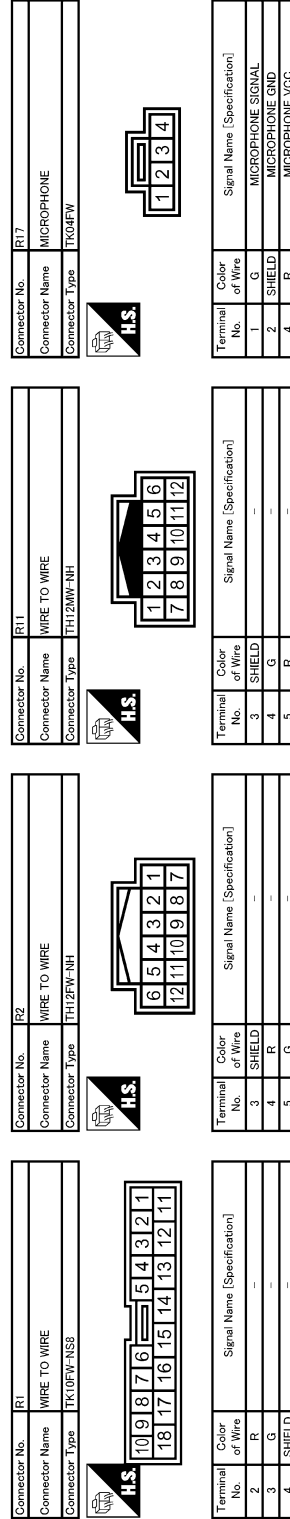
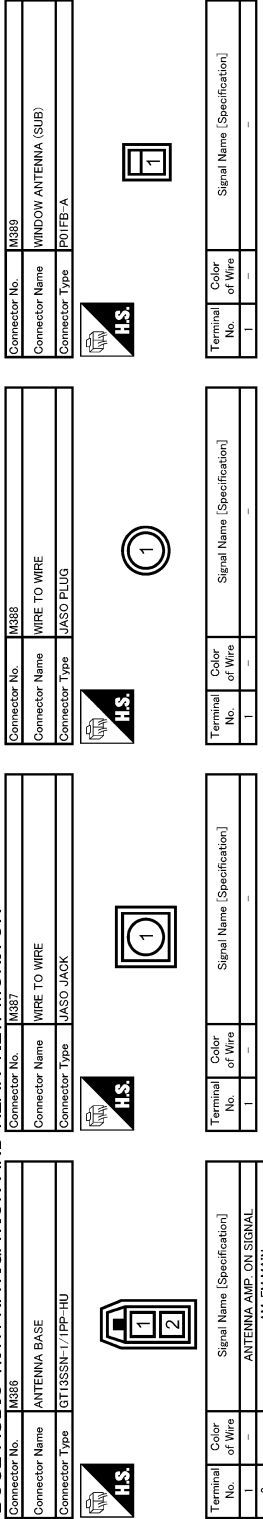
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR



Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

NOTE:

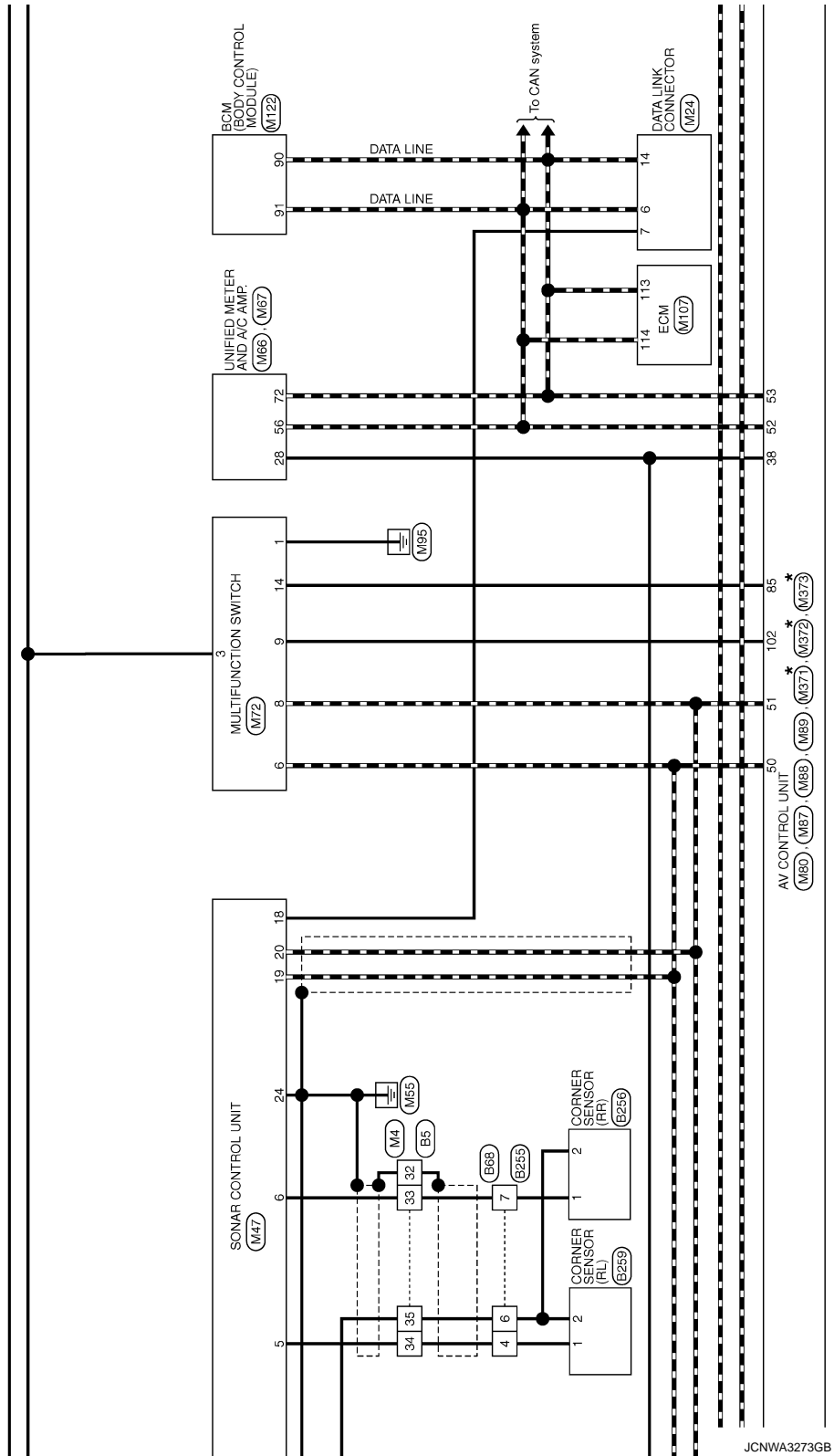
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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



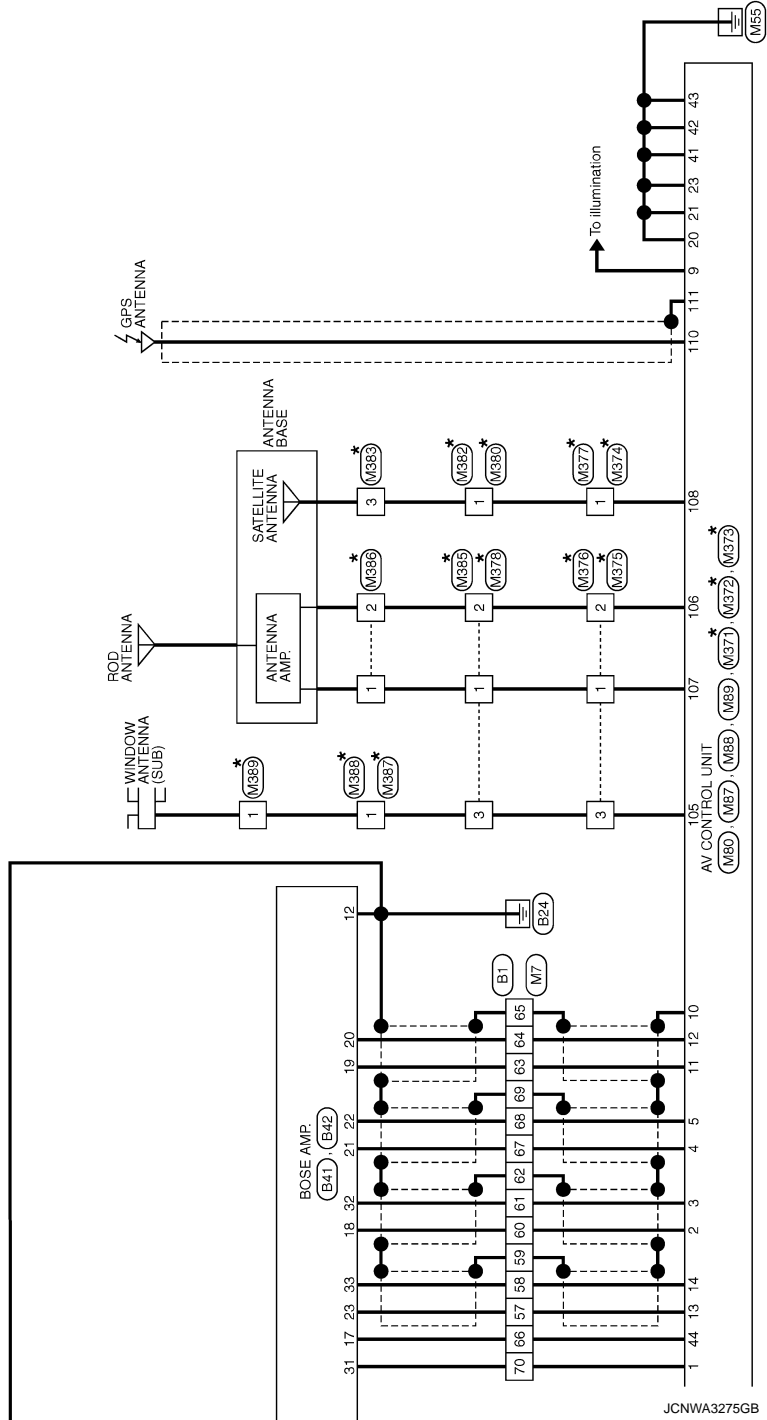
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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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



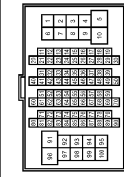
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	G	-- [With around view monitor]
45	Y	-- [With around view monitor]
46	W	-- [With around view monitor]
47	B	-- [With around view monitor]
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	P	-
64	G	-
66	SHIELD	-
66	O	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-



Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

15	LG	-
16	P	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	G	-
4	SHIELD	-
7	Y	-
8	R	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	GR	-
4	SB	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

26	L	-
27	R	-
28	W	-
29	Y	-
30	BR	-
31	O	-
32	SHIELD	-
33	W	-
34	R	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	12G	Y	-
Color of Wire			
Signal Name [Specification]			

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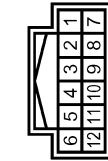
AV CONTROL UNIT

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[BOSE AUDIO WITH NAVIGATION]

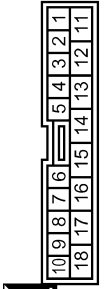
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW VIEW MONITOR

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS5



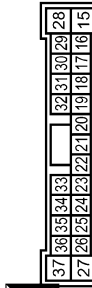
Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH12MMV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	-
14	R	- [With around view monitor]
15	Y	- [With around view monitor]
16	W	- [With around view monitor]
17	L	- [With around view monitor]
18	SHIELD	-

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SGA4



Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (+)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL FRONT REAR LH (+)
21	V	SOUND SIGNAL FRONT REAR RH (+)
22	SB	SOUND SIGNAL REAR LH (-)
23	BR	SOUND SIGNAL REAR RH (-)
25	GR	WOOFER AMP. ON SIGNAL
27	R	SOUND SIGNAL FRONT SQUAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

31	W	AMP ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SQUAWKER RH (+)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SJA2



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

12	B	GUID
13	Y	SOUND SIGNAL FRONT DOOR SPEAKER RH (+)
14	R	SOUND SIGNAL WOOFER (-)

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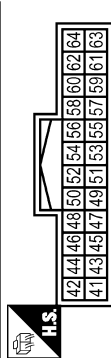
AV CONTROL UNIT

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[BOSE AUDIO WITH NAVIGATION]

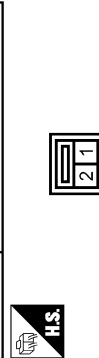
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW VIEW MONITOR

Connector No.	B45
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
41	Y	FRONT CAMERA IMAGE SIGNAL
42	G	FRONT CAMERA IMAGE GND
43	SHIELD	SHIELD
44	B	FRONT CAMERA GND
45	W	FRONT CAMERA COMM
46	R	FRONT CAMERA POWER SUPPLY
47	L	SIDE CAMERA LH COMM
48	BR	SIDE CAMERA LH POWER SUPPLY
49	SHIELD	SHIELD
50	R	SIDE CAMERA LH GND
51	Y	SIDE CAMERA LH IMAGE SIGNAL

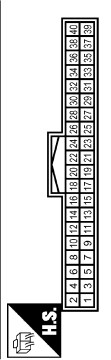
Connector No.	B48
Connector Name	REAR SQUARE LH
Connector Type	TK02FBR



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

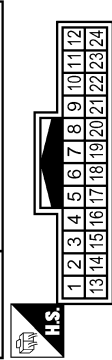
52	W	SIDE CAMERA LH IMAGE GND
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Connector No.	B46
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	P	IGNITION
4	GR	ACC
5	O	ILLUMINATION
6	SB	VEHICLE SPEED (3-PULSE)
7	G	REVERSE
13	B	CONTROL SIGNAL
14	L	SENSOR SIGNAL 1
15	BR	SENSOR SIGNAL 2
16	R	SENSOR SIGNAL 3

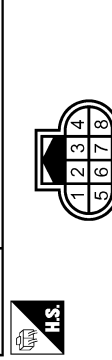
Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MMF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

17	G	AV COMM (H)
18	Y	AV COMM (L)
21	W	AV COMM (H)
22	B	AV COMM (L)
23	LG	LED (+)
24	G	LED (-)
27	W	CAMERA IMAGE SIGNAL
28	SHIELD	CAMERA IMAGE GND
29	Y	SIDE CAMERA RH IMAGE SIGNAL
30	G	SIDE CAMERA RH IMAGE GND
31	SHIELD	SHIELD
32	B	SIDE CAMERA RH GND
33	W	SIDE CAMERA RH COMM
34	R	SIDE CAMERA RH POWER SUPPLY
35	L	REAR CAMERA COMM
36	BR	REAR CAMERA POWER SUPPLY
37	SHIELD	SHIELD
38	R	REAR CAMERA GND
39	Y	REAR CAMERA IMAGE SIGNAL
40	W	REAR CAMERA IMAGE GND

Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	RF09MB



Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-
6	B	-
7	W	-

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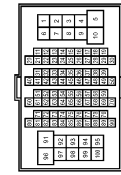
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[BOSE AUDIO WITH NAVIGATION]

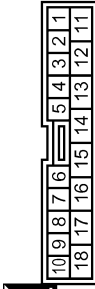
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	THBDFW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	P	-
98	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TKU0FW-ANS



Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR



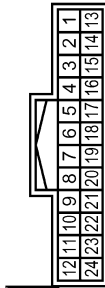
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	B240
Connector Name	BUIZZER
Connector Type	FK02FBR



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

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B255
Connector Name	WIRE TO WIRE
Connector Type	RU08FB



Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
6	B	-
7	R	-

Connector No.	B256
Connector Name	CORNER SENSOR (RR)
Connector Type	YDX02FB



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

Connector No.	B259
Connector Name	CORNER SENSOR (RL)
Connector Type	YDX02FB



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

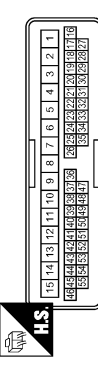
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW VIEW MONITOR

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



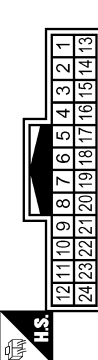
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	
8	BR	
18	R	
19	Y	
20	B	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	
30	W	
31	LG	
32	BR	

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



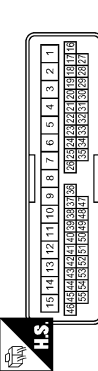
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	B	
5	Y	
6	R	
17	G	
18	W	

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



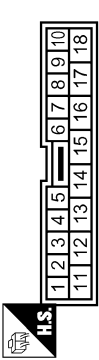
Terminal No.	Color of Wire	Signal Name [Specification]
4	W	
5	L	
16	R	
17	W	
18	G	
19	Y	
27	B	
28	SHIELD	

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FBR-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TR10MMF-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	W	
4	LG	
5	B	
6	R	
16	BR	
17	G	
18	Y	

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK0MW-NS8



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FER-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



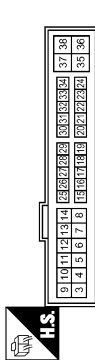
Terminal No.	Color of Wire	Signal Name [Specification]
13	R	-
14	L	- [With around view monitor]
15	Y	-
16	G	- [With around view monitor]
17	W	- [With around view monitor]
18	SHIELD	-

Connector No.	D111
Connector Name	REAR CAMERA
Connector Type	TH08MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	REAR CAMERA IMAGE GND
4	W	REAR CAMERA COMM
5	Y	REAR CAMERA IMAGE SIGNAL
7	L	REAR CAMERA GND
8	R	REAR CAMERA POWER SUPPLY

Connector No.	E5
Connector Name	ECM E/F (INTELLIGENT POWER DISTRIBUTION) MODULE ENGINE ROOM
Connector Type	TH20PW-CS12-ME-1V



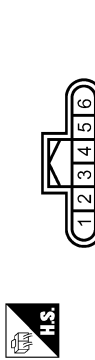
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E63
Connector Name	CORNER SENSOR (FL)
Connector Type	TDX02FB



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

Connector No.	E73
Connector Name	FRONT CAMERA
Connector Type	FR08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	FRONT CAMERA POWER SUPPLY
2	BR	FRONT CAMERA GND
3	Y	FRONT CAMERA IMAGE SIGNAL
4	L	FRONT CAMERA IMAGE GND
6	W	FRONT CAMERA COMM

Connector No.	E81
Connector Name	WIRE TO WIRE
Connector Type	FR02MB



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

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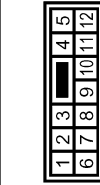
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

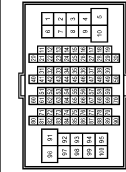
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	BR	-
3	L	-
4	SHIELD	-
7	Y	-
8	R	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	W	-
3	R	-
4	GR	-
59	O	-
84	G	-
93	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TEB01FW



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

Connector No.	E151
Connector Name	WIRE TO WIRE
Connector Type	RS02FB



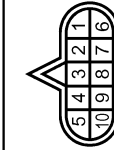
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-

Connector No.	E152
Connector Name	CORNER SENSOR (FR)
Connector Type	YD02FB



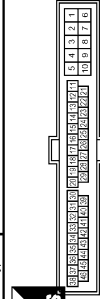
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



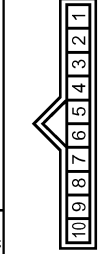
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



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

Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

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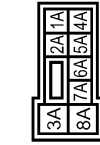
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

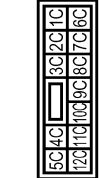
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



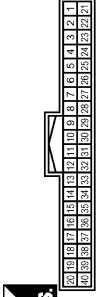
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

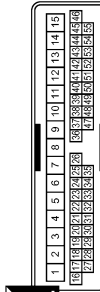
Connector No.	M4
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	V	-
4	V	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

26	W	-
27	B	-
28	G	-
29	Y	-
30	R	-
31	R	-
32	SHIELD	-
33	R	-
34	W	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
4	P	-
5	L	-
16	R	-
17	B	-
18	G	-
19	Y	-
27	W	-
28	SHIELD	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	W	-
4	SHIELD	-
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	LG	-
45	V	-
46	G	-
47	R	-
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

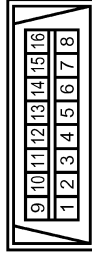
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
7	V	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NSJ16MM-GS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

15	LG
16	P

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGV-IV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M47
Connector Name	SONAR CONTROL UNIT
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	R	CORNER SENSOR FRONT LH
4	W	CORNER SENSOR FRONT RH
5	R	CORNER SENSOR REAR LH
6	R	CORNER SENSOR REAR RH
12	B	SENSOR GND
13	V	ACC
18	O	K LINE
19	G	AV COMM (H)
20	R	AV COMM (L)
23	GR	BUZZER
24	B	GND

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



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

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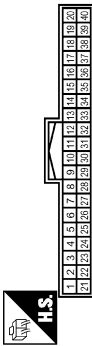
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH10FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



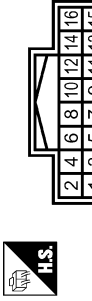
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS10FL-ME-LG



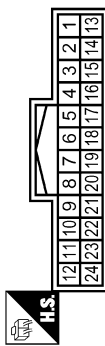
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

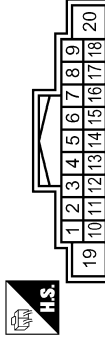
Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
12	B	GND
14	SHIELD	COMPZ GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R, RED) SIGNAL
18	R	RGB (B, BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CSZ



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP. ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
19	Y	BATTERY
20	B	GND

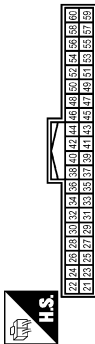
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
29	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PULSE)
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GB	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
46	G	AV COMM (R)
49	R	AV COMM (L)
50	LG	AV COMM (H)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R-RED) SIGNAL
62	W	RGB (G-GREEN) SIGNAL
63	R	RGB (B-BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (VS) SIGNAL
68	R	HP
69	W	VP
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)

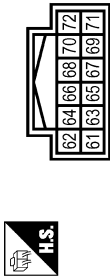
Connector No.	M107
Connector Name	ECM
Connector Type	FR24FGY-F26-R-LH-Z



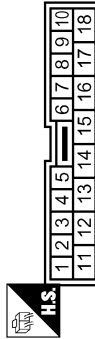
Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHICAN-LI
114	L	VEHICAN-HI

72	SHIELD	SHIELD
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Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



Connector No.	M105
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	
3	G	
4	SHIELD	

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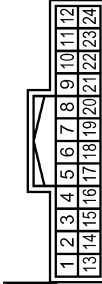
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

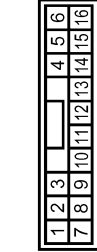
Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

Connector No.	M112
Connector Name	iPod SIDE
Connector Type	IP16FGY



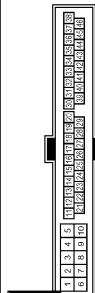
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	W	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	R	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS1.0



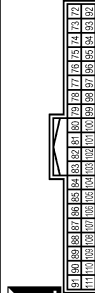
Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



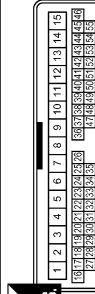
Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	V	- [With BOSE audio]
100	SB	- [With BOSE audio]

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MP-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
18	R	-
19	B	-
20	Y	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	G	-

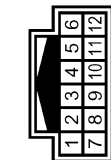
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

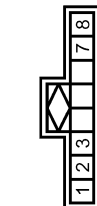
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT1SSH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	PARA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



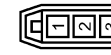
Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT1SSC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-1S-HU



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

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



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

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU

Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAETLLITE ANTENNA

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU

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

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



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

Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



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

Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	FO1FB-A



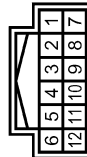
Terminal No.	1	Signal Name [Specification]
Color of Wire	-	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK(GFW)-NS



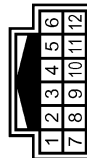
Terminal No.	2	Color of Wire	R	Signal Name [Specification]
3	G	-	-	-
4	SHIELD	-	-	-

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	TH12PW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]
4	R	-	-	-
5	G	-	-	-

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]
4	G	-	-	-
5	R	-	-	-

Connector No.	R17
Connector Name	MICROPHONE
Connector Type	TRG4FW



Terminal No.	1	Color of Wire	G	Signal Name [Specification]
2	SHIELD	-	-	MICROPHONE SIGNAL
4	R	-	-	MICROPHONE VCC

Fail-Safe

When the ambient temperature becomes extremely low or extremely high, or when HDD is malfunctioning, AV control unit displays the message and limits the AV control unit function.

FAIL-SAFE CONDITIONS

- When the ambient temperature is -20°C or lower, or when it is 70°C or higher
- when HDD is malfunctioning

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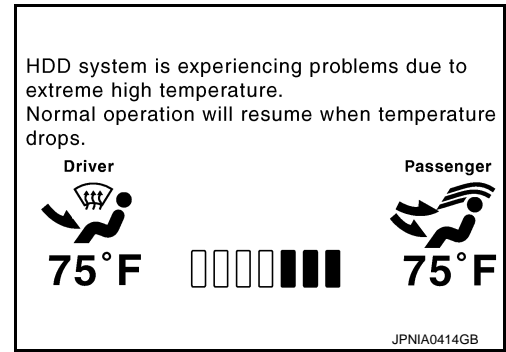
AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Display

The messages displayed on fail-safe conditions are as shown below:



Fail-safe mode	Display (display of the fail-safe condition)
When HDD temperature is low	HDD system is experiencing problems due to extreme low temperature. Normal operation will resume when temperature rises.
When HDD temperature is high	HDD system is experiencing problems due to extreme high temperature. Normal operation will resume when temperature drops.
When HDD is malfunctioning	HDD system is not functioning. Please contact your dealer for assistance.

DESCRIPTION OF CONTROLS

Function	When Fail-safe Function is activated	
Air conditioner	Operation	Only multifunction switch (preset switch) can be operated.
	Display	<ul style="list-style-type: none"> • LED of multifunction switch (preset switch) illuminates. • Aimed temperature, blow angle, and flow rate are displayed in simplified mode.
Audio	Operation	Only ON/OFF and volume control operations by multifunction switch (preset switch) are possible.
	Display	No display ("Fail-safe mode" is displayed)
Camera	Operation	Image tone cannot be controlled.
	Display	Cannot be superimposed. (warning display, tone control display)
Hands-free phone	Operation	Cannot be operated.
Navigation	Operation	Cannot be operated.
Self diagnosis	The display in simplified mode of fail-safe condition	
CONSULT-III diagnosis	Cannot be operated.	

Ability Operation Mode

There is an ability operation mode for Fail-safes due to low or high ambient temperature.

If HDD data can be read, fail-safe is shown, then normal displays are displayed only for functions which can be operated.

RELEASE CONDITIONS OF FAIL-SAFE

Fail-safe is released on following conditions and normal mode is restored.

When The Temperature of HDD Is Low Or High

If the ambient temperature becomes out of fail-safe condition range, normal mode is restored.

When HDD Is Malfunctioning

If the malfunction disappears, normal mode is restored.

NOTE:

- If fail-safe mode due to HDD malfunction is seen continuously, replace AV control unit.
- If fail-safe mode due to HDD malfunction is seen temporarily, check the "Error History" of Confirmation/Adjustment mode. If this is normal, then continue the normal operation, observing the function. (It might be a temporary malfunction of HDD.)

AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

DTC Index

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SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display item	Refer to
U1000	CAN COMM CIRCUIT [U1000]	AV-242, "Diagnosis Procedure"
U1010	CONTROL UNIT (CAN) [U1010]	AV-243, "Diagnosis Procedure"
U1310	CONTROL UNIT (AV) [U1310]	AV-244, "DTC Logic"
U1200	Cont Unit FLASH-ROM [U1200]	AV-245, "DTC Logic"
U1201	Gyro NO CONN [U1201]	AV-246, "DTC Logic"
U1216	CAN CONT [U1216]	AV-247, "DTC Logic"
U1217	BLUETOOTH CONN [U1217]	AV-248, "DTC Logic"
U1218	HDD CONN [U1218]	AV-249, "DTC Logic"
U1219	HDD READ [U1219]	AV-250, "DTC Logic"
U1220	XM SERIAL COMM [U1220]	AV-251, "DTC Logic"
U121A	HDD WRITE [U121A]	AV-252, "DTC Logic"
U121B	HDD COMM [U121B]	AV-253, "DTC Logic"
U121C	HDD ACCESS [U121C]	AV-254, "DTC Logic"
U121D	DSP CONN [U121D]	AV-255, "DTC Logic"
U121E	DSP COMM [U121E]	AV-256, "DTC Logic"
U121F	INTERNAL COMM [U121F]	AV-257, "Diagnosis Procedure"
U1204	GPS COMM [U1204]	AV-258, "Diagnosis Procedure"
U1205	GPS ROM [U1205]	AV-259, "Diagnosis Procedure"
U1206	GPS RAM [U1206]	AV-260, "Diagnosis Procedure"
U1207	GPS RTC [U1207]	AV-261, "Diagnosis Procedure"
U1243	FRONT DISP CONN [U1243]	AV-262, "Diagnosis Procedure"
U1244	GPS ANTENNA CONN [U1244]	AV-264, "Diagnosis Procedure"
U1250	CAMERA CONT. CONN [U1250]	AV-265, "Diagnosis Procedure"
U1258	XM ANTENNA CONN [U1258]	AV-266, "Diagnosis Procedure"
U1300 U121F	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] INTERNAL COMM [U121F] 	With rear view monitor <ul style="list-style-type: none"> AV-267, "WITH REAR VIEW MONITOR : Description" With around view monitor <ul style="list-style-type: none"> AV-267, "WITH AROUND VIEW MONITOR : Description"
U1300 U1240	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] SWITCH CONN [U1240] 	With rear view monitor <ul style="list-style-type: none"> AV-267, "WITH REAR VIEW MONITOR : Description" With around view monitor <ul style="list-style-type: none"> AV-267, "WITH AROUND VIEW MONITOR : Description"
U1300 U1254	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] IPOD CONN [U1254] 	With rear view monitor <ul style="list-style-type: none"> AV-267, "WITH REAR VIEW MONITOR : Description" With around view monitor <ul style="list-style-type: none"> AV-267, "WITH AROUND VIEW MONITOR : Description"
U1300 U125B	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] AROUND CAMERA CONN [U125B] 	AV-267, "WITH AROUND VIEW MONITOR : Description"
U1300 U125C	<ul style="list-style-type: none"> AV COMM CIRCUIT [U1300] SONAR CONN [U125C] 	AV-267, "WITH AROUND VIEW MONITOR : Description"

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AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

DTC	Display item	Refer to
U1300 U1252 U1254	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • REAR CAMERA LAN CONN [U1252] • IPOD CONN [U1254] 	AV-267, "WITH REAR VIEW MONITOR : Description"
U1300 U1240 U1252 U1254	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] • REAR CAMERA LAN CONN [U1252] • IPOD CONN [U1254] 	AV-267, "WITH REAR VIEW MONITOR : Description"
U1300 U1254 U125B	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	AV-267, "WITH AROUND VIEW MONITOR : Description"
U1300 U1240 U1254 U125B	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • SWITCH CONN [U1240] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	AV-267, "WITH AROUND VIEW MONITOR : Description"
U1300 U121F U1240 U1254	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] • SWITCH CONN [U1240] • IPOD CONN [U1254] 	AV-267, "WITH REAR VIEW MONITOR : Description"
U1300 U121F U1240 U1252 U1254	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] • SWITCH CONN [U1240] • REAR CAMERA LAN CONN [U1252] • IPOD CONN [U1254] 	AV-267, "WITH REAR VIEW MONITOR : Description"
U1300 U121F U1240 U1254 U125B	<ul style="list-style-type: none"> • AV COMM CIRCUIT [U1300] • INTERNAL COMM [U121F] • SWITCH CONN [U1240] • IPOD CONN [U1254] • AROUND CAMERA CONN [U125B] 	AV-267, "WITH AROUND VIEW MONITOR : Description"

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

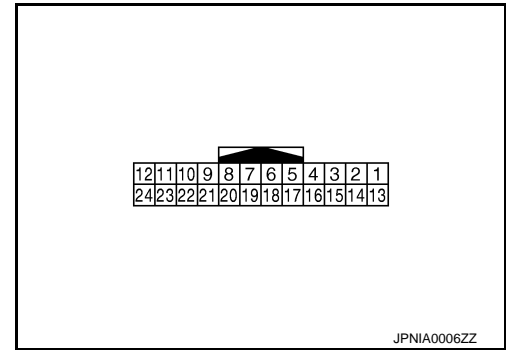
[BOSE AUDIO WITH NAVIGATION]

DISPLAY UNIT

Reference Value

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TERMINAL LAYOUT



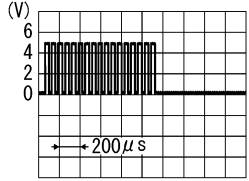
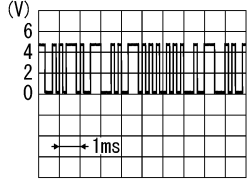
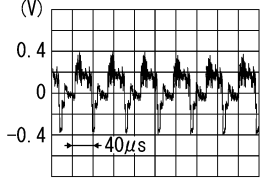
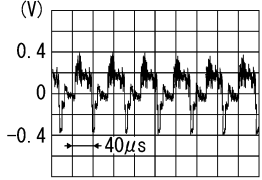
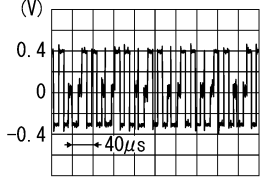
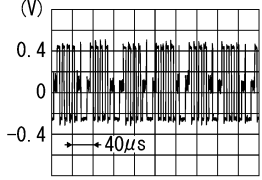
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
3 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
4	—	Shield	—	—	—	—
5 (R)	Ground	AUX image ground	—	Ignition switch ON	—	0 V
6 (W)	Ground	RGB signal (G: green)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNO- SIS screen.	
7	—	Shield	—	—	—	—
8 (R)	Ground	Horizontal synchronizing (HP) signal	Output	Ignition switch ON	—	

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

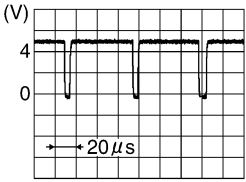
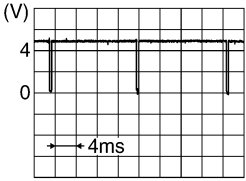
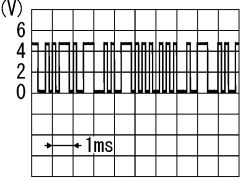
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/ Output		
9 (B)	Ground	RGB area (YS) signal	Input	Ignition switch ON	At RGB image display 5.0 V
				At rear view camera image display	 PKIB4948J
11 (BR)	Ground	Communication signal (CONT→DISP)	Input	Ignition switch ON	When adjusting display brightness.  PKIB5039J
12 (W)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image display  SKIB2251J
13 (B)	Ground	Ground	—	Ignition switch ON	— 0 V
14	—	Shield	—	—	—
15 (G)	Ground	AUX image signal	Input	Ignition switch ON	AUX image display  SKIB2251J
17 (B)	Ground	RGB signal (R: red)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.  SKIB2238J
18 (R)	Ground	RGB signal (B: blue)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.  SKIB2237J

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
19 (G)	Ground	RGB synchronizing signal	Input	Ignition switch ON	—	 <p>SKIB3603E</p>
20 (W)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch ON	—	 <p>SKIB3598E</p>
21	—	Shield	—	—	—	—
22 (Y)	Ground	Communication signal (DISP→CONT)	Output	Ignition switch ON	When adjusting display brightness.	 <p>PKIB5039J</p>
23	—	Shield	—	—	—	—

Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -

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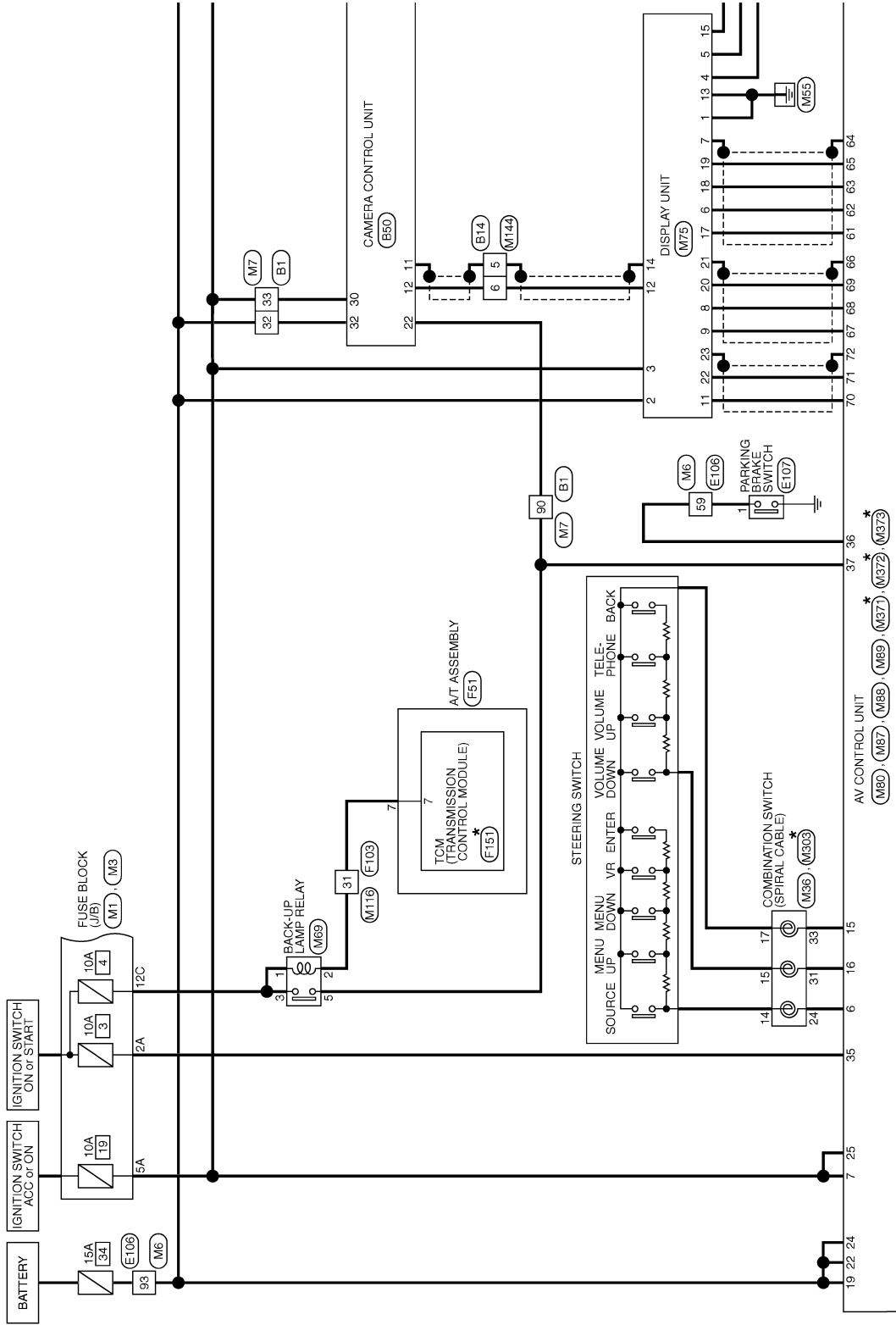
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[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR



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

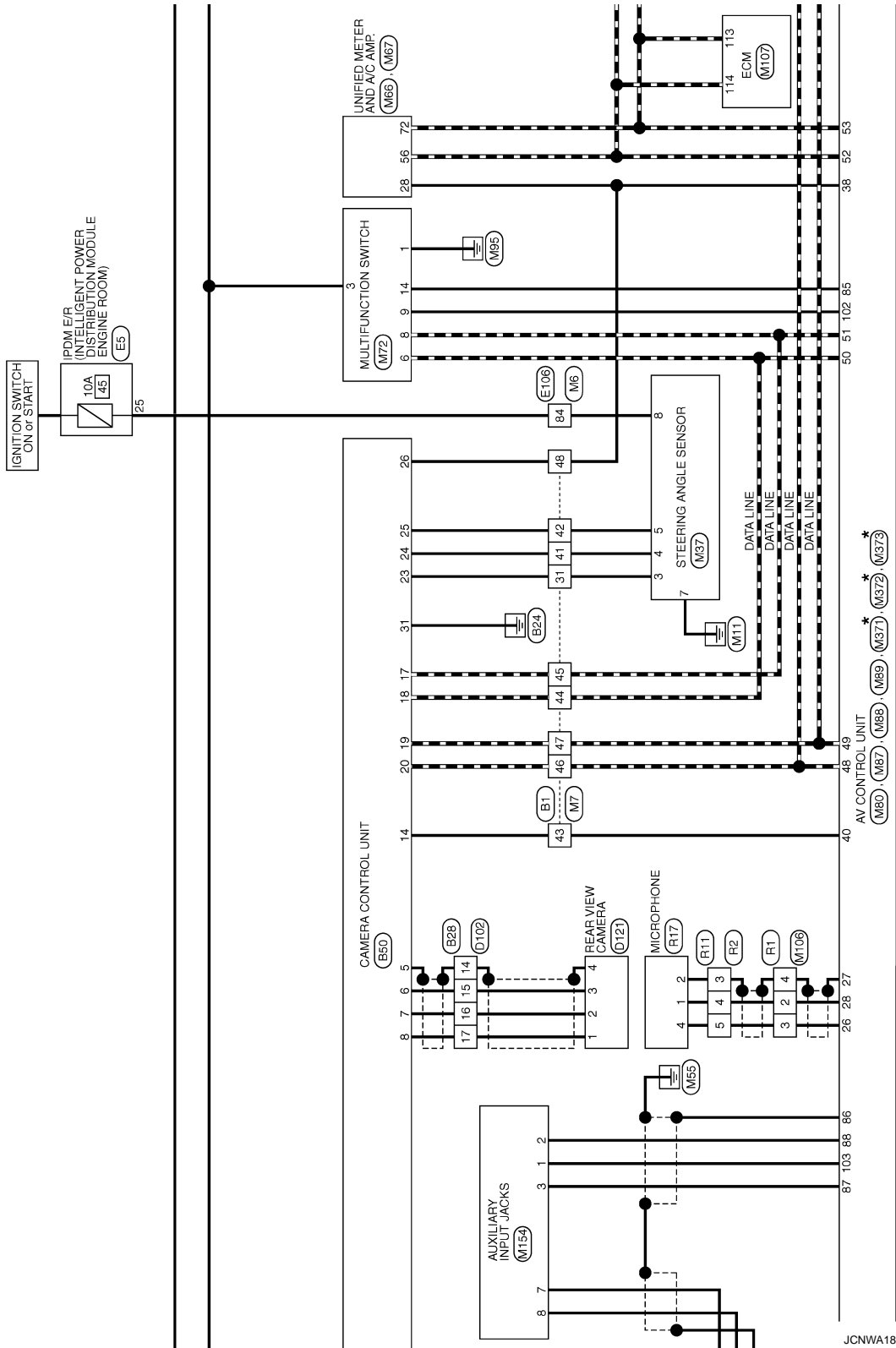
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[BOSE AUDIO WITH NAVIGATION]



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

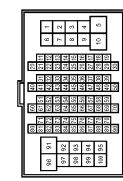
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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]
47	R	- [Without around view monitor]
48	V	-

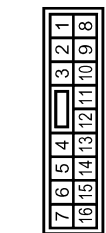
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS12PBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	O	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	MS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10PW-NS8



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

15	LG	-
16	P	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH28MP-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	W	- [Without around view monitor]
16	B	- [Without around view monitor]
17	R	- [Without around view monitor]

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SG44



Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (-)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL REAR LH (-)
21	V	SOUND SIGNAL REAR RH (-)
22	SB	SOUND SIGNAL REAR LH (+)
23	BR	SOUND SIGNAL REAR RH (+)
25	GR	WOOFER AMP. ON SIGNAL
27	R	SOUND SIGNAL FRONT SQUAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

Connector No.	B48
Connector Name	REAR SQUAWKER LH
Connector Type	TK02FBR



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

31	W	AMP. ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SQUAWKER RH (+)



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

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SIA2



22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (3-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY



Connector No.	B51
Connector Name	WOOFER
Connector Type	RS06FY-PR

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL WOOFER (-)
2	G	SOUND SIGNAL WOOFER (+)
4	GR	WOOFER AMP. ON SIGNAL
5	B	GND
6	W	BATTERY

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B36
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSS

Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR

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

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

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

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS

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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FBR-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FBR-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



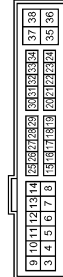
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH10MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	FRONT LEFT (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20PW-CS12-MH-TV

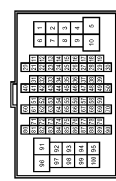


Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



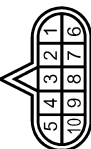
Terminal No.	Color of Wire	Signal Name [Specification]
58	O	-
84	G	-
93	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TE01FW



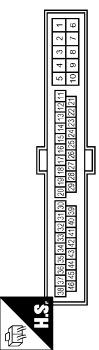
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



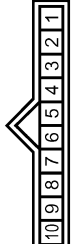
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS/D




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

Connector No.	F151
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SPT0FBCY




Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



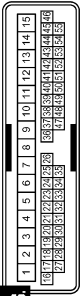
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MP-CS15

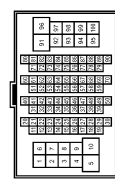


Terminal No.	Color of Wire	Signal Name [Specification]
4	P	-
5	L	-

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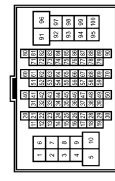
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	Y	-
33	V	-
41	BR	-
42	R	-
43	W	-
44	LG	-
45	V	-
46	G	-
47	R	-
48	V	-

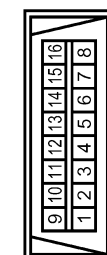
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FER



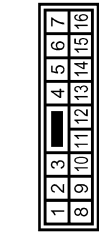
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

15	LG	-
16	P	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

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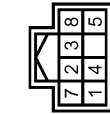
DISPLAY UNIT

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[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH88FW-NH



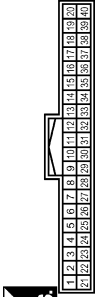
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



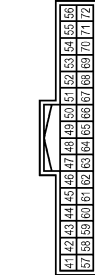
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	G	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



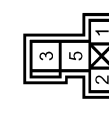
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



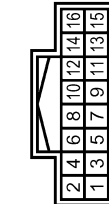
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



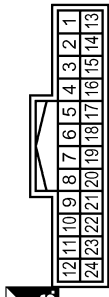
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



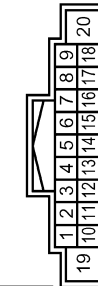
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
13	B	GND
14	SHIELD	COMP2 GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R, RED) SIGNAL
18	R	RGB (B, BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

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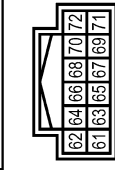
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-GS2



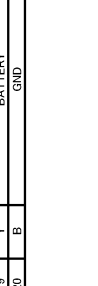
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP_ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



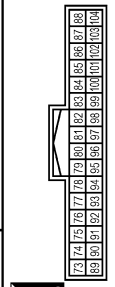
Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R: RED) SIGNAL
62	W	RGB (G: GREEN) SIGNAL
63	R	RGB (B: BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (Y/S) SIGNAL
68	R	UP
69	W	UP
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

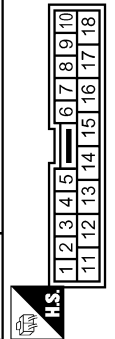
Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH62FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	R	IPod SOUND SIGNAL LH (+)
80	B	IPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	IPod SOUND SIGNAL LH (-)
96	G	IPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PUL SE)
40	W	CONNECTION RECOGNITION
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
48	G	AV COMM (R)
49	R	AV COMM (L)
50	LG	AV COMM (R)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10AMP-NS8



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

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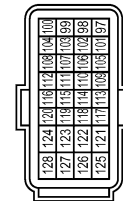
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[BOSE AUDIO WITH NAVIGATION]

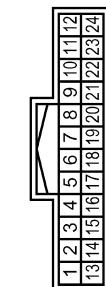
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

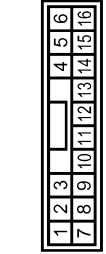
Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (-)
2	B	iPod SOUND SIGNAL RH (-)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod->iPod ADAPTER)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

Connector No.	M112
Connector Name	iPod SIDE
Connector Type	PI16FGY



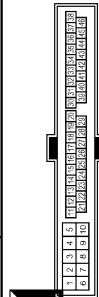
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	W	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod->iPod ADAPTER)
7	R	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
18	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



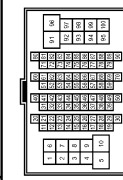
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK68MW-NS10



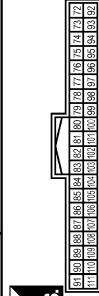
Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
99	V	- [With BOSE audio]
100	SD	- [With BOSE audio]

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



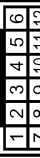
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	
15	L	
17	BR	

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	
6	W	

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH02MW-CS1.5



Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	
8	LG	

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

Connector No.	M273
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M272
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FARRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

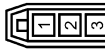
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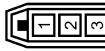
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



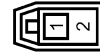
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-1S-HU



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

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



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

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAATELITE ANTENNA

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M386	Connector No.	M387	Connector No.	M388	Connector No.	M389
Connector Name	ANTENNA BASE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WINDOW ANTENNA (SUB)
Connector Type	GTJ3SSNF-1/1PP-HU	Connector Type	UASO JACK	Connector Type	UASO PLUG	Connector Type	PROFB-A

Terminal No.	1	2	Color of Wire	Signal Name [Specification]
1	-	-	-	ANTENNA AMP_ON SIGNAL
2	-	-	-	AM-FM MAIN

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

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

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

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

Connector No.	R1	Connector No.	R2	Connector No.	R11	Connector No.	R17
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	MICROPHONE
Connector Type	TKJ0FW-NSB	Connector Type	TH12PW-NH	Connector Type	TH12AMF-NH	Connector Type	TK04FW

Terminal No.	1	2	3	4	Color of Wire	Signal Name [Specification]
1	10	9	8	7	G	MICROPHONE SIGNAL
2	18	17	16	15	G	MICROPHONE GND
3	6	5	4	3	R	MICROPHONE VCC
4	5	4	3	2	R	MICROPHONE VCC

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

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

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

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

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Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

NOTE:

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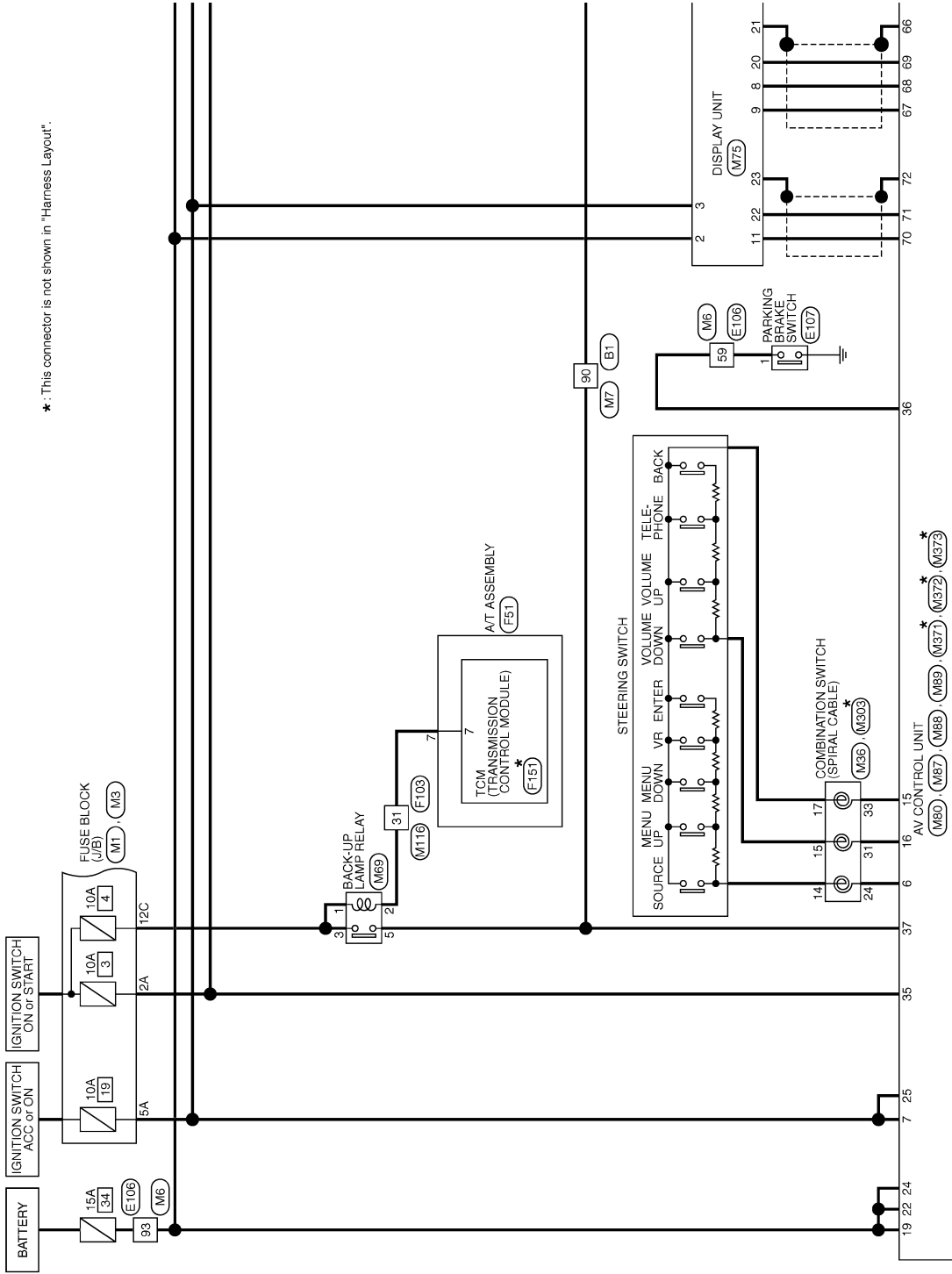
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[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR



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

2010/02/17

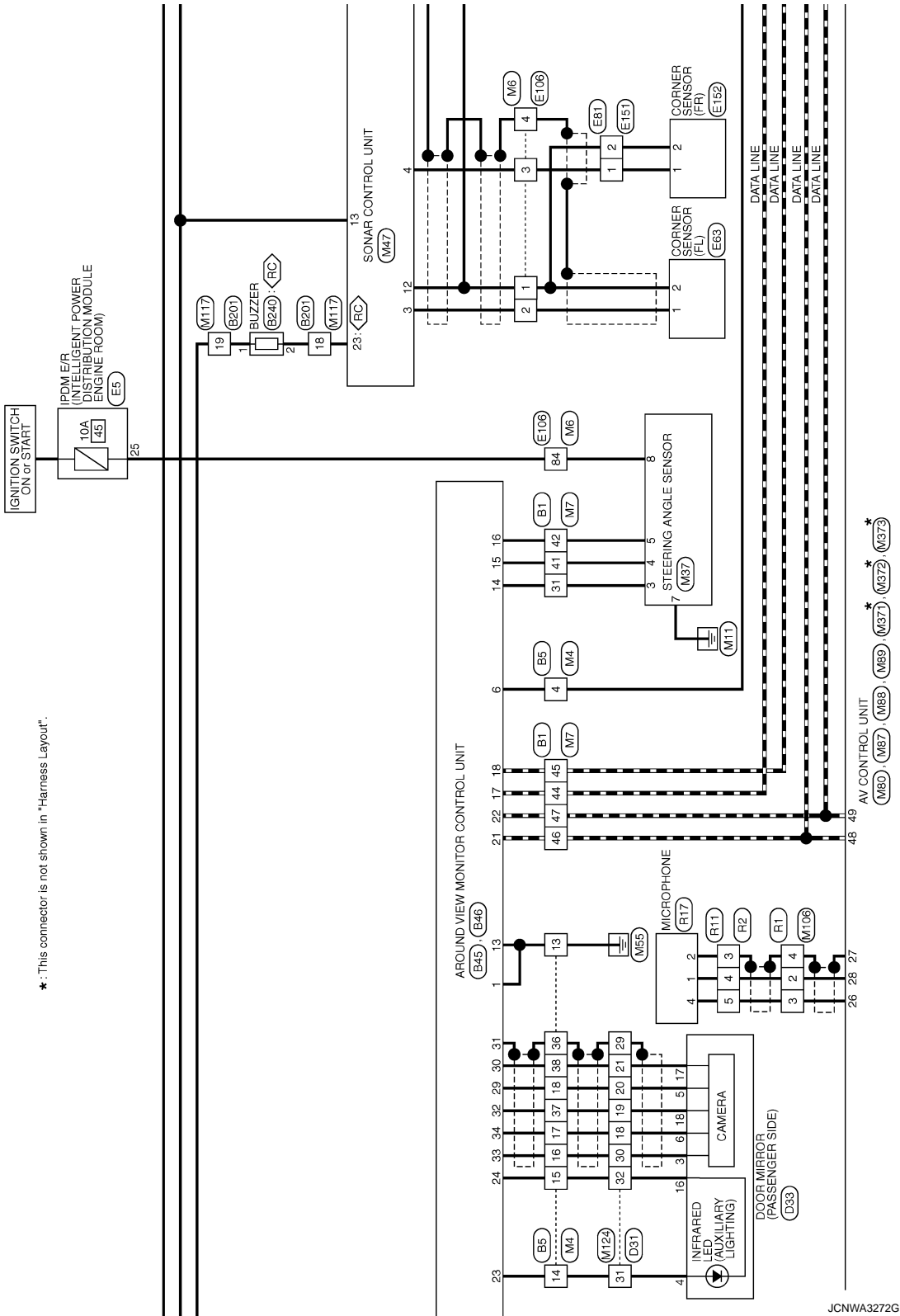
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[BOSE AUDIO WITH NAVIGATION]

RC: Up to vehicles manufactured on November 2008



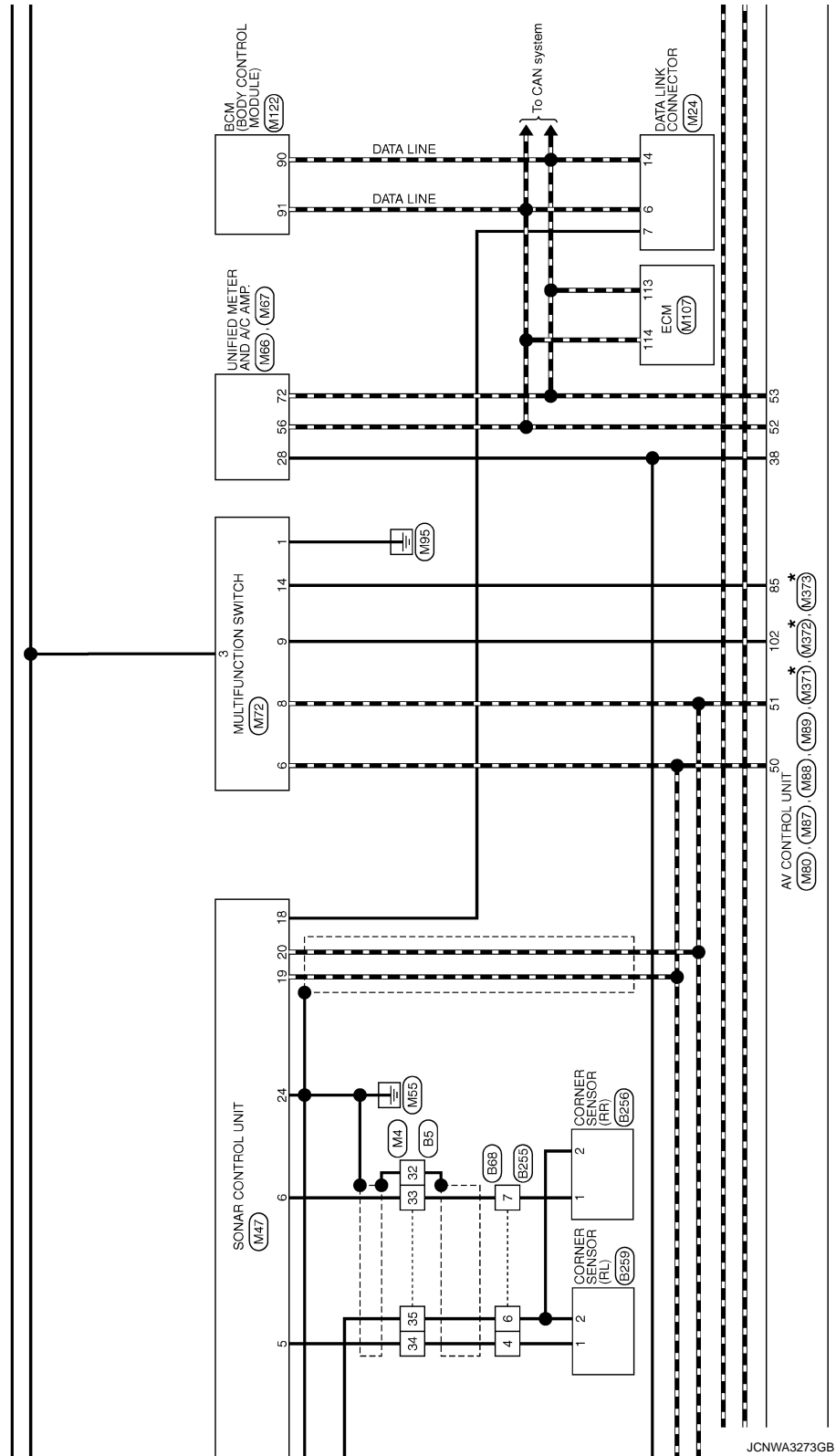
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[BOSE AUDIO WITH NAVIGATION]

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



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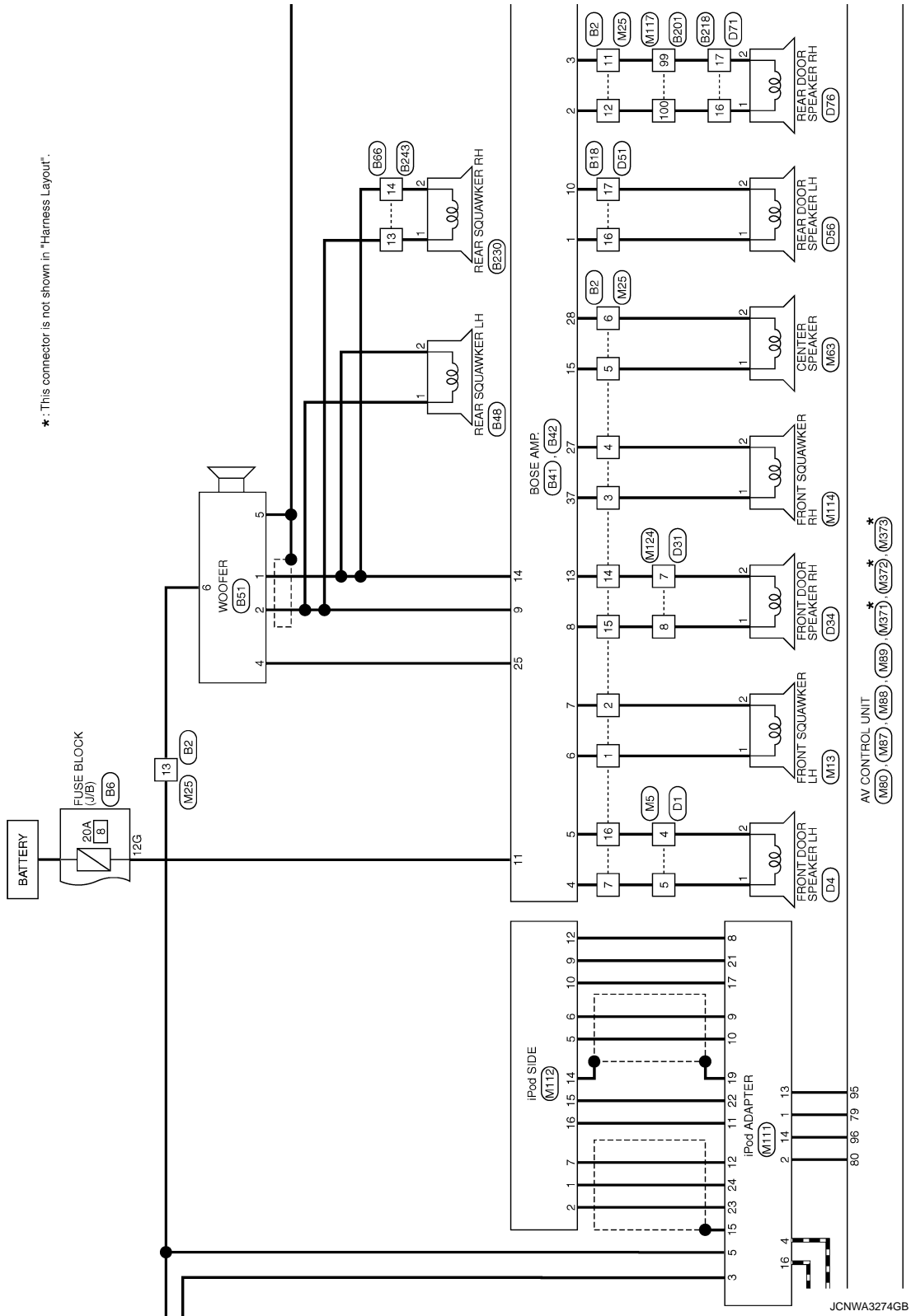
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



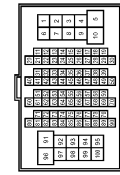
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[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4

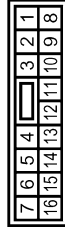


Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	G	-- [With around view monitor]
45	Y	-- [With around view monitor]
46	W	-- [With around view monitor]
47	B	-- [With around view monitor]
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	V	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-

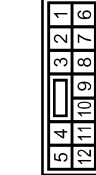


Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



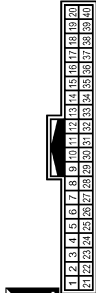
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS12PW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	G	-
4	SHIELD	-
7	Y	-
8	R	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	GR	-
4	SB	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
23	SHIELD	-

15	LG	-
16	P	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

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DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B45
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH24FW-NH



42	44	46	48	50	52	54	56	58	60	62	64
41	43	45	47	49	51	53	55	57	59	61	63

Terminal No.	Color of Wire	Signal Name [Specification]
41	Y	FRONT CAMERA IMAGE SIGNAL
42	G	FRONT CAMERA IMAGE GND
43	SHIELD	SHIELD
44	B	FRONT CAMERA GND
45	W	FRONT CAMERA COMM
46	R	FRONT CAMERA POWER SUPPLY
47	L	SIDE CAMERA LH COMM
48	BR	SIDE CAMERA LH POWER SUPPLY
49	SHIELD	SHIELD
50	R	SIDE CAMERA LH GND
51	Y	SIDE CAMERA LH IMAGE SIGNAL

Connector No.	B46
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH40FW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	P	IGNITION
4	GR	ACC
5	O	ILLUMINATION
6	SB	VEHICLE SPEED (3-PULSE)
7	G	REVERSE
13	B	CONTROL SIGNAL
14	L	SENSOR SIGNAL 1
15	BR	SENSOR SIGNAL 2
16	R	SENSOR SIGNAL 3

17	G	AV COMM (H)
18	Y	AV COMM (L)
21	W	AV COMM (H)
22	B	AV COMM (L)
23	LG	LED (+)
24	G	LED (-)
27	W	CAMERA IMAGE SIGNAL
28	SHIELD	CAMERA IMAGE GND
29	Y	SIDE CAMERA RH IMAGE SIGNAL
30	G	SIDE CAMERA RH IMAGE GND
31	SHIELD	SHIELD
32	B	SIDE CAMERA RH GND
33	W	SIDE CAMERA RH COMM
34	R	SIDE CAMERA RH POWER SUPPLY
35	L	REAR CAMERA COMM
36	BR	REAR CAMERA POWER SUPPLY
37	SHIELD	SHIELD
38	R	REAR CAMERA GND
39	Y	REAR CAMERA IMAGE SIGNAL
40	W	REAR CAMERA IMAGE GND

Connector No.	B48
Connector Name	REAR SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	B51
Connector Name	WOOFER
Connector Type	RS08FGY-PR



2	4	6
1	3	5

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL_WOOFER (-)
2	G	SOUND SIGNAL_WOOFER (+)
4	GR	WOOFER AMP_ON SIGNAL
5	B	GND
6	W	BATTERY

Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MMY-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	FR008MB

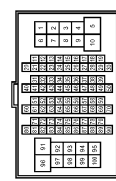


1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-
6	B	-
7	W	-


BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	P	-
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS8




Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR




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

Connector No.	B240
Connector Name	BUZZER
Connector Type	TK02FBR



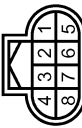
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	GR	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B255
Connector Name	WIRE TO WIRE
Connector Type	RH08FB




Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
6	B	-
7	R	-

Connector No.	B256
Connector Name	CORNER SENSOR (RR)
Connector Type	YDX02FB



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

Connector No.	B259
Connector Name	CORNER SENSOR (RL)
Connector Type	YDX02FB



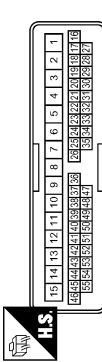
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
5	L	-
16	R	-
17	W	-
18	G	-
19	Y	-
27	B	-
28	SHIELD	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



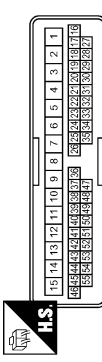
Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
5	Y	-
6	R	-
17	G	-
18	W	-

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS30ZFB-R-GS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-
18	R	-
19	Y	-
20	B	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	BR	-

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH



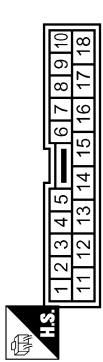
Terminal No.	Color of Wire	Signal Name [Specification]
3	W	-
4	LG	-
5	B	-
6	R	-
16	BR	-
17	G	-
18	Y	-

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS30ZFB-R-GS



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

Connector No.	DE1
Connector Name	WIRE TO WIRE
Connector Type	TK10MK-NS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS30ZFB-R-GS



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

DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK-0MW-NSB



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FER-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



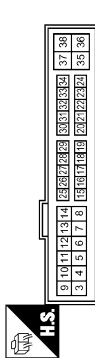
Terminal No.	Color of Wire	Signal Name [Specification]
13	R	-
14	L	- [With around view monitor]
15	Y	-
16	G	- [With around view monitor]
17	W	-
18	SHIELD	-

Connector No.	D111
Connector Name	REAR CAMERA
Connector Type	TH08MF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	REAR CAMERA IMAGE GND
4	W	REAR CAMERA COMM
5	Y	REAR CAMERA IMAGE SIGNAL
7	L	REAR CAMERA GND
8	R	REAR CAMERA POWER SUPPLY

Connector No.	E5
Connector Name	FROM E/B (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-MF-TV



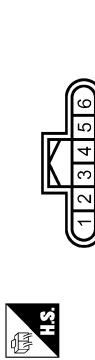
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E6B
Connector Name	CORNER SENSOR (FL)
Connector Type	YDX02FB



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

Connector No.	E73
Connector Name	FRONT CAMERA
Connector Type	FR06FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	FRONT CAMERA POWER SUPPLY
2	BR	FRONT CAMERA GND
3	Y	FRONT CAMERA IMAGE SIGNAL
4	L	FRONT CAMERA IMAGE GND
6	W	FRONT CAMERA COMM

Connector No.	E81
Connector Name	WIRE TO WIRE
Connector Type	RS02MB



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

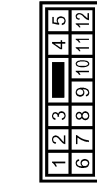
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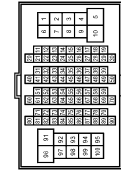
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW VIEW MONITOR

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	
2	BR	
3	L	
4	SHIELD	
7	Y	
8	R	

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	
2	W	
3	R	
4	GR	
59	O	
84	G	
93	Y	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	1E81FW



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

Connector No.	E151
Connector Name	WIRE TO WIRE
Connector Type	RS02FB



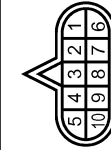
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	B	

Connector No.	E102
Connector Name	CORNER SENSOR (FR)
Connector Type	YDX02FB



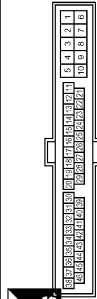
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	B	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
31	R	

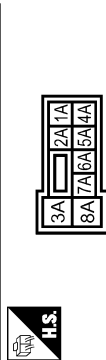
Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



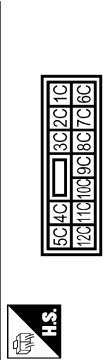
Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

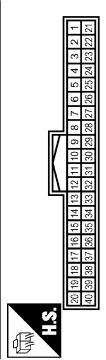
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Connector No.	M4
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH



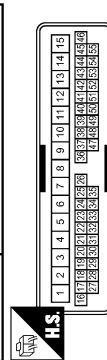
26	W
27	B
28	G
29	Y
30	R
31	R
32	SHIELD
33	R
34	W
35	B
36	SHIELD
37	B
38	G

Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

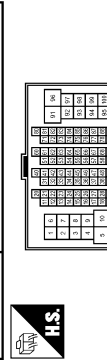
Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	V	-
4	V	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

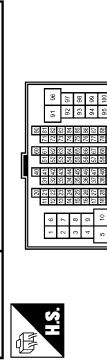
Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH00MW-CS15



Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



61	L
62	SHIELD
63	R
64	G
65	SHIELD
66	SB
67	V
68	LG
69	SHIELD
70	V
90	O

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	-
5	L	-
16	R	-
17	B	-
18	G	-
19	Y	-
23	W	-
28	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	W	-
4	SHIELD	-
59	V	-
84	G	-
93	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	LG	-
45	V	-
46	G	-
47	R	-
57	BR	-
58	V	-
59	SHIELD	-
60	P	-

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[BOSE AUDIO WITH NAVIGATION]

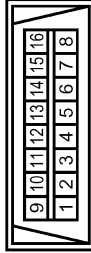
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
7	V	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MM-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-IV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FPW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M47
Connector Name	SONAR CONTROL UNIT
Connector Type	TH24FPW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	R	CORNER SENSOR FRONT LH
4	W	CORNER SENSOR FRONT RH
5	W	CORNER SENSOR REAR LH
6	R	CORNER SENSOR REAR RH
12	B	SENSOR GND
13	V	ACC
18	O	K LINE
19	G	AV COMM (H)
20	B	AV COMM (L)
23	GR	BUZZER
24	B	GND

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



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

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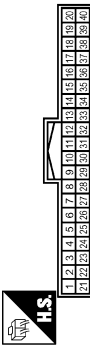
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



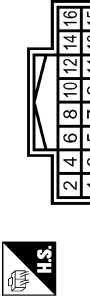
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS30FL-ME-LC



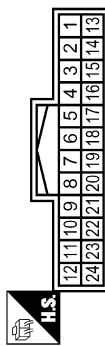
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

13	B	GND
14	SHIELD	COMPZ GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R, RED) SIGNAL
18	R	RGB (B, BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP. ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
8	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
19	Y	BATTERY
20	B	GND

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH10PW-NH



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	101	102	103	104
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Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



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	101	102	103	104
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Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PULSE)
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
48	G	AV COMM (H)
49	R	AV COMM (L)
50	LG	AV COMM (H)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



62	64	66	68	70	72
61	63	65	67	69	71

Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R, RED) SIGNAL
62	W	RGB (G, GREEN) SIGNAL
63	R	RGB (B, BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (VS) SIGNAL
68	R	HP
69	W	VP
70	BR	COMM (CONT-TO DISP)
71	Y	COMM (DISP-TO CONT)

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R25-R-LH-Z



128	124	120	116	112	108	104	100
127	123	119	115	111	107	103	99
126	122	118	114	110	106	102	98
125	121	117	113	109	105	101	97

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



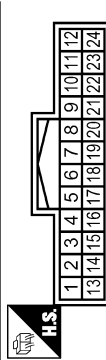
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18		

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

72	SHIELD	SHIELD
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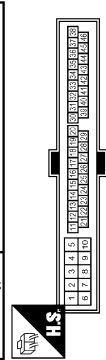
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M111
Connector Name	I-Pod ADAPTER
Connector Type	TH4FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	I-Pod SOUND SIGNAL LH (+)
2	B	I-Pod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (I-Pod ADAPTER->I-Pod)
10	L	COMM (I-Pod->I-Pod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	I-Pod SOUND SIGNAL RH (+)
13	W	I-Pod SOUND SIGNAL LH (-)

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK68MW-NS10

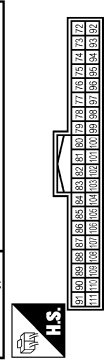


Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

14	G	I-Pod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	I-Pod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	I-Pod SOUND SIGNAL GND
24	B	I-Pod SOUND SIGNAL LH (+)

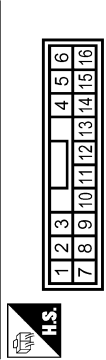
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	I-Pod SOUND SIGNAL LH (+)
2	W	I-Pod SOUND SIGNAL GND
5	L	COMM (I-Pod->I-Pod ADAPTER)
6	P	COMM (I-Pod ADAPTER->I-Pod)
7	R	I-Pod SOUND SIGNAL RH (+)
9	W	I-Pod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



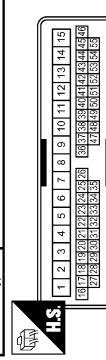
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M112
Connector Name	I-Pod SIDE
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
18	R	-
19	B	-
20	Y	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	G	-

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



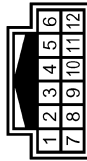
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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	
6	W	

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A0BEW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	1K08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	W	
15	L	
17	BR	

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT1SSHF-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FAKRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT1SSC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	
2	-	
3	-	

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M376	Connector No.	M377	Connector No.	M380
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU	Connector Type	GT16C-1PP-HU	Connector Type	GT16-IS-HU

Terminal No.	1	2	3	Signal Name [Specification]
Color of Wire	-	-	-	-
Terminal No.	1	2	3	Signal Name [Specification]
Color of Wire	-	-	-	-

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

Connector No.	M382	Connector No.	M383	Connector No.	M385	Connector No.	M386
Connector Name	WIRE TO WIRE	Connector Name	ANTENNA BASE	Connector Name	WIRE TO WIRE	Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU	Connector Type	GT16C-1PP-HU	Connector Type	GT13SCN-2/1PP-HU	Connector Type	GT13SSN-1/1PP-HU

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

Terminal No.	1	2	3	Signal Name [Specification]
Color of Wire	-	-	-	-

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

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

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	FOIFB-A



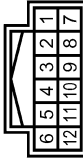
Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TKUGFW-NSB



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

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	TH12PW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]	-
4	R	-	-	-	-
5	G	-	-	-	-

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]	-
4	G	-	-	-	-
5	R	-	-	-	-

Connector No.	R17
Connector Name	MICROPHONE
Connector Type	TKUGFW



Terminal No.	1	Color of Wire	G	Signal Name [Specification]	MICROPHONE SIGNAL
2	SHIELD	-	-	-	MICROPHONE GND
4	R	-	-	-	MICROPHONE VCC

BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

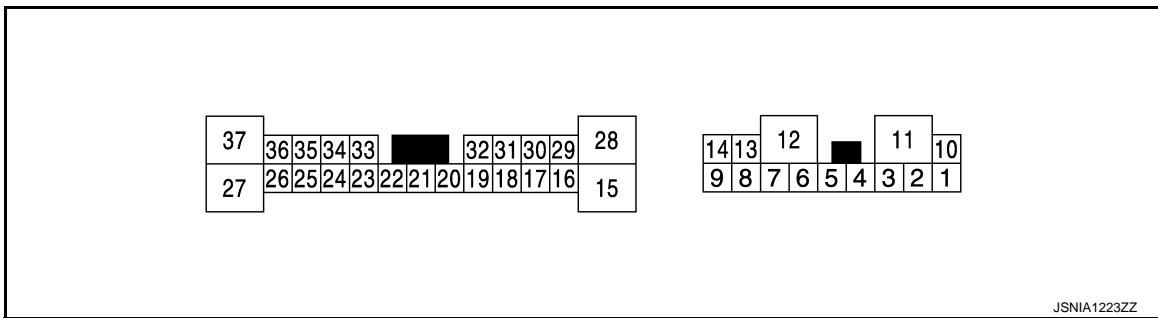
[BOSE AUDIO WITH NAVIGATION]

BOSE AMP.

Reference Value

INFOID:000000004506731

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (Y)	10 (G)	Sound signal rear door speaker LH	Output	Ignition switch ON	Audio output	
2 (SB)	3 (V)	Sound signal rear door speaker RH	Output	Ignition switch ON	Audio output	
4 (B)	5 (P)	Sound signal front door speaker LH	Output	Ignition switch ON	Audio output	
6 (L)	7 (W)	Sound signal front squawk- er LH	Output	Ignition switch ON	Audio output	

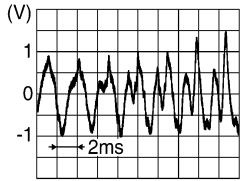
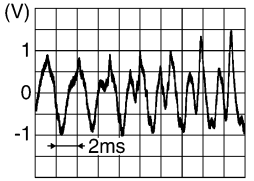
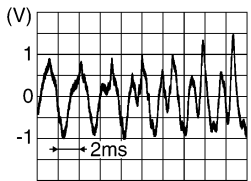
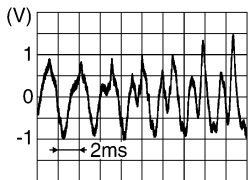
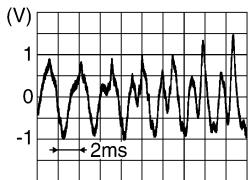
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BOSE AMP.

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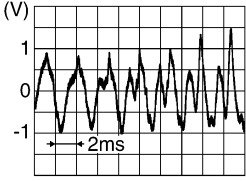
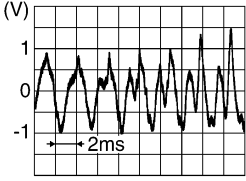
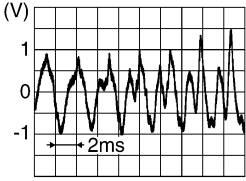
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
8 (LG)	13 (Y)	Sound signal front door speaker RH	Output	Ignition switch ON	Audio output	 SKIB3609E
9 (G)	14 (R)	Sound signal woofer and rear squawker (LH and RH)	Output	Ignition switch ON	Audio output	 SKIB3609E
11 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
12 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
15 (B)	28 (G)	Sound signal center speaker	Output	Ignition switch ON	Audio output	 SKIB3609E
17 (O)	Ground	Mode change signal	Input	Ignition switch ON	Driver's Audio Stage ON	0 V
				Ignition switch ON	Driver's Audio Stage OFF	8.5 V
18 (P)	32 (L)	Sound signal front LH	Input	Ignition switch ON	Audio output	 SKIB3609E
19 (R)	20 (G)	Sound signal front RH	Input	Ignition switch ON	Audio output	 SKIB3609E

BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
21 (V)	22 (SB)	Sound signal rear LH	Input	Ignition switch ON	Audio output	 SKIB3609E
23 (BR)	33 (Y)	Sound signal rear RH	Input	Ignition switch ON	Audio output	 SKIB3609E
25 (GR)	Ground	Woofer amp. ON signal	Output	Ignition switch ACC	—	12.0 V
37 (BR)	27 (R)	Sound signal front squawker RH	Output	Ignition switch ON	Audio output	 SKIB3609E
31 (W)	Ground	Amp. ON signal	Input	Ignition switch ACC	—	12.0 V

Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -

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NOTE:

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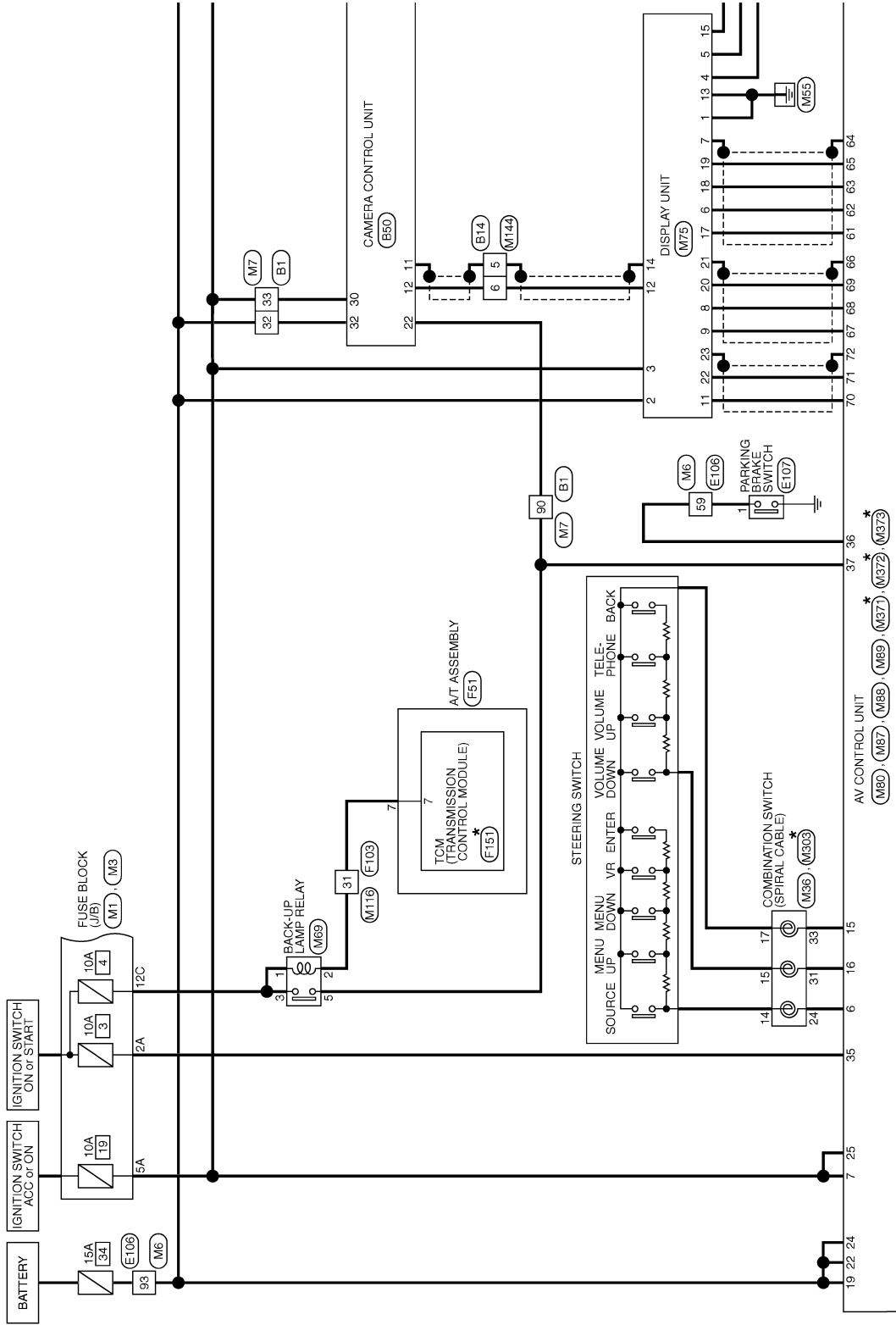
BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR



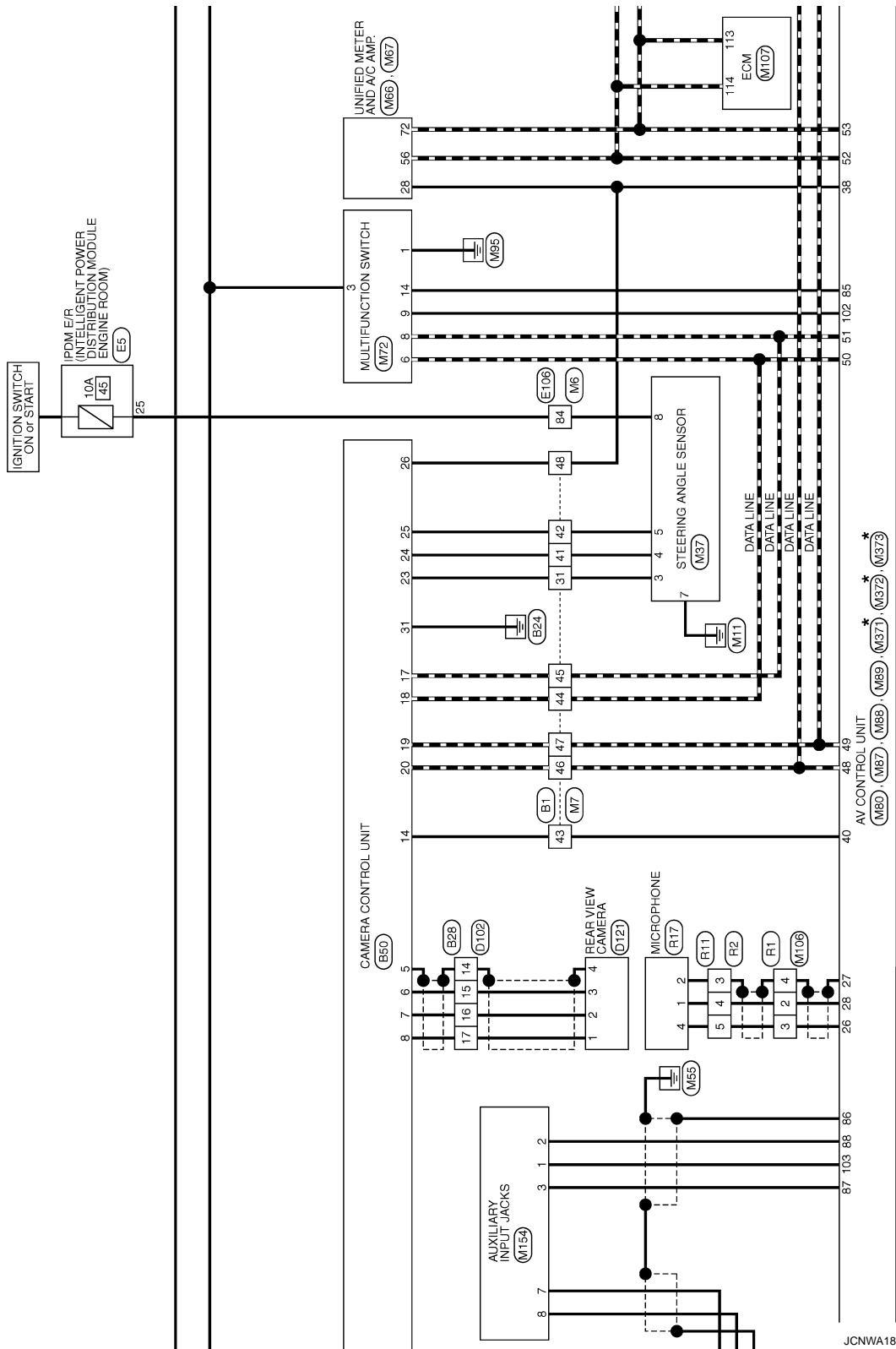
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BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



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

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

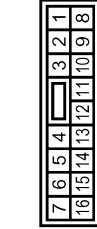
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]
47	R	- [Without around view monitor]
48	V	-

57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	O	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

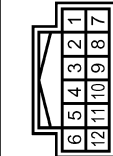
15	LG	-
16	P	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12BFR-CS



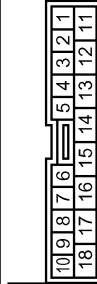
Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



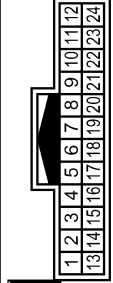
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10PW-NS6



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH28MP-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	W	- [Without around view monitor]
16	B	- [Without around view monitor]
17	R	- [Without around view monitor]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA18FBR-SG44



Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (-)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL REAR LH (-)
21	V	SOUND SIGNAL REAR RH (-)
22	SB	SOUND SIGNAL REAR LH (+)
23	BR	SOUND SIGNAL REAR RH (+)
25	GR	WOOFER AMP. ON SIGNAL
27	R	SOUND SIGNAL FRONT SQUAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

Connector No.	B48
Connector Name	REAR SQUAWKER LH
Connector Type	TK02FBR



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

31	W	AMP. ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SQUAWKER RH (+)



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

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SIA2



22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (3-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY



Connector No.	B51
Connector Name	WOOFER
Connector Type	RS08FY-PR

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL WOOFER (-)
2	G	SOUND SIGNAL WOOFER (+)
4	GR	WOOFER AMP. ON SIGNAL
5	B	GND
6	W	BATTERY


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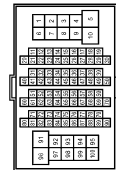
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B36
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



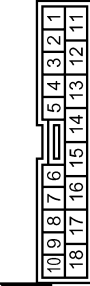
Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSS



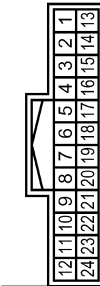
Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR



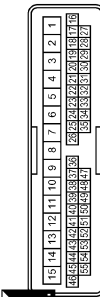
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



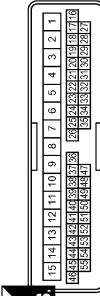
Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
5	L	-

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FBR-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FBR-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH10MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	IGNITION (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20PW-CS12-MH-TV



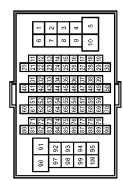
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
58	O	
84	G	
93	Y	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TE01FW



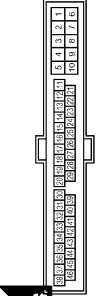
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY




Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS/D




Terminal No.	Color of Wire	Signal Name [Specification]
31	R	

Connector No.	F151
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SPT0FBCY



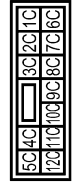
Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



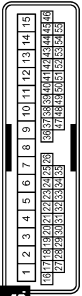
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	
5A	V	

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	

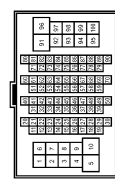
Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MP-CS15



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

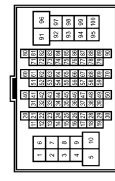
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	Y	-
33	V	-
41	BR	-
42	R	-
43	W	-
44	LG	-
45	V	-
46	G	-
47	R	-
48	V	-

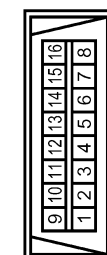
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FER



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

15	LG	-
16	P	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



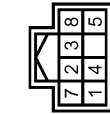
Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH88FW-NH



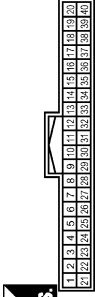
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



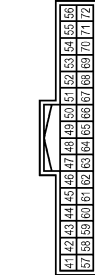
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	G	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



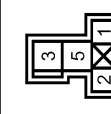
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



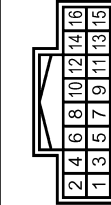
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



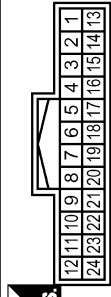
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



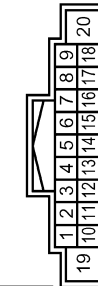
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G. GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
13	B	GND
14	SHIELD	COMP2 GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R. RED) SIGNAL
18	R	RGB (B. BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

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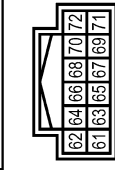
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-GS2



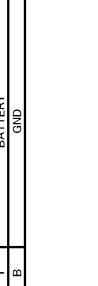
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP_ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



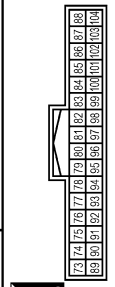
Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R: RED) SIGNAL
62	W	RGB (G: GREEN) SIGNAL
63	R	RGB (B: BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (Y/S) SIGNAL
68	R	UP
69	W	UP
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)

13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
18	Y	BATTERY
20	B	GND



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

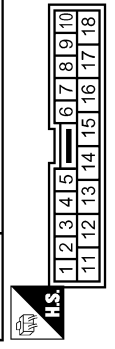
Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	R	IPod SOUND SIGNAL LH (+)
80	B	IPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	IPod SOUND SIGNAL LH (-)
96	G	IPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PUL SE)
40	W	CONNECTION RECOGNITION
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
48	G	AV COMM (R)
49	R	AV COMM (L)
50	LG	AV COMM (R)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10AMP-NS8



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

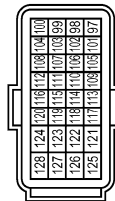
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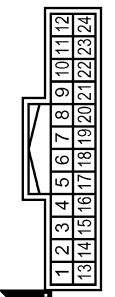
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

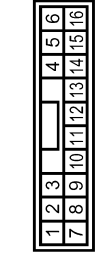
Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (-)
2	B	iPod SOUND SIGNAL RH (-)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod->iPod ADAPTER)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

Connector No.	M112
Connector Name	iPod SIDE
Connector Type	PI16FGY



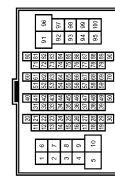
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	W	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod->iPod ADAPTER)
7	R	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
18	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



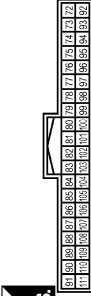
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
99	V	- [With BOSE audio]
100	SD	- [With BOSE audio]

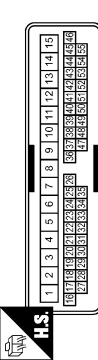
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH20NW-CSI5



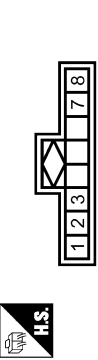
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



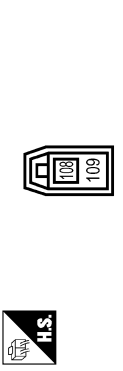
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FARRA JACK



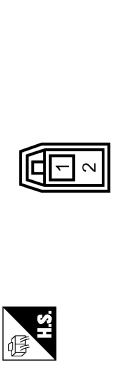
Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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



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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU

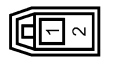

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-1S-HU



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

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



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

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU

Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAATELITE ANTENNA

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M386	Connector No.	M387	Connector No.	M388	Connector No.	M389
Connector Name	ANTENNA BASE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WINDOW ANTENNA (SUB)
Connector Type	GTJ3SSNF-1/1PP-HU	Connector Type	UASO JACK	Connector Type	UASO PLUG	Connector Type	PROFB-A

Terminal No.	1	2	Color of Wire	Signal Name [Specification]
1	-	-	-	ANTENNA AMP_ON SIGNAL
2	-	-	-	AM-FM MAIN

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

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

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

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

Connector No.	R1	Connector No.	R2	Connector No.	R11	Connector No.	R17
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	MICROPHONE
Connector Type	TKJ0FW-NSB	Connector Type	TH12PW-NH	Connector Type	TH12AMF-NH	Connector Type	TKJ0FW

Terminal No.	1	2	3	4	Color of Wire	Signal Name [Specification]
1	10	9	8	7	G	MICROPHONE SIGNAL
2	18	17	16	15	R	MICROPHONE GND
3	6	5	4	3	G	MICROPHONE VCC
4	12	11	10	9	R	MICROPHONE VCC

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

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

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

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

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Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

NOTE:

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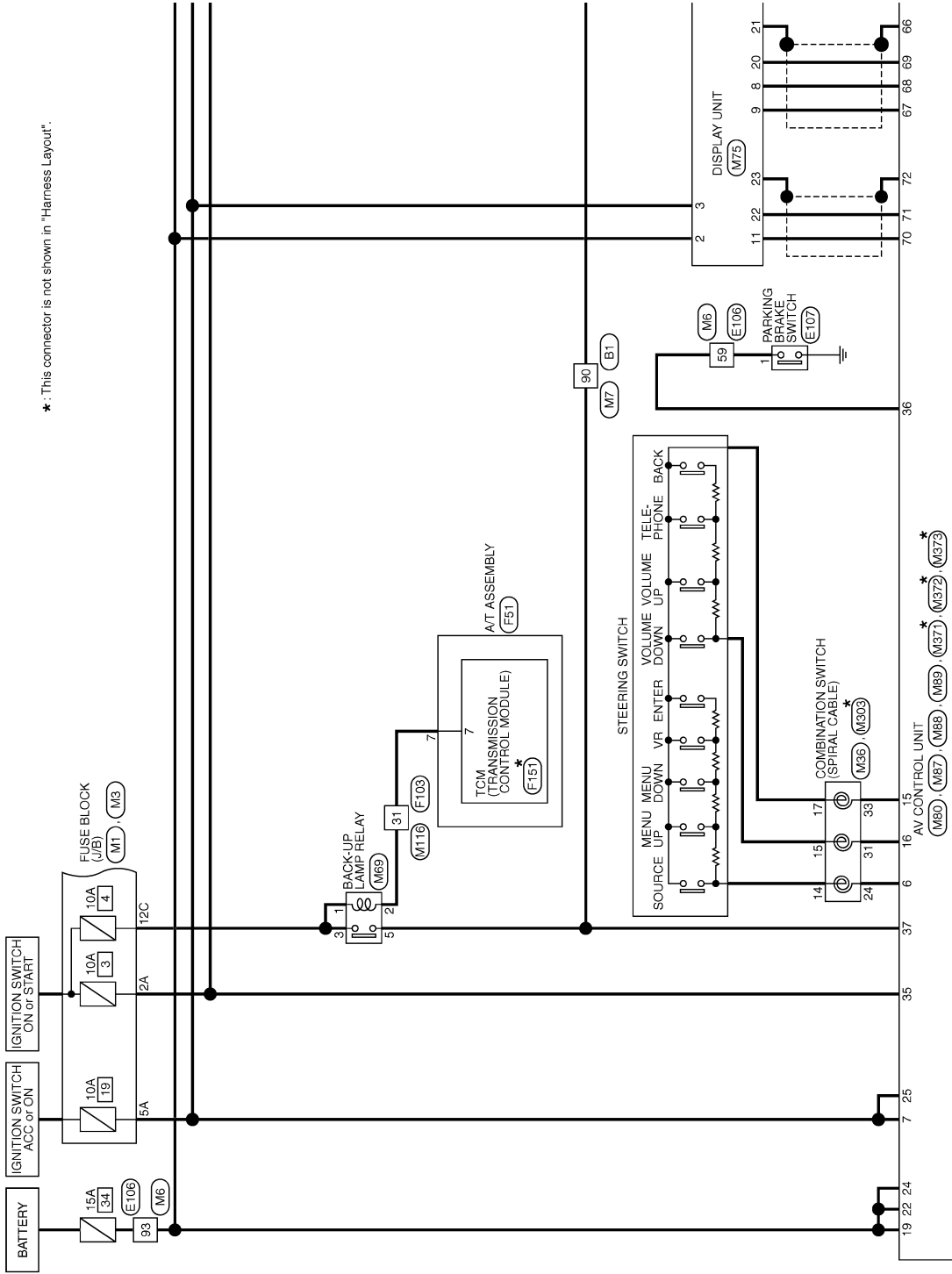
BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR



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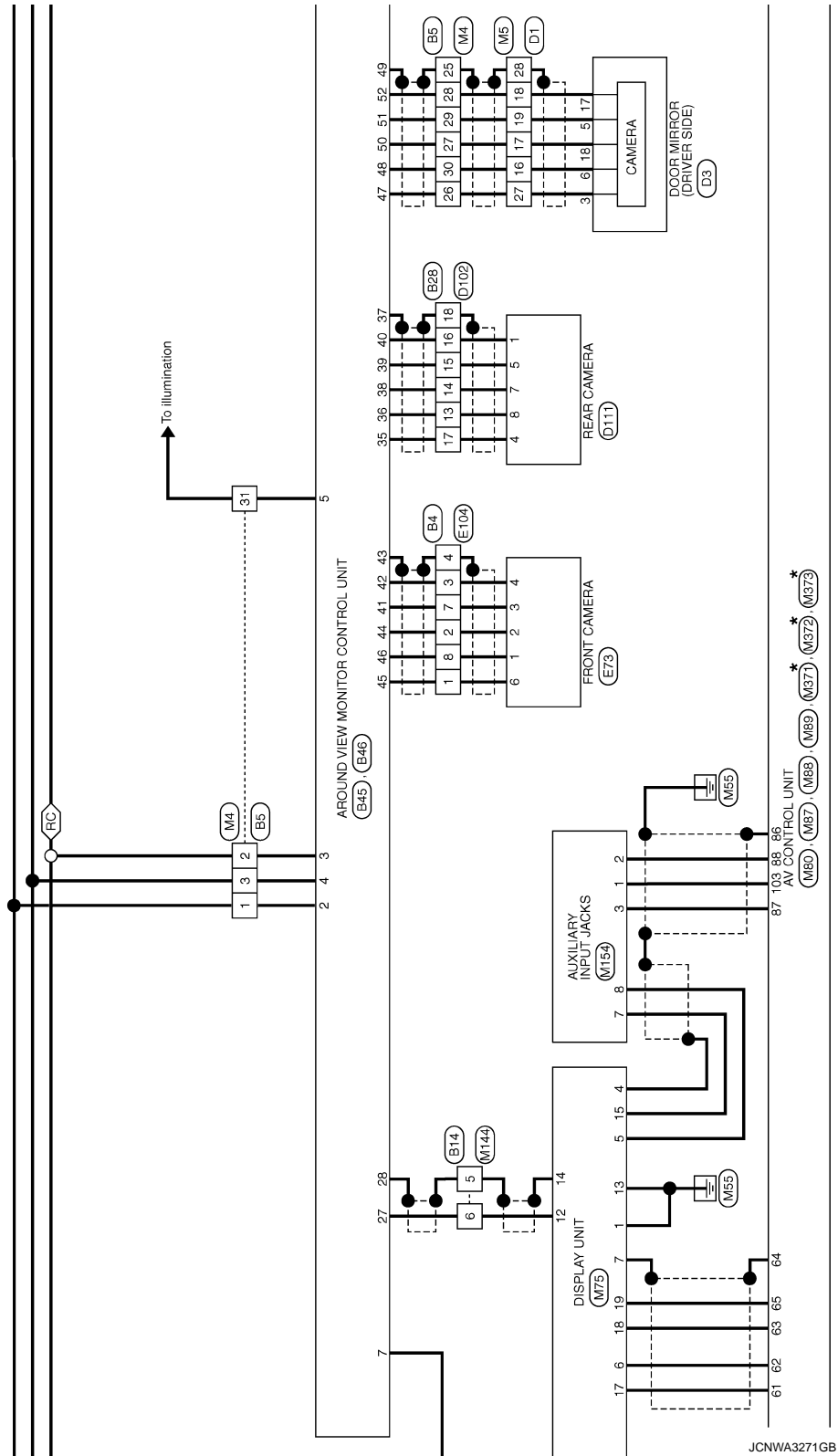
BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

RC : Up to vehicles manufactured on November 2008

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



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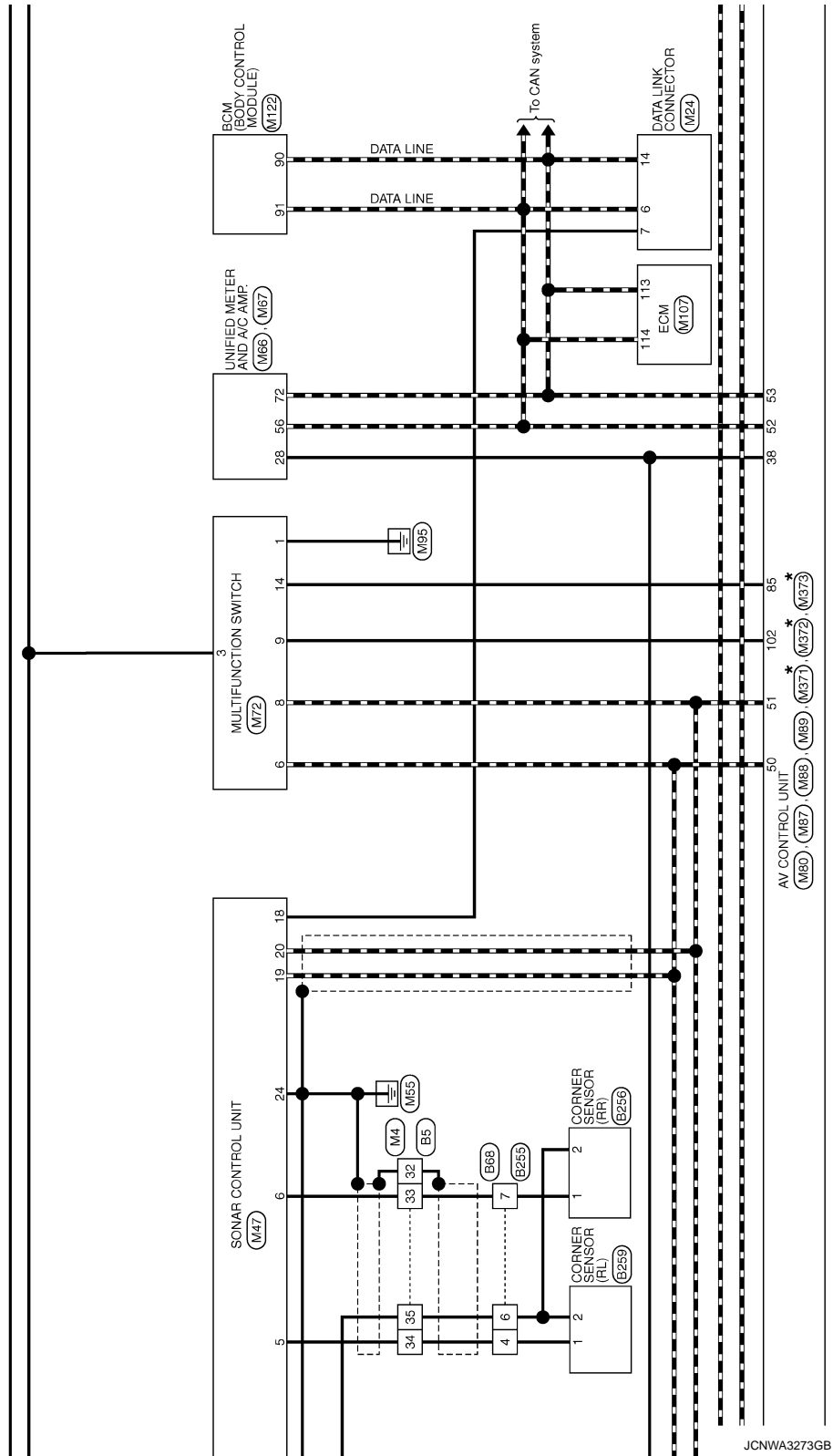
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BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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



JCNWA3273GB

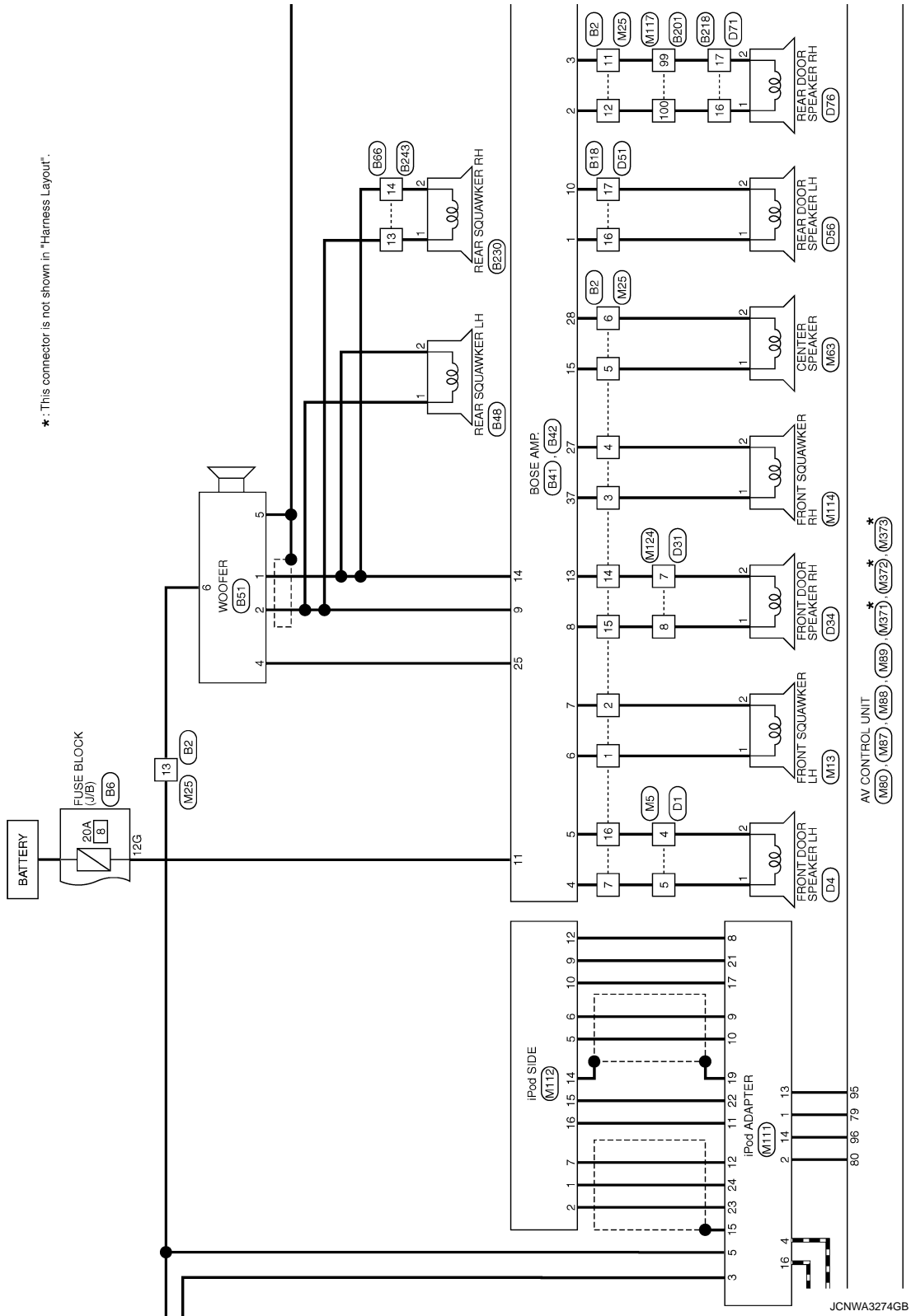
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BOSE AMP.

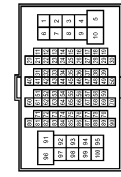
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[BOSE AUDIO WITH NAVIGATION]



BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

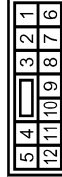
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	G	-- [With around view monitor]
45	Y	-- [With around view monitor]
46	W	-- [With around view monitor]
47	B	-- [With around view monitor]
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-



Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	MS12PW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	G	-
4	SHIELD	-
7	Y	-
8	R	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	V	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-



Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	MS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	GR	-
4	SB	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
23	SHIELD	-

15	LG	-
16	P	-

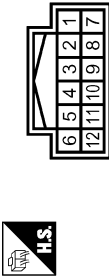
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



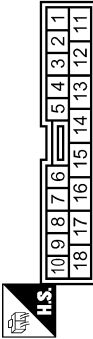
Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

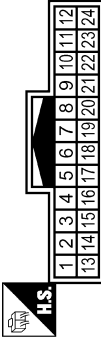
Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-RH



Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSB



Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH24MM-RH

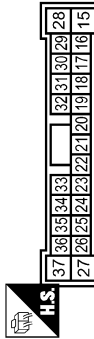


Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	-
14	R	- [With around view monitor]
15	Y	- [With around view monitor]
16	W	- [With around view monitor]
17	L	- [With around view monitor]
18	SHIELD	-

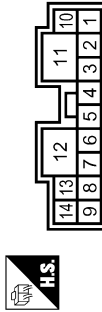
Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SGA4



31	W	AMP ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SQUAWKER RH (+)

Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (+)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL FRONT RH (-)
21	V	SOUND SIGNAL REAR LH (+)
22	SB	SOUND SIGNAL REAR LH (-)
23	BR	SOUND SIGNAL REAR RH (+)
25	GR	VOICERAMP ON SIGNAL
27	R	SOUND SIGNAL FRONT SQUAWKER RH (-)
28	G	SOUND SIGNAL CENTER (+)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SJA2



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

12	B	GROUND
13	Y	SOUND SIGNAL FRONT DOOR SPEAKER RH (-)
14	R	SOUND SIGNAL WOODFEE (-)

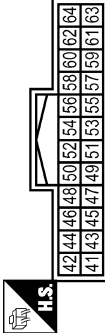
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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

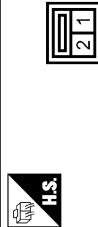
52	W	SIDE CAMERA LH IMAGE GND
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Connector No.	B45
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH24FW-NH



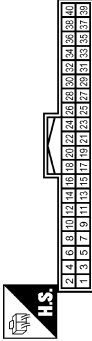
Terminal No.	Color of Wire	Signal Name [Specification]
41	Y	FRONT CAMERA IMAGE SIGNAL
42	G	FRONT CAMERA IMAGE GND
43	B	SHIELD
44	W	FRONT CAMERA GND
45	R	FRONT CAMERA POWER SUPPLY
46	L	SIDE CAMERA LH COMM
47	BR	SIDE CAMERA LH POWER SUPPLY
48	SHIELD	SHIELD
49	R	SIDE CAMERA LH GND
50	Y	SIDE CAMERA LH IMAGE SIGNAL
51		

Connector No.	B48
Connector Name	REAR SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	B46
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	P	IGNITION
4	GR	ACC
5	O	ILLUMINATION
6	SB	VEHICLE SPEED (3-PULSE)
7	G	REVERSE
13	B	CONTROL SIGNAL
14	L	SENSOR SIGNAL 1
15	BR	SENSOR SIGNAL 2
16	R	SENSOR SIGNAL 3

Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	L	
14	W	

17	G	AV COMM (H)
18	Y	AV COMM (L)
21	W	AV COMM (H)
22	B	AV COMM (L)
23	LG	LED (+)
24	G	LED (-)
27	W	CAMERA IMAGE SIGNAL
28	SHIELD	CAMERA IMAGE GND
29	Y	SIDE CAMERA RH IMAGE SIGNAL
30	G	SIDE CAMERA RH IMAGE GND
31	SHIELD	SHIELD
32	B	SIDE CAMERA RH GND
33	W	SIDE CAMERA RH COMM
34	R	SIDE CAMERA RH POWER SUPPLY
35	L	REAR CAMERA COMM
36	BR	REAR CAMERA POWER SUPPLY
37	SHIELD	SHIELD
38	R	REAR CAMERA GND
39	Y	REAR CAMERA IMAGE SIGNAL
40	W	REAR CAMERA IMAGE GND

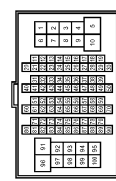
Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	FR00MB



Terminal No.	Color of Wire	Signal Name [Specification]
4	R	
6	B	
7	W	


BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	P	-
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS8




Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR




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

Connector No.	B240
Connector Name	BUZZER
Connector Type	TK02FBR



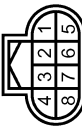
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	GR	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B235
Connector Name	WIRE TO WIRE
Connector Type	RH08FB




Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
6	B	-
7	R	-

Connector No.	B236
Connector Name	CORNER SENSOR (RR)
Connector Type	YDX02FB



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

Connector No.	B239
Connector Name	CORNER SENSOR (RL)
Connector Type	YDX02FB



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

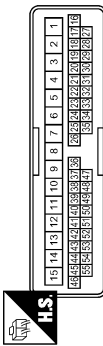
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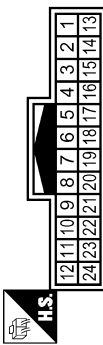
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



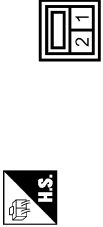
Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
5	L	-
16	R	-
17	W	-
18	G	-
19	Y	-
27	B	-
28	SHIELD	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



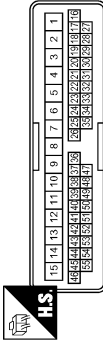
Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
5	Y	-
6	R	-
17	G	-
18	W	-

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS30ZFBR-CS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-
18	R	-
19	Y	-
20	B	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	BR	-

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH



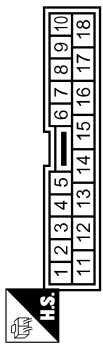
Terminal No.	Color of Wire	Signal Name [Specification]
3	W	-
4	LG	-
5	B	-
6	R	-
16	BR	-
17	G	-
18	Y	-

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS30ZFBR-CS



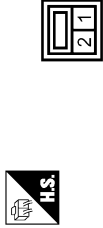
Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	R	-

Connector No.	DE1
Connector Name	WIRE TO WIRE
Connector Type	TK10MK-NS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS30ZFBR-CS



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

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK-0MW-NSB



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FER-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



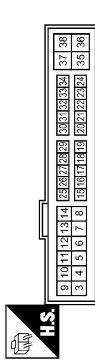
Terminal No.	Color of Wire	Signal Name [Specification]
13	R	-
14	L	- [With around view monitor]
15	Y	-
16	G	- [With around view monitor]
17	W	-
18	SHIELD	-

Connector No.	D111
Connector Name	REAR CAMERA
Connector Type	TH08MF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	REAR CAMERA IMAGE GND
4	W	REAR CAMERA COMM
5	Y	REAR CAMERA IMAGE SIGNAL
7	L	REAR CAMERA GND
8	R	REAR CAMERA POWER SUPPLY

Connector No.	E5
Connector Name	FROM E B (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH02PW-CS12-MF-1V



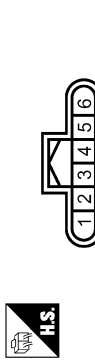
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E6B
Connector Name	CORNER SENSOR (FL)
Connector Type	YD02PEB



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

Connector No.	E73
Connector Name	FRONT CAMERA
Connector Type	FR065FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	FRONT CAMERA POWER SUPPLY
2	BR	FRONT CAMERA GND
3	Y	FRONT CAMERA IMAGE SIGNAL
4	L	FRONT CAMERA IMAGE GND
6	W	FRONT CAMERA COMM

Connector No.	E81
Connector Name	WIRE TO WIRE
Connector Type	RS02MB



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

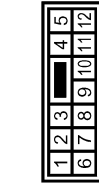
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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW VIEW MONITOR

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	
2	BR	
3	L	
4	SHIELD	
7	Y	
8	R	

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	
2	W	
3	R	
4	GR	
59	O	
84	G	
93	Y	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	1E81FW



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

Connector No.	E151
Connector Name	WIRE TO WIRE
Connector Type	RS02FB



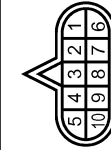
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	B	

Connector No.	E102
Connector Name	CORNER SENSOR (FR)
Connector Type	YD02FB



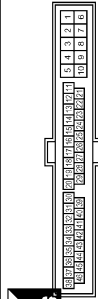
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	B	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
31	R	

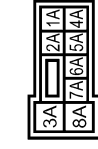
Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

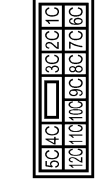
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



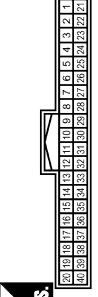
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

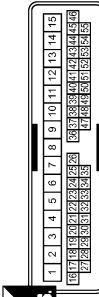
Connector No.	M4
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	V	-
4	V	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

26	W	-
27	B	-
28	G	-
29	Y	-
30	R	-
31	R	-
32	SHIELD	-
33	R	-
34	W	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH00MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
4	P	-
5	L	-
16	R	-
17	B	-
18	G	-
19	Y	-
23	W	-
28	SHIELD	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	W	-
4	SHIELD	-
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	LG	-
45	V	-
46	G	-
47	R	-
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

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

BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

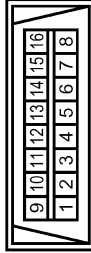
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
7	V	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MM-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-IV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M47
Connector Name	SONAR CONTROL UNIT
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	R	CORNER SENSOR FRONT LH
4	W	CORNER SENSOR FRONT RH
5	W	CORNER SENSOR REAR LH
6	R	CORNER SENSOR REAR RH
12	B	SENSOR GND
13	V	ACC
18	O	K LINE
19	G	AV COMM (H)
20	B	AV COMM (L)
23	GR	BUZZER
24	B	GND

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR

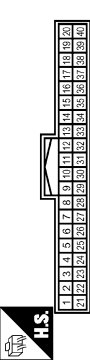


Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	G	-

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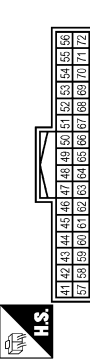
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS30FL-ME-LC



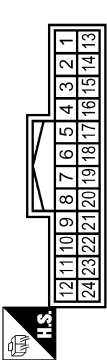
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



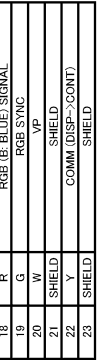
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	RGB AREA (VS) SIGNAL
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
8	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
19	Y	BATTERY
20	B	GND

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH10PW-NH



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	101	102	103	104
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Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

38	R	VEHICLE SPEED (8-PULSE)
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
48	G	AV COMM (H)
49	R	AV COMM (L)
50	LG	AV COMM (H)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L



62	64	66	68	70	72
61	63	65	67	69	71

Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R, RED) SIGNAL
62	W	RGB (G, GREEN) SIGNAL
63	R	RGB (B, BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (VS) SIGNAL
68	R	HP
69	W	VP
70	BR	COMM (CONT-TO DISP)
71	Y	COMM (DISP-TO CONT)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



72	SHIELD	SHIELD
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Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



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	101	102	103	104

Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

Connector No.	M105
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18		

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

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R25-R-LH-Z

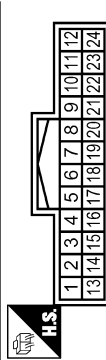


128	124	120	116	112	108	104	100
127	123	119	115	111	107	103	99
126	122	118	114	110	106	102	98
125	121	117	113	109	105	101	97

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

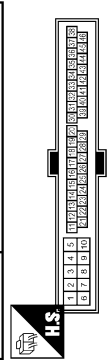
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M111
Connector Name	I-Pod ADAPTER
Connector Type	TH4FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	I-Pod SOUND SIGNAL LH (+)
2	B	I-Pod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (I-Pod ADAPTER->I-Pod)
10	L	COMM (I-Pod->I-Pod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	I-Pod SOUND SIGNAL RH (+)
13	W	I-Pod SOUND SIGNAL LH (-)

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK6MW-NS10

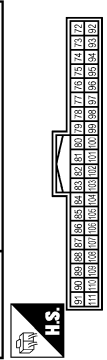


Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

14	G	I-Pod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	I-Pod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	I-Pod SOUND SIGNAL GND
24	B	I-Pod SOUND SIGNAL LH (+)

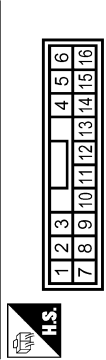
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	I-Pod SOUND SIGNAL LH (+)
2	W	I-Pod SOUND SIGNAL GND
5	L	COMM (I-Pod->I-Pod ADAPTER)
6	P	COMM (I-Pod ADAPTER->I-Pod)
7	R	I-Pod SOUND SIGNAL RH (+)
9	W	I-Pod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M112
Connector Name	I-Pod SIDE
Connector Type	IP16FGY

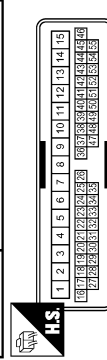


Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



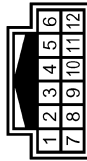
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
18	R	-
19	B	-
20	Y	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	G	-

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	
6	W	

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A0BEW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	1K08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	W	
15	L	
17	BR	

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT1SSHF-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FARRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT1SSC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	
2	-	
3	-	

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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M376	Connector No.	M377	Connector No.	M380	Connector No.	M378	Connector No.	M386
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	ANTENNA BASE
Connector Type	GT13SCN-2/1PP-HU	Connector Type	GT16C-1PP-HU	Connector Type	GT16C-1PP-HU	Connector Type	GT13SC-2/1S-HU	Connector Type	GT13SSN-1/1PP-HU

Terminal No.	1	2	3	Terminal No.	1	2	Terminal No.	1	2
Color of Wire	-	-	-	Color of Wire	-	-	Color of Wire	-	-
Signal Name [Specification]	-	-	-	Signal Name [Specification]	-	-	Signal Name [Specification]	-	-



Connector No.	M382	Connector No.	M383	Connector No.	M385	Connector No.	M386
Connector Name	WIRE TO WIRE	Connector Name	ANTENNA BASE	Connector Name	WIRE TO WIRE	Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU	Connector Type	GT16C-1PP-HU	Connector Type	GT13SCN-2/1PP-HU	Connector Type	GT13SSN-1/1PP-HU

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



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BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	PO1FB-A



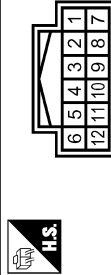
Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS8



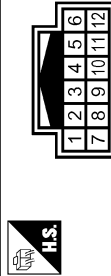
Terminal No.	2	Color of Wire	R	Signal Name [Specification]	-
3	G	-	-	-	-
4	SHIELD	-	-	-	-

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]	-
4	R	-	-	-	-
5	G	-	-	-	-

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]	-
4	G	-	-	-	-
5	R	-	-	-	-

Connector No.	R17
Connector Name	MICROPHONE
Connector Type	TK04FW



Terminal No.	1	Color of Wire	G	Signal Name [Specification]	MICROPHONE SIGNAL
2	SHIELD	-	-	-	MICROPHONE GND
4	R	-	-	-	MICROPHONE VCC

IPOD ADAPTER

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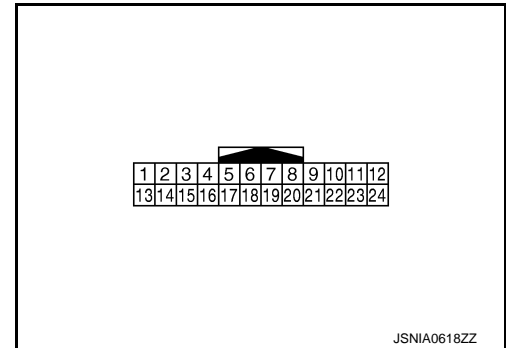
[BOSE AUDIO WITH NAVIGATION]

IPOD ADAPTER

Reference Value

INFOID:000000004506735

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (R)	13 (W)	iPod sound signal LH	Output	Ignition switch ON	When iPod mode is select- ed	<p style="text-align: right;">SKIB3609E</p>
2 (B)	14 (G)	iPod sound signal RH	Output	Ignition switch ON	When iPod mode is select- ed	<p style="text-align: right;">SKIB3609E</p>
3 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
4 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
5 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
8 (W)	Ground	iPod battery charge	Output	Ignition switch ON	Connected to iPod®	12.0 V

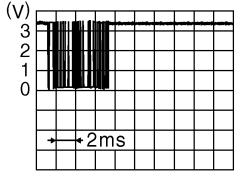
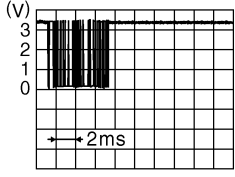
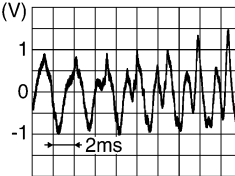
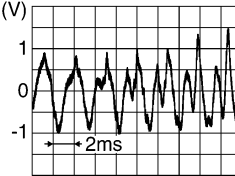
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AV

IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output	Ignition switch ON		
9 (P)	Ground	Communication signal (iPod adapter→iPod®)	Output	Ignition switch ON	The wave pattern is displayed just after iPod connection.	 <p>JPNIA0462GB</p> <p>NOTE: After the wave pattern display, the value continues Approx 3.3 V</p>
10 (L)	Ground	Communication signal (iPod®→iPod adapter)	Input	Ignition switch ON	Connected to iPod®	 <p>JPNIA0462GB</p>
11 (O)	Ground	ACCESSORY-IDENTIFY	—	Ignition switch ON	Connected to iPod®	0 V
12 (R)	23 (W)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is selected	 <p>SKIB3609E</p>
15	—	Shield	—	—	—	—
16 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
17 (BR)	Ground	Ground	—	Ignition switch ON	—	0 V
19	—	Shield	—	—	—	—
21 (W)	Ground	iPod connection recognition signal	Input	Ignition switch ON	Not connected to iPod®	4.0 V
					Connected to iPod®	0 V
22 (G)	Ground	ACCESSORY-DETECT	—	Ignition switch ON	Connected to iPod®	0 V
24 (B)	23 (W)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is selected	 <p>SKIB3609E</p>

IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

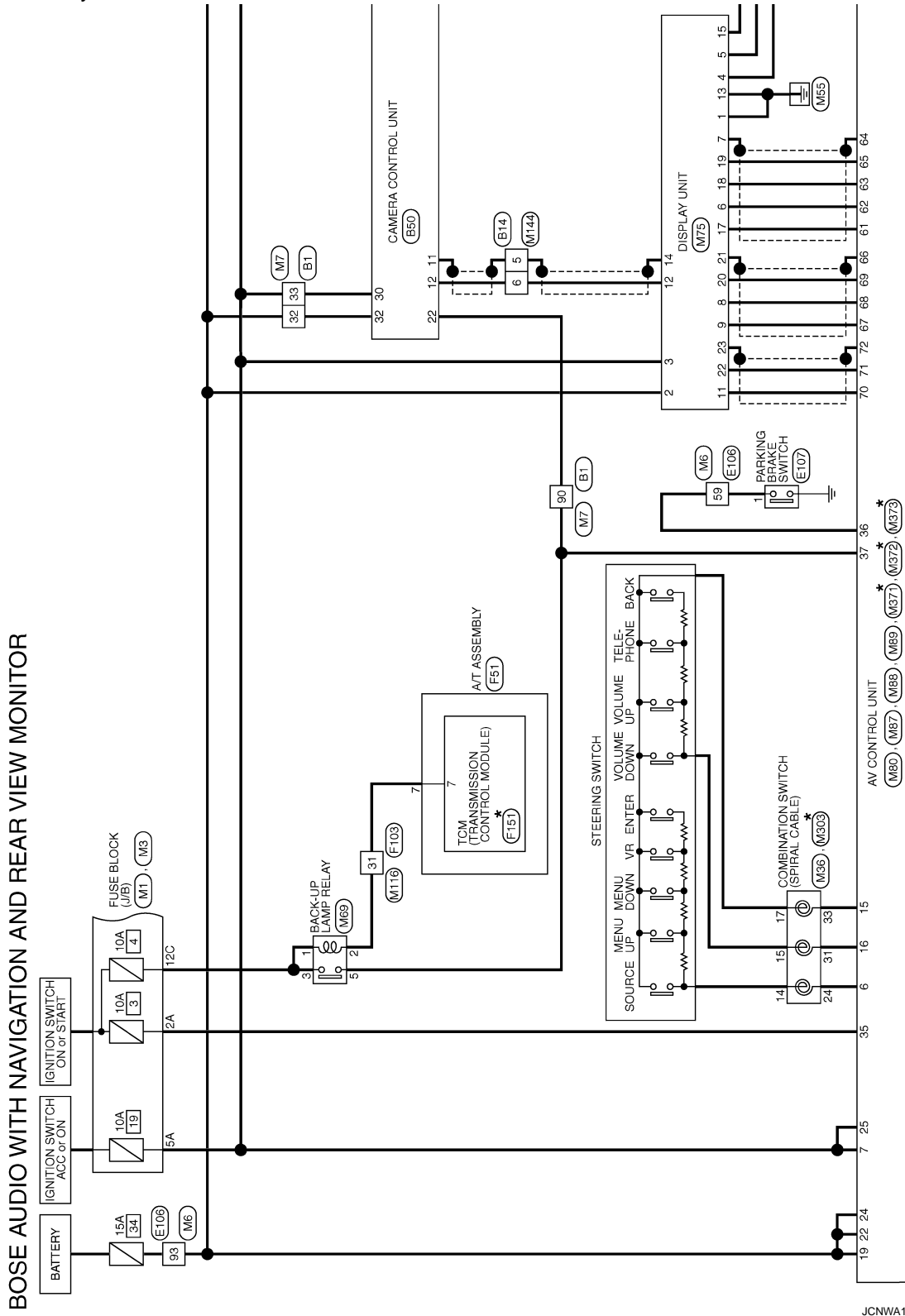
[BOSE AUDIO WITH NAVIGATION]

Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -

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NOTE:

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.



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

2008/08/28

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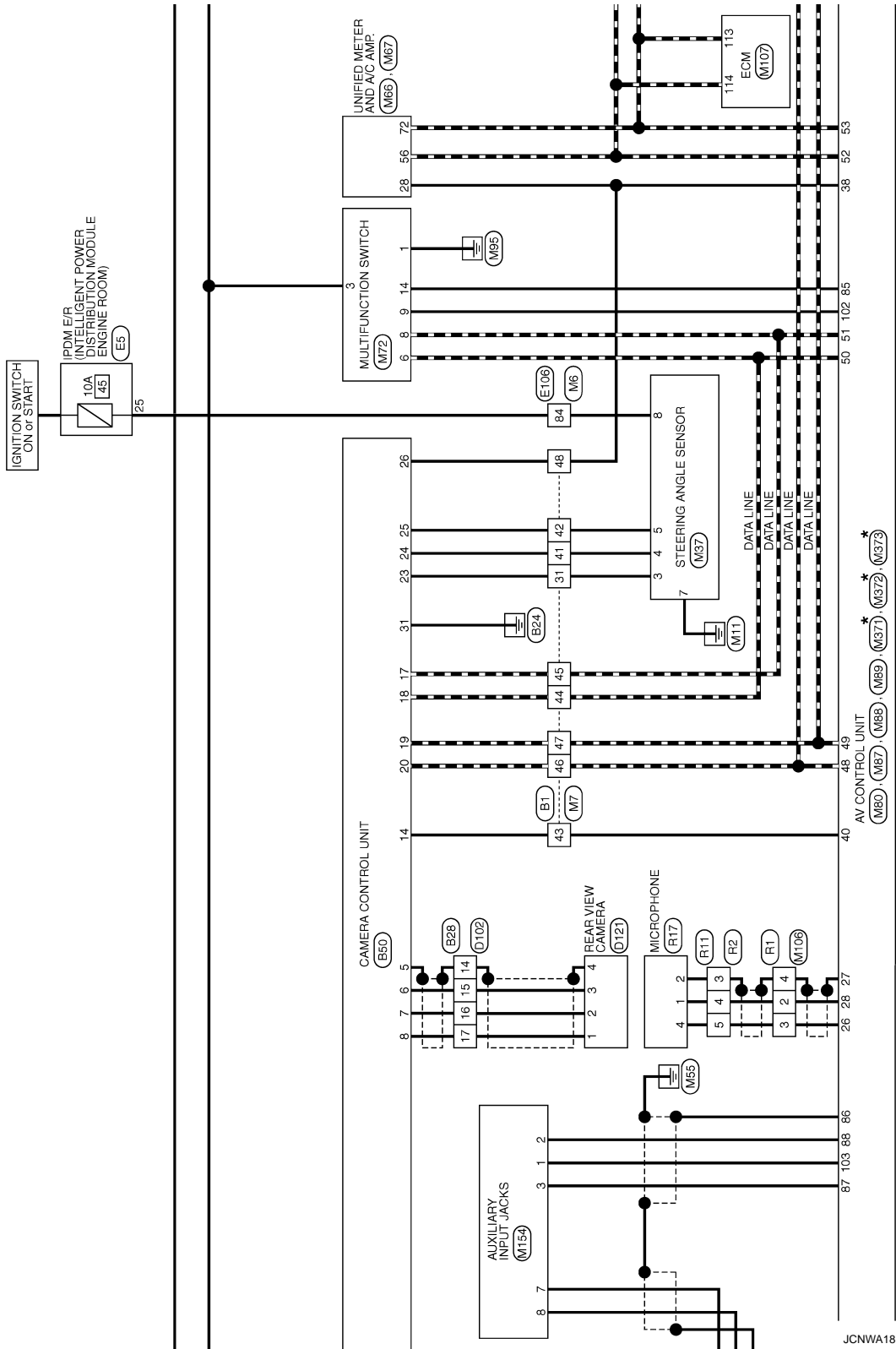
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



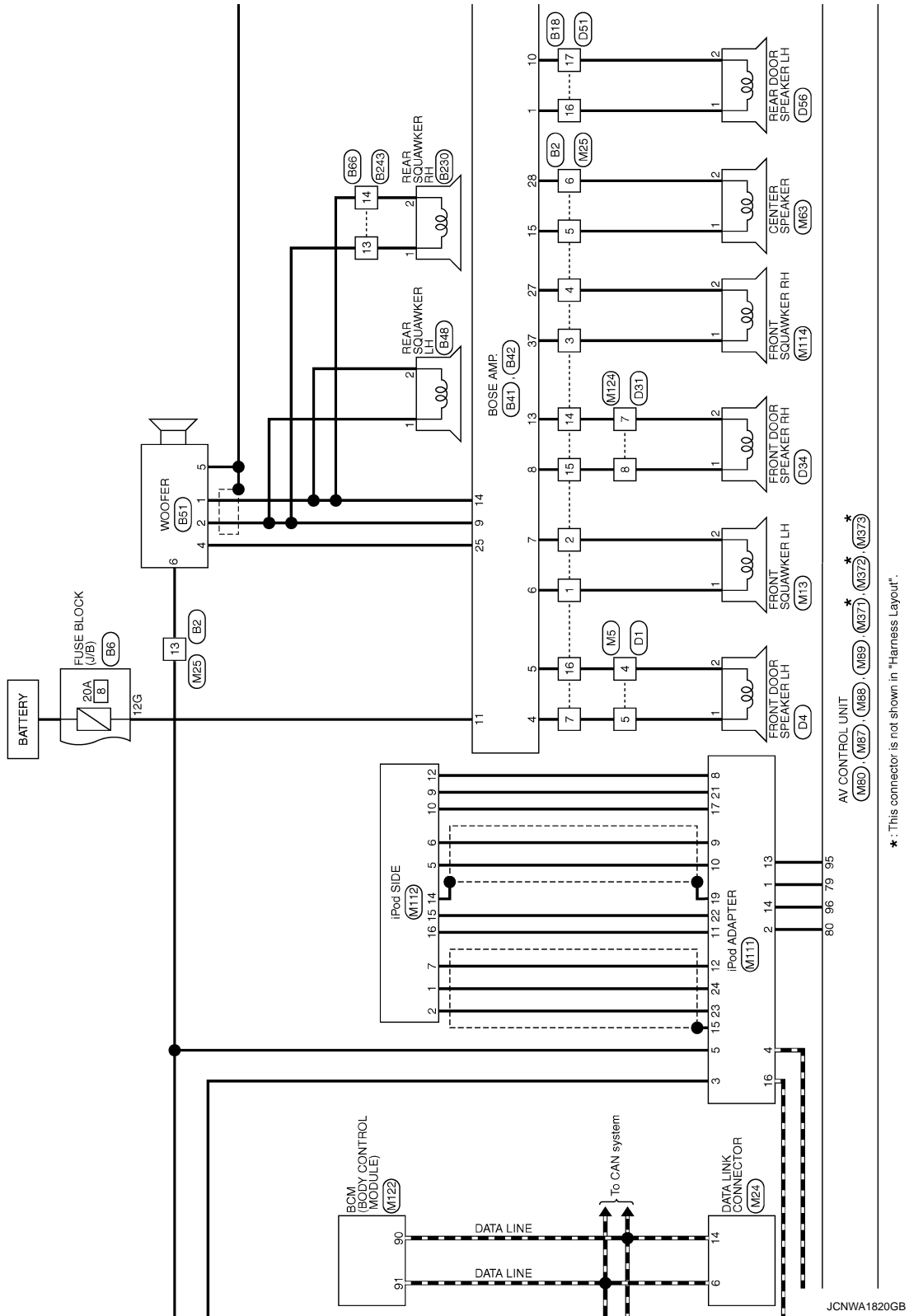
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*: This connector is not shown in "Harness Layout".

IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



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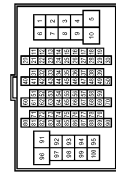
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH20FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]
47	R	- [Without around view monitor]
48	V	- [Without around view monitor]

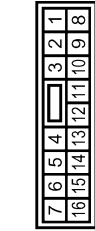
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS12FBS-CS



Terminal No.	12G	Y	-
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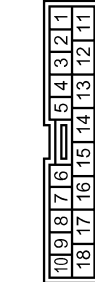
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	O	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	MS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TR10FW-NS8



Terminal No.	16	Y	- [With BOSE audio]
17	G	-	- [With BOSE audio]

15	LG	-
16	P	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TR28MW-NH



Terminal No.	14	SHIELD	- [Without around view monitor]
15	W	-	- [Without around view monitor]
16	B	-	- [Without around view monitor]
17	R	-	- [Without around view monitor]

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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SG44



Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (+)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL REAR LH (+)
21	V	SOUND SIGNAL REAR RH (+)
22	SB	SOUND SIGNAL REAR LH (-)
23	BR	SOUND SIGNAL REAR RH (-)
25	GR	WOOFER AMP. ON SIGNAL
27	R	SOUND SIGNAL FRONT SOLAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

Connector No.	B48
Connector Name	REAR SOLAWKER LH
Connector Type	TK02FBR



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

31	W	AMP. ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SOLAWKER RH (+)



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

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY

Connector No.	B51
Connector Name	WOOFER
Connector Type	RS00FY-PR



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL WOOFER (-)
2	G	SOUND SIGNAL WOOFER (+)
4	GR	WOOFER AMP. ON SIGNAL
5	B	GND
6	W	BATTERY

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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B168	Connector No.	B201	Connector No.	B218	Connector No.	B230
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	REAR SQUAWKER RH
Connector Type	TH24FW-NH	Connector Type	TH60FW-CS16-TM4	Connector Type	TK10FW-NSS	Connector Type	TK02FBR

Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Color of Wire	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Signal Name [Specification]																								

Terminal No.	99	100
Color of Wire	O	L
Signal Name [Specification]		- [With BOSE audio]

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

Terminal No.	13	14
Color of Wire	L	W
Signal Name [Specification]		

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

Connector No.	B243	Connector No.	D1	Connector No.	D4	Connector No.	D31
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)	Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH	Connector Type	TH40FW-CS15	Connector Type	NS02FBR-CS	Connector Type	TH40FW-CS15

Terminal No.	12	11	10	9	8	7	6	5	4	3	2	1
Color of Wire	L	L	L	L	L	L	L	L	L	L	L	L
Signal Name [Specification]												

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

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

Terminal No.	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Color of Wire	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Signal Name [Specification]															

Terminal No.	7	8
Color of Wire	R	BR
Signal Name [Specification]		

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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS8



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FBR-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS8



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FBR-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



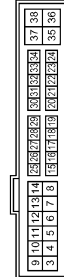
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH103MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	FRONT-REAR INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20PFW-CS12-NH-T1V



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

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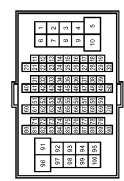
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
59	O	-
84	G	-
93	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



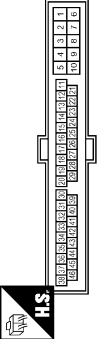
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DG7




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

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10




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

Connector No.	F151
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBCY




Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



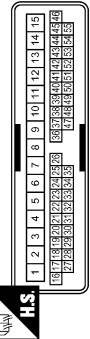
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



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

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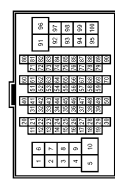
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[BOSE AUDIO WITH NAVIGATION]

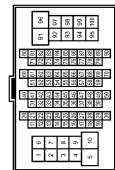
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	Y	-
33	V	-
41	BR	-
42	R	-
43	W	-
44	LG	-
45	V	-
46	G	-
47	R	-
48	V	-

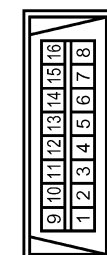
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



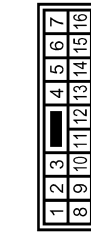
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

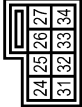
Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	MS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	V	-
14	Y	-

15	LG	-
16	P	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-1V



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

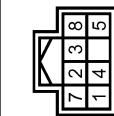
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[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH88FW-NH



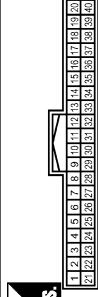
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



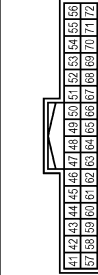
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	G	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



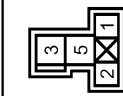
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



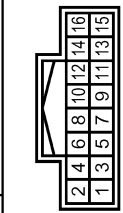
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



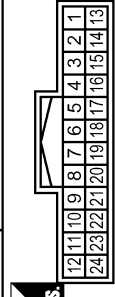
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G. GREEN) SIGNAL
7	SHIELD	SHIELD
8	B	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT-2)DISP
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
13	B	GND
14	SHIELD	COMP2 GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R. RED) SIGNAL
18	R	RGB (B. BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

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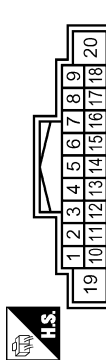
IPOD ADAPTER

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[BOSE AUDIO WITH NAVIGATION]

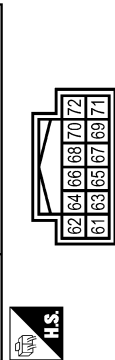
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-GSZ



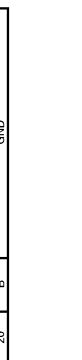
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP_ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



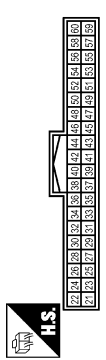
Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R: RED) SIGNAL
62	W	RGB (G: GREEN) SIGNAL
63	R	RGB (B: BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA(Y) SIGNAL
68	R	HP
68	W	HP
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)

13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
18	Y	BATTERY
20	B	GND



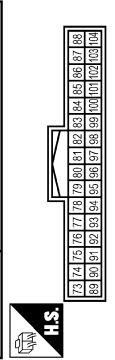
72	SHIELD	SHIELD
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Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE YCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

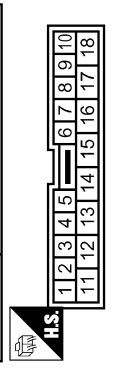
Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	R	POD SOUND SIGNAL LH (+)
80	B	POD SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	POD SOUND SIGNAL LH (-)
96	G	POD SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PULSE)
40	W	CONNECTION RECOGNITION
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
46	G	AV COMM (P)
49	R	AV COMM (L)
50	LG	AV COMM (R)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10AMP-HSB



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

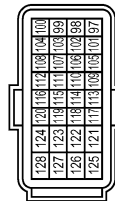
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

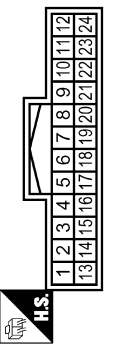
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M107
Connector Name	ECM
Connector Type	RHE4FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Connector No.	M111
Connector Name	IPOD ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	IPOD SOUND SIGNAL LH (+)
2	B	IPOD SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (IPOD ADAPTER->IPOD)
10	L	COMM (IPOD->IPOD ADAPTER)
11	O	ACCESSORY IDENTITY
12	R	IPOD SOUND SIGNAL RH (+)
13	W	IPOD SOUND SIGNAL LH (-)

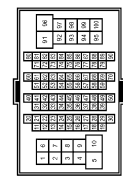
Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

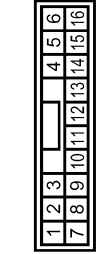
14	G	IPOD SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	IPOD CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	IPOD SOUND SIGNAL GND
24	B	IPOD SOUND SIGNAL LH (+)

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-7M4



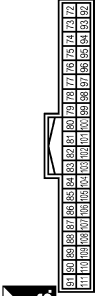
Terminal No.	Color of Wire	Signal Name [Specification]
99	V	- [With BOSE audio]
100	SB	- [With BOSE audio]

Connector No.	M112
Connector Name	IPOD SIDE
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	IPOD SOUND SIGNAL LH (+)
2	W	IPOD SOUND SIGNAL GND
5	L	COMM (IPOD->IPOD ADAPTER)
6	P	COMM (IPOD ADAPTER->IPOD)
7	R	IPOD SOUND SIGNAL RH (+)
9	W	IPOD CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

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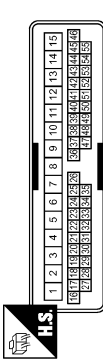
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	THROW-CSI5



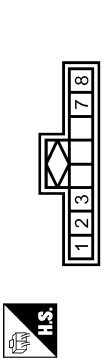
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



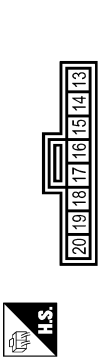
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



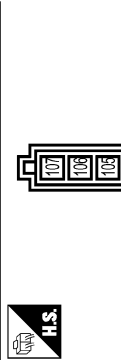
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	T03BFGY



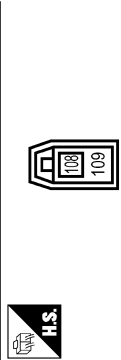
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FAKRA JACK



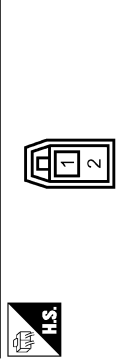
Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M273
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

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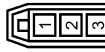
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

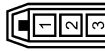
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/IPP-HU



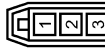
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IPP-HU



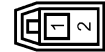
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-IS-HU



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

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IPP-HU



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

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAETLITE ANTENNA

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

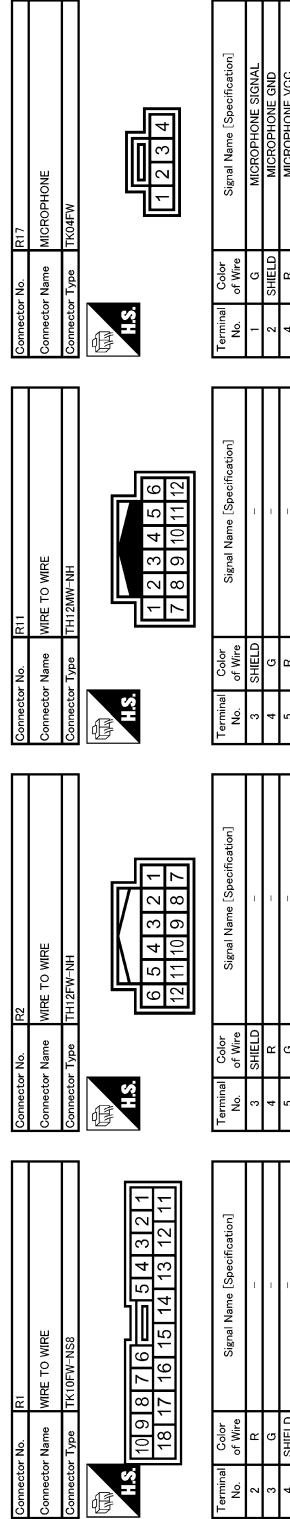
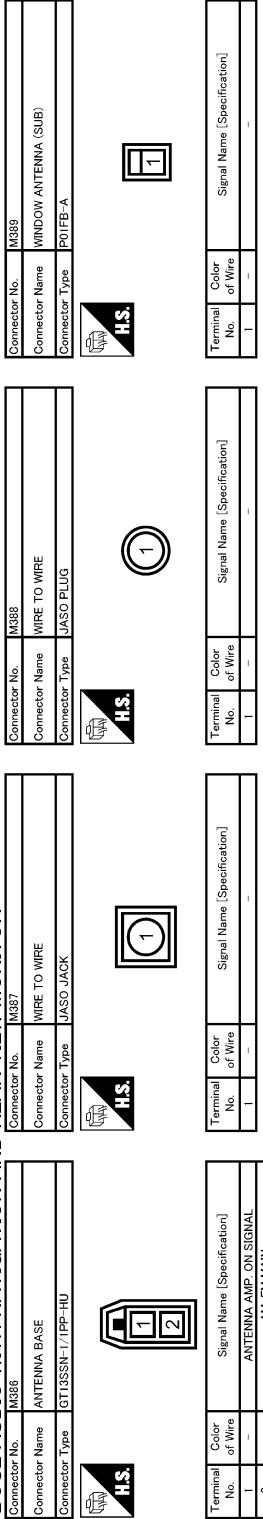
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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR



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Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

NOTE:

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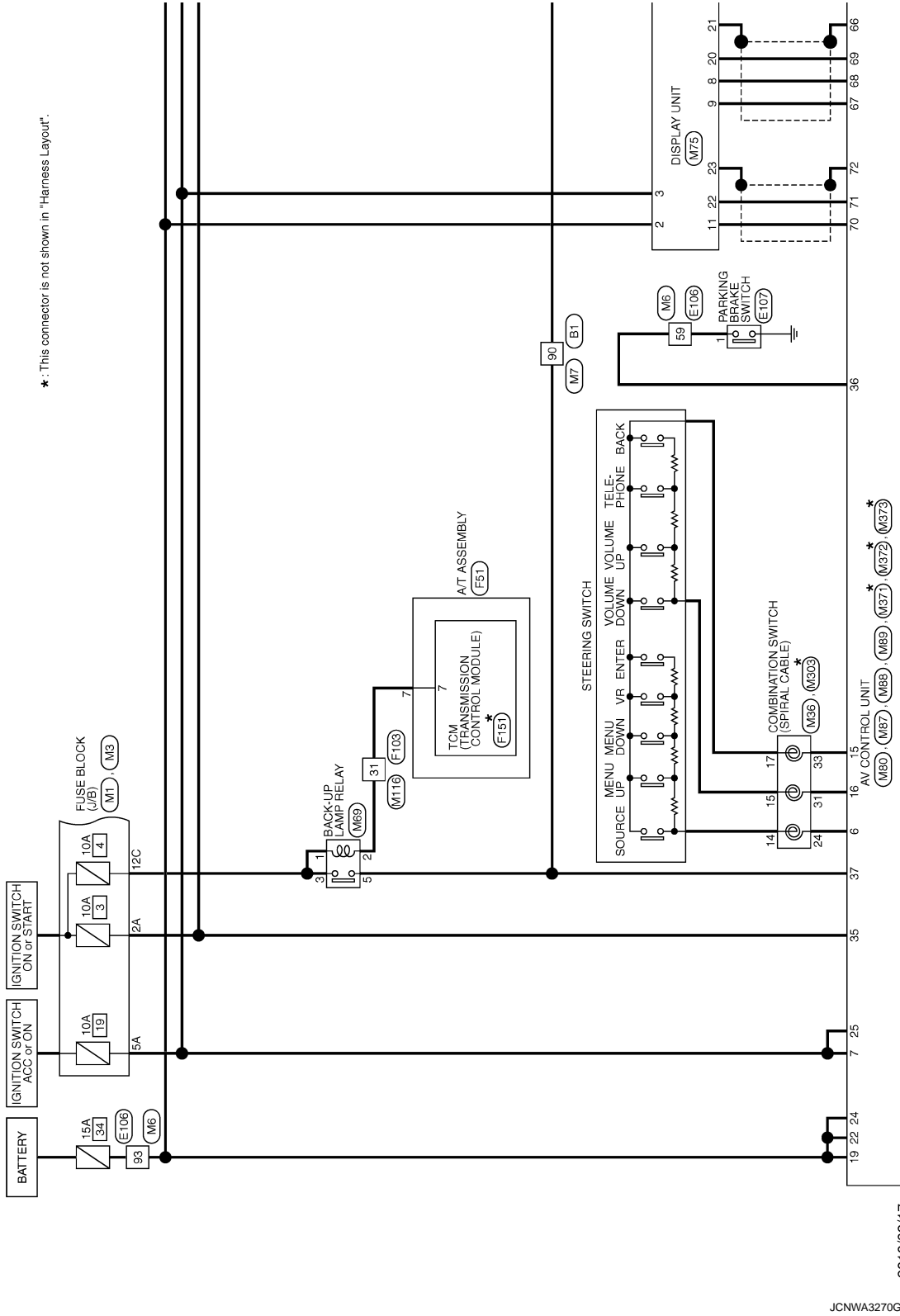
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR



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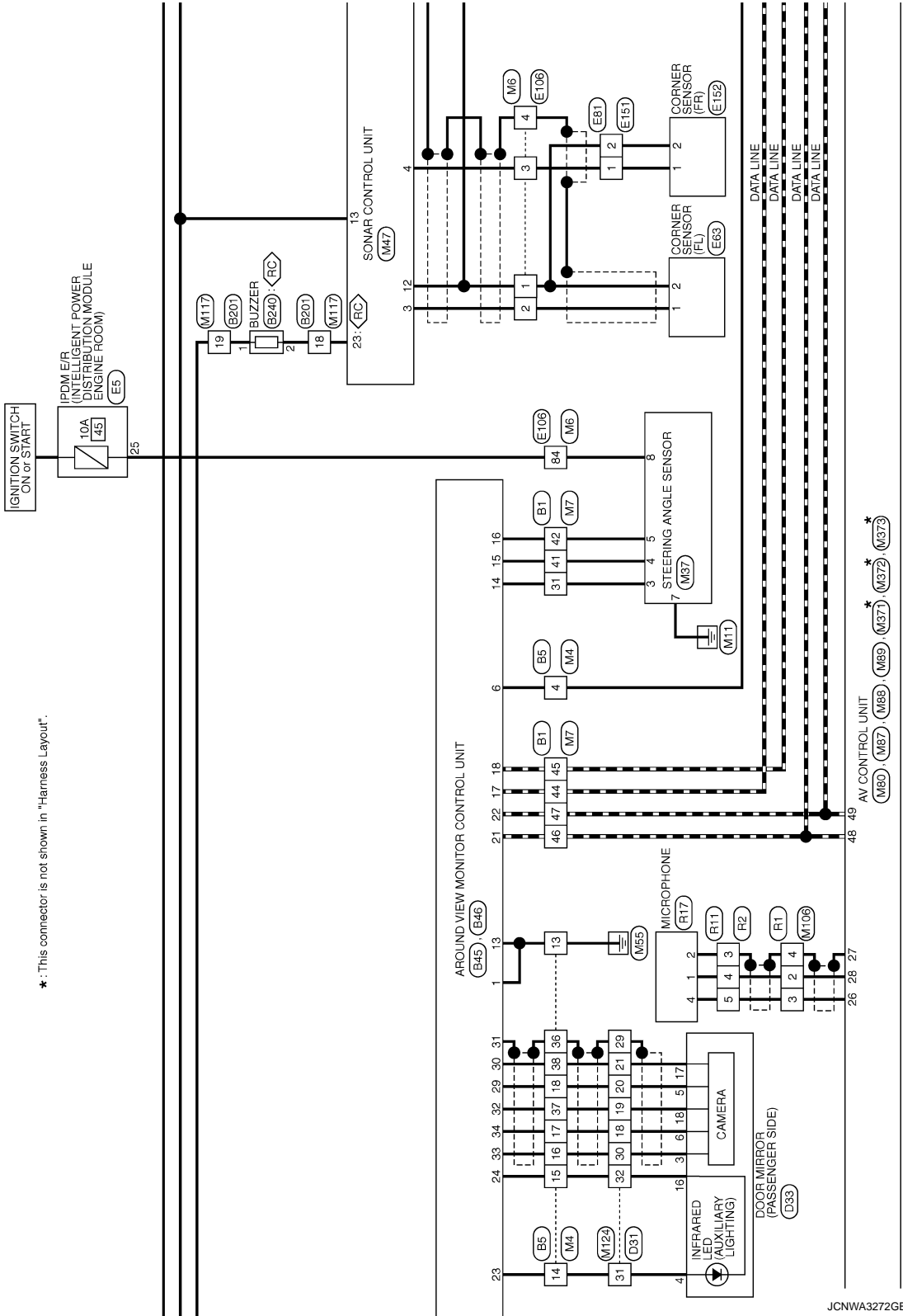
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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

RC: Up to vehicles manufactured on November 2008



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

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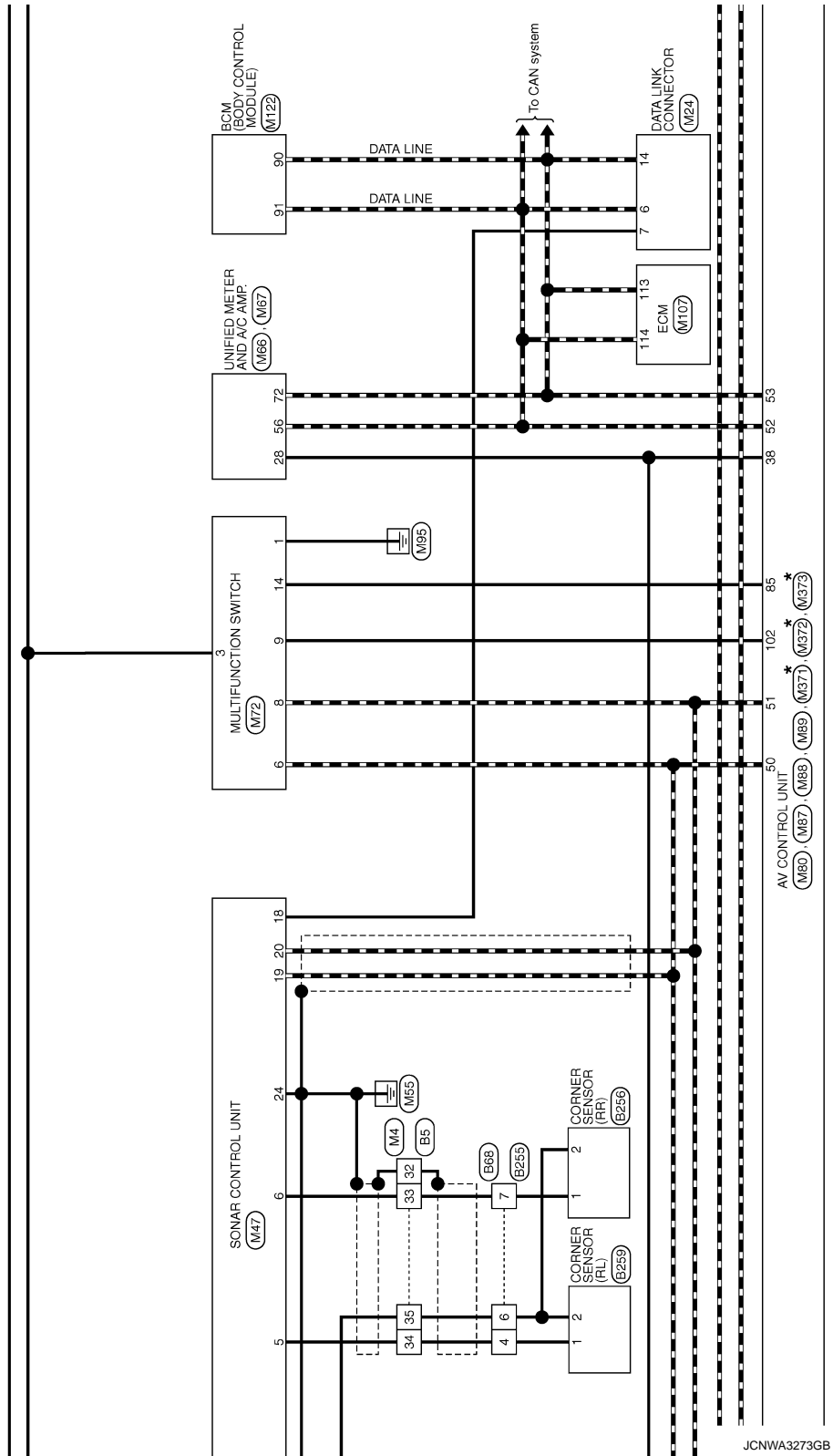
AV

IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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

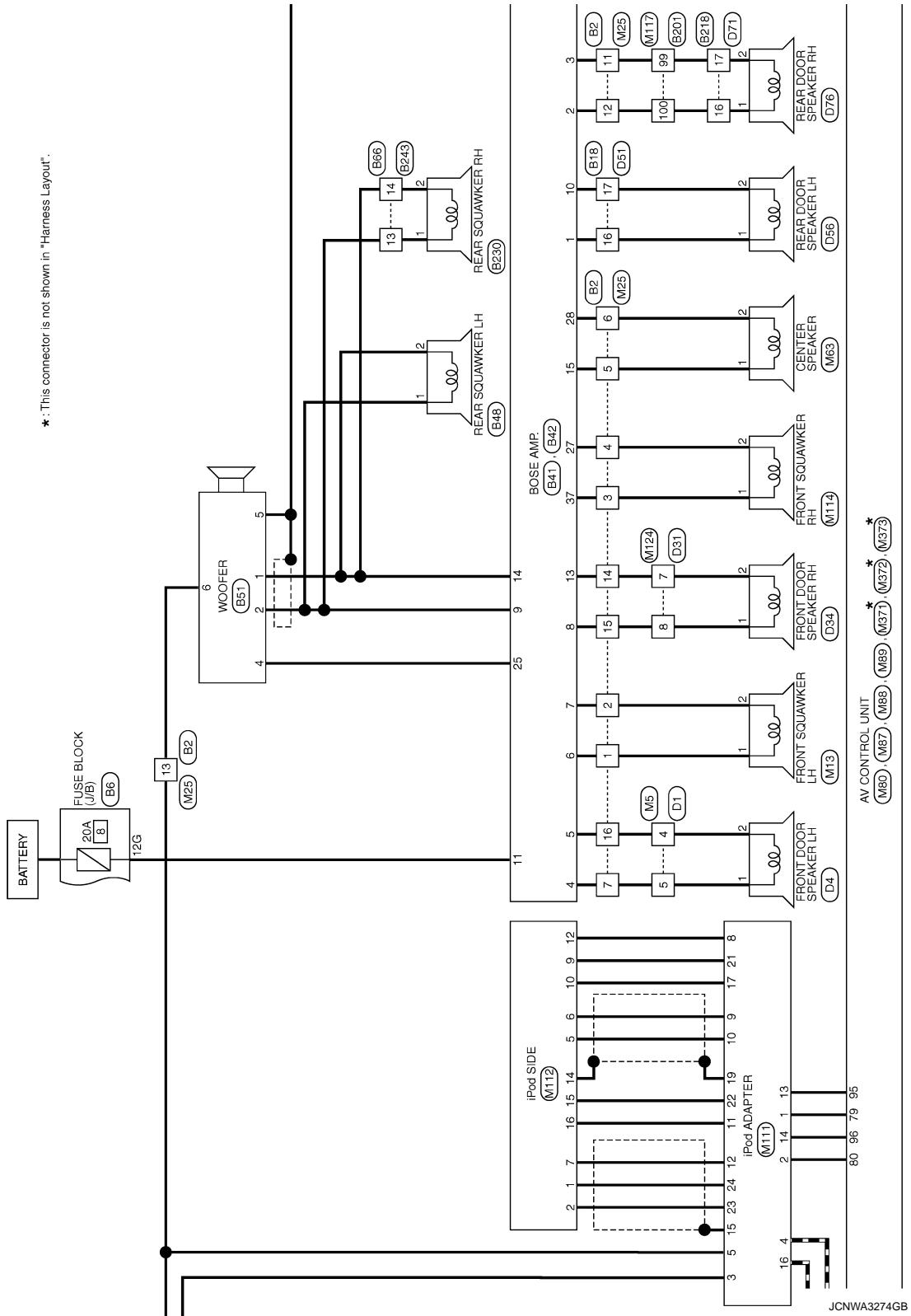


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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



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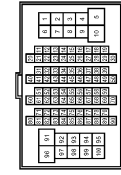
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

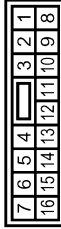


Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	G	-- [With around view monitor]
45	Y	-- [With around view monitor]
46	W	-- [With around view monitor]
47	B	-- [With around view monitor]
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	P	-
64	G	-
66	SHIELD	-
66	O	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-



Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

15	LG	-
16	P	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	G	-
4	SHIELD	-
7	Y	-
8	R	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	GR	-
4	SB	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

26	L	-
27	R	-
28	W	-
29	Y	-
30	BR	-
31	O	-
32	SHIELD	-
33	W	-
34	R	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	12G	Y	-
Color of Wire			
Signal Name [Specification]			

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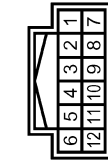
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

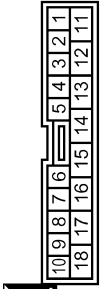
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



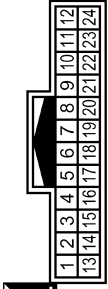
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS5



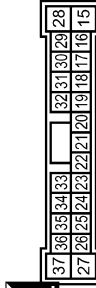
Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH12MMV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	-
14	R	- [With around view monitor]
15	Y	- [With around view monitor]
16	W	- [With around view monitor]
17	L	- [With around view monitor]
18	SHIELD	-

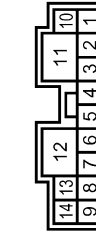
Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SGA4



Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (+)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL FRONT REAR LH (+)
21	V	SOUND SIGNAL REAR LH (+)
22	SB	SOUND SIGNAL REAR RH (+)
23	BR	SOUND SIGNAL REAR LH (-)
24	GR	WOOFER AMP. ON SIGNAL
25	R	SOUND SIGNAL FRONT SOUAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

31	W	AMP ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SOUAWKER RH (+)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SJA2



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

12	B	GUID
13	Y	SOUND SIGNAL FRONT DOOR SPEAKER RH (+)
14	R	SOUND SIGNAL WOOFER (-)

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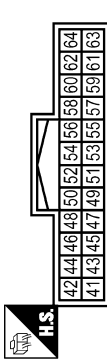
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B45
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
41	Y	FRONT CAMERA IMAGE SIGNAL
42	G	FRONT CAMERA IMAGE GND
43	SHIELD	SHIELD
44	B	FRONT CAMERA GND
45	W	FRONT CAMERA COMM
46	R	FRONT CAMERA POWER SUPPLY
47	L	SIDE CAMERA LH COMM
48	BR	SIDE CAMERA LH POWER SUPPLY
49	SHIELD	SHIELD
50	R	SIDE CAMERA LH GND
51	Y	SIDE CAMERA LH IMAGE SIGNAL

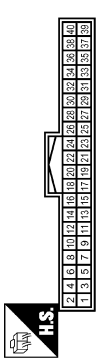
Connector No.	B48
Connector Name	REAR SQUAWKER LH
Connector Type	TK02FBR



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

52	W	SIDE CAMERA LH IMAGE GND
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Connector No.	B46
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	P	IGNITION
4	GR	ACC
5	O	ILLUMINATION
6	SB	VEHICLE SPEED (3-PULSE)
7	G	REVERSE
13	B	CONTROL SIGNAL
14	L	SENSOR SIGNAL 1
15	BR	SENSOR SIGNAL 2
16	R	SENSOR SIGNAL 3

Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MMF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

17	G	AV COMM (H)
18	Y	AV COMM (L)
21	W	AV COMM (H)
22	B	AV COMM (L)
23	LG	LED (+)
24	G	LED (-)
27	W	CAMERA IMAGE SIGNAL
28	SHIELD	CAMERA IMAGE GND
29	Y	SIDE CAMERA RH IMAGE SIGNAL
30	G	SIDE CAMERA RH IMAGE GND
31	SHIELD	SHIELD
32	B	SIDE CAMERA RH GND
33	W	SIDE CAMERA RH COMM
34	R	SIDE CAMERA RH POWER SUPPLY
35	L	REAR CAMERA COMM
36	BR	REAR CAMERA POWER SUPPLY
37	SHIELD	SHIELD
38	R	REAR CAMERA GND
39	Y	REAR CAMERA IMAGE SIGNAL
40	W	REAR CAMERA IMAGE GND

Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	RF08MB



Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-
6	B	-
7	W	-

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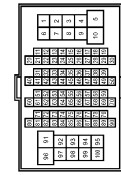
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

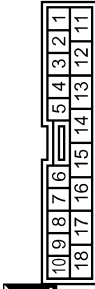
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	THBDFW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	P	-
98	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TKU0FW-ANS



Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR



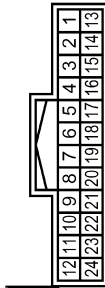
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	B240
Connector Name	BUIZZER
Connector Type	RK02FBR



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

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-1N1



Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B255
Connector Name	WIRE TO WIRE
Connector Type	RU08FB



Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
6	B	-
7	R	-

Connector No.	B256
Connector Name	CORNER SENSOR (RR)
Connector Type	YDX02FB



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

Connector No.	B259
Connector Name	CORNER SENSOR (RL)
Connector Type	YDX02FB



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

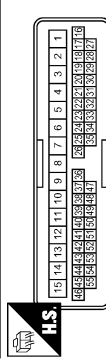
IPOD ADAPTER

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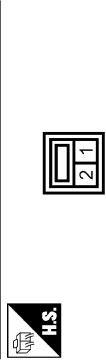
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW VIEW MONITOR

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	
8	BR	
18	R	
19	Y	
20	B	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	
30	W	
31	LG	
32	BR	

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



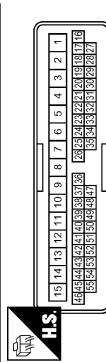
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



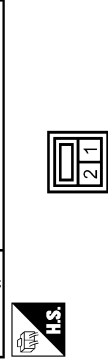
Terminal No.	Color of Wire	Signal Name [Specification]
3	B	
5	Y	
6	R	
17	G	
18	W	

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



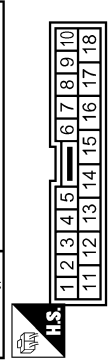
Terminal No.	Color of Wire	Signal Name [Specification]
4	W	
5	L	
16	R	
17	W	
18	G	
19	Y	
27	B	
28	SHIELD	

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FBR-CS



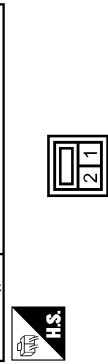
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	
2	G	

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TR10MMF-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D54
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	W	
4	LG	
5	B	
6	R	
16	BR	
17	G	
18	Y	

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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS8



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FER-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



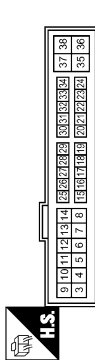
Terminal No.	Color of Wire	Signal Name [Specification]
13	R	-
14	L	- [With around view monitor]
15	Y	-
16	G	- [With around view monitor]
17	W	- [With around view monitor]
18	SHIELD	-

Connector No.	D111
Connector Name	REAR CAMERA
Connector Type	TH08MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	REAR CAMERA IMAGE GND
4	W	REAR CAMERA COMM
5	Y	REAR CAMERA IMAGE SIGNAL
7	L	REAR CAMERA GND
8	R	REAR CAMERA POWER SUPPLY

Connector No.	E5
Connector Name	ECM E/F (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20PW-CS12-ME-1V



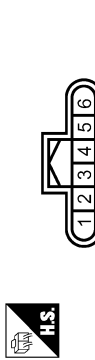
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E63
Connector Name	CORNER SENSOR (FL)
Connector Type	TDX02FB



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

Connector No.	E73
Connector Name	FRONT CAMERA
Connector Type	FR06FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	FRONT CAMERA POWER SUPPLY
2	BR	FRONT CAMERA GND
3	Y	FRONT CAMERA IMAGE SIGNAL
4	L	FRONT CAMERA IMAGE GND
6	W	FRONT CAMERA COMM

Connector No.	E81
Connector Name	WIRE TO WIRE
Connector Type	FR02MB



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

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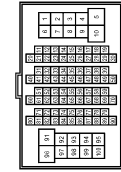
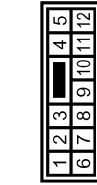
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	W	-
3	R	-
4	GR	-
59	O	-
84	G	-
93	Y	-



Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TEB01FW



Connector No.	E151
Connector Name	WIRE TO WIRE
Connector Type	RS02FB



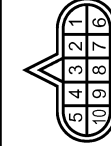
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-

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

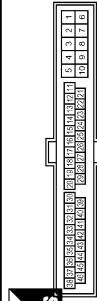
Connector No.	E152
Connector Name	CORNER SENSOR (FR)
Connector Type	YD02FB



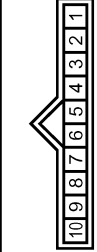
Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10



Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



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

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

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

Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

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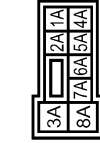
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

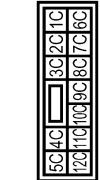
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



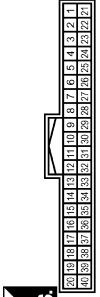
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

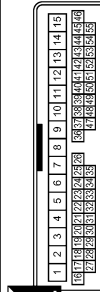
Connector No.	M4
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	V	-
4	V	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

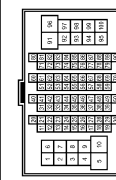
26	W	-
27	B	-
28	G	-
29	Y	-
30	R	-
31	R	-
32	SHIELD	-
33	R	-
34	W	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



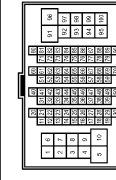
Terminal No.	Color of Wire	Signal Name [Specification]
4	P	-
5	L	-
16	R	-
17	B	-
18	G	-
19	Y	-
27	W	-
28	SHIELD	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	W	-
4	SHIELD	-
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	LG	-
45	V	-
46	G	-
47	R	-
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

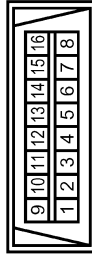
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
7	V	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NSJ16MM-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

15	LG
16	P

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGV-IV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M47
Connector Name	SONAR CONTROL UNIT
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	R	CORNER SENSOR FRONT LH
4	W	CORNER SENSOR FRONT RH
5	R	CORNER SENSOR REAR LH
6	R	CORNER SENSOR REAR RH
12	B	SENSOR GND
13	V	ACC
18	O	K LINE
19	G	AV COMM (H)
20	R	AV COMM (L)
23	GR	BUZZER
24	B	GND

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



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

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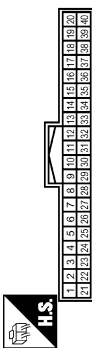
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH10FW-NH



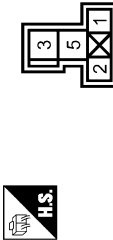
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



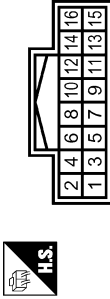
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS10FL-ME-LG



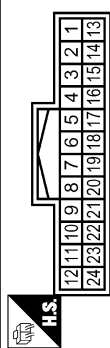
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

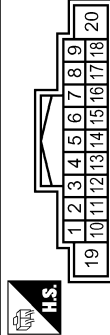
Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
12	B	GND
14	SHIELD	COMPZ GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R, RED) SIGNAL
18	R	RGB (B, BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CSZ



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP. ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW B
16	L	STRG SW B
19	Y	BATTERY
20	B	GND

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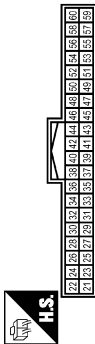
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH52FW-NH

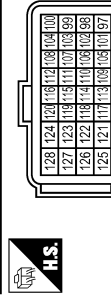


Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (+)
96	G	iPod SOUND SIGNAL RH (+)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PULSE)
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GB	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
46	G	AV COMM (R)
49	R	AV COMM (L)
50	LG	AV COMM (H)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R-RED) SIGNAL
62	W	RGB (G-GREEN) SIGNAL
63	R	RGB (B-BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (VS) SIGNAL
68	R	HP
69	W	VP
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)

Connector No.	M107
Connector Name	ECM
Connector Type	FR24FGY-F26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

72	SHIELD	SHIELD
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Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



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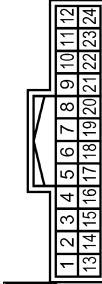
IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

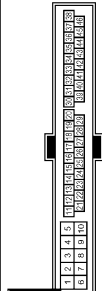
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS1.0

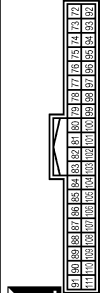


Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

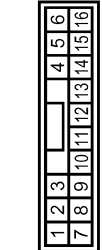
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	W	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	R	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



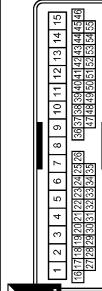
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M112
Connector Name	iPod SIDE
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MP-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
18	R	-
19	B	-
20	Y	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	G	-

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



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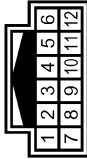
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MWF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT1SSH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	PARA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT1SSC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



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

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-IS-HU



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

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



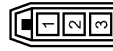
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAETLLITE ANTENNA

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

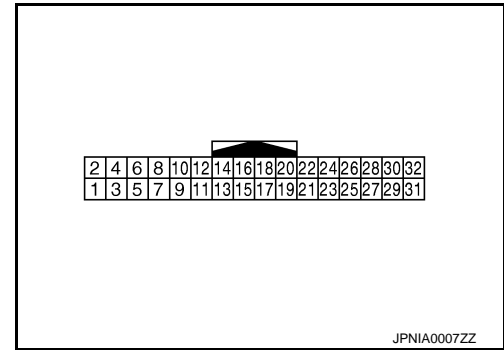
[BOSE AUDIO WITH NAVIGATION]

CAMERA CONTROL UNIT

Reference Value

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TERMINAL LAYOUT



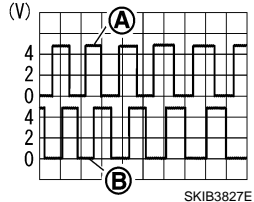
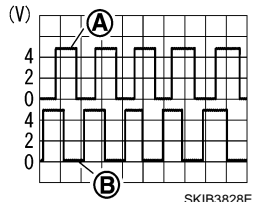
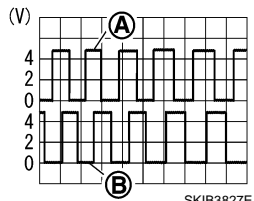
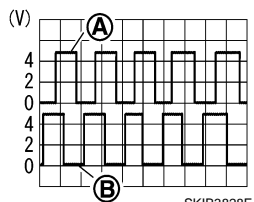
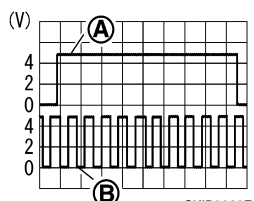
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
5	—	Shield	—	—	—	—
6 (W)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image display	
7 (B)	Ground	Camera ground	—	Ignition switch ON	—	0 V
8 (R)	Ground	Camera power supply	Output	Ignition switch ON	R position	6.0 V
					Other than R position	0 V
11	—	Shield	—	—	—	—
12 (W)	Ground	Camera image signal	Output	Ignition switch ON	At rear view camera image display	
14 (W)	Ground	Camera-connection recog- nition signal	—	Ignition switch ON	Connected to camera con- trol unit connector	0 V
					Not connected to camera control unit connector	5.0 V
17 (V)	—	AV communication signal (L)	Input/ Output	—	—	—
18 (LG)	—	AV communication signal (H)	Input/ Output	—	—	—
19 (R)	—	AV communication signal (L)	Input/ Output	—	—	—

CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
20 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
22 (O)	Ground	Reverse signal	Input	Ignition switch ON	Shift position in R position	12.0 V
					Other than shift position in R position	0 V
23 (L)	Ground	Sensor signal 1	Input	Ignition switch ON	Turn the steering to the right	 <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left	 <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
24 (BR)	Ground	Sensor signal 2	Input	Ignition switch ON	Turn the steering to the right	 <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left	 <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
25 (R)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position	 <p style="text-align: center;">A: Sensor signal 3 B: Sensor signal 1</p>

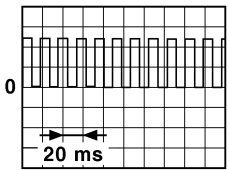
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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
26 (V)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)	<p>NOTE: The maximum voltage varies de- pending (destination unit)</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>
30 (LG)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
31 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
32 (L)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage

Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR -

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NOTE:

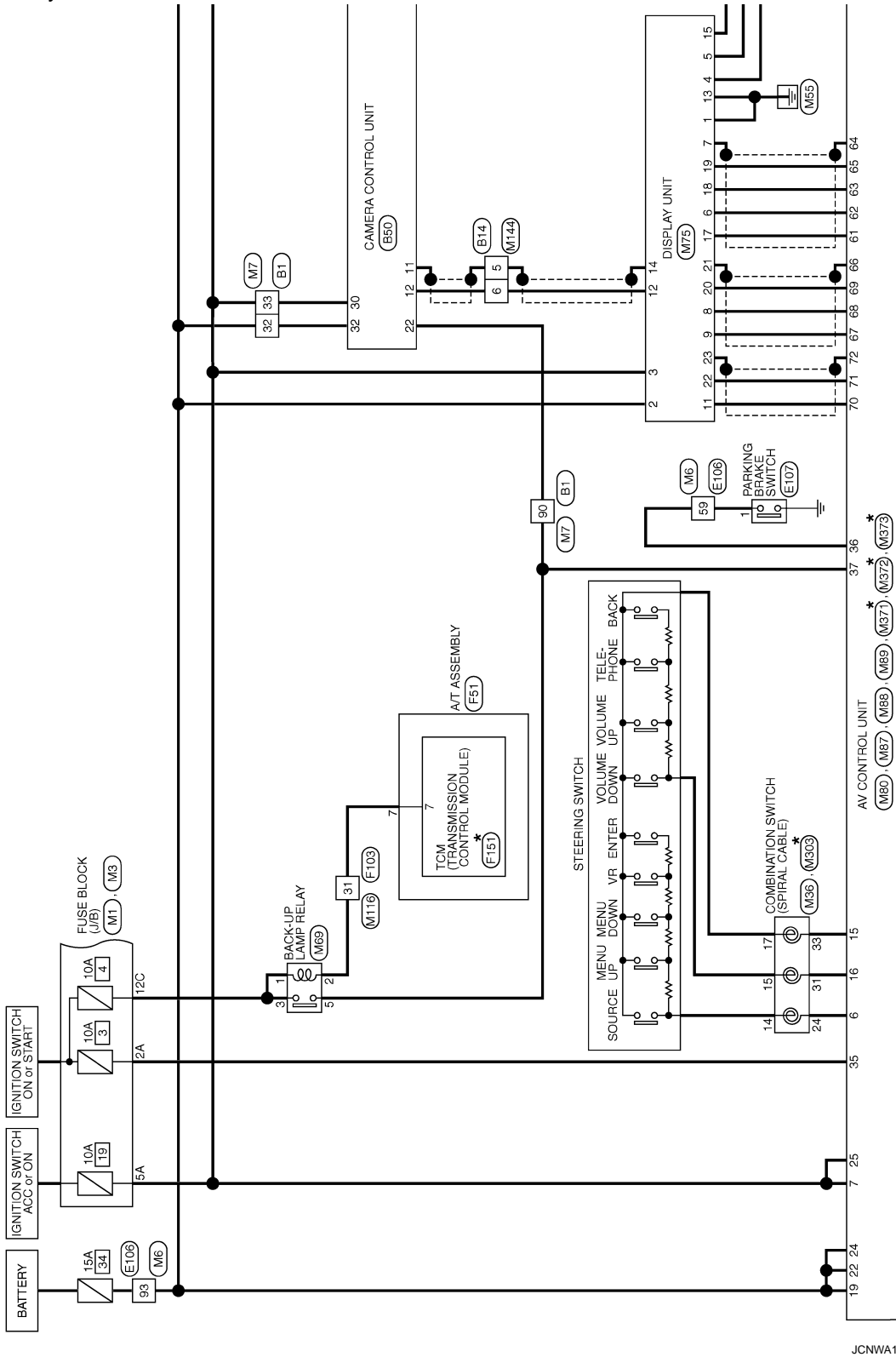
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR



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

2008/08/28

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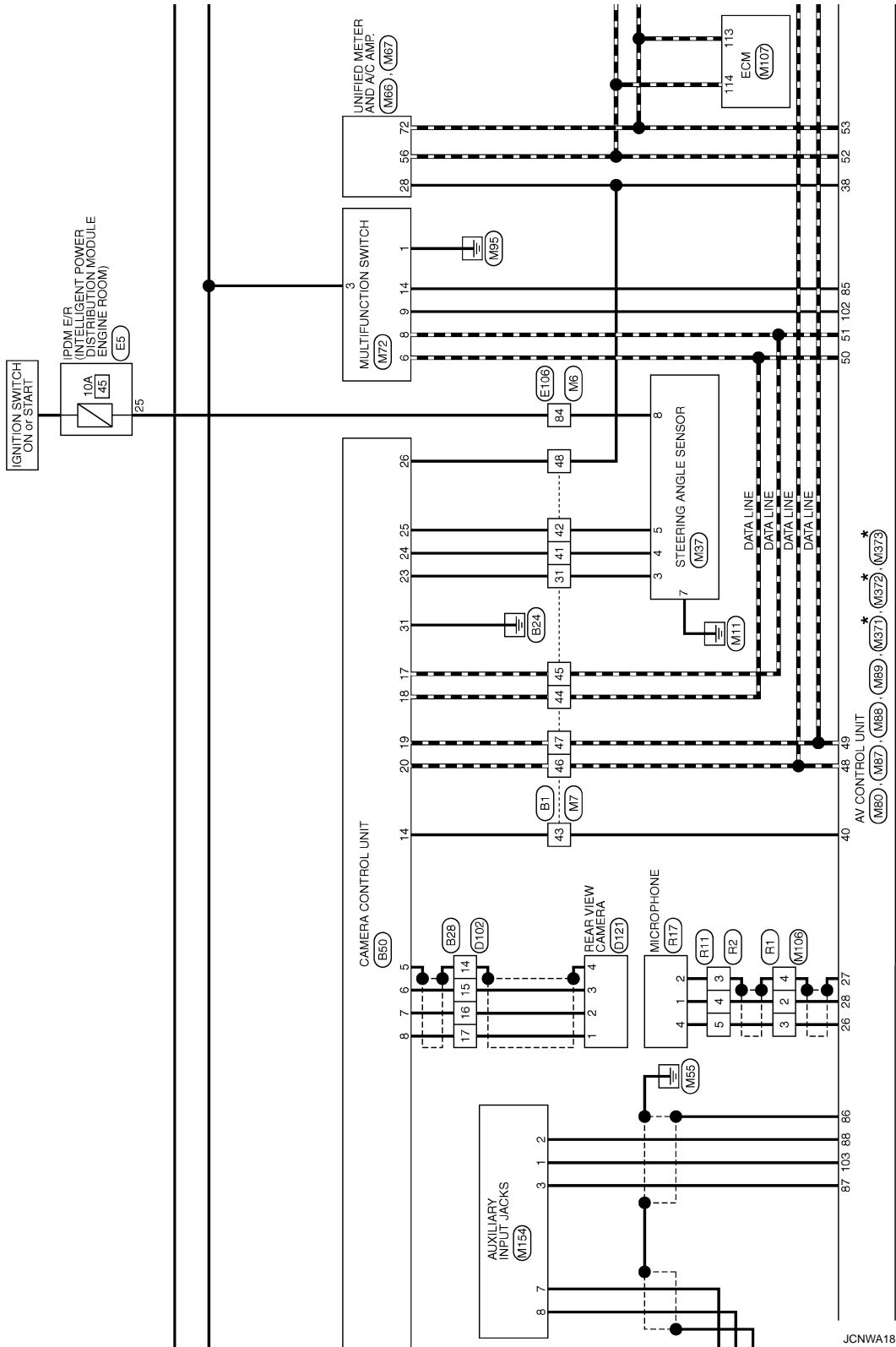
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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



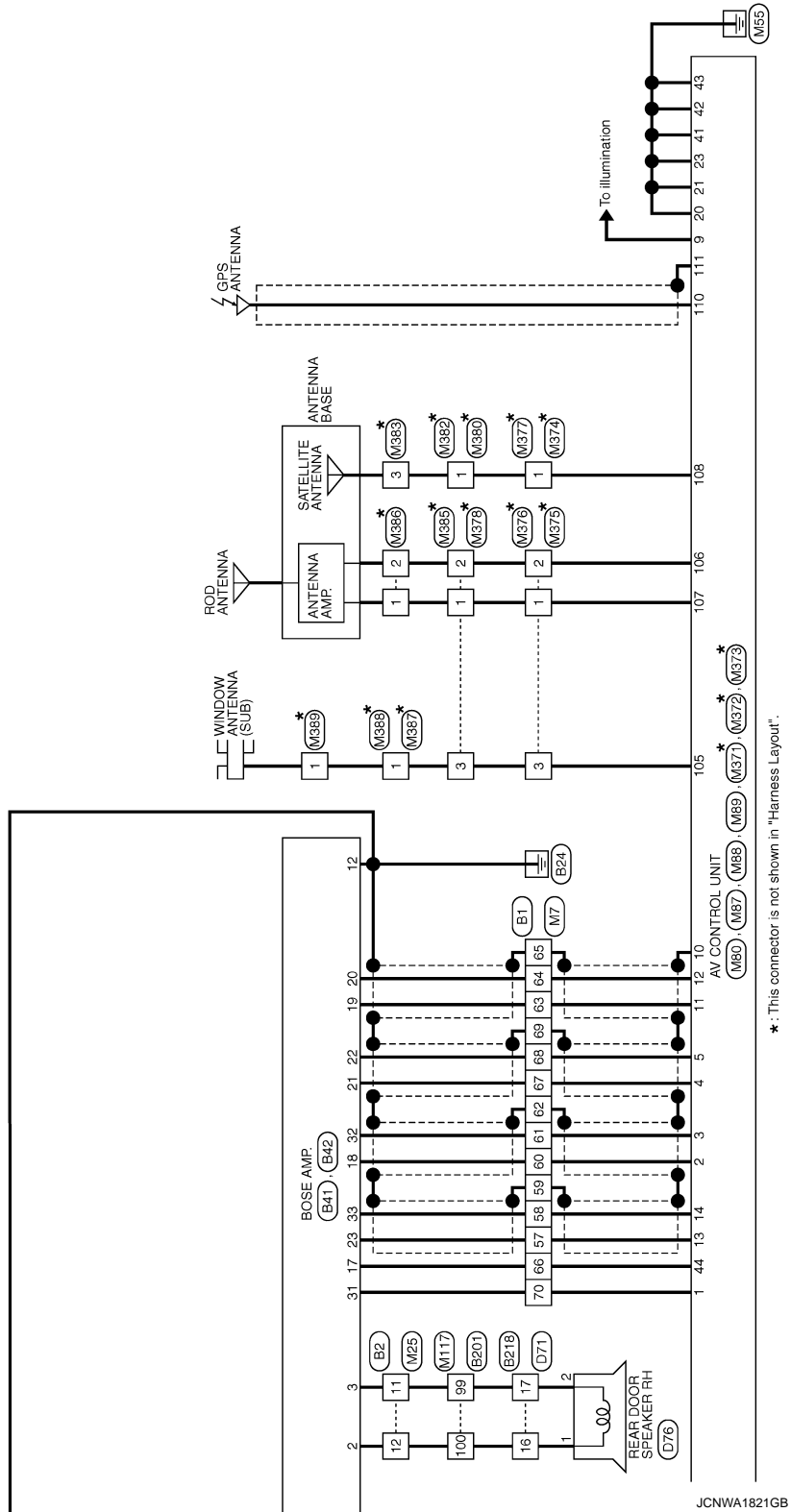
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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



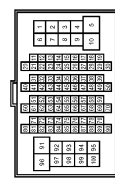
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH20FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	L	-
33	LG	-
41	BR	-
42	R	-
43	W	-
44	LG	- [Without around view monitor]
45	V	- [Without around view monitor]
46	G	- [Without around view monitor]
47	R	- [Without around view monitor]
48	V	- [Without around view monitor]

57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	O	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

15	LG
16	P

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBS-CS



Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TR10FW-NSB



Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH28MW-NH



Terminal No.	12G	Y	-
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Terminal No.	5	SHIELD	-
Terminal No.	6	W	-

Terminal No.	16	Y	- [With BOSE audio]
Terminal No.	17	G	- [With BOSE audio]

Terminal No.	14	SHIELD	- [Without around view monitor]
Terminal No.	15	W	- [Without around view monitor]
Terminal No.	16	B	- [Without around view monitor]
Terminal No.	17	R	- [Without around view monitor]

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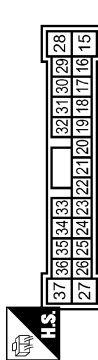
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SG44

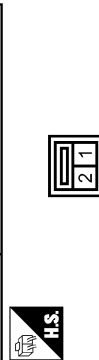


Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (+)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL REAR LH (+)
21	V	SOUND SIGNAL REAR RH (+)
22	SB	SOUND SIGNAL REAR LH (-)
23	BR	SOUND SIGNAL REAR RH (-)
25	GR	WOOFER AMP. ON SIGNAL
27	R	SOUND SIGNAL FRONT SOLAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

31	W	AMP. ON SIGNAL
32	L	SOUND SIGNAL FRONT LH (-)
33	Y	SOUND SIGNAL REAR RH (-)
37	BR	SOUND SIGNAL FRONT SOLAWKER RH (+)

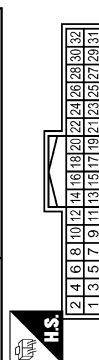


Connector No.	B48
Connector Name	REAR SOLAWKER LH
Connector Type	TK02FBR



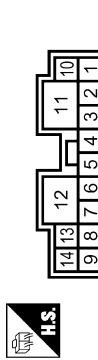
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	B50
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	W	CAMERA IMAGE SIGNAL
7	B	CAMERA GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	W	CONNECTION RECOGNITION
17	V	AV COMM (L)
18	LG	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SJA2

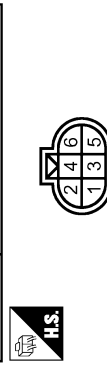


Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	SOUND SIGNAL REAR DOOR LH (+)
2	SB	SOUND SIGNAL REAR DOOR RH (-)
3	V	SOUND SIGNAL REAR DOOR RH (+)
4	B	SOUND SIGNAL FRONT DOOR SPEAKER LH (+)
5	P	SOUND SIGNAL FRONT DOOR SPEAKER LH (-)
6	L	SOUND SIGNAL FRONT SOLAWKER LH (+)
7	W	SOUND SIGNAL FRONT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

22	O	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	R	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	LG	ACC
31	B	GND
32	L	BATTERY

12	B	GND
13	Y	SOUND SIGNAL FRONT DOOR SPEAKER RH (-)
14	R	SOUND SIGNAL WOOFER (-)

Connector No.	B51
Connector Name	WOOFER
Connector Type	RS00FY-PR



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL WOOFER (-)
2	G	SOUND SIGNAL WOOFER (+)
4	GR	WOOFER AMP. ON SIGNAL
5	B	GND
6	W	BATTERY

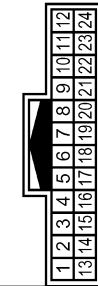
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

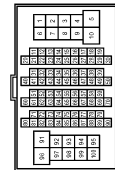
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	B166
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



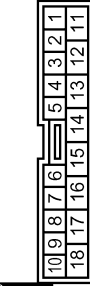
Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-N5S



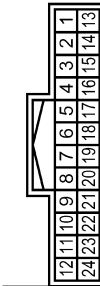
Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR



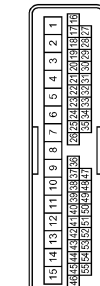
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



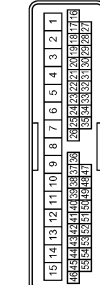
Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
5	L	-

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-

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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS02FBR-CS



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

Connector No.	D51
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS02FBR-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NS



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FBR-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



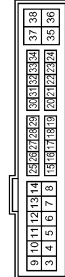
Terminal No.	Color of Wire	Signal Name [Specification]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]

Connector No.	D121
Connector Name	REAR VIEW CAMERA
Connector Type	TH103MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	CAMERA POWER SUPPLY
2	L	CAMERA GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	E5
Connector Name	FRONT-REAR INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20PFW-CS12-NH-T1V



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

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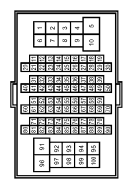
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
59	O	-
84	G	-
93	Y	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



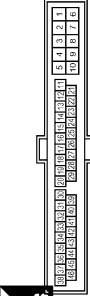
Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DG1




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

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10




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

Connector No.	F151
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBCY




Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



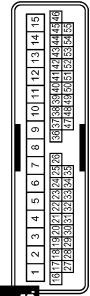
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



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

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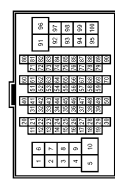
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[BOSE AUDIO WITH NAVIGATION]

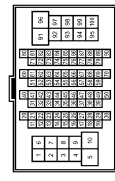
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
32	Y	-
33	V	-
41	BR	-
42	R	-
43	W	-
44	LG	-
45	V	-
46	G	-
47	R	-
48	V	-

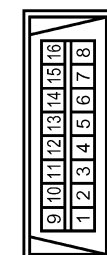
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FER



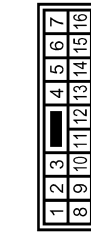
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	MS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	V	-
14	Y	-

15	LG	-
16	P	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-1V



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

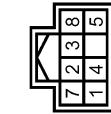
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[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH88FW-NH



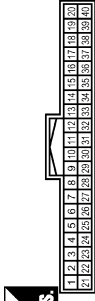
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



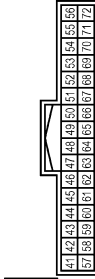
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	G	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



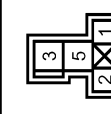
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



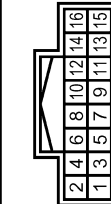
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



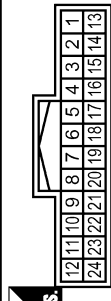
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G. GREEN) SIGNAL
7	SHIELD	SHIELD
8	B	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT-2)DISP
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
13	B	GND
14	SHIELD	COMP2 GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R. RED) SIGNAL
18	R	RGB (B. BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

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

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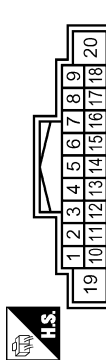
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

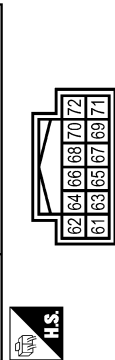
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-GSZ



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP_ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
9	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

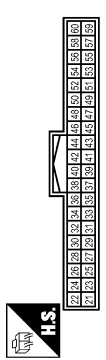
Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R: RED) SIGNAL
62	W	RGB (G: GREEN) SIGNAL
63	R	RGB (B: BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA(Y) SIGNAL
68	R	HP
68	W	HP
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)

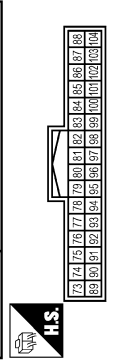
13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
18	Y	BATTERY
20	B	GND

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE YCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

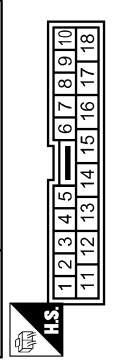
Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	R	IPod SOUND SIGNAL LH (+)
80	B	IPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	IPod SOUND SIGNAL LH (-)
96	G	IPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PULSE)
40	W	CONNECTION RECOGNITION
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
46	G	AV COMM (P)
49	R	AV COMM (L)
50	LG	AV COMM (R)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MP-HSB



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

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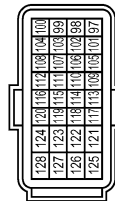
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[BOSE AUDIO WITH NAVIGATION]

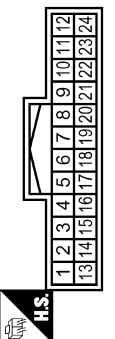
BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M107
Connector Name	ECM
Connector Type	RHE4FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Connector No.	M111
Connector Name	IPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	IPod SOUND SIGNAL LH (+)
2	B	IPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (IPod ADAPTER->IPod)
10	L	COMM (IPod->IPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	R	IPod SOUND SIGNAL RH (+)
13	W	IPod SOUND SIGNAL LH (+)

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

14	G	IPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	IPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	IPod SOUND SIGNAL GND
24	B	IPod SOUND SIGNAL LH (+)

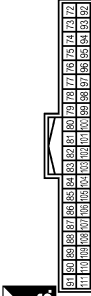
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	IPod SOUND SIGNAL LH (+)
2	W	IPod SOUND SIGNAL GND
5	L	COMM (IPod->IPod ADAPTER)
6	P	COMM (IPod ADAPTER->IPod)
7	R	IPod SOUND SIGNAL RH (+)
9	W	IPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-7M4



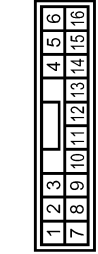
Terminal No.	Color of Wire	Signal Name [Specification]
99	V	- [With BOSE audio]
100	SB	- [With BOSE audio]

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M112
Connector Name	IPod SIDE
Connector Type	IP16FGY



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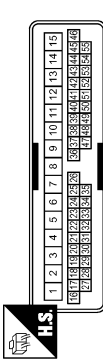
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	THROWAW-CSI5



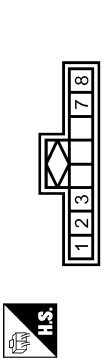
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	—
8	LG	—

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



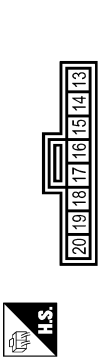
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	—
6	W	—

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A08BW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



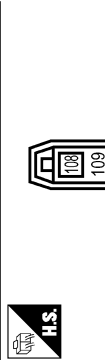
Terminal No.	Color of Wire	Signal Name [Specification]
14	W	—
15	L	—
17	BR	—

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	—	FM SUB
106	—	AM-FM MAIN
107	—	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FAKRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	—	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	—	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

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
CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU




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

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCH-2/1PP-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU




Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAETLITE ANTENNA

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU



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

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-1S-HU



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

JCNWA1832GB

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CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND REAR VIEW MONITOR

Connector No.	M386	Connector No.	M387	Connector No.	M388	Connector No.	M389
Connector Name	ANTENNA BASE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WINDOW ANTENNA (SUB)
Connector Type	GTJSSNF-1/PP-HU	Connector Type	JASO-JACK	Connector Type	JASO PLUG	Connector Type	PTJFB-A

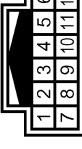
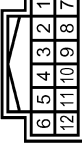
Terminal No.	1	2	Terminal No.	1	Terminal No.	1	Terminal No.	1	
Color of Wire	-	-	Color of Wire	-	Color of Wire	-	Color of Wire	-	
Signal Name [Specification]	ANTENNA AMP ON SIGNAL AM-FM MAIN	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-



Connector No.	R1	Connector No.	R2	Connector No.	R11	Connector No.	R17
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	MICROPHONE
Connector Type	TK0FW-NSB	Connector Type	TH12PV-NH	Connector Type	TH12MVF-NH	Connector Type	TK0FW

Terminal No.	2	3	4	Terminal No.	3	4	5
Color of Wire	R	G	SHIELD	Color of Wire	SHIELD	G	R
Signal Name [Specification]	-	-	-	Signal Name [Specification]	-	-	-

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



JCNWA1833GB

AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

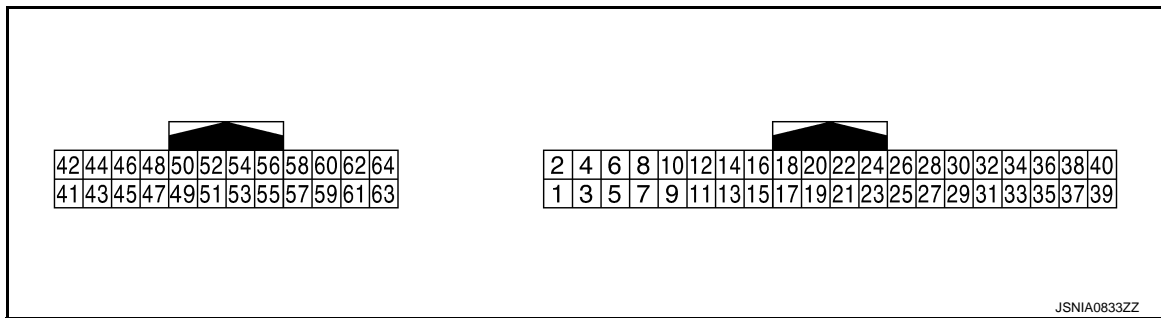
[BOSE AUDIO WITH NAVIGATION]

AROUND VIEW MONITOR CONTROL UNIT

Reference Value

INFOID:000000004506741

TERMINAL LAYOUT



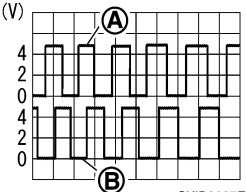
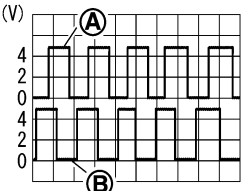
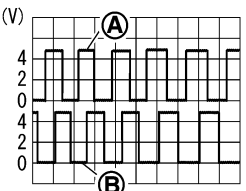
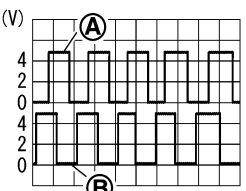
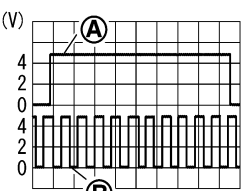
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
3 (P)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
4 (GR)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
5 (O)	Ground	Illumination signal	Input	Ignition switch OFF	Lighting switch is OFF.	0 V
					Lighting switch is ON.	12.0 V
6 (SB)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)	
7 (G)	Ground	Reverse signal	Input	Ignition switch ON	R position	12.0 V
					Other than R position	0 V
13 (B)	Ground	Control signal	—	Ignition switch ON	—	0 V

AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

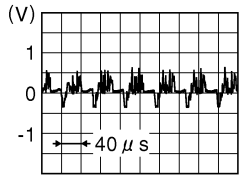
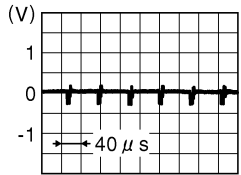
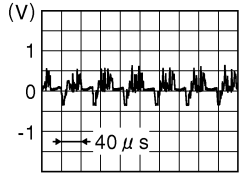
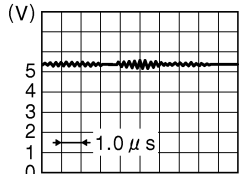
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
14 (L)	Ground	Sensor signal 1	Input	Ignition switch ON	Turn the steering to the right	 <p style="text-align: right;">SKIB3827E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
				Ignition switch ON	Turn the steering to the left	 <p style="text-align: right;">SKIB3828E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
15 (BR)	Ground	Sensor signal 2	Input	Ignition switch ON	Turn the steering to the right	 <p style="text-align: right;">SKIB3827E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
				Ignition switch ON	Turn the steering to the left	 <p style="text-align: right;">SKIB3828E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
16 (R)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position	 <p style="text-align: right;">SKIB3829E</p> <p>A: Sensor signal 3 B: Sensor signal 1</p>
17 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
18 (Y)	—	AV communication signal (L)	Input/ Output	—	—	—

AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
21 (W)	—	AV communication signal (H)	Input/ Output	—	—	—
22 (B)	—	AV communication signal (L)	Input/ Output	—	—	—
23 (LG)	24 (G)	Auxiliary infrared LED power supply	Output	Ignition switch ON	“CAMERA” switch is ON or shift position is “R”.	5.5 V
27 (W)	Ground	Camera image signal	Output	Ignition switch ON	At camera image display	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>
					Other than camera image display	 <p style="text-align: right; font-size: small;">JSNIA0835GB</p>
28	—	Camera image ground	—	—	—	—
29 (Y)	30 (G)	Side camera passenger side image signal	Input	Input	“CAMERA” switch is ON or shift position is “R”.	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>
31	—	Shield	—	—	—	—
32 (B)	Ground	Side camera passenger side ground	—	Ignition switch ON	—	0 V
33 (W)	Ground	Side camera passenger side communication signal	Input/ Output	Ignition switch ON	“CAMERA” switch is ON or shift position is “R”.	 <p style="text-align: right; font-size: small;">JSNIA0836GB</p>
34 (R)	Ground	Side camera passenger side power supply	Output	Ignition switch ON	“CAMERA” switch is ON or shift position is “R”.	6.0 V

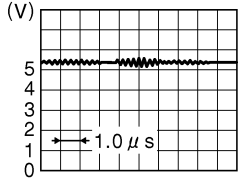
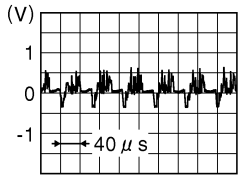
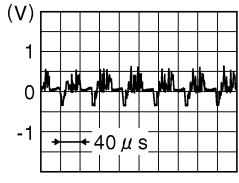
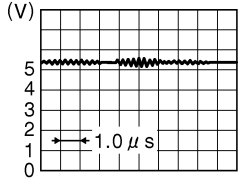
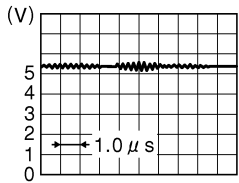
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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

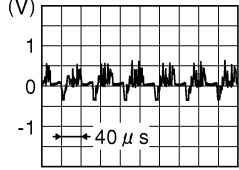
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
35 (L)	Ground	Rear camera communication signal	Input/ Output	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	 <p style="text-align: right; font-size: small;">JSNIA0836GB</p>
36 (BR)	Ground	Rear camera power supply	Output	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	6.0 V
37	—	Shield	—	—	—	—
38 (R)	Ground	Rear camera ground	—	Ignition switch ON	—	0 V
39 (Y)	40 (W)	Rear camera image signal	Input	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>
41 (Y)	42 (G)	Front camera image signal	Input	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>
43	—	Shield	—	—	—	—
44 (B)	Ground	Front camera ground	—	Ignition switch ON	—	0 V
45 (W)	Ground	Front camera communication signal	Input/ Output	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	 <p style="text-align: right; font-size: small;">JSNIA0836GB</p>
46 (R)	Ground	Front camera power supply	Output	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	6.0 V
47 (L)	Ground	Side camera driver side communication signal	Input/ Output	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	 <p style="text-align: right; font-size: small;">JSNIA0836GB</p>

AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
48 (BR)	Ground	Side camera driver side power supply	Output	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	6.0 V
49	—	Shield	—	—	—	—
50 (R)	Ground	Side camera driver side ground	—	Ignition switch ON	—	0 V
51 (Y)	52 (W)	Side camera driver side image signal	Input	Ignition switch ON	"CAMERA" switch is ON or shift position is "R".	 <p style="text-align: right; font-size: small;">JSNIA0834GB</p>

Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

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NOTE:

AV

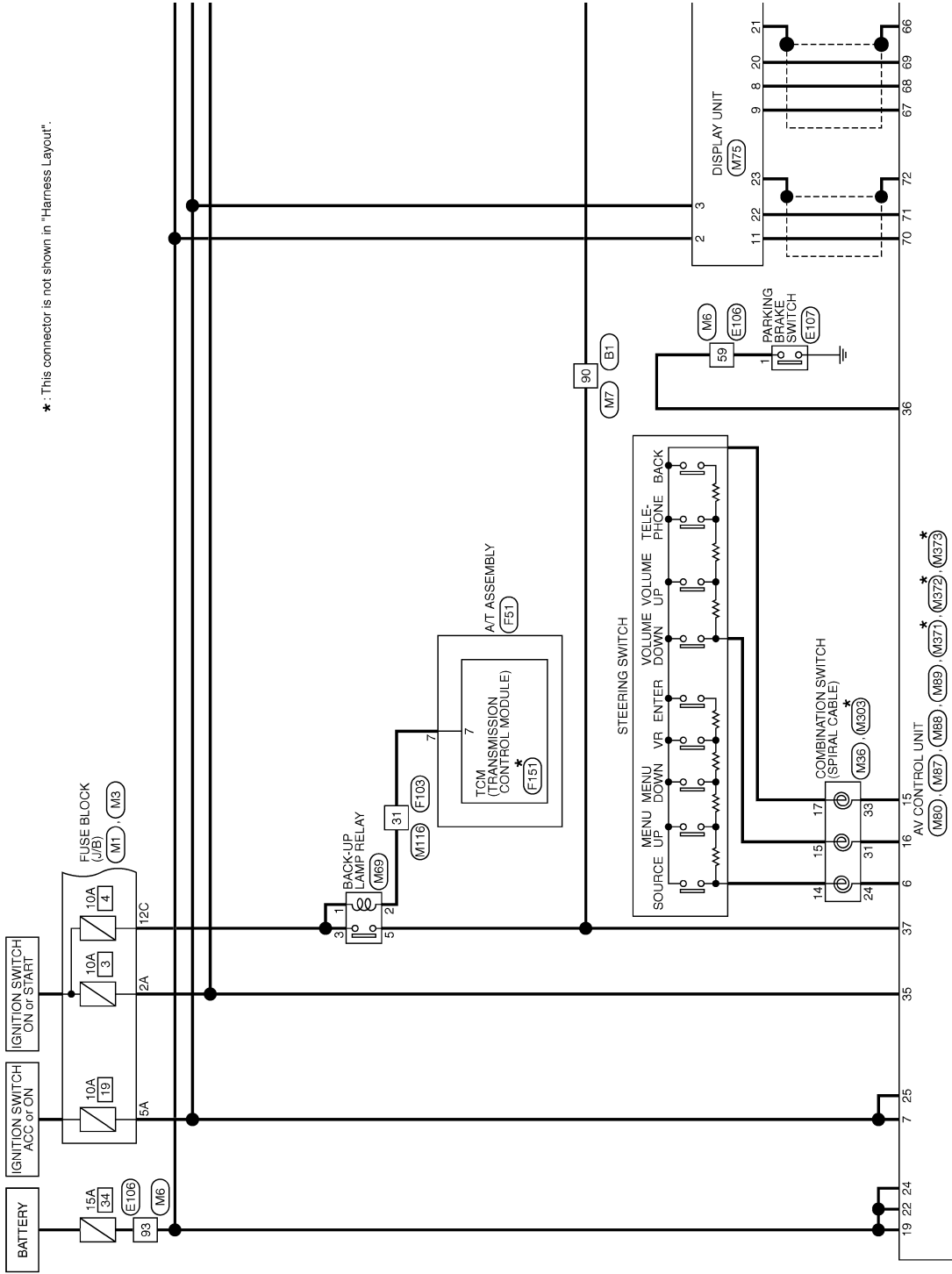
AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR



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

2010/02/17

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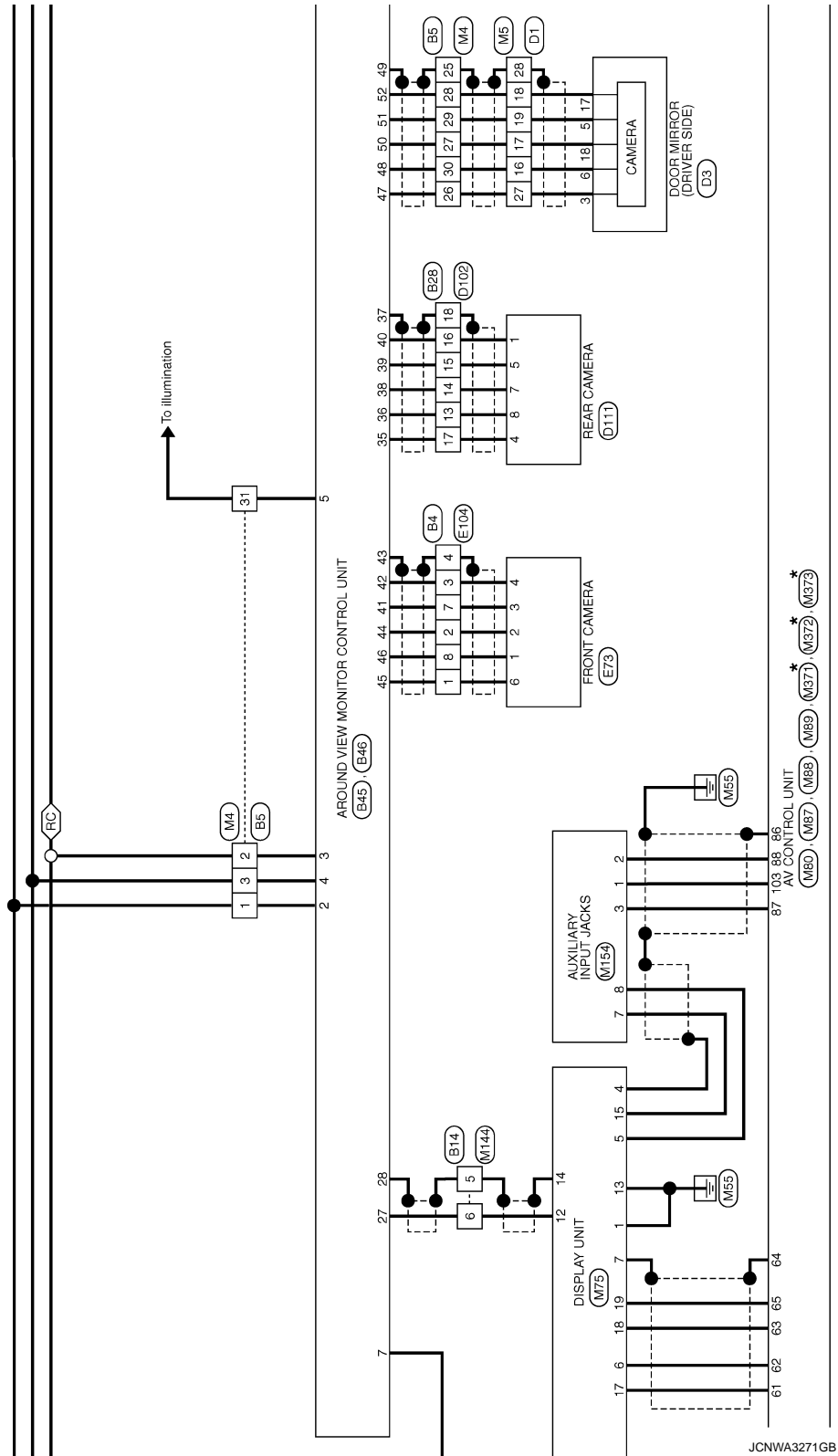
AROUND VIEW MONITOR CONTROL UNIT

[BOSE AUDIO WITH NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

RC : Up to vehicles manufactured on November 2008

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



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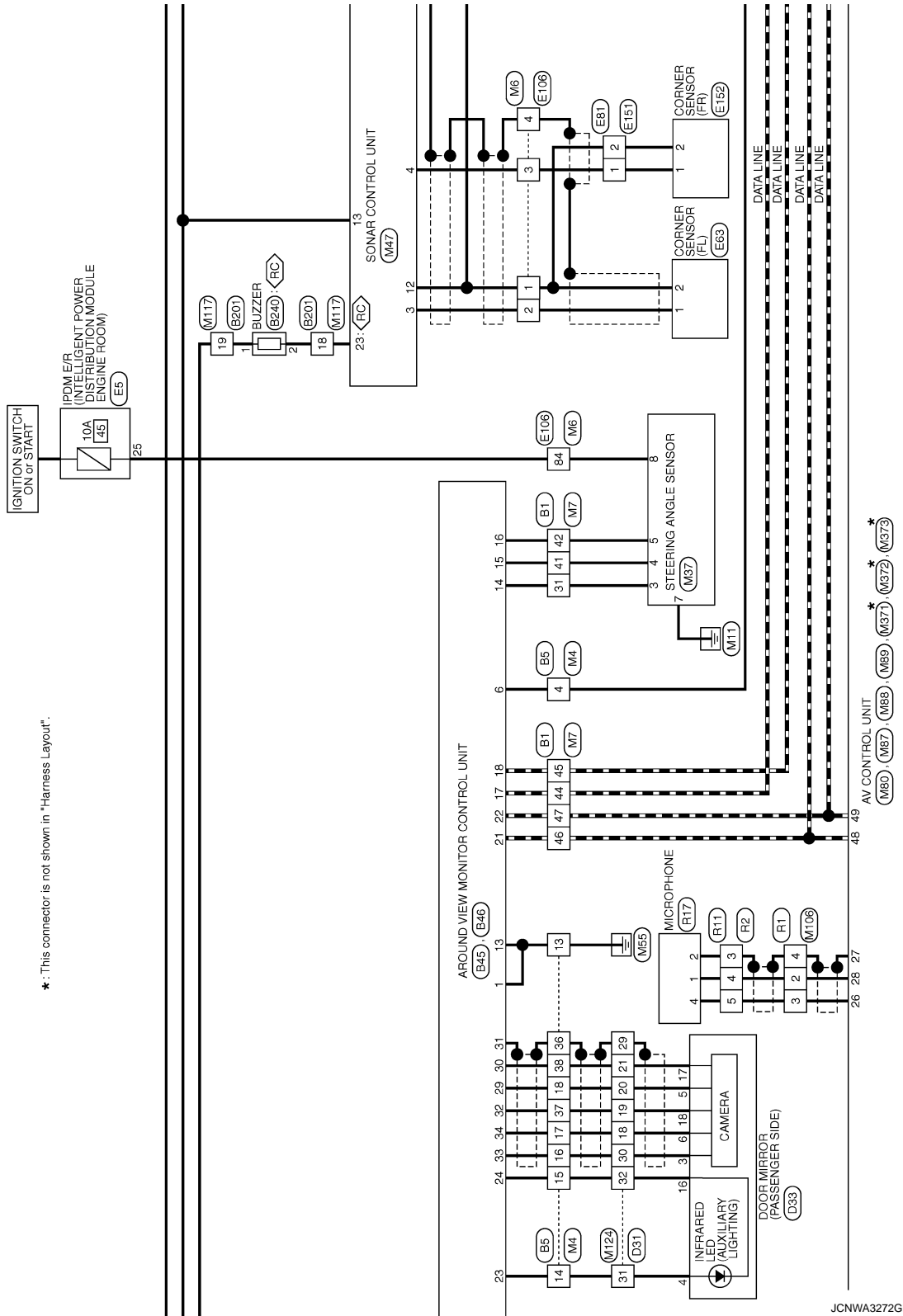
AROUND VIEW MONITOR CONTROL UNIT

[BOSE AUDIO WITH NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

◁ RC ▷ : Up to vehicles manufactured on November 2008

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



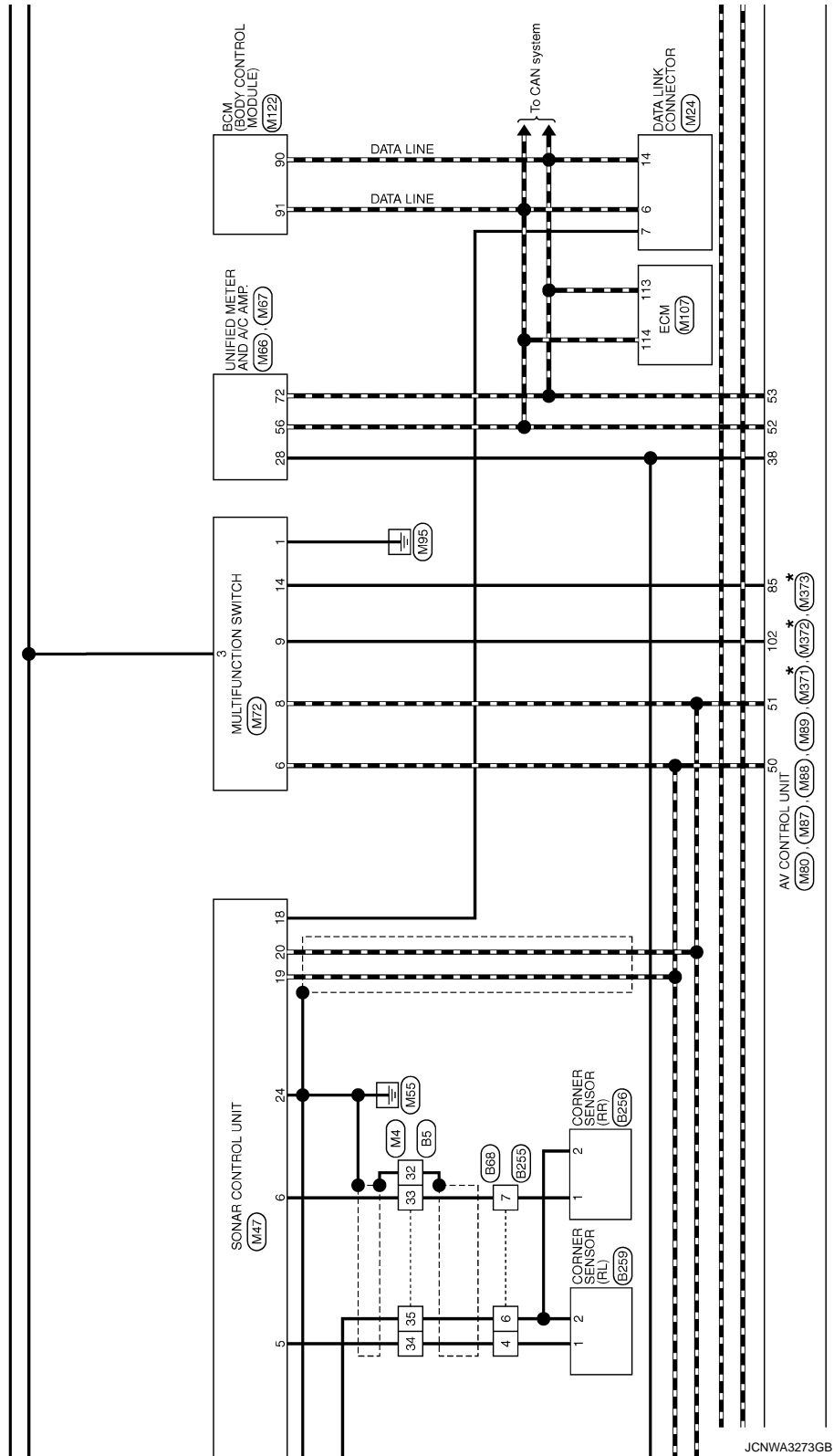
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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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



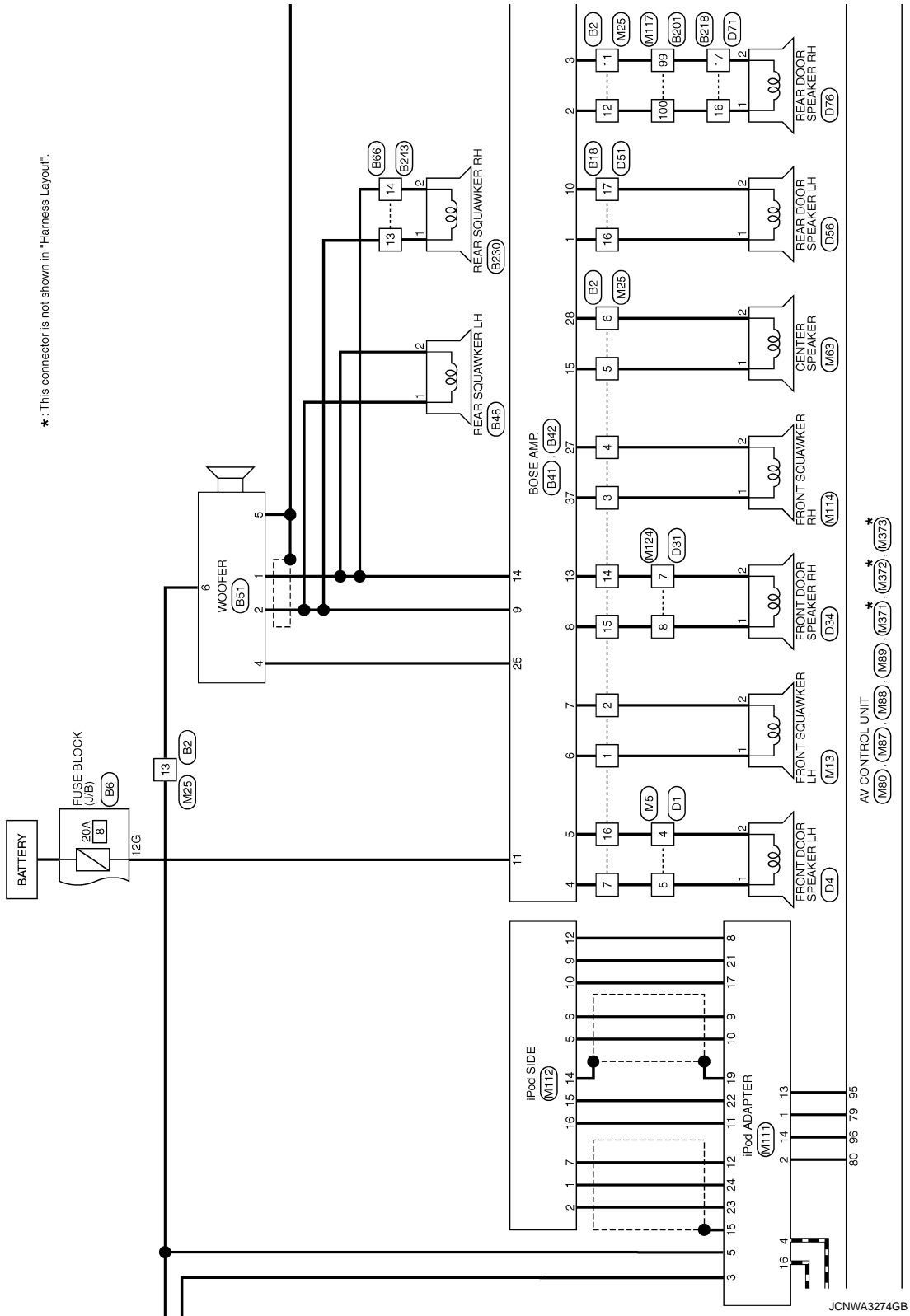
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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



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

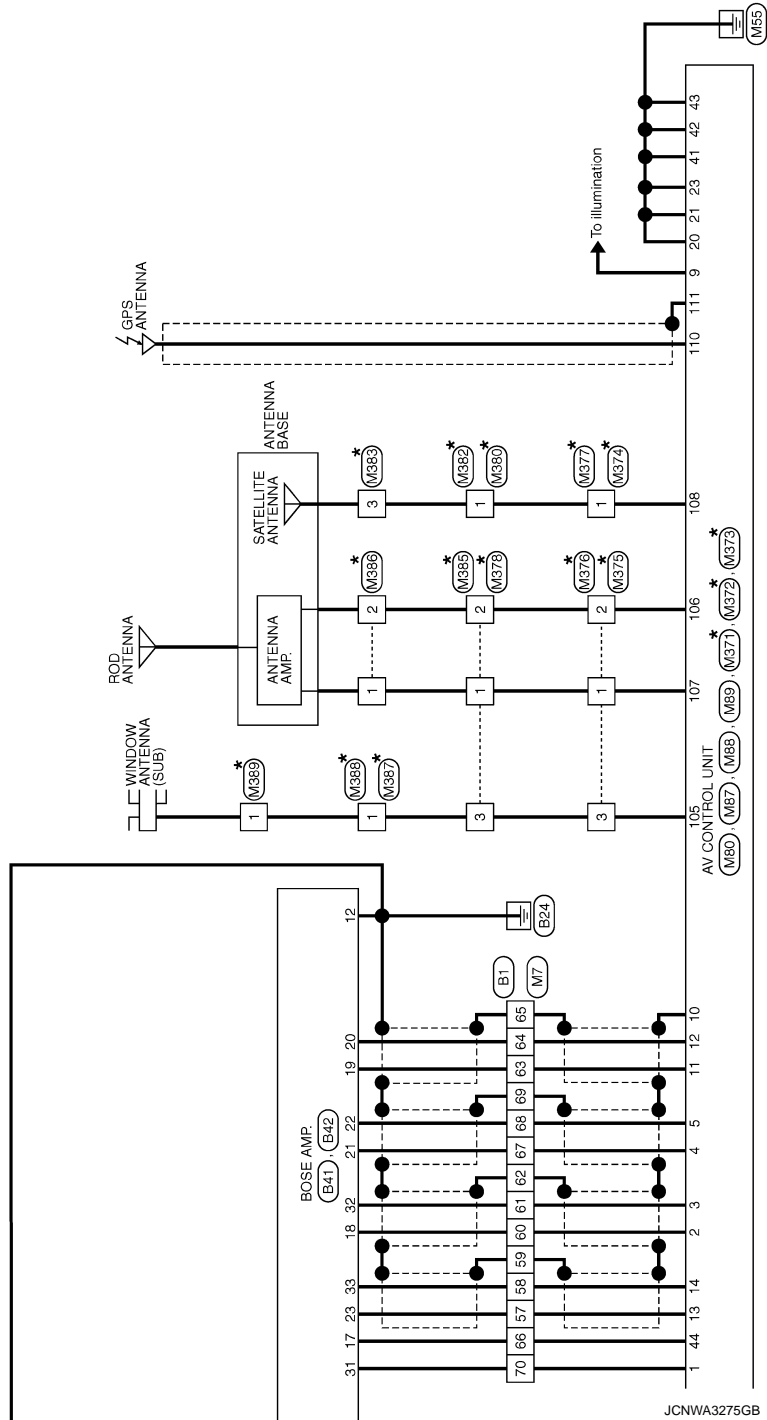
JCNWA3274GB

AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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



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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	G	-- [With around view monitor]
45	Y	-- [With around view monitor]
46	W	-- [With around view monitor]
47	B	-- [With around view monitor]
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	V	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-

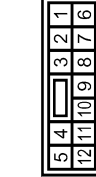


Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



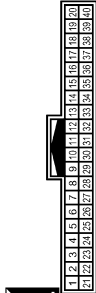
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS12PW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	G	-
4	SHIELD	-
7	Y	-
8	R	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	GR	-
4	SB	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
23	SHIELD	-

15	LG	-
16	P	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B45
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH24FW-NH



42	44	46	48	50	52	54	56	58	60	62	64
41	43	45	47	49	51	53	55	57	59	61	63

Terminal No.	Color of Wire	Signal Name [Specification]
41	Y	FRONT CAMERA IMAGE SIGNAL
42	G	FRONT CAMERA IMAGE GND
43	SHIELD	SHIELD
44	B	FRONT CAMERA GND
45	W	FRONT CAMERA COMM
46	R	FRONT CAMERA POWER SUPPLY
47	L	SIDE CAMERA LH COMM
48	BR	SIDE CAMERA LH POWER SUPPLY
49	SHIELD	SHIELD
50	R	SIDE CAMERA LH GND
51	Y	SIDE CAMERA LH IMAGE SIGNAL



2	1
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Connector No.	B48
Connector Name	REAR SQUAWKER LH
Connector Type	TK02FBR

Connector No.	B51
Connector Name	WOOFER
Connector Type	RS08FGY-PR



2	4	6
1	3	5

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL_WOOFER (-)
2	G	SOUND SIGNAL_WOOFER (+)
4	GR	WOOFER AMP_ON SIGNAL
5	B	GND
6	W	BATTERY

Connector No.	B46
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH40FW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	P	IGNITION
4	GR	ACC
5	O	ILLUMINATION
6	SB	VEHICLE SPEED (3-PULSE)
7	G	REVERSE
13	B	CONTROL SIGNAL
14	L	SENSOR SIGNAL 1
15	BR	SENSOR SIGNAL 2
16	R	SENSOR SIGNAL 3

Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MMV-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	FR008MB



1	2	3	4
5	6	7	8

17	G	AV COMM (H)
18	Y	AV COMM (L)
21	W	AV COMM (H)
22	B	AV COMM (L)
23	LG	LED (+)
24	G	LED (-)
27	W	CAMERA IMAGE SIGNAL
28	SHIELD	CAMERA IMAGE GND
29	Y	SIDE CAMERA RH IMAGE SIGNAL
30	G	SIDE CAMERA RH IMAGE GND
31	SHIELD	SHIELD
32	B	SIDE CAMERA RH GND
33	W	SIDE CAMERA RH COMM
34	R	SIDE CAMERA RH POWER SUPPLY
35	L	REAR CAMERA COMM
36	BR	REAR CAMERA POWER SUPPLY
37	SHIELD	SHIELD
38	R	REAR CAMERA GND
39	Y	REAR CAMERA IMAGE SIGNAL
40	W	REAR CAMERA IMAGE GND

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-
6	B	-
7	W	-

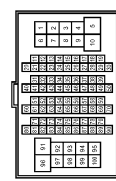
AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	P	-
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS8




Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR




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

Connector No.	B240
Connector Name	BUZZER
Connector Type	TK02FBR



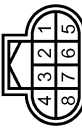
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	GR	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B235
Connector Name	WIRE TO WIRE
Connector Type	RH08FB




Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
6	B	-
7	R	-

Connector No.	B236
Connector Name	CORNER SENSOR (RR)
Connector Type	YDX02FB



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

Connector No.	B239
Connector Name	CORNER SENSOR (RL)
Connector Type	YDX02FB



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

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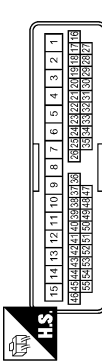
AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
5	L	-
16	R	-
17	W	-
18	G	-
19	Y	-
27	B	-
28	SHIELD	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



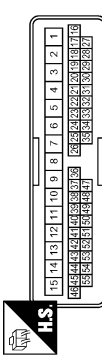
Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
5	Y	-
6	R	-
17	G	-
18	W	-

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS30ZFB-R-GS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-
18	R	-
19	Y	-
20	B	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	BR	-

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH



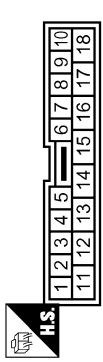
Terminal No.	Color of Wire	Signal Name [Specification]
3	W	-
4	LG	-
5	B	-
6	R	-
16	BR	-
17	G	-
18	Y	-

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS30ZFB-R-GS



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

Connector No.	DE1
Connector Name	WIRE TO WIRE
Connector Type	TK10MK-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS30ZFB-R-GS



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

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AROUND VIEW MONITOR CONTROL UNIT

[BOSE AUDIO WITH NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK-0MW-NSB



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

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FER-CS



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

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



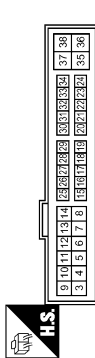
Terminal No.	Color of Wire	Signal Name [Specification]
13	R	-
14	L	- [With around view monitor]
15	Y	-
16	G	- [With around view monitor]
17	W	-
18	SHIELD	-

Connector No.	D111
Connector Name	REAR CAMERA
Connector Type	TH08MF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	REAR CAMERA IMAGE GND
4	W	REAR CAMERA COMM
5	Y	REAR CAMERA IMAGE SIGNAL
7	L	REAR CAMERA GND
8	R	REAR CAMERA POWER SUPPLY

Connector No.	E5
Connector Name	FROM E B (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH02PW-CS12-MF-TV



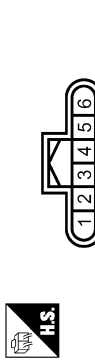
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E6B
Connector Name	CORNER SENSOR (FL)
Connector Type	YDX02FB



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

Connector No.	E73
Connector Name	FRONT CAMERA
Connector Type	FR065FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	FRONT CAMERA POWER SUPPLY
2	BR	FRONT CAMERA GND
3	Y	FRONT CAMERA IMAGE SIGNAL
4	L	FRONT CAMERA IMAGE GND
6	W	FRONT CAMERA COMM

Connector No.	E81
Connector Name	WIRE TO WIRE
Connector Type	RS02MB



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

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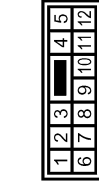
AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

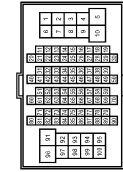
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	
2	BR	
3	L	
4	SHIELD	
7	Y	
8	R	

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	
2	W	
3	R	
4	GR	
59	O	
84	G	
93	Y	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	1E81FW



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

Connector No.	E151
Connector Name	WIRE TO WIRE
Connector Type	RS02FB



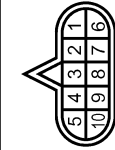
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	B	

Connector No.	E182
Connector Name	CORNER SENSOR (FR)
Connector Type	YD02FB



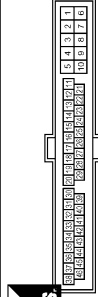
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	B	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



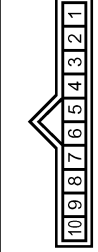
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
31	R	

Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

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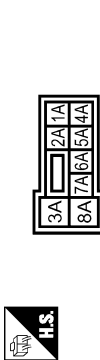
AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

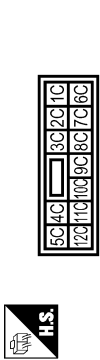
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



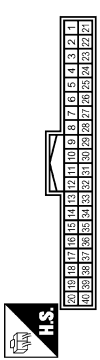
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

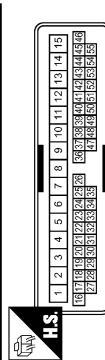
Connector No.	M4
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	V	-
4	V	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

26	W	-
27	B	-
28	G	-
29	Y	-
30	R	-
31	R	-
32	SHIELD	-
33	R	-
34	W	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH00MW-CS15



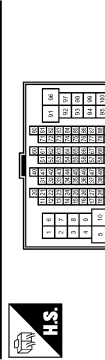
Terminal No.	Color of Wire	Signal Name [Specification]
4	P	-
5	L	-
16	R	-
17	B	-
18	G	-
19	Y	-
23	W	-
28	SHIELD	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	W	-
4	SHIELD	-
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	LG	-
45	V	-
46	G	-
47	R	-
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

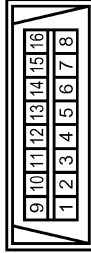
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
7	V	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MM-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-IV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FPW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M47
Connector Name	SONAR CONTROL UNIT
Connector Type	TH24FPW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	R	CORNER SENSOR FRONT LH
4	W	CORNER SENSOR FRONT RH
5	W	CORNER SENSOR REAR LH
6	R	CORNER SENSOR REAR RH
12	B	SENSOR GND
13	V	ACC
18	O	K LINE
19	G	AV COMM (H)
20	B	AV COMM (L)
23	GR	BUZZER
24	B	GND

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



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

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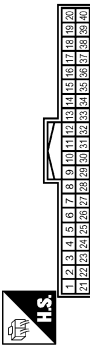
AROUND VIEW MONITOR CONTROL UNIT

[BOSE AUDIO WITH NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS30FL-ME-LC



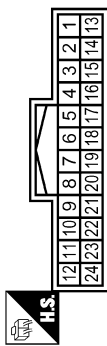
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

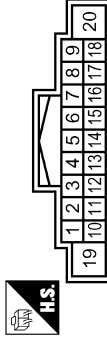
Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
13	B	GND
14	SHIELD	COMPZ GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R, RED) SIGNAL
18	R	RGB (B, BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP, ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
8	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
19	Y	BATTERY
20	B	GND

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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH10PW-NH



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	101	102	103	104
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Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

38	R	VEHICLE SPEED (8-PULSE)
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
48	G	AV COMM (H)
49	R	AV COMM (L)
50	LG	AV COMM (H)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L



62	64	66	68	70	72
61	63	65	67	69	71

Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R, RED) SIGNAL
62	W	RGB (G, GREEN) SIGNAL
63	R	RGB (B, BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (VS) SIGNAL
68	R	HP
69	W	VP
70	BR	COMM (CONT-TO DISP)
71	Y	COMM (DISP-TO CONT)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



62	64	66	68	70	72
61	63	65	67	69	71

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



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	101	102	103	104

Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

Connector No.	M105
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18		

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

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R25-R-LH-Z



128	124	120	116	112	108	104	100
127	123	119	115	111	107	103	99
126	122	118	114	110	106	102	98
125	121	117	113	109	105	101	97

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

72	SHIELD	SHIELD
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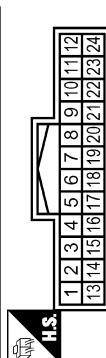
AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

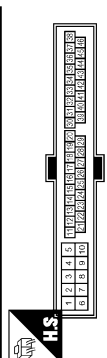
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M111
Connector Name	I-Pod ADAPTER
Connector Type	TH4FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	I-Pod SOUND SIGNAL LH (+)
2	B	I-Pod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (I-Pod ADAPTER->I-Pod)
10	L	COMM (I-Pod->I-Pod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	I-Pod SOUND SIGNAL RH (+)
13	W	I-Pod SOUND SIGNAL LH (-)

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK68MW-NS10

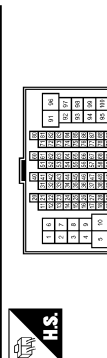


Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

14	G	I-Pod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
18	SHIELD	SHIELD
19	W	I-Pod CONNECTION RECOGNITION
21	G	ACCESSORY DETECT
22	W	I-Pod SOUND SIGNAL GND
24	B	I-Pod SOUND SIGNAL LH (+)

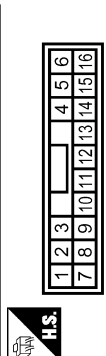
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	I-Pod SOUND SIGNAL LH (+)
2	W	I-Pod SOUND SIGNAL GND
5	L	COMM (I-Pod->I-Pod ADAPTER)
6	P	COMM (I-Pod ADAPTER->I-Pod)
7	R	I-Pod SOUND SIGNAL RH (+)
9	W	I-Pod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH68MW-CS16-TM4



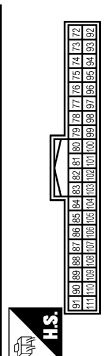
Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	P	-
99	V	- (With BOSE audio)
100	SB	- (With BOSE audio)

Connector No.	M112
Connector Name	I-Pod SIDE
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- (With BOSE audio)
2	LG	- (With BOSE audio)

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



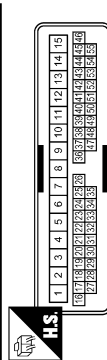
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M114
Connector Name	FRONT SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- (With BOSE audio)
2	LG	- (With BOSE audio)

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
18	R	-
19	B	-
20	Y	- (With around view monitor)
21	G	- (With around view monitor)
29	SHIELD	-
30	W	-
31	LG	-
32	G	-

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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A0BEW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	1K08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT1SSHF-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FARRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT1SSC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU




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

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/1S-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-1S-HU




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

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-1PP-HU




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

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU




Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAETLLITE ANTENNA

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

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AROUND VIEW MONITOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M387
Connector Name	WIRE TO WIRE
Connector Type	JASO JACK



Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	M388
Connector Name	WIRE TO WIRE
Connector Type	JASO PLUG



Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	M389
Connector Name	WINDOW ANTENNA (SUB)
Connector Type	FOIFB-A



Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-
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Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TKUGFW-NSS



Terminal No.	10	Color of Wire	R	Signal Name [Specification]	-
	9		R		-
	8		R		-
	7		R		-
	6		G		-
	5		G		-
	4		G		-
	3		G		-
	2		G		-
	1		G		-
	18		G		-
	17		G		-
	16		G		-
	15		G		-
	14		G		-
	13		G		-
	12		G		-
	11		G		-
	4		SHIELD		-

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	TH12PW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]	-
	4		R		-
	5		G		-

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]	-
	4		G		-
	5		R		-

Connector No.	R17
Connector Name	MICROPHONE
Connector Type	TKUGFW



Terminal No.	1	Color of Wire	G	Signal Name [Specification]	MICROPHONE SIGNAL
	2		SHIELD		MICROPHONE GND
	4		R		MICROPHONE VCC

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

Reference Value

INFOID:000000004506743

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status	
SONAR OPE	Ignition switch ON	Around view monitor operating (sonar operating).	On
		Around view monitor non-operating (sonar non-operating).	Off
BUZZER OUTPUT	Ignition switch ON	Buzzer is output condition.	On
		Buzzer is not output condition.	Off
CR SEN [FL]	Ignition switch ON	When a sensor is abnormal.	ERROR
		When a sensor is not detection.	LV.0
		The distance between the corner sensor and an obstacle is 50 cm (19.6 in) or more and less then 60 cm (23.6 in).	LV.2
		The distance between the corner sensor and an obstacle is 30 cm (11.8 in) or more and less then 50 cm (19.6 in).	LV.3
		The distance between corner sensor and an obstacle less than 30 cm (11.8 in).	LV.4
CR SEN [FR]	Ignition switch ON	When a sensor is abnormal.	ERROR
		When a sensor is not detection.	LV.0
		The distance between the corner sensor and an obstacle is 50 cm (19.6 in) or more and less then 60 cm (23.6 in).	LV.2
		The distance between the corner sensor and an obstacle is 30 cm (11.8 in) or more and less then 50 cm (19.6 in).	LV.3
		The distance between corner sensor and an obstacle less than 30 cm (11.8 in).	LV.4
CR SEN [RL]	Ignition switch ON	When a sensor is abnormal.	ERROR
		When a sensor is not detection.	LV.0
		The distance between the corner sensor and an obstacle is 50 cm (19.6 in) or more and less then 60 cm (23.6 in).	LV.2
		The distance between the corner sensor and an obstacle is 30 cm (11.8 in) or more and less then 50 cm (19.6 in).	LV.3
		The distance between corner sensor and an obstacle less than 30 cm (11.8 in).	LV.4
CR SEN [RR]	Ignition switch ON	When a sensor is abnormal.	ERROR
		When a sensor is not detection.	LV.0
		The distance between the corner sensor and an obstacle is 50 cm (19.6 in) or more and less then 60 cm (23.6 in).	LV.2
		The distance between the corner sensor and an obstacle is 30 cm (11.8 in) or more and less then 50 cm (19.6 in).	LV.3
		The distance between corner sensor and an obstacle less than 30 cm (11.8 in).	LV.4

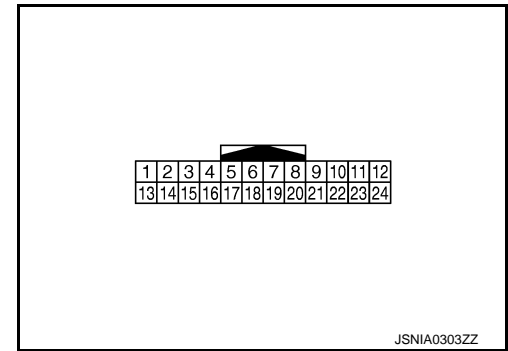
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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

TERMINAL LAYOUT



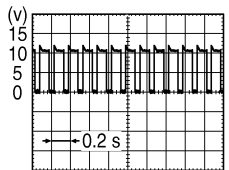
PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output	Ignition switch	Condition	
3 (R)	12 (B)	Corner sensor signal front LH	Input	ON	"CAMERA" switch is ON or shift position is "R".	<p style="text-align: right; font-size: x-small;">JSNIA0837GB</p>
4 (W)	12 (B)	Corner sensor signal front RH	Input	ON	"CAMERA" switch is ON or shift position is "R".	<p style="text-align: right; font-size: x-small;">JSNIA0837GB</p>
5 (W)	12 (B)	Corner sensor signal rear LH	Input	ON	"CAMERA" switch is ON or shift position is "R".	<p style="text-align: right; font-size: x-small;">JSNIA0837GB</p>
6 (R)	12 (B)	Corner sensor signal rear RH	Input	ON	"CAMERA" switch is ON or shift position is "R".	<p style="text-align: right; font-size: x-small;">JSNIA0837GB</p>
12 (B)	Ground	Sensor ground	—	ON	—	0 V
13 (V)	Ground	ACC power supply	Input	ACC	—	12.0 V
18 (O)	—	K-line (CONSULT-III)	—	—	—	—

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
19 (G)	—	AV communication (H)	Input/ Output	—	—	—
20 (R)	—	AV communication (L)	Input/ Output	—	—	—
23* (GR)	Ground	Buzzer drive signal	Output	Ignition switch ON	When buzzer operation	<p>NOTE: Waveform period changes due to the distance to an obstacle.</p>  <p style="text-align: right; font-size: small;">SKIB8943E</p>
24 (B)	Ground	Ground	—	Ignition switch ON	—	0 V

*: Up to vehicles manufactured on November 2008. A buzzer is included in the sonar control unit, starting from vehicles manufactured on December 2008.

Wiring Diagram - BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

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NOTE:

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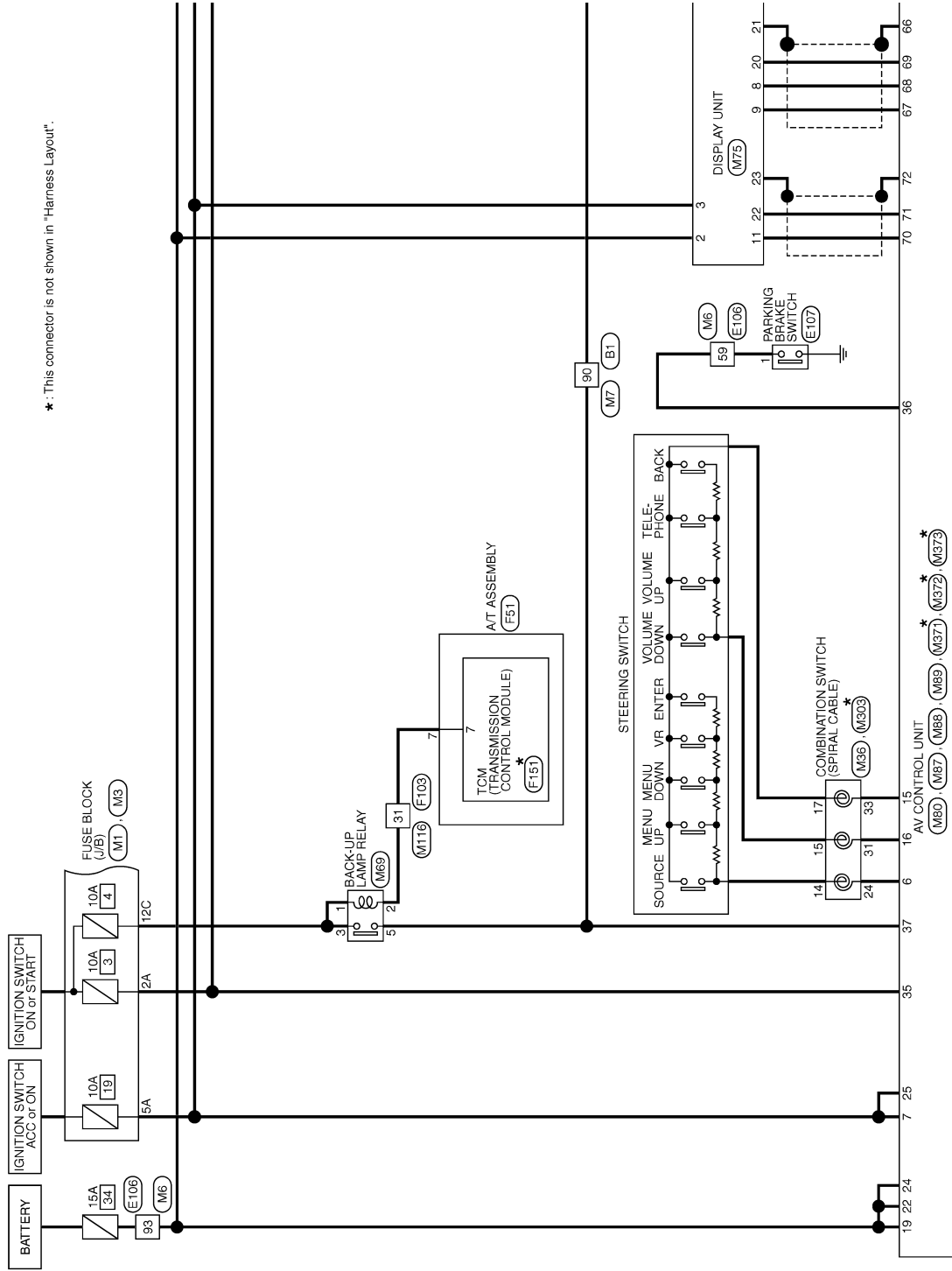
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR



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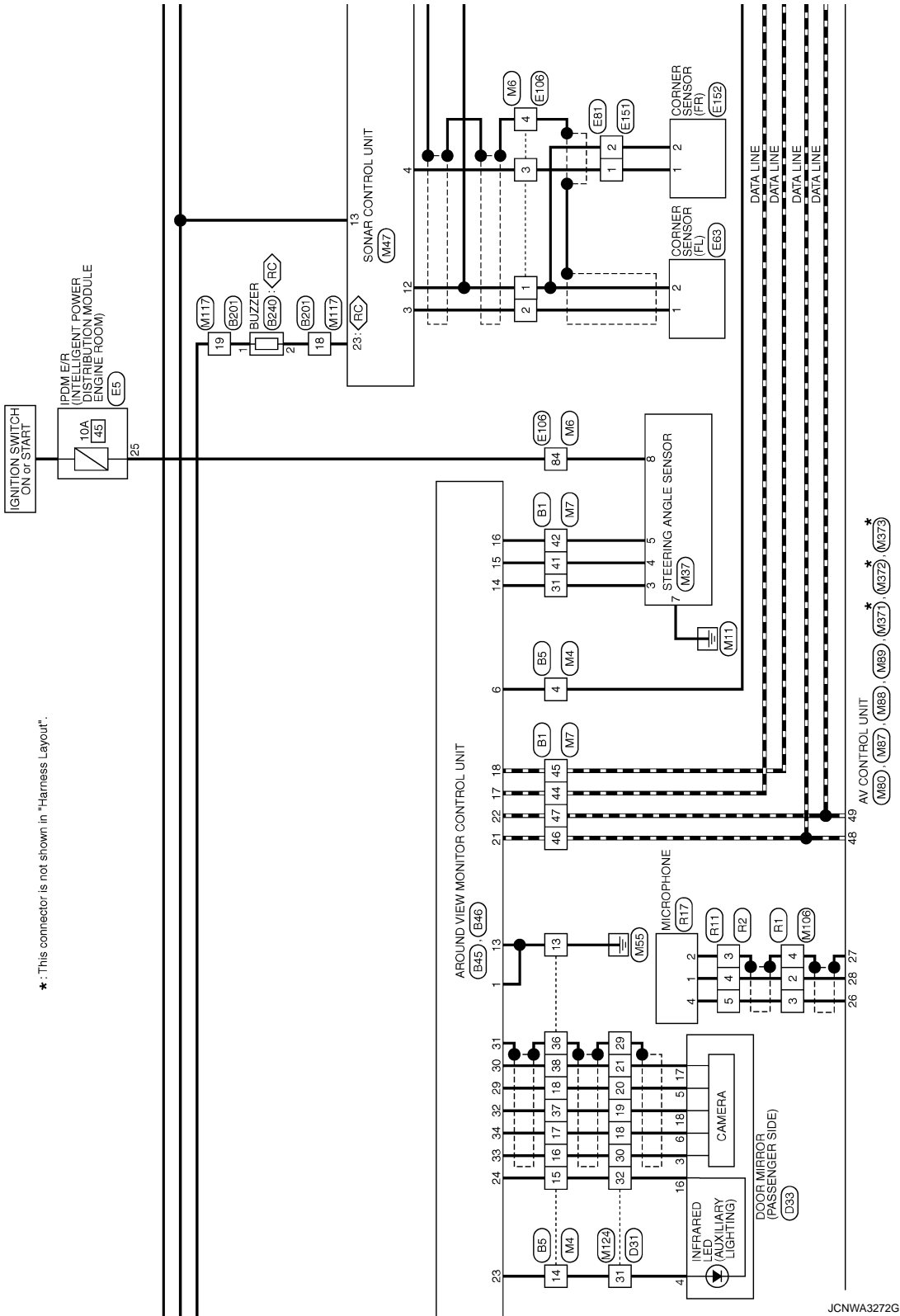
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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

◁ RC ▷ : Up to vehicles manufactured on November 2008

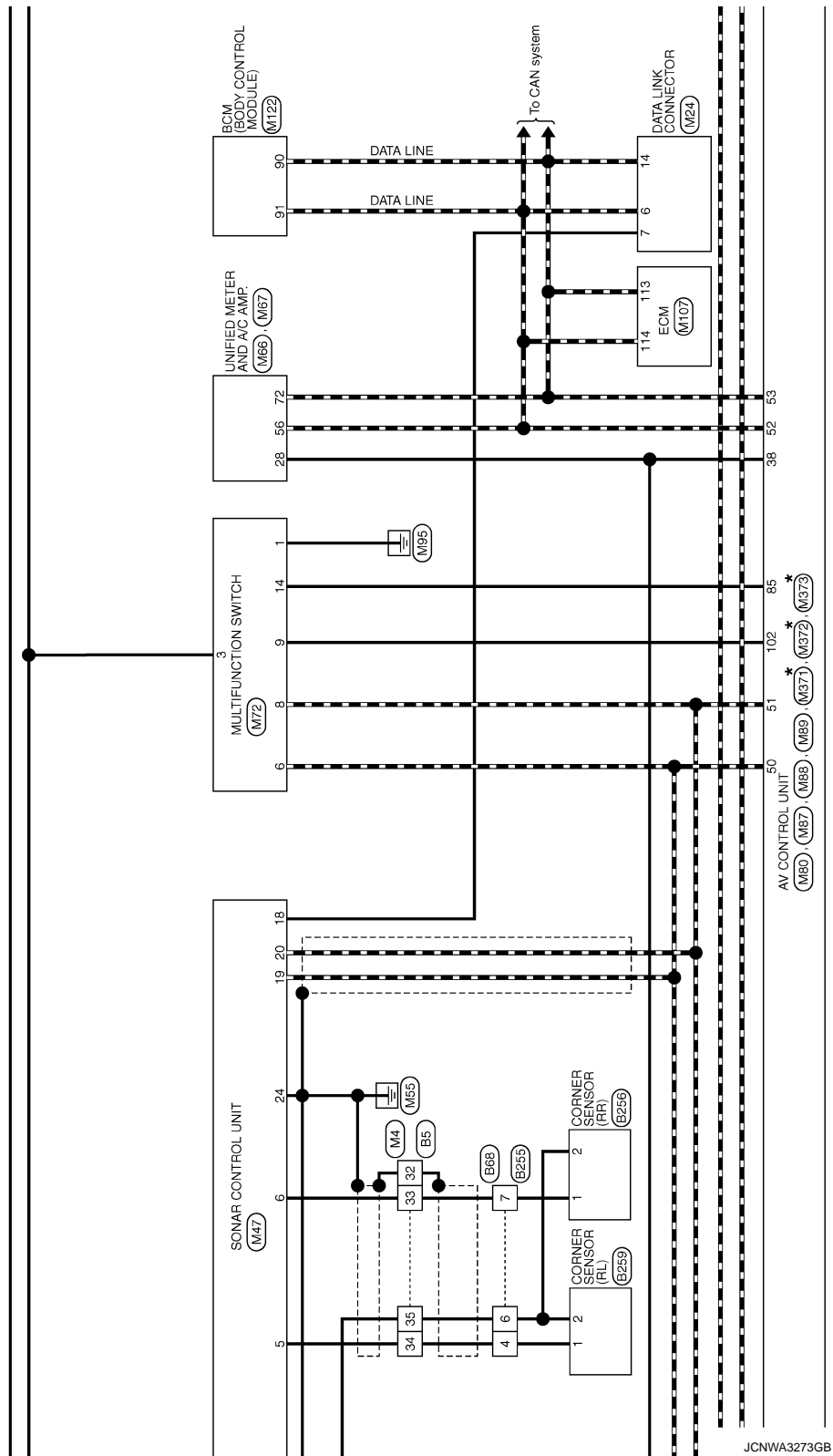


SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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



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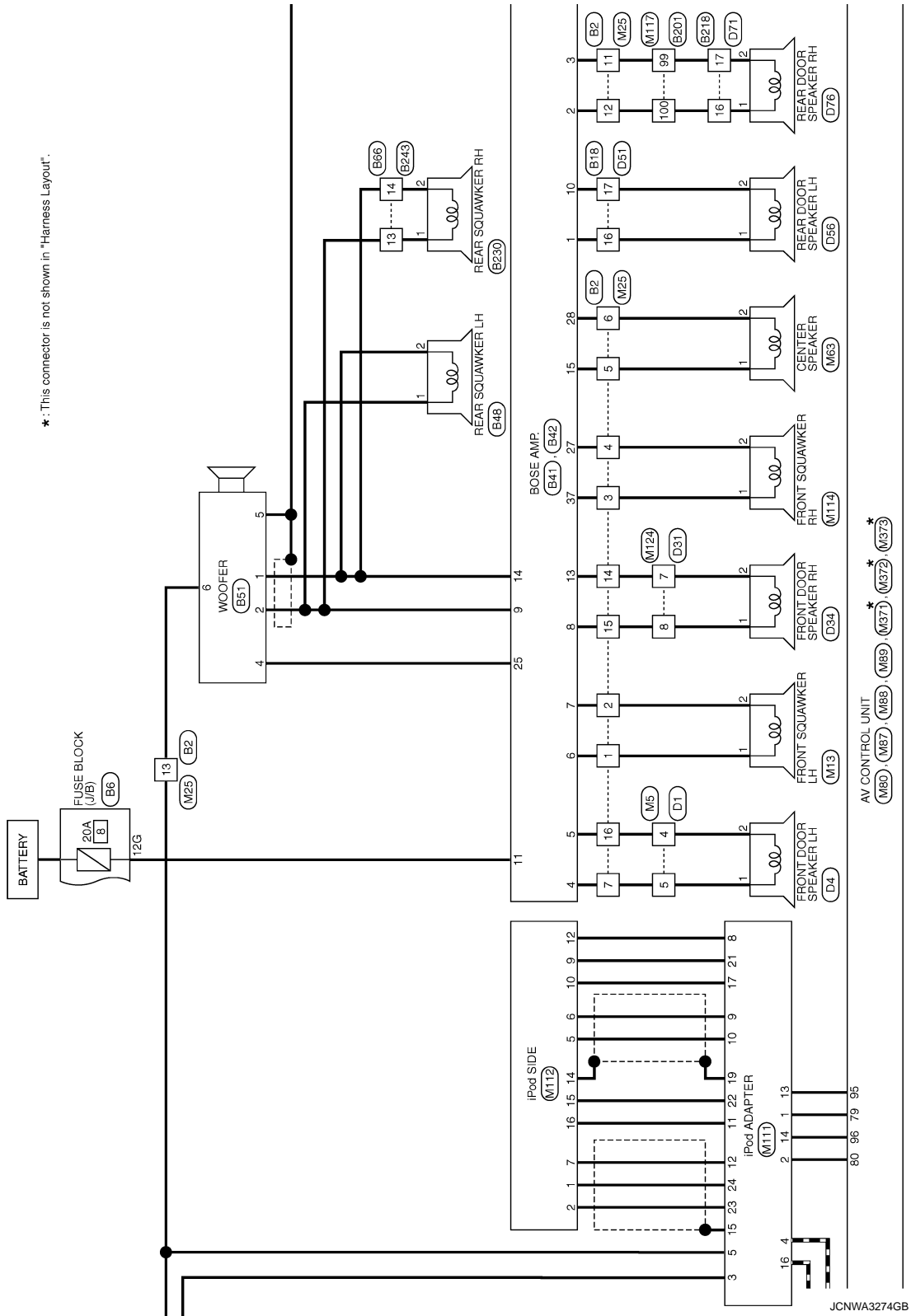
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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



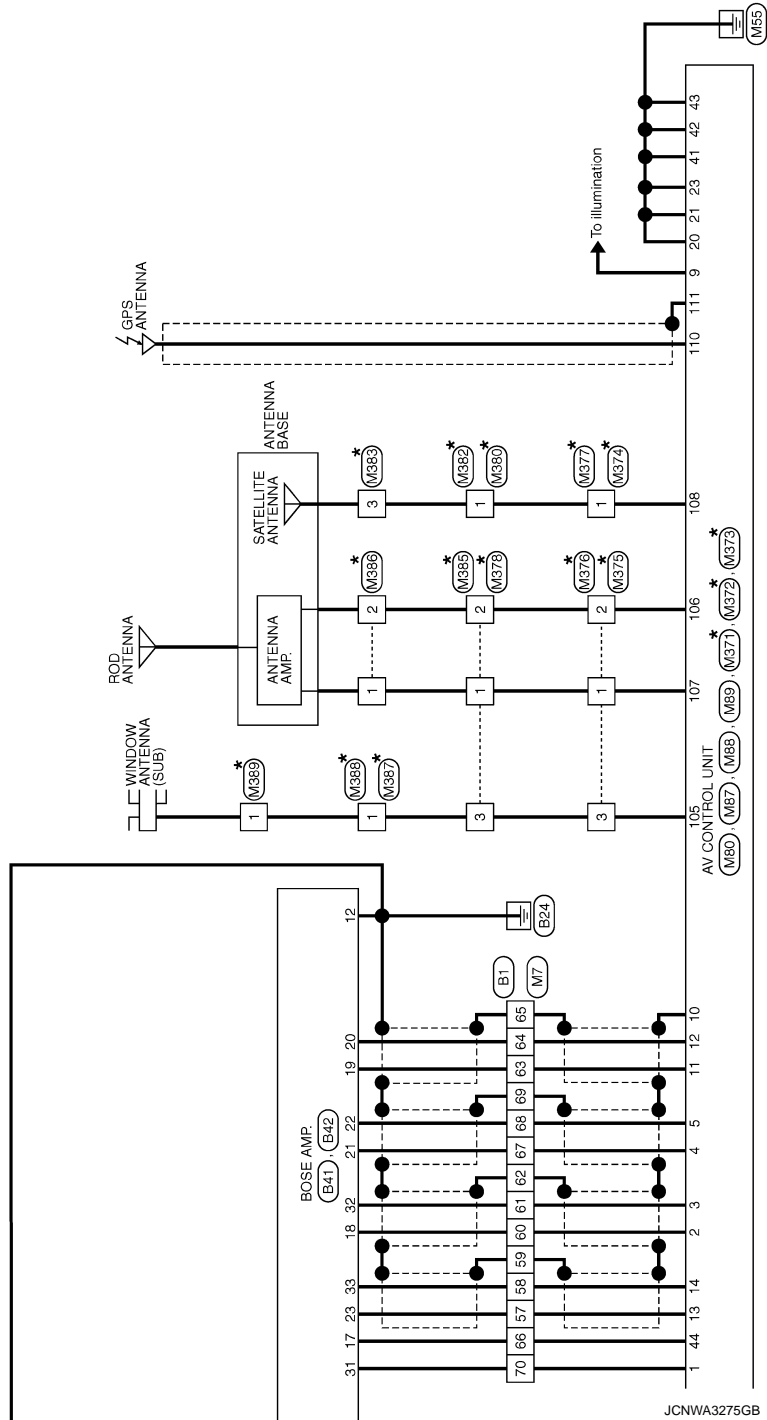
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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

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



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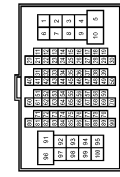
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	G	-- [With around view monitor]
45	Y	-- [With around view monitor]
46	W	-- [With around view monitor]
47	B	-- [With around view monitor]
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	V	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
90	O	-



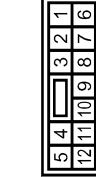
Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	R	-
5	B	-
6	G	-
7	B	-
11	V	-
12	SB	-
13	W	-
14	Y	-

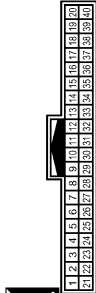
15	LG	-
16	P	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS12PW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	G	-
4	SHIELD	-
7	Y	-
8	R	-

Connector No.	B5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	GR	-
4	SB	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
23	SHIELD	-

26	L	-
27	R	-
28	W	-
29	Y	-
30	BR	-
31	O	-
32	SHIELD	-
33	W	-
34	R	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	12G	Y
Color of Wire		
Signal Name [Specification]		

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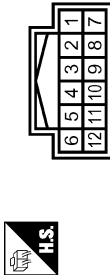
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

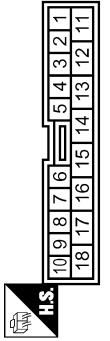
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B14
Connector Name	WIRE TO WIRE
Connector Type	TH12PW-RH



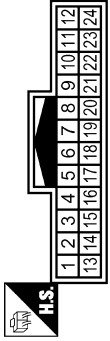
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TK10PW-NSB



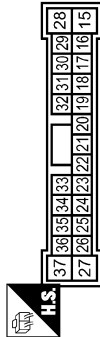
Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH24MM-RH



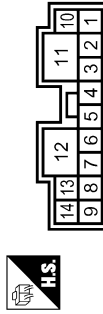
Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	-
14	R	- [With around view monitor]
15	Y	- [With around view monitor]
16	W	- [With around view monitor]
17	L	- [With around view monitor]
18	SHIELD	-

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	SCA19FBR-SGA4



Terminal No.	Color of Wire	Signal Name [Specification]
15	B	SOUND SIGNAL CENTER (+)
17	O	MODE CHANGE SIGNAL
18	P	SOUND SIGNAL FRONT LH (+)
19	R	SOUND SIGNAL FRONT RH (+)
20	G	SOUND SIGNAL FRONT RH (-)
21	V	SOUND SIGNAL REAR LH (+)
22	SB	SOUND SIGNAL REAR LH (-)
23	BR	SOUND SIGNAL REAR RH (+)
25	GR	WOOFER AMP. ON SIGNAL
27	R	SOUND SIGNAL FRONT SQUAWKER RH (-)
28	G	SOUND SIGNAL CENTER (-)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SCA12FBR-SJA2



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

12	B	GND
13	Y	SOUND SIGNAL FRONT DOOR SPEAKER RH (+)
14	R	SOUND SIGNAL WOOFER (-)

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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B45
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH24FW-NH



42	44	46	48	50	52	54	56	58	60	62	64
41	43	45	47	49	51	53	55	57	59	61	63

Terminal No.	Color of Wire	Signal Name [Specification]
41	Y	FRONT CAMERA IMAGE SIGNAL
42	G	FRONT CAMERA IMAGE GND
43	SHIELD	SHIELD
44	B	FRONT CAMERA GND
45	W	FRONT CAMERA COMM
46	R	FRONT CAMERA POWER SUPPLY
47	L	SIDE CAMERA LH COMM
48	BR	SIDE CAMERA LH POWER SUPPLY
49	SHIELD	SHIELD
50	R	SIDE CAMERA LH GND
51	Y	SIDE CAMERA LH IMAGE SIGNAL



2	1
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Connector No.	B48
Connector Name	REAR SQUAWKER LH
Connector Type	TK02FBR

Connector No.	B51
Connector Name	WOOFER
Connector Type	RS08FGY-PR



2	4	6
1	3	5

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	SOUND SIGNAL_WOOFER (-)
2	G	SOUND SIGNAL_WOOFER (+)
4	GR	WOOFER AMP_ON SIGNAL
5	B	GND
6	W	BATTERY

Connector No.	B46
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH40FW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	P	IGNITION
4	GR	ACC
5	O	ILLUMINATION
6	SB	VEHICLE SPEED (3-PULSE)
7	G	REVERSE
13	B	CONTROL SIGNAL
14	L	SENSOR SIGNAL 1
15	BR	SENSOR SIGNAL 2
16	R	SENSOR SIGNAL 3

Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MMV-NH



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]
13	L	-
14	W	-

17	G	AV COMM (H)
18	Y	AV COMM (L)
21	W	AV COMM (H)
22	B	AV COMM (L)
23	LG	LED (+)
24	G	LED (-)
27	W	CAMERA IMAGE SIGNAL
28	SHIELD	CAMERA IMAGE GND
29	Y	SIDE CAMERA RH IMAGE SIGNAL
30	G	SIDE CAMERA RH IMAGE GND
31	SHIELD	SHIELD
32	B	SIDE CAMERA RH GND
33	W	SIDE CAMERA RH COMM
34	R	SIDE CAMERA RH POWER SUPPLY
35	L	REAR CAMERA COMM
36	BR	REAR CAMERA POWER SUPPLY
37	SHIELD	SHIELD
38	R	REAR CAMERA GND
39	Y	REAR CAMERA IMAGE SIGNAL
40	W	REAR CAMERA IMAGE GND

Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	FR008MB



1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-
6	B	-
7	W	-

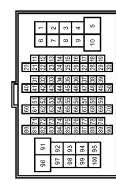
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]


BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
18	GR	-
19	P	-
99	O	- [With BOSE audio]
100	L	-

Connector No.	B218
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NS8




Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	O	- [With BOSE audio]

Connector No.	B230
Connector Name	REAR SQUAWKER RH
Connector Type	TK02FBR




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

Connector No.	B240
Connector Name	BUZZER
Connector Type	TK02FBR



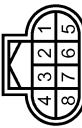
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	GR	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
13	L	-
14	W	-

Connector No.	B255
Connector Name	WIRE TO WIRE
Connector Type	RH08FB




Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
6	B	-
7	R	-

Connector No.	B256
Connector Name	CORNER SENSOR (RR)
Connector Type	YDX02FB



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

Connector No.	B259
Connector Name	CORNER SENSOR (RL)
Connector Type	YDX02FB



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

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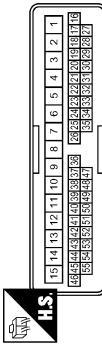
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
4	W	-
5	L	-
16	R	-
17	W	-
18	G	-
19	Y	-
27	B	-
28	SHIELD	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



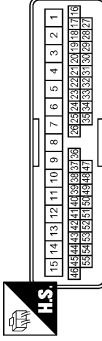
Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
5	Y	-
6	R	-
17	G	-
18	W	-

Connector No.	D4
Connector Name	FRONT DOOR SPEAKER LH (WITH BOSE SYSTEM)
Connector Type	NS30ZFB-R-GS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	BR	-
18	R	-
19	Y	-
20	B	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	BR	-

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH



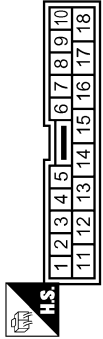
Terminal No.	Color of Wire	Signal Name [Specification]
3	W	-
4	LG	-
5	B	-
6	R	-
16	BR	-
17	G	-
18	Y	-

Connector No.	D34
Connector Name	FRONT DOOR SPEAKER RH (WITH BOSE SYSTEM)
Connector Type	NS30ZFB-R-GS



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

Connector No.	DE1
Connector Name	WIRE TO WIRE
Connector Type	TK10MK-NS



Terminal No.	Color of Wire	Signal Name [Specification]
16	Y	- [With BOSE audio]
17	G	- [With BOSE audio]

Connector No.	D56
Connector Name	REAR DOOR SPEAKER LH
Connector Type	NS30ZFB-R-GS



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

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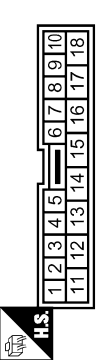
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	TK-0MW-NSB



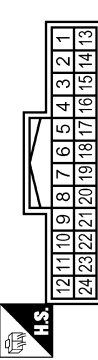
Terminal No.	Color of Wire	Signal Name [Specification]
16	L	-
17	Y	-

Connector No.	D76
Connector Name	REAR DOOR SPEAKER RH
Connector Type	NS02FER-CS



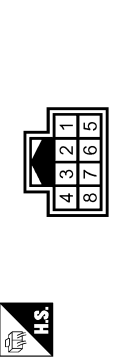
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	Y	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



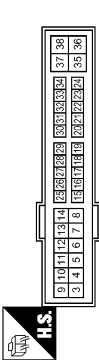
Terminal No.	Color of Wire	Signal Name [Specification]
13	R	-
14	L	- [With around view monitor]
15	Y	-
16	G	- [With around view monitor]
17	W	-
18	SHIELD	-

Connector No.	D111
Connector Name	REAR CAMERA
Connector Type	TH08MF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	REAR CAMERA IMAGE GND
4	W	REAR CAMERA COMM
5	Y	REAR CAMERA IMAGE SIGNAL
7	L	REAR CAMERA GND
8	R	REAR CAMERA POWER SUPPLY

Connector No.	E5
Connector Name	PCM & B (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH02FW-CS12-MF-1V



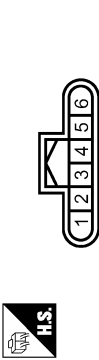
Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E6B
Connector Name	CORNER SENSOR (FL)
Connector Type	YD002FB



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

Connector No.	E73
Connector Name	FRONT CAMERA
Connector Type	FR005FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	FRONT CAMERA POWER SUPPLY
2	BR	FRONT CAMERA GND
3	Y	FRONT CAMERA IMAGE SIGNAL
4	L	FRONT CAMERA IMAGE GND
6	W	FRONT CAMERA COMM

Connector No.	E81
Connector Name	WIRE TO WIRE
Connector Type	RS02MB



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

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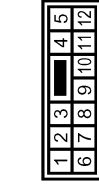
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

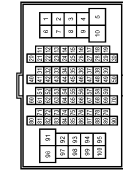
[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS



Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	1E81FW



Connector No.	E151
Connector Name	WIRE TO WIRE
Connector Type	RS02FB



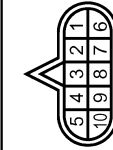
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	B	

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	
2	BR	
3	L	
4	SHIELD	
7	Y	
8	R	

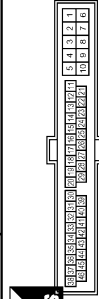
Connector No.	E102
Connector Name	CORNER SENSOR (FR)
Connector Type	YD02FB



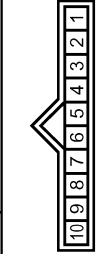
Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



Connector No.	F151
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FBGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	O	REV LAMP RLY

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

Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

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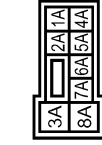
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

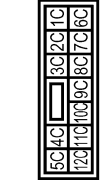
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



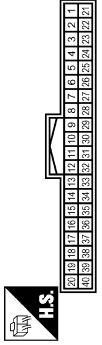
Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	V	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

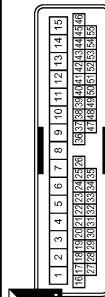
Connector No.	M4
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	P	-
3	V	-
4	V	-
13	B	-
14	LG	-
15	G	-
16	W	-
17	R	-
18	Y	-
25	SHIELD	-

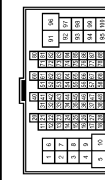
26	W	-
27	B	-
28	G	-
29	Y	-
30	R	-
31	R	-
32	SHIELD	-
33	R	-
34	W	-
35	B	-
36	SHIELD	-
37	B	-
38	G	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH00MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
4	P	-
5	L	-
16	R	-
17	B	-
18	G	-
19	Y	-
23	W	-
28	SHIELD	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	W	-
4	SHIELD	-
59	V	-
84	G	-
93	Y	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	L	-
41	BR	-
42	R	-
44	LG	-
45	V	-
46	G	-
47	R	-
57	BR	-
58	Y	-
59	SHIELD	-
60	P	-

61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	V	-
90	O	-

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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

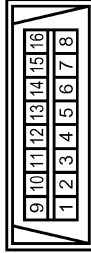
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M13
Connector Name	FRONT SQUAWKER LH
Connector Type	TK02FBR



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
7	V	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MM-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	Y	-
6	G	-
7	L	-
11	V	-
12	SB	-
13	Y	-
14	Y	-

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-IV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FPV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	R	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M47
Connector Name	SONAR CONTROL UNIT
Connector Type	TH12FPV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	R	CORNER SENSOR FRONT LH
4	W	CORNER SENSOR FRONT RH
5	W	CORNER SENSOR REAR LH
6	R	CORNER SENSOR REAR RH
12	B	SENSOR GND
13	V	ACC
18	O	K LINE
19	G	AV COMM (H)
20	B	AV COMM (L)
23	GR	BUZZER
24	B	GND

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



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

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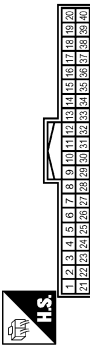
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS30FL-ME-LC



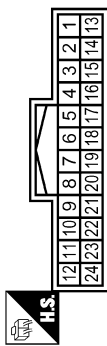
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	V	ACC
6	LG	AV COMM (H)
8	V	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

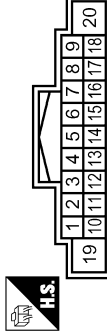
Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	V	ACC
4	SHIELD	SHIELD
5	R	AUX IMAGE GND
6	W	RGB (G, GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (VS) SIGNAL
11	BR	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
13	B	GND
14	SHIELD	COMPZ GND
15	G	AUX IMAGE SIGNAL
17	B	RGB (R, RED) SIGNAL
18	R	RGB (B, BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	Y	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	AMP. ON SIGNAL
2	P	SOUND SIGNAL FRONT LH (+)
3	L	SOUND SIGNAL FRONT LH (-)
4	V	SOUND SIGNAL REAR LH (+)
5	LG	SOUND SIGNAL REAR LH (-)
6	P	STRG SW A
7	V	ACC
8	R	ILLUMINATION
10	V	SHIELD
11	R	SOUND SIGNAL FRONT RH (+)
12	G	SOUND SIGNAL FRONT RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
13	BR	SOUND SIGNAL REAR RH (+)
14	Y	SOUND SIGNAL REAR RH (-)
15	B	STRG SW GND
16	L	STRG SW B
19	Y	BATTERY
20	B	GND

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AV

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH10PW-NH



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	101	102	103	104
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Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
35	G	IGNITION
36	V	PARKING BRAKE
37	O	REVERSE

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



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	101	102	103	104
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Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	R	AUX SOUND SIGNAL LH (+)
88	W	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	B	AUX SOUND SIGNAL RH (+)

38	R	VEHICLE SPEED (8-PULSE)
41	B	CONTROL SIGNAL 1
42	B	CONTROL SIGNAL 2
43	GR	CONTROL SIGNAL 3
44	SB	MODE CHANGE SIGNAL
48	G	AV COMM (H)
49	R	AV COMM (L)
50	LG	AV COMM (H)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12PW-NH



62	64	66	68	70	72
61	63	65	67	69	71

Terminal No.	Color of Wire	Signal Name [Specification]
61	B	RGB (R, RED) SIGNAL
62	W	RGB (G, GREEN) SIGNAL
63	R	RGB (B, BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (VS) SIGNAL
68	R	HP
69	W	VP
70	BR	COMM (CONT-2DISP)
71	Y	COMM (DISP-2CONT)

Connector No.	M107
Connector Name	ECM
Connector Type	FR24FGY-R25-R-LH-Z



128	124	120	116	112	108	104	100
127	123	119	115	111	107	103	99
126	122	118	114	110	106	102	98
125	121	117	113	109	105	101	97

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M105
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18		

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

72	SHIELD	SHIELD
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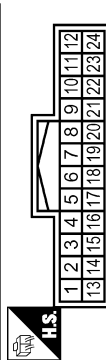
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

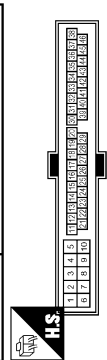
BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M111
Connector Name	I-Pod ADAPTER
Connector Type	TH4FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	I-Pod SOUND SIGNAL LH (+)
2	B	I-Pod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (I-Pod ADAPTER->I-Pod)
10	L	COMM (I-Pod->I-Pod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	R	I-Pod SOUND SIGNAL RH (+)
13	W	I-Pod SOUND SIGNAL LH (-)

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK6MW-NS10

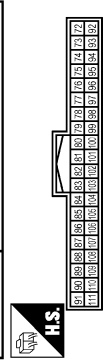


Terminal No.	Color of Wire	Signal Name [Specification]
31	W	-

14	G	I-Pod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	I-Pod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	W	I-Pod SOUND SIGNAL GND
24	B	I-Pod SOUND SIGNAL LH (+)

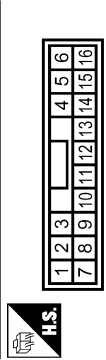
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	I-Pod SOUND SIGNAL LH (+)
2	W	I-Pod SOUND SIGNAL GND
5	L	COMM (I-Pod->I-Pod ADAPTER)
6	P	COMM (I-Pod ADAPTER->I-Pod)
7	R	I-Pod SOUND SIGNAL RH (+)
9	W	I-Pod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



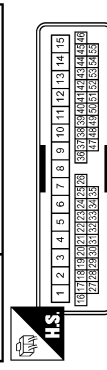
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M112
Connector Name	I-Pod SIDE
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	- [With BOSE audio]
2	LG	- [With BOSE audio]

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
18	R	-
19	B	-
20	Y	- [With around view monitor]
21	G	- [With around view monitor]
29	SHIELD	-
30	W	-
31	LG	-
32	G	-

Connector No.	M114
Connector Name	FRONT SOUAWKER RH
Connector Type	TK02FBR



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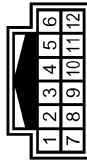
SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M144
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	-
6	W	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS
Connector Type	A0BEW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	AUX SOUND SIGNAL RH (+)
2	W	AUX SOUND SIGNAL GND
3	R	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	1K08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	W	-
15	L	-
17	BR	-

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT1SSH-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
105	-	FM SUB
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FARRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SAETLLITE ANTENNA

Connector No.	M373
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT5-IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
110	-	GPS ANTENNA
111	SHIELD	SHIELD

Connector No.	M374
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IS-HU



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

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT1SSC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



BOSE AUDIO WITH NAVIGATION AND AROUND VIEW MONITOR

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M377
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IPP-HU



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

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SC-2/IS-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M380
Connector Name	WIRE TO WIRE
Connector Type	GT16-IS-HU



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

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	GT16C-IPP-HU



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

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	GT16C-IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	SAETLLITE ANTENNA

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SCN-2/IPP-HU

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-

Connector No.	M386
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/IPP-HU

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

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SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

DTC Index

INFOID:000000004506746

DTC	Display item	Malfunction is detected when...	Reference
B2700	CORNER SENSOR [FL] [B2700]	Corner sensor front left is malfunctioning.	AV-269
B2701	SENSOR HARNESS OPEN [CR-FL] [B2701]	Corner sensor front left harness circuit is open.	AV-270
B2702	CORNER SENSOR [FR] [B2702]	Corner sensor front right is malfunctioning.	AV-271
B2703	SENSOR HARNESS OPEN [CR-FR] [B2703]	Corner sensor front right harness circuit is open.	AV-272
B2704	CORNER SENSOR [RL] [B2704]	Corner sensor rear left is malfunctioning.	AV-273
B2705	SENSOR HARNESS OPEN [CR-RL] [B2705]	Corner sensor rear left harness circuit is open.	AV-274
B2706	CORNER SENSOR [RR] [B2706]	Corner sensor rear right is malfunctioning.	AV-275
B2707	SENSOR HARNESS OPEN [CR-RR] [B2707]	Corner sensor rear right harness circuit is open.	AV-276

NOTE:

"TIME" means the following.

- 0: Means detected malfunction at present. (From malfunction detection to turning ignition switch OFF)
- 1–39: Means detected malfunction in past.

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AV

MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

SYMPTOM DIAGNOSIS

MULTI AV SYSTEM SYMPTOMS

Symptom Table

INFOID:000000004347970

RELATED TO NAVIGATION

Symptoms	Check items	Possible malfunction location / Action to take
Multifunction switch and preset switch operation does not work.	<ul style="list-style-type: none"> All switches cannot be operated. "MULTI AV" is displayed on system selection screen when the CONSULT-III is started. 	<ul style="list-style-type: none"> Multifunction switch power supply and ground circuit. AV communication circuit between AV control unit and multifunction switch. Perform CONSULT-III self-diagnosis. Refer to AV-233, "CONSULT-III Function (MULTI AV)" .
	<ul style="list-style-type: none"> All switches cannot be operated. "MULTI AV" is not displayed on system selection screen when the CONSULT-III is initialized. 	AV control unit power supply and ground circuit malfunction. Refer to AV-277, "AV CONTROL UNIT : Diagnosis Procedure" .
	Only specified switch cannot be operated.	Multifunction switch or preset switch malfunction. Perform multifunction switch and preset switch self-diagnosis function. Refer to AV-217, "Diagnosis Description" .
Fuel economy display, vehicle setting operation is abnormal.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to AV-233, "CONSULT-III Function (MULTI AV)" .
	There is no malfunction in the self-diagnosis results.	Ignition signal circuit malfunction. Refer to AV-277, "AV CONTROL UNIT : Diagnosis Procedure" .
Guide sound is not heard.	On the setting display select "system sound (guide sound volume, etc.)," and confirm that guide sound is ON.	AV control unit malfunction. Replace AV control unit. Refer to AV-575, "Exploded View" .

RELATED TO HANDS-FREE PHONE

- Check that the cellular phone is corresponding type (Bluetooth® correspond) when the hands-free related malfunction vehicle is in service before performing a diagnosis.
- There is a case that malfunction occurs due to the version change of the phone type, etc. even though it is a corresponding type. Therefore, confirm it by changing the cellular phone to another corresponding type phone, and check that it operates normally. It is necessary to distinguish whether the cause is the vehicle or cellular phone.

Simple Check for Bluetooth® Communication

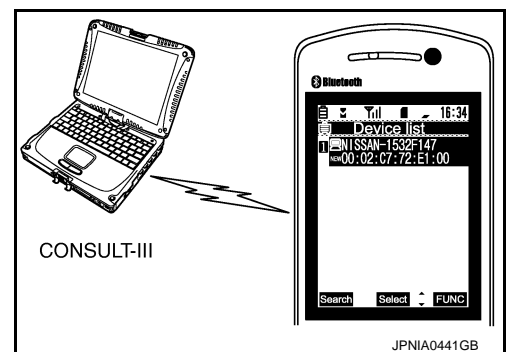
If cellular phone and AV control unit cannot be connected with Bluetooth® communication, following procedure allows the technician to judge which device has malfunction.

- 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 malfunctioning. Repair the cellular phone first, then perform diagnosis.
- If CONSULT-III is displayed on device name, cellular phone is normal. Perform diagnosis as per the following table.



Trouble Diagnosis Chart by Symptom

MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location	
Does not recognize cellular phone connection. (no connection is displayed on the display at the guide.)	Repeat the registration of cellular phone.	AV control unit malfunction. Replace AV control unit. Refer to AV-575, "Exploded View" .	A B
Hands-free phone cannot be established.	<ul style="list-style-type: none"> Hands-free phone operation can be made, but the communication cannot be established. Hands-free phone operation can be performed, however, voice between each other cannot be heard during the conversation. 	AV control unit malfunction. Replace AV control unit. Refer to AV-575, "Exploded View" .	C D
The other party's voice cannot be heard by hands-free phone.	Check the "microphone speaker" in "Confirmation/Adjustment" mode if sound is heard.	AV control unit malfunction. Replace AV control unit. Refer to AV-575, "Exploded View" .	E
	Check the "microphone speaker" in "Confirmation/Adjustment" mode if sound is not heard.	AV control unit malfunction. Replace AV control unit. Refer to AV-575, "Exploded View" .	F
Originating sound is not heard by the other party with hands-free phone communication.	Sound operation function is normal.	AV control unit malfunction. Replace AV control unit. Refer to AV-575, "Exploded View" .	G
	Sound operation function does not work.	Microphone signal circuit malfunction. Refer to AV-293, "Diagnosis Procedure" .	H

RELATED TO REAR VIEW MONITOR

Symptoms	Check items	Probable malfunction location	
Camera image is not displayed (displayed in black and nothing can be displayed)	AUX image is not displayed.	<ul style="list-style-type: none"> Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to AV-288, "Diagnosis Procedure" Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-289, "Diagnosis Procedure". 	I J
Camera image is not shown. (Guiding line is displayed.)	—	<ul style="list-style-type: none"> Camera image signal circuit between camera control unit and rear view camera. Rear view camera power supply circuit. Refer to AV-295, "Diagnosis Procedure". 	K L
Camera image is not displayed. (Only warning message under area is displayed.)	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to AV-233, "CONSULT-III Function (MULTI AV)" .	M
	AUX image is normal.	Camera image signal circuit malfunction between camera control unit and display unit. Refer to AV-297, "WITH REAR VIEW MONITOR : Diagnosis Procedure" .	AV
	AUX image is not displayed.	RGB area (YS) signal circuit malfunction between AV control unit and display unit. Refer to AV-287, "Diagnosis Procedure" .	
	Select "Camera Cont." of "Confirmation/Adjustment" mode, Reverse Sensor is not turned ON at "Connection Confirmation".	Reverse signal circuit (camera control unit).	O
Camera image is rolling.	AUX image is also rolling.	Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-289, "Diagnosis Procedure" .	P

MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location
Camera image does not switch.	Malfunction of self-diagnosis result is indicated.	Camera-connection recognition signal circuit Refer to AV-233, "CONSULT-III Function (MULTI AV)" .
	Malfunction of self-diagnosis result is not indicated.	Reverse signal circuit (AV control unit).
Possible route line is indicated abnormally when camera image is displayed.	—	Sensor signal circuit malfunction. Refer to AV-300, "WITH REAR VIEW MONITOR : Diagnosis Procedure" .

RELATED TO AROUND VIEW MONITOR

Symptoms	Check items	Probable malfunction location / Action to take
It does not switch to camera image even when the "CAMERA" switch is pressed or the selector lever is in the reverse position.	"Camera Cont." of "Confirmation/Adjustment" can be selected.	Ignition signal circuit.
	"Camera Cont." of "Confirmation/Adjustment" cannot be selected.	<ul style="list-style-type: none"> • Around view monitor control unit power supply and ground circuits. Refer to AV-280, "AROUND VIEW MONITOR CONTROL UNIT : Diagnosis Procedure". • AV communication circuits. Refer to AV-233, "CONSULT-III Function (MULTI AV)".
The screen switches when pressing the "CAMERA" switch or shifting the selector lever to the reverse position, however, all views are not displayed.	Only superimposing is displayed. (Only the image displayed by AV control unit is displayed)	<ul style="list-style-type: none"> • Camera image signal circuit between around view monitor control unit and display unit. Refer to AV-280, "AROUND VIEW MONITOR CONTROL UNIT : Diagnosis Procedure". • RGB (YS) area signal circuit. Refer to AV-287, "Diagnosis Procedure".
	Superimposing is not displayed.	<p>Communication circuit between AV control unit and display unit. Refer to AV-233, "CONSULT-III Function (MULTI AV)".</p> <p>When detecting no malfunction in those components, the following items are a possible cause.</p> <ul style="list-style-type: none"> • Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to AV-288, "Diagnosis Procedure". • Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-289, "Diagnosis Procedure".
Camera image is rolling.	AUX image is rolling	<ul style="list-style-type: none"> • Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to AV-288, "Diagnosis Procedure". • Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to AV-289, "Diagnosis Procedure".
It cannot be switched to rear view monitor even when the selector lever is in the reverse position.	The front view is displayed normally.	Reverse signal circuit. (AV control unit)

MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location / Action to take
The predicted course line display in front view and rear view is malfunctioning.	The "Steer. Angle Sensor" is not turned ON at "Connection Confirmation" of "Camera Cont."	Steering angle sensor signal circuits. Refer to AV-300, "WITH REAR VIEW MONITOR : Diagnosis Procedure" .
<ul style="list-style-type: none"> The front view screen is not displayed. The front of Birds-Eye view screen is not displayed. 	Check the item Front Camera in "Connection Confirmation" mode of "Camera Cont."	<ul style="list-style-type: none"> Image Output Signal: NG COMM Status: NG COMM Line: NG <ul style="list-style-type: none"> Front camera image signal circuit. Front camera power supply and ground circuits. Refer to AV-311, "Diagnosis Procedure"
		<ul style="list-style-type: none"> Image Output Signal: OK COMM Status: NG COMM Line: NG Front camera communication signal circuit. Refer to AV-310, "Diagnosis Procedure" .
<ul style="list-style-type: none"> The rear view screen is not displayed. The rear of Birds-Eye view screen is not displayed. 	Check the item Rear Camera in "Connection Confirmation" mode of "Camera Cont."	<ul style="list-style-type: none"> Image Output Signal: NG COMM Status: NG COMM Line: NG <ul style="list-style-type: none"> Rear camera image signal circuit. Rear camera power supply and ground circuits. Refer to AV-314, "Diagnosis Procedure" .
		<ul style="list-style-type: none"> Image Output Signal: OK COMM Status: NG COMM Line: NG Rear camera communication signal circuits. Refer to AV-313, "Diagnosis Procedure" .
<ul style="list-style-type: none"> The front-side screen is not displayed. The side RH of Birds-Eye view screen is not displayed. 	Check the item Pass-Side Camera in "Connection Confirmation" mode of "Camera Cont."	<ul style="list-style-type: none"> Image Output Signal: NG COMM Status: NG COMM Line: NG <ul style="list-style-type: none"> Side camera RH image signal circuit. Side camera RH power supply and ground circuits. Refer to AV-320, "Diagnosis Procedure" .
		<ul style="list-style-type: none"> Image Output Signal: OK COMM Status: NG COMM Line: NG Side camera RH communication circuit. Refer to AV-319, "Diagnosis Procedure" .
The side LH of Birds-eye view screen is not displayed.	Check the item Dr-Side Camera at "Connection Confirmation" mode of "Camera Cont."	<ul style="list-style-type: none"> Image Output Signal: NG COMM Status: NG COMM Line: NG <ul style="list-style-type: none"> Side camera LH image signal circuit. Side camera LH power supply and ground circuits. Refer to AV-317, "Diagnosis Procedure" .
		<ul style="list-style-type: none"> Image Output Signal: OK COMM Status: NG COMM Line: NG Side camera LH communication circuit. Refer to AV-316, "Diagnosis Procedure" .
When shift position is other than "R" the front-side and front screen or the Birds-Eye view and front screen remain displaying even if the vehicle speed increases.	—	Vehicle speed signal (around view monitor control unit).
Around view monitor does not start other than shift position "R"	—	Certain States restrict the operation so that around view monitor does not start other than at shift position "R".

RELATED TO CAMERA ASSISTANCE SONAR

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MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location / Action to take
The malfunction is detected in the sonar indicator (Always displayed in red)	The malfunction is detected in only 1 indicator (Always displayed in red)	<ul style="list-style-type: none"> Corner sensor malfunction in corresponding area Corner sensor harness circuit in corresponding area Perform CONSULT-III self-diagnosis of sonar system. Refer to AV-240, "CONSULT-III Function (SONAR)" .
	The malfunction is detected in all 4 indicators (Always displayed in red)	<ul style="list-style-type: none"> Corner sensor ground circuit. Perform CONSULT-III self-diagnosis of sonar system. Refer to AV-240, "CONSULT-III Function (SONAR)" . <ul style="list-style-type: none"> Sonar control unit power supply and ground circuits. AV communication circuits. Perform CONSULT-III self-diagnosis of multi AV system. Refer to AV-233, "CONSULT-III Function (MULTI AV)" .
The sonar indicator is normal, but the buzzer does not sound (Up to vehicles manufactured on November 2008)	The buzzer is turned ON when performing "Buzzer" in "Active test" of "Sonar".	Replace sonar control unit. Refer to AV-601, "Exploded View"
	The buzzer is not turned ON when performing "Buzzer" in "Active test" of "Sonar".	Replace buzzer. Refer to AV-604, "Exploded View" .
The sonar indicator is normal, but the buzzer does not sound (From vehicles manufactured on December 2008)	—	Replace sonar control unit. Refer to AV-601, "Exploded View"

RELATED TO RGB IMAGE

Symptoms	Check items	Possible malfunction location / Action to take
RGB image is not shown.	<ul style="list-style-type: none"> All RGB images are not shown. "MULTI AV" is displayed on system selection screen when the CONSULT-III is started. 	Perform CONSULT-III self-diagnosis. Refer to AV-233, "CONSULT-III Function (MULTI AV)" .
	<ul style="list-style-type: none"> All RGB images are not shown. "MULTI AV" is not displayed on system selection screen when the CONSULT-III is started. 	AV control unit power supply and ground circuit malfunction. Refer to AV-277, "AV CONTROL UNIT : Diagnosis Procedure" .
Color of RGB image is not proper.	Light blue (Cyan) tint.	RGB signal (R: red) circuit malfunction between AV control unit and display unit. Refer to AV-283, "Diagnosis Procedure" .
	Purple (Magenta) tint.	RGB signal (G: green) circuit malfunction between AV control unit and display unit. Refer to AV-284, "Diagnosis Procedure" .
	Screen looks yellowish.	RGB signal (B: blue) circuit malfunction between AV control unit and display unit. Refer to AV-285, "Diagnosis Procedure" .
RGB screen is rolling.	—	RGB synchronizing signal circuit malfunction between AV control unit and display unit. Refer to AV-286, "Diagnosis Procedure" .

RELATED TO VOICE CONTROL

MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location	
The voice cannot be controlled even if the voice control screen is displayed.	Voice sounds at "Voice Microphone Test" of Confirmation/Adjustment mode.	AV control unit malfunction. Replace AV control unit. Refer to AV-575, "Exploded View" .	A
	Voice does not sound at "Voice Microphone Test" of Confirmation/Adjustment mode.	Microphone circuit malfunction. Refer to AV-293, "Diagnosis Procedure" .	B
The voice cannot be controlled (Voice control screen is not displayed).	Steering switch "SOURCE", "MENU UP", "MENU DOWN", "ENTER" operates, but "⏪" does not operate.	Steering switch malfunction. Replace steering switch.	C
	Steering switch's "SOURCE", "MENU UP", "MENU DOWN", "⏪", "ENTER" does not operate.	Steering switch signal A circuit malfunction. Refer to AV-304, "Diagnosis Procedure" .	D
	All steering switches do not work.	Steering switch signal GND circuit malfunction. Refer to AV-308, "Diagnosis Procedure" .	E

RELATED TO AUDIO

Symptoms	Check items	Possible malfunction location / Action to take	
The disk cannot be removed.	—	Disk eject signal circuit malfunction between AV control unit and preset switch. Refer to AV-292, "Diagnosis Procedure" .	G
Audio sound is not heard.	No sound from all speakers.	<ul style="list-style-type: none"> Amp. ON signal circuit. BOSE amp. power supply and ground circuits. Refer to AV-279, "BOSE AMP. : Diagnosis Procedure" .	H
	Sound is not heard from woofer.	<ul style="list-style-type: none"> Woofer power supply and ground circuits. Sound signal woofer circuits between BOSE amp. and woofer. Woofer amp. ON signal circuit between BOSE amp. and woofer. 	I
	Sound is not heard from center speaker.	Sound signals center speaker circuit.	J
	Sound is heard only from specific places (RH front, RH rear, LH front and LH rear).	Sound signal circuits of suspect system.	K
It does not change to "Driver's Audio Stage" mode.	—	Mode change signal circuit. Refer to AV-291, "Diagnosis Procedure" .	L
Satellite radio is not received.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to AV-233, "CONSULT-III Function (MULTI AV)" .	M
	There is no malfunction in the CONSULT-III self-diagnosis result.	Perform the following inspection procedure. <ol style="list-style-type: none"> Check satellite radio antenna mounting nut for looseness. NOTE: Tightening torque: 6.5 N·m (0.66 kg·m, 58 in·lb) <ol style="list-style-type: none"> Visually check for satellite radio antenna feeder. Replace the satellite radio antenna (antenna base). Refer to AV-584, "Exploded View". Replace the AV control unit. Refer to AV-575, "Exploded View". 	AV
AM/FM radio is not received.	Other audio sounds are normal.	<ul style="list-style-type: none"> Antenna amp. ON signal circuit. Antenna feeder. 	O

RELATED TO iPod®

Connect another iPod® and check if the symptom is reproduced or not. If the symptom is reproduced, diagnose the vehicle. If no malfunction is detected, replace the iPod harness.

NOTE:

It is unable to check that between iPod® and iPod harness.

MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Possible malfunction location / Action to take
The sound of iPod® is not heard.	Other audio sounds are normal.	<ul style="list-style-type: none"> iPod sound signal circuits between AV control unit and iPod adapter. iPod sound signal circuits between iPod® and iPod adapter.
It does not change to iPod mode.	There is malfunction in the CONSULT-III self-diagnosis.	Perform CONSULT-III self-diagnosis. Refer to AV-233. "CONSULT-III Function (MULTI AV)" .
"iPod is not connected" is displayed when it comes to iPod mode.	Connected to iPod®.	iPod connection recognition signal circuit between iPod® and iPod adapter.
iPod® cannot charge the battery.	—	iPod battery charge circuit between iPod® and iPod adapter.
The title of music file in the iPod® is not indicated.	—	Communication circuit between iPod® and iPod adapter.
Accessing the iPod® is unavailable from the vehicle.		

RELATED TO STEERING SWITCH

Symptoms	Probable malfunction location
None of the steering switch operations work.	Steering switch signal GND circuit malfunction. Refer to AV-308. "Diagnosis Procedure" .
Only specified switch cannot be operated.	Steering switch malfunction. Replace steering switch.
Steering switch's "SOURCE", "MENU UP", "MENU DOWN", "↙", "ENTER" switches do not work.	Steering switch signal A circuit malfunction. Refer to AV-304. "Diagnosis Procedure" .
Steering switch's "↶", "VOL UP", "VOL DOWN", "↷" switches do not work.	Steering switch signal B circuit malfunction. Refer to AV-306. "Diagnosis Procedure" .

RELATED TO AUXILIARY INPUT

NOTE:

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

Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
No voice sound is heard when AUX mode is selected.	Voice sound is heard when other modes are selected.	AUX sound signal circuits (auxiliary input jacks to AV control unit).
Image is not displayed when AUX mode is selected.	Camera image is displayed.	AUX image signal circuit malfunction. Refer to AV-290. "Diagnosis Procedure" .

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

NORMAL OPERATING CONDITION

Description

INFOID:000000004347971

- For Navigation system operation information, refer to Navigation system Owner's Manual.
- Vehicle operation information, refer to Owner's Manual.

BASIC OPERATIONS




Symptom	Possible cause	Possible solution
No image is displayed.	The brightness is at the lowest setting.	Adjust the brightness of the display.
	The system in the video mode.	Press <DISC-AUX> to change the mode.
	The display is turned off.	Press <Day/Night> to turn on the display.
No voice guidance is available. Or The volume is too high or too low.	The volume is not set correctly, or it is turned off.	Adjust the volume of voice guidance.
	Voice guidance is not provided for certain streets (roads displayed in gray).	This is not a malfunction.
No map is displayed on the screen.	A screen other than map screen is displayed.	Press <MAP>.
The screen is too dim. The movement is slow.	The temperature in the interior of the vehicle is low.	Wait until the interior of the vehicle has warmed up.
Some pixels in the display are darker or brighter than others.	This condition is an inherent characteristic of liquid crystal displays.	This is not a malfunction.
Some menu items cannot be selected.	Some menu items become unavailable while the vehicle is driven.	Park the vehicle in a safe location, and then operate the navigation system.

NOTE:

Locations stored in the Address Book and other memory functions may be lost if the vehicle's battery is disconnected or becomes discharged. If this occurs, service the vehicle's battery as necessary and re-enter the information in the Address Book.

RELATED TO VOICE RECOGNITION

Related to basic operation

Symptom	Possible cause	Possible solution
The system does not recognize your command. or The system recognizes your command incorrectly	The interior of the vehicle is too noisy.	Close the windows or have other occupants quiet.
	The volume of your voice is too low.	Speak louder
	The volume if your voice is too loud.	Speak softer
	Your pronunciation is unclear	Speak clearly
	You are speaking before the voice recognition made is ready	Press and release “  ” switch on the steering switch, and speak a command after the tone sounds
	8 seconds or more have passed after you pressed and released “  ” switch on the steering switch.	Make sure to speak a command within 8 seconds after you press and release “  ” switch on the steering switch.
	Only a limited range of voice commands is usable for each screen.	Use a correct voice command appropriate for the current screen
	The fan of the air conditioner is too loud.	Lower the fan speed as necessary as voice command can be recognized more easily.

Related to item choice

The system should respond correctly to all voice commands without difficulty. If problems are encountered, follow the solutions given in this guide for the appropriate error.

Where the solutions are listed by number, try each solution in turn, starting with number one, until the problem is resolved.

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Symptom/ error message	Solution
Displays "COMMAND NOT RECOGNIZED" or the system fails to interpret the command correctly.	1. Ensure that the command format is valid.
	2. Speak clearly without pausing between words and at a level appropriate to the ambient noise level.
	3. Ensure that the ambient noise level is not excessive, for example, windows open or defrost on. NOTE: If it is too noisy to use the phone, it is likely that voice commands will not be recognized.
	4. If optional words of the command have been omitted, then command should be tried with these in place.
The system consistently selects the wrong voicetag	1. Ensure that the voicetag requested matches what was originally stored. This can be confirmed by giving the Addressbook Directory or Phone Directory command.
	2. Replace one of the voicetags being confused with a different voicetag.

Related to telephone

The system should respond correctly to all voice commands without difficulty. If problems are encountered, try the following solutions.

Where the solutions are listed by number, try each solution in turn, starting with number 1, until the problem is resolved.

Symptom	Solution
System fails to interpret the command correctly.	1. Ensure that the command is valid.
	2. Ensure that the command is spoken after the tone.
	3. Speak clearly without pausing between words and at level appropriate to the ambient noise level in the vehicle.
	4. Ensure that the ambient noise level is not excessive (for example, windows open or defroster on), NOTE: If it is too noisy to use the phone, it is likely that the voice commands will be recognized.
	5. If more than one command was said at a time, try saying the commands separately.
	6. If the system consistently fails to recognize commands, the voice training procedure should be carried out to improve the recognition response for the speaker. See "Speaker adaptation (SA) mode" earlier in this section. Refer to "OWNER'S MANUAL".
The system consistently selects the wrong voicetag	1. Ensure that the phone book entry name requested matches what was originally stored. This can be confirmed by using the "List Names" command.
	2. Replace one of the names being confused with a new name.

RELATED TO AUDIO

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

NOTE:

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

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Symptom	Cause and Counter measure
Cannot play	Check if the CD/CF was inserted correctly.
	Check if the CD/CF is scratched or dirty.
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than “.MP3”, “.WMA”, “.mp3”, or “.wma” cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.
	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.
	Check if the finalization process, such as session close and disc close, is done for the disc.
Poor sound quality	Check if the CD/CF 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/CF, or if it is a multisession disc, some time may be required before the music starts playing.
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.
Skipping with high bit rate files	Skipping may occur with large quantities if data such as for high bit rate data.
Move immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of “.MP3”, “.WMA”, “.mp3”, or “.wma”, or when play is prohibited by copyright protection, the player will skip to the next song.
The songs do not play back in the desired order.	The playback order is the order in which the files were written by the software, so the files might not play in the desired order.

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

NOTE:

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

RELATED TO VEHICLE ICON

Symptom	Possible cause	Possible solution
Names of roads differ between Plan View and Birdview™.	This is because the quantity of the displayed information is reduced so that the screen does not become too crowded. There is also a chance that names of the roads may be displayed multiple times, and the names appearing on the screen may be different because of a processing procedure.	This is not a malfunction.
The vehicle icon is not displayed in the correct position.	The vehicle was transported after the ignition switch was pressed off, for example, by a ferry or car transporter.	Drive the vehicle for a while on a road where GPS signals can be received.
	The position and direction of the vehicle icon may be incorrect depending on the driving environments and the levels of positioning accuracy of the navigation system.	This is not a malfunction. Drive the vehicle for a while to automatically correct the position and direction of the vehicle icon.
When the vehicle is traveling on a new road, the vehicle icon is located on another road nearby.	Because the new road is not stored in the map data, the system automatically places the vehicle icon on the nearest road available.	Updated road information will be included in the next version of the map data.

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Symptom	Possible cause	Possible solution
The screen does not switch to the night screen even after turning on the headlights.	The daytime screen was set the last time the headlights were turned on.	Set the screen to the night screen mode using <Day/Night> when you turn on the headlights.
The map does not scroll even when the vehicle is moving.	The current location map screen is not displayed.	Press <MAP>.
The vehicle icon is not displayed.	The current location map screen is not displayed.	Press <MAP>.
The location of the vehicle icon is misaligned from the actual position.	When using tire chains or replacing the tires, speed calculations based on the speed sensor may be incorrect.	Drive the vehicle for a while (at approximately 19 MPH for about 30 minutes) to automatically correct the vehicle icon position. If this does not correct the vehicle icon position, contact an INFINITI dealer.
	The map data has a mistake or is incomplete (the vehicle icon position is always misaligned in the same area).	Updated road information will be included in the next version of the map data.

RELATED TO ROUTE CALCULATION AND VISUAL GUIDANCE

Symptom	Possible cause	Possible solution
Waypoints are not included in the auto reroute calculation.	Waypoints that you have already passed are not included in the auto reroute calculation.	If you want to go to that waypoint again, you need to edit the route.
Route information is not displayed.	Route calculation has not yet been performed.	Set the destination and perform route calculation.
	You are not driving on the suggested route.	Drive on the suggested route.
	Route guidance is set to off.	Turn on route guidance.
	Route information is not provided for certain types of roads (roads displayed in gray).	This is not a malfunction.
The auto reroute calculation (or detour calculation) suggests the same route as the one previously suggested.	Route calculations took priority conditions into consideration, but the same route was calculated.	This is not a malfunction.
A waypoint cannot be added.	Five waypoints are already set on the route, including ones that you have already passed.	A maximum of 5 waypoints can be set on the route. If you want to go to 6 or more waypoints, perform route calculations multiple times as necessary.
The suggested route is not displayed.	Roads near the destination cannot be calculated.	Reset the destination to a main or ordinary road, and recalculate the route.
	The starting point and destination are too close.	Set a more distant destination.
	The starting point and destination are too far away.	Divide your trip by selecting one or two intermediate destinations, and perform route calculations multiple times.
	There are time restricted roads (by the day of the week, by time) near the current vehicle location or destination.	Set [Use Time Restricted Roads] to off.
The part of the route that you have already passed is deleted.	A route is managed by sections between waypoints. If you passed the first waypoint, the section between the starting point and the waypoint is deleted. (It may not be deleted depending on the area.)	This is not a malfunction.
An indirect route is suggested.	If there are restrictions (such as one-way streets) on roads close to the starting point or destination, the system may suggest an indirect route.	Adjust the location of the starting of the starting point or destination.
	The system may suggest an indirect route because route calculation does not take into consideration some areas such as narrow streets (gray roads.)	Reset the destination to a main or ordinary road, and recalculate the route.

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Symptom	Possible cause	Possible solution
The landmark information does not correspond to the actual information.	This may be caused by insufficient or incorrect map data.	Updated information will be included in the next version of the data.
The suggested route does not exactly connect to the starting point, waypoints, or destination.	There is no data for route calculation closes to these locations.	Set the starting point, waypoints and destination on a main road, and perform route calculation.

RELATED TO VOICE GUIDANCE

Symptom	Possible cause	Possible solution
Voice guidance is not available	Voice guidance is only available at certain intersections marked with? In some case, voice guidance is not available even when the vehicle should make a turn.	This is not a malfunction.
	The vehicle has deviated from the suggested route.	Go back to the suggested route or request route calculation again
	Voice guide is set to off.	Turn on voice guidance.
	Route guidance is set to off.	Turn on voice guidance.
The guidance contact does not correspond to the actual condition.	The contact of voice guidance may vary, depending on the types of intersections at which turn are made.	Follow all traffic rules and regulations.

RELATED TO TRAFFIC INFORMATION

Symptom	Possible cause	Possible solution
The traffic information is not displayed	The traffic information is not set to on.	Set the traffic information to on.
	You are in an area where traffic information is not available	Scroll to an area where traffic information is available
	You have not subscribed to XM NavTraffic or, your subscription to XM NavTraffic has expired.	Check your subscription status of XM NavTraffic.
	The map scale is set at a level where the display of icons is impossible.	Check that the map scale is set at a level in which the display of icons is possible.
With the automatic detour route search ON, no detour route is set to avoid congested areas.	There is no faster route compared to the current route, based on the road network and traffic information.	The automatic detour search is not intended for avoiding traffic jams. It searches for the fastest route taking into consideration such things as traffic jams.
The route does not avoid road section with traffic information stating it is closed due to road construction.	The navigation system is designed not to avoid this event because the actual period of closure may differ from the declared roadwork period.	Observe the actual road condition and follow the instructions on road for detour when necessary. If the road closure is for certain, use detour function and set the detour distance to avoid the closed road section.
Traffic information displayed differs from information from other media (e.g. radio).	Other media may use different information sources.	Observe the actual road conditions and regulations. Always observe safe driving practices and follow all traffic regulations.

PRECAUTION

PRECAUTIONS

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

INFOID:000000004347972

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

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

WARNING:

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

Precaution for Trouble Diagnosis

INFOID:000000004347973

AV COMMUNICATION SYSTEM

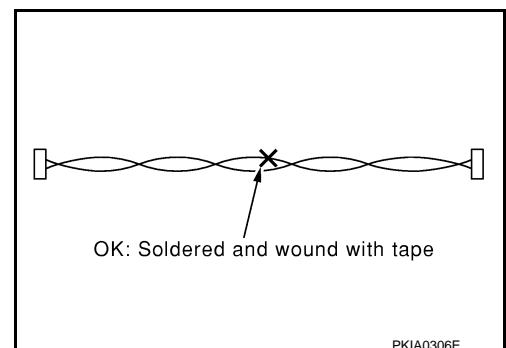
- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

Precaution for Harness Repair

INFOID:000000004347974

AV COMMUNICATION SYSTEM

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

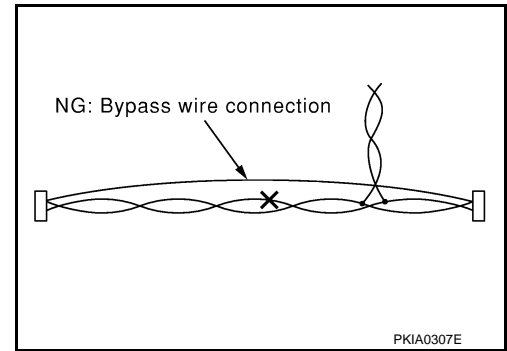


PRECAUTIONS

< PRECAUTION >

[BOSE AUDIO WITH NAVIGATION]

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



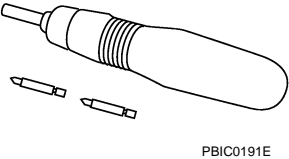
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PREPARATION

PREPARATION

Commercial Service Tools

INFOID:000000004347975

Tool name	Description
<p>Power tool</p>  <p>PBIC0191E</p>	<p>Loosening screws</p>

AV CONTROL UNIT

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

REMOVAL AND INSTALLATION

AV CONTROL UNIT

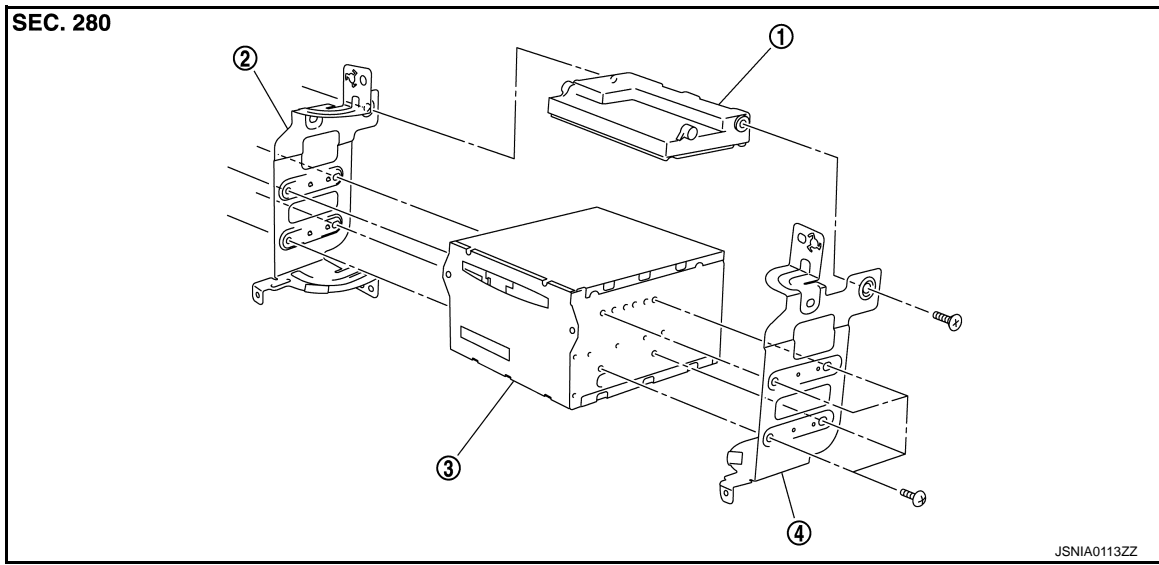
Exploded View

INFOID:000000004347976

REMOVAL

Refer to [IP-12, "Exploded View"](#).

DISASSEMBLY



1. Unified meter and A/C amp.
2. Bracket LH
3. AV control unit
4. Bracket RH

Removal and Installation

INFOID:000000004347977

REMOVAL

1. Remove display unit.
2. Remove AV control unit with a unified meter and A/C amp. as a single unit from the body.
3. Remove bracket screws, and then remove AV control unit.

INSTALLATION

Installation is the reverse order of removal.

CAUTION:

Since AV control unit connector and unified meter and A/C amp. connector have the same form, be careful not to insert them wrongly.

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DISPLAY UNIT

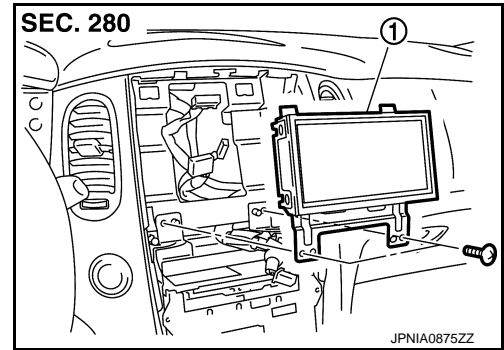
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

DISPLAY UNIT

Exploded View

INFOID:000000004347978



1. Display unit

Removal and Installation

INFOID:000000004347979

REMOVAL

1. Remove cluster lid D. Refer to [JP-12, "Exploded View"](#).
2. Remove display unit mounting screws.
3. Remove display unit.

INSTALLATION

Installation is the reverse order of removal.

FRONT DOOR SPEAKER

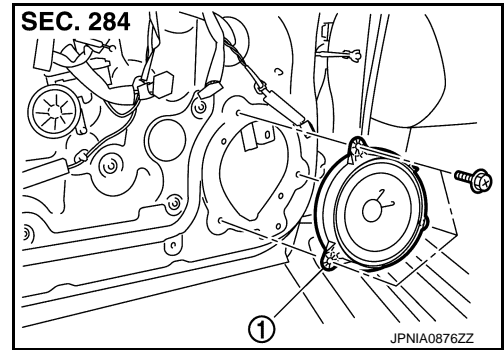
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

FRONT DOOR SPEAKER

Exploded View

INFOID:000000004347980



1. Front door speaker

Removal and Installation

INFOID:000000004347981

REMOVAL

1. Remove front door finisher. Refer to [INT-11. "DRIVER SIDE : Exploded View"](#) (driver side) or [INT-14. "PASSENGER SIDE : Exploded View"](#) (passenger side).
2. Remove front door speaker mounting bolts, disconnect the front door speaker connector.
3. Remove front door speaker.

INSTALLATION

Installation is the reverse order of removal.

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AV

REAR DOOR SPEAKER

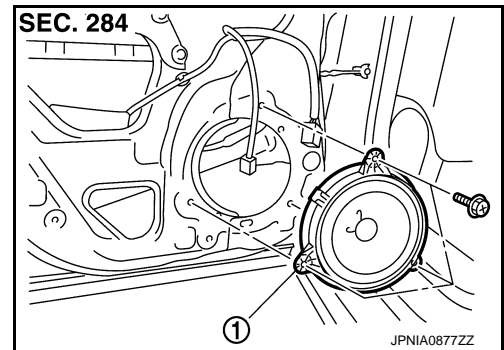
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

REAR DOOR SPEAKER

Exploded View

INFOID:000000004347982



1. Rear door speaker

Removal and Installation

INFOID:000000004347983

REMOVAL

1. Remove rear door finisher. Refer to [JNT-17. "Exploded View"](#).
2. Remove rear door speaker mounting bolts, disconnect the rear door speaker connector.
3. Remove rear door speaker.

INSTALLATION

Installation is the reverse order of removal.

FRONT SQUAWKER

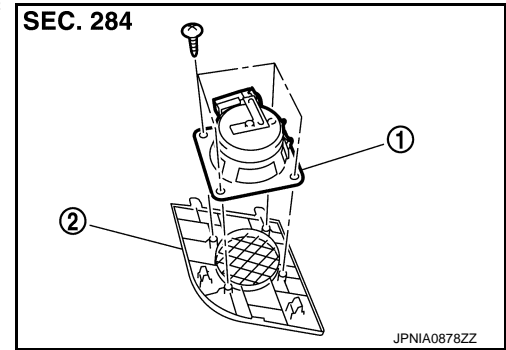
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

FRONT SQUAWKER

Exploded View

INFOID:000000004347984



1. Front squawker
2. Speaker grille

Removal and Installation

INFOID:000000004347985

REMOVAL

1. Lift up the speaker grille with squawker. Refer to [IP-12. "Exploded View"](#).
2. Disconnect the front squawker connector.
3. Remove front squawker mounting screws.
4. Remove front squawker.

INSTALLATION

Installation is the reverse order of removal.

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REAR SQUAWKER

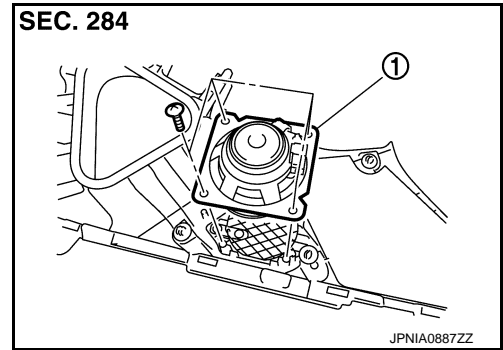
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

REAR SQUAWKER

Exploded View

INFOID:000000004347986



1. Rear squawker

Removal and Installation

INFOID:000000004347987

REMOVAL

1. Remove luggage side finisher upper. Refer to [INT-34, "Exploded View"](#).
2. Remove rear squawker mounting screws.
3. Remove rear squawker.

INSTALLATION

Installation is the reverse order of removal.

CENTER SPEAKER

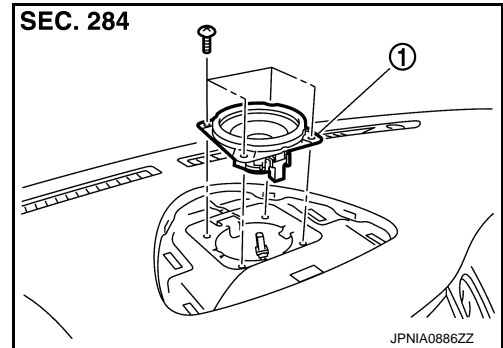
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

CENTER SPEAKER

Exploded View

INFOID:000000004347988



1. Center speaker

Removal and Installation

INFOID:000000004347989

REMOVAL

1. Remove center speaker grille. Refer to [JP-12, "Exploded View"](#).
2. Remove center speaker mounting screws, lift up the center speaker and disconnect center speaker connector.
3. Remove center speaker.

INSTALLATION

Installation is the reverse order of removal.

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AV

WOOFER

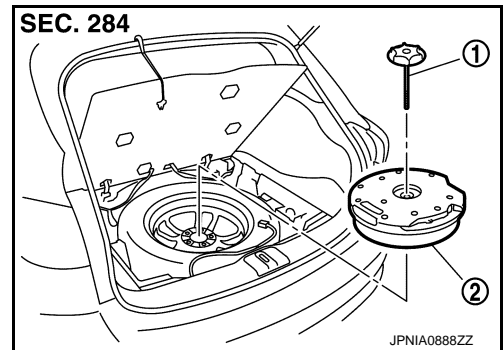
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

WOOFER

Exploded View

INFOID:000000004347990



1. Woofer clamp
2. Woofer

Removal and Installation

INFOID:000000004347991

REMOVAL

1. Remove luggage finisher center. Refer to [INT-34, "Exploded View"](#).
2. Remove woofer clamp.
3. Remove harness clip and woofer connector.
4. Remove woofer.

INSTALLATION

Installation is the reverse order of removal.

BOSE AMP.

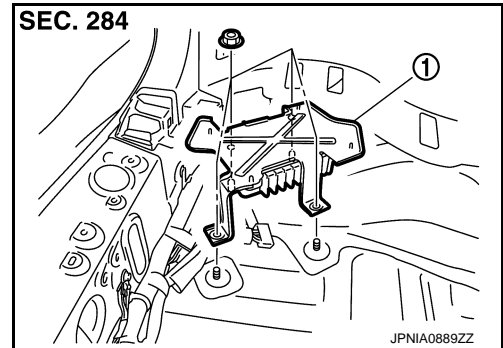
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

BOSE AMP.

Exploded View

INFOID:000000004347992



1. BOSE amp.

Removal and Installation

INFOID:000000004347993

REMOVAL

1. Remove luggage floor spacer (LH). Refer to [INT-34, "Exploded View"](#).
2. Remove BOSE amp. mounting nuts.
3. Remove BOSE amp.

INSTALLATION

Installation is the reverse order of removal.

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AV

ANTENNA BASE

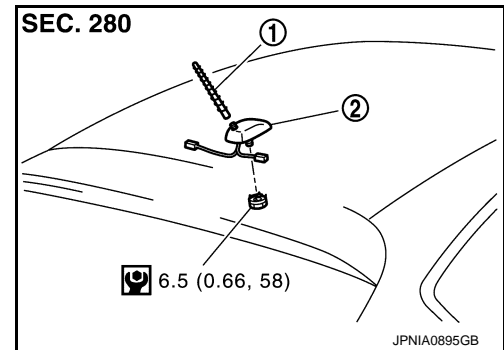
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

ANTENNA BASE

Exploded View

INFOID:000000004347994



1. Antenna rod
2. Antenna base

Refer to [GI-4. "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000004347995

REMOVAL

1. Remove headlining (rear). Keep a service area. Refer to [INT-26. "NORMAL ROOF : Exploded View"](#) (normal roof) or [INT-30. "SUNROOF : Exploded View"](#) (sunroof).
2. Remove antenna base mounting nut.
3. Remove antenna base.

INSTALLATION

Installation is the reverse order of removal.

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

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.

MULTIFUNCTION SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

MULTIFUNCTION SWITCH

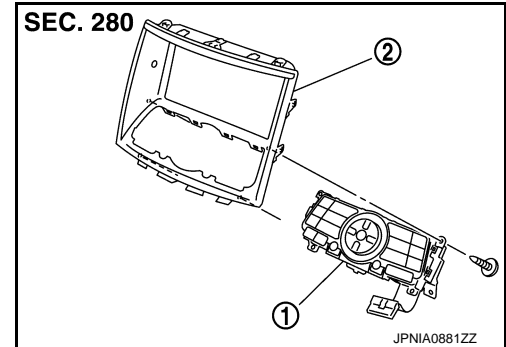
Exploded View

INFOID:000000004347996

REMOVAL

Refer to [IP-12, "Exploded View"](#).

DISASSEMBLY



1. Multifunction switch
2. Cluster lid D

Removal and Installation

INFOID:000000004347997

REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove multifunction switch mounting screws.
3. Remove multifunction switch.

INSTALLATION

Installation is the reverse order of removal.

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PRESET SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

PRESET SWITCH

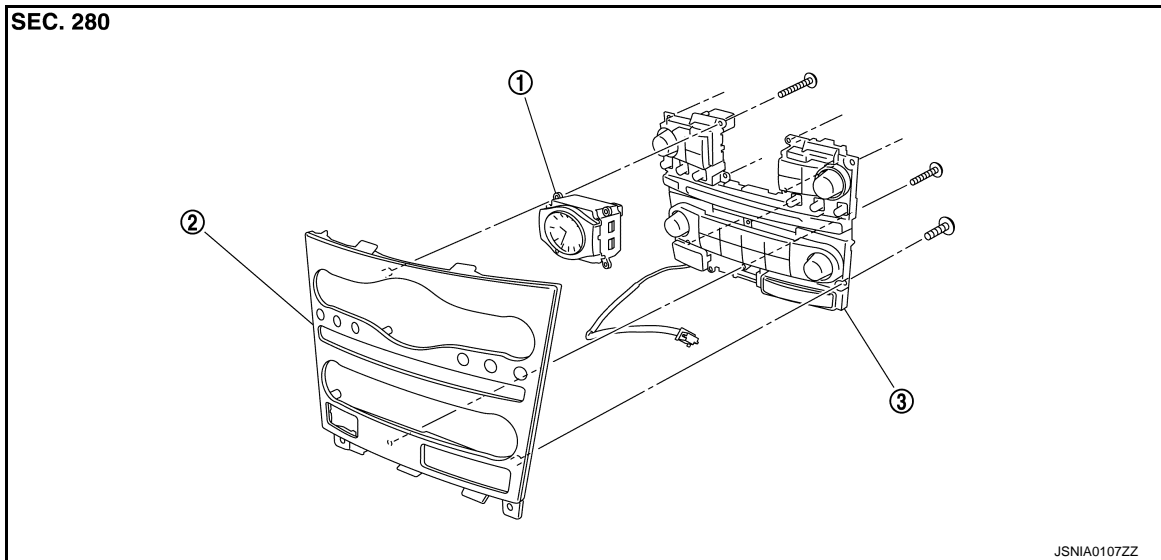
Exploded View

INFOID:000000004347998

REMOVAL

Refer to [IP-12. "Exploded View"](#).

DISASSEMBLY



1. Clock

2. Cluster lid C

3. Preset switch

Removal and Installation

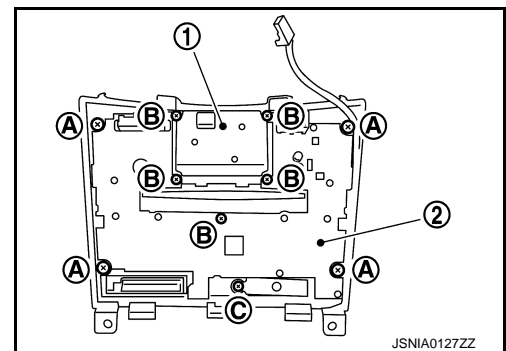
INFOID:000000004347999

REMOVAL

1. Remove cluster lid C. Refer to [IP-12. "Exploded View"](#).
2. Remove preset switch mounting screws (A), (B) and (C).

1. Clock

3. Remove preset switch (2).



INSTALLATION

Installation is the reverse order of removal.

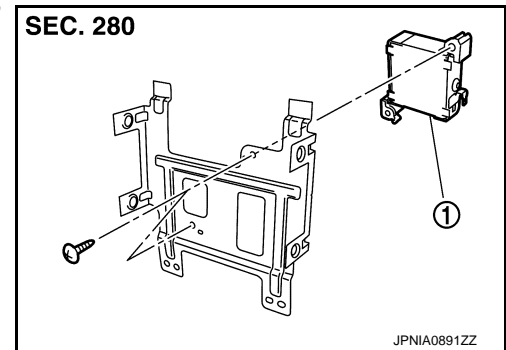
NOTE:

When installing preset switch, do not allow the print wire that connects preset switch and multifunction switch to get caught in between AV control unit and preset switch.

IPOD ADAPTER

Exploded View

INFOID:000000004348000



1. iPod adapter

Removal and Installation

INFOID:000000004348001

REMOVAL

1. Remove display unit with bracket. Refer to [IP-12. "Exploded View"](#).
2. Remove display from display bracket.
3. Remove iPod adapter mounting screws.
4. Remove iPod adapter.

INSTALLATION

Install in the reverse order of removal.

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IPOD CONNECTOR

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

IPOD CONNECTOR

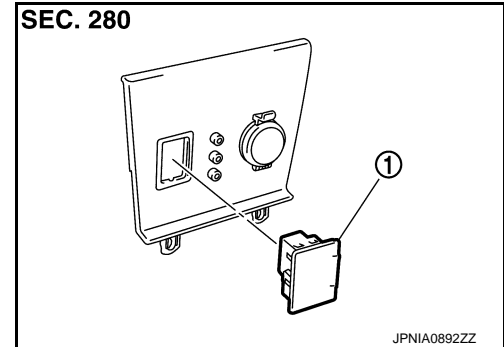
Exploded View

INFOID:000000004348002

REMOVAL

Refer to [IP-23, "Exploded View"](#).

DISASSEMBLY



1. iPod connector

Removal and Installation

INFOID:000000004348003

REMOVAL

1. Remove console finisher. Refer to [IP-23, "Exploded View"](#).
2. Push the pawl from the back of console finisher to remove iPod connector.

INSTALLATION

Install in the reverse order of removal.

AUXILIARY INPUT JACKS

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

AUXILIARY INPUT JACKS

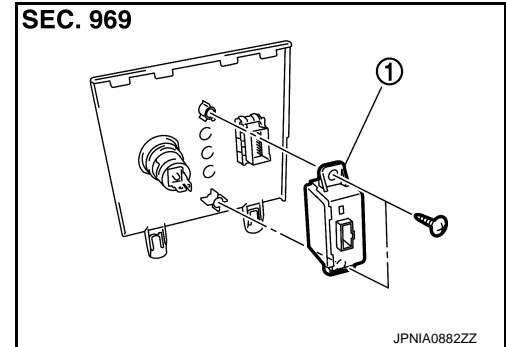
Exploded View

INFOID:000000004348004

REMOVAL

Refer to [IP-23, "Exploded View"](#).

DISASSEMBLY



1. Auxiliary input jacks

Removal and Installation

INFOID:000000004348005

REMOVAL

1. Remove console finisher. Refer to [IP-23, "Exploded View"](#).
2. Remove auxiliary mounting screws.
3. Remove auxiliary input jacks.

INSTALLATION

Installation is the reverse order of removal.

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MICROPHONE

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

MICROPHONE

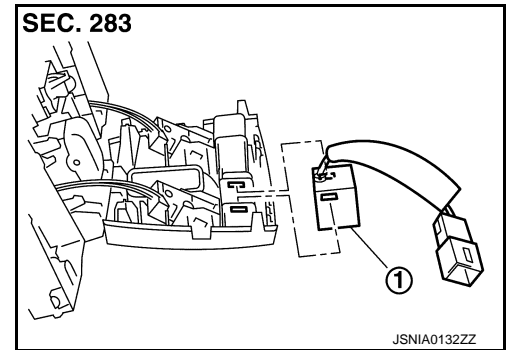
Exploded View

INFOID:000000004348006

REMOVAL

Refer to [INT-26. "NORMAL ROOF : Exploded View"](#) (normal roof) or [INT-30. "SUNROOF : Exploded View"](#) (sunroof).

DISASSEMBLY



1. Microphone

Removal and Installation

INFOID:000000004348007

REMOVAL

1. Remove map lamp assembly. Refer to [INT-26. "NORMAL ROOF : Exploded View"](#) (normal roof) or [INT-30. "SUNROOF : Exploded View"](#) (sunroof).
2. Remove microphone stretching pawls of map lamp assembly.

INSTALLATION

Installation is the reverse order of removal.

GPS ANTENNA

< REMOVAL AND INSTALLATION >

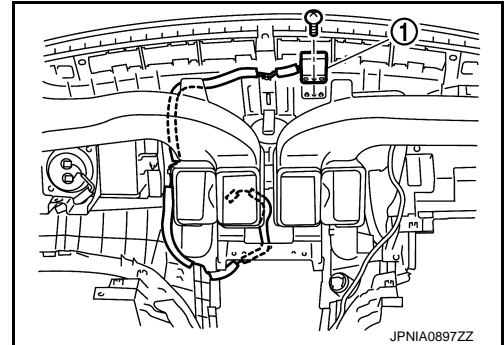
[BOSE AUDIO WITH NAVIGATION]

Removal and Installation

INFOID:000000004348010

REMOVAL

1. Remove instrument panel. Refer to [IP-12. "Exploded View"](#).
2. Remove GPS antenna mounting screw.
3. Remove GPS antenna (1).



INSTALLATION

Installation is the reverse order of removal.

CAMERA CONTROL UNIT

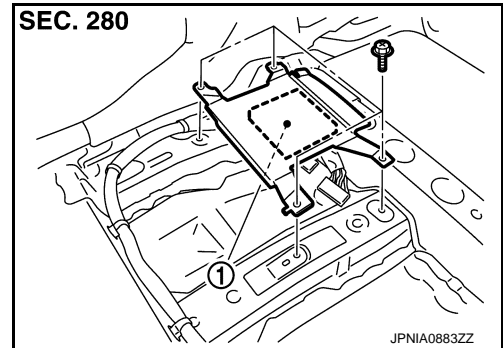
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

CAMERA CONTROL UNIT

Exploded View

INFOID:000000004348011



1. Camera control unit

Removal and Installation

INFOID:000000004348012

REMOVAL

1. Remove front seat (LH side). Refer to [SE-86. "Exploded View"](#).
2. Remove floor carpet. Keep a service area.
3. Remove camera control unit.

INSTALLATION

1. Installation is the reverse order of removal.
2. Perform predicted course line center position adjustment. Refer to [AV-172. "PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

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AROUND VIEW MONITOR CONTROL UNIT

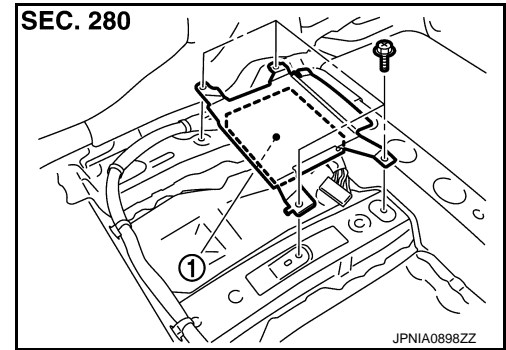
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

AROUND VIEW MONITOR CONTROL UNIT

Exploded View

INFOID:000000004348013



1. Around view monitor control unit

Removal and Installation

INFOID:000000004348014

REMOVAL

1. Remove front seat (LH side). Refer to [SE-86. "Exploded View"](#).
2. Remove floor carpet. Keep a service area.
3. Remove around view monitor control unit.

INSTALLATION

1. Installation is the reverse order of removal.
2. Perform camera image calibration. Refer to [AV-173. "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Special Repair Requirement"](#).
3. Perform predicted course line center position adjustment. Refer to [AV-172. "PREDICTED COURSE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

CAUTION:

Perform the calibration and perform the writing to the around view monitor control unit when removing and replacing each camera, removing the camera mounting parts (front grille, door mirror, etc.) and replacing the around view monitor control unit.

REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

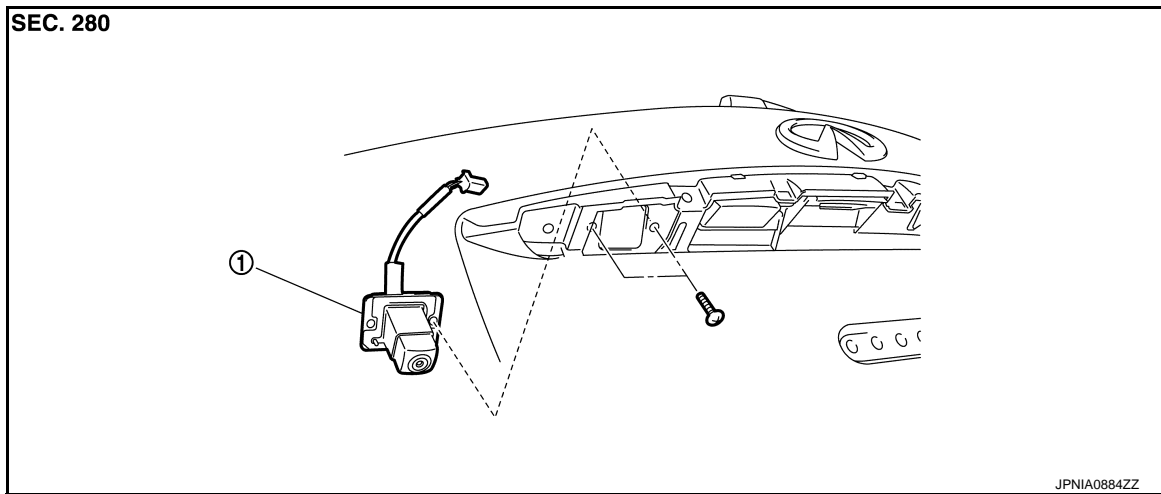
[BOSE AUDIO WITH NAVIGATION]

REAR VIEW CAMERA

Exploded View

INFOID:000000004348015

DISASSEMBLY



1. Rear view camera

Removal and Installation

INFOID:000000004348016

REMOVAL

1. Remove back door finisher inner. Refer to [INT-38, "Exploded View"](#).
2. Remove back door outside finisher upper. Refer to [EXT-48, "Exploded View"](#).
3. Remove back door outside finisher lower. Refer to [EXT-48, "Exploded View"](#).
4. Remove rear view camera mounting screws and rear view camera harness connector.
5. Remove rear view camera.

INSTALLATION

1. Installation is the reverse order of removal.
2. Adjust the guide line position if the guide line position is shifted after installing the rear view camera. Refer to [AV-596, "Adjustment"](#).

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REAR VIEW CAMERA

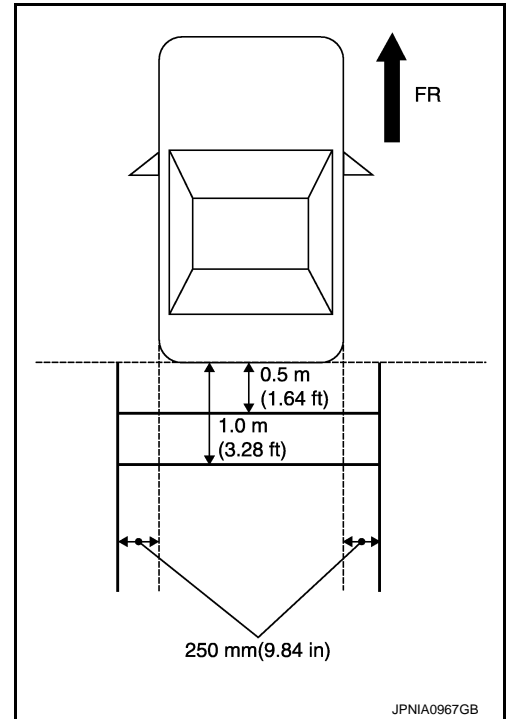
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

INFOID:000000004348017

Adjustment

1. Draw lines on rearward area of the vehicle passing through the following points: 250 mm (9.84 in) from both sides of the vehicle, and 0.5 m (1.64 ft), 1.0 m (3.28 ft) from the rear end of the bumper.
2. Set into "Adjust offset of rear view camera" mode of Confirmation/Adjustment mode.



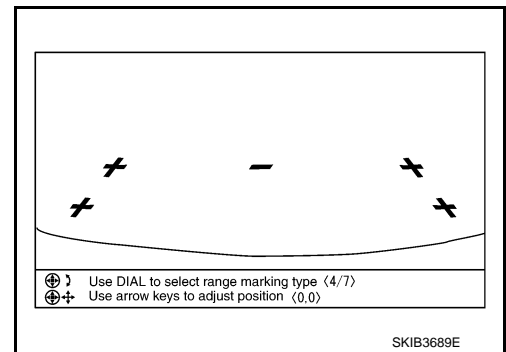
3. Rotate the center dial, and then select the guiding line pattern so that its angle is aligned with the correction line of the rear of the vehicle.

Selected pattern : 7

4. Make fine adjustment to the correction line of the rear of the vehicle with up/down/left/right switches so that its position is aligned with the guiding line. Press "OK" switch and record the adjusted guiding line position to the camera control unit.

Up/Down adjustment range : -20 - 20

Left/Right adjustment range : -20 - 20



CAUTION:

Never operate other function such as pressing BACK while writing index data.

If Confirmation/Adjustment mode does not function in the above procedure, perform one of the following service to adjust the index again.

- Remove battery for five min. Then reconnect battery.
- Remove camera control unit connector for five min. Then reconnect camera control unit connector.

FRONT CAMERA

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

FRONT CAMERA

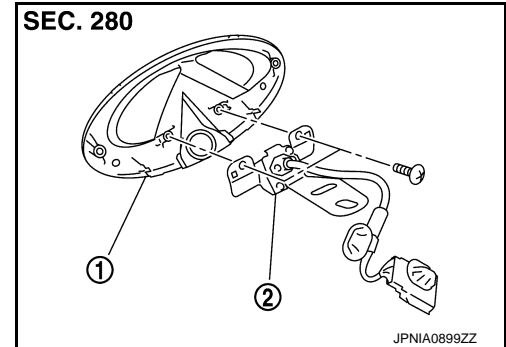
Exploded View

INFOID:000000004348018

REMOVAL

Refer to [EXT-20. "Exploded View"](#).

DISASSEMBLY



1. Front emblem
2. Front camera

Removal and Installation

INFOID:000000004348019

REMOVAL

1. Remove harness clip and connector clip from front camera bracket.
2. Remove front emblem. Refer to [EXT-20. "Exploded View"](#).
3. Remove front emblem mounting screws.
4. Remove front camera.

INSTALLATION

1. Installation is the reverse order of removal.
2. Perform camera image calibration. Refer to [AV-173. "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Special Repair Requirement"](#).

CAUTION:

Perform the calibration and perform the writing to the around view monitor control unit when removing and replacing each camera, removing the camera mounting parts (front grille, door mirror, etc.) and replacing the around view monitor control unit.

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REAR CAMERA

< REMOVAL AND INSTALLATION >

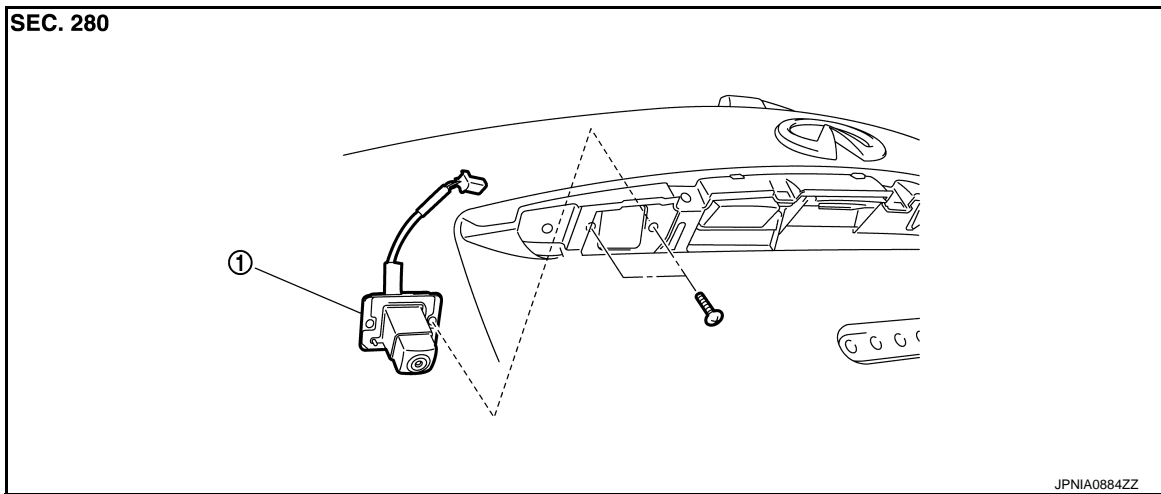
[BOSE AUDIO WITH NAVIGATION]

REAR CAMERA

Exploded View

INFOID:000000004348020

DISASSEMBLY



1. Rear camera

Removal and Installation

INFOID:000000004348021

REMOVAL

1. Remove back door finisher inner. Refer to [INT-38, "Exploded View"](#).
2. Remove back door outside finisher upper. Refer to [EXT-48, "Exploded View"](#).
3. Remove back door outside finisher lower. Refer to [EXT-48, "Exploded View"](#).
4. Remove rear camera mounting screws and rear camera harness connector.
5. Remove rear camera.

INSTALLATION

1. Installation is the reverse order of removal.
2. Perform camera image calibration. Refer to [AV-173, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Special Repair Requirement"](#).

CAUTION:

Perform the calibration and perform the writing to the around view monitor control unit when removing and replacing each camera, removing the camera mounting parts (front grille, door mirror, etc.) and replacing the around view monitor control unit.

SIDE CAMERA LH

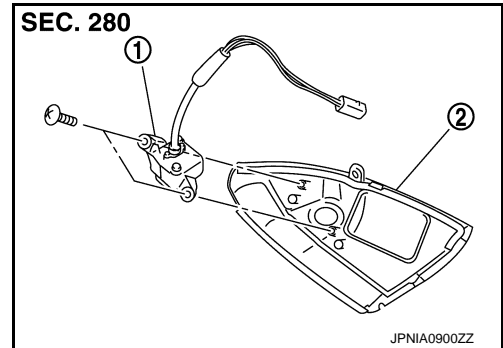
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

SIDE CAMERA LH

Exploded View

INFOID:000000004348022



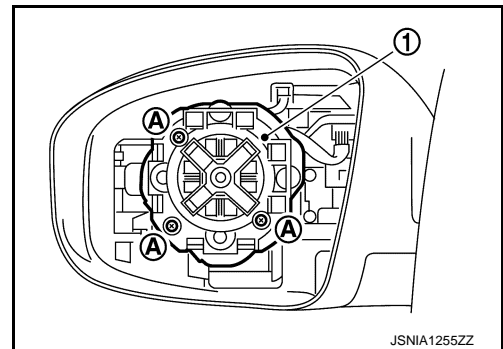
1. Side camera (LH)
2. Door mirror under cover

Removal and Installation

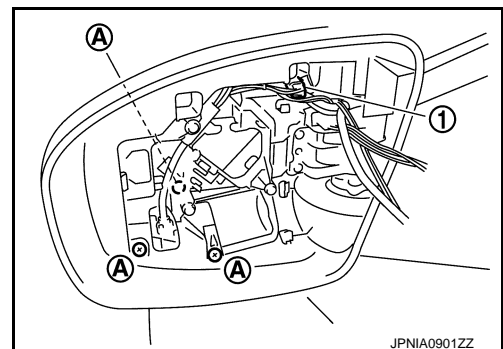
INFOID:000000004348023

REMOVAL

1. Remove door mirror glass (driver side). Refer to [MIR-125, "GLASS MIRROR : Exploded View"](#).
2. Remove screws (A), and door mirror actuator connector, and then door mirror actuator (1).



3. Remove door mirror under cover. Refer to [MIR-124, "DOOR MIRROR ASSEMBLY : Exploded View"](#).
4. Remove screws (A) and connector (1), and then remove side camera (LH).



INSTALLATION

1. Installation is the reverse order of removal.
2. Perform camera image calibration. Refer to [AV-173, "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Special Repair Requirement"](#).

CAUTION:

Perform the calibration and perform the writing to the around view monitor control unit when removing and replacing each camera, removing the camera mounting parts (front grille, door mirror, etc.) and replacing the around view monitor control unit.

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SIDE CAMERA RH

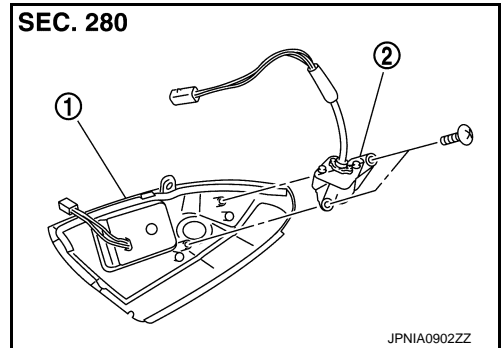
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

SIDE CAMERA RH

Exploded View

INFOID:000000004348024



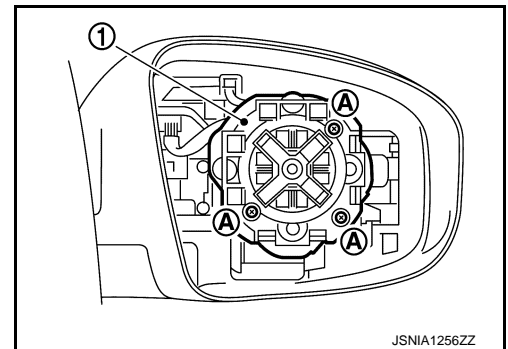
1. Side camera lamp assembly
2. Side camera (RH)

Removal and Installation

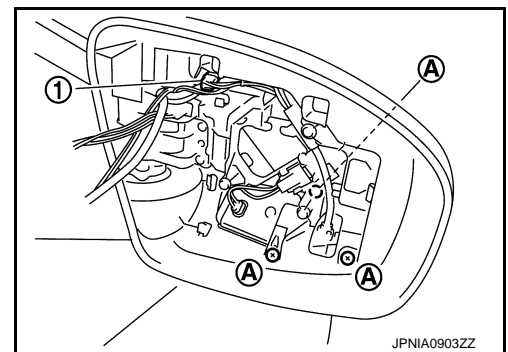
INFOID:000000004348025

REMOVAL

1. Remove door mirror glass (passenger side). Refer to [MIR-125. "GLASS MIRROR : Exploded View"](#).
2. Remove screws (A) and door mirror actuator connector, and then door mirror actuator (1).



3. Remove door mirror under cover. Refer to [MIR-124. "DOOR MIRROR ASSEMBLY : Exploded View"](#).
4. Remove screws (A) and connector (1), and then remove side camera (RH).



INSTALLATION

1. Installation is the reverse order of removal.
2. Perform camera image calibration. Refer to [AV-173. "CALIBRATING CAMERA IMAGE \(AROUND VIEW MONITOR\) : Special Repair Requirement"](#).

CAUTION:

Perform the calibration and perform the writing to the around view monitor control unit when removing and replacing each camera, removing the camera mounting parts (front grille, door mirror, etc.) and replacing the around view monitor control unit.

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

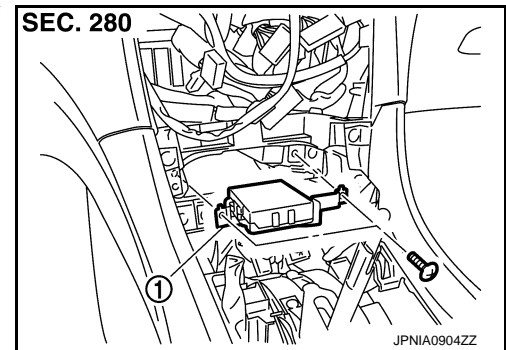
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

SONAR CONTROL UNIT (WITH AROUND VIEW MONITOR)

Exploded View

INFOID:000000004348026



1. Sonar control unit

Removal and Installation

INFOID:000000004348027

REMOVAL

1. Remove AV control unit. Refer to [AV-575, "Exploded View"](#).
2. Remove screws and connector, and then sonar control unit.

INSTALLATION

Install in the reverse order of removal.

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SONAR SENSOR

< REMOVAL AND INSTALLATION >

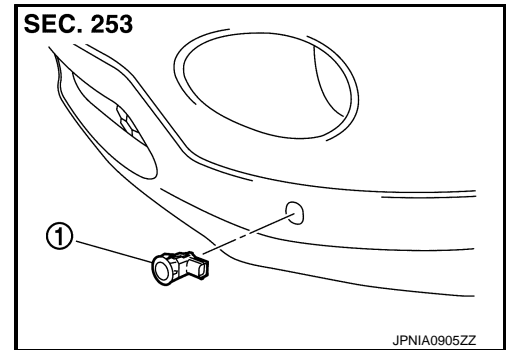
[BOSE AUDIO WITH NAVIGATION]

SONAR SENSOR

FRONT

FRONT : Exploded View

INFOID:000000004348028



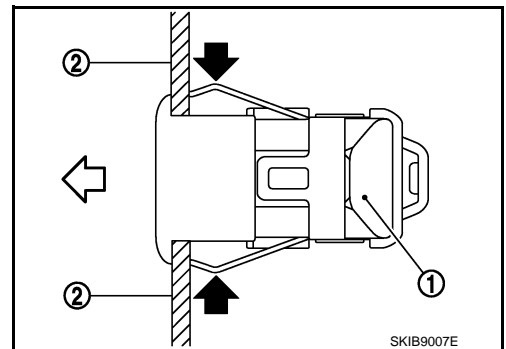
1. Sonar sensor (front)

FRONT : Removal and Installation

INFOID:000000004348029

REMOVAL

1. Remove fender protector. Keep a service area. Refer to [EXT-25, "FENDER PROTECTOR : Exploded View"](#).
2. Remove sonar sensor connector.
3. Press the sonar sensor (1) outside (direction of white arrow) the front bumper (2), pressing the metal clips on the back to the direction of black arrows.



INSTALLATION

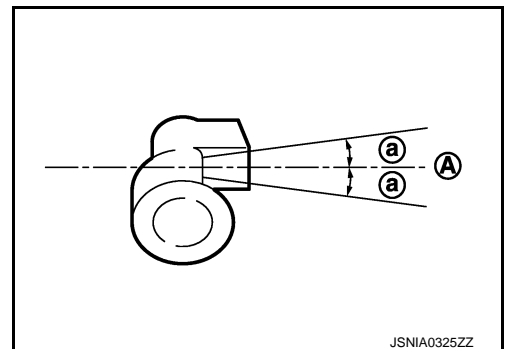
Install the bumper when the pawl engages.

CAUTION:

The connector direction is within $\pm 10^\circ$ from the horizontal position when assembling the bumper.

A : Horizontal position

a : 10°



REAR

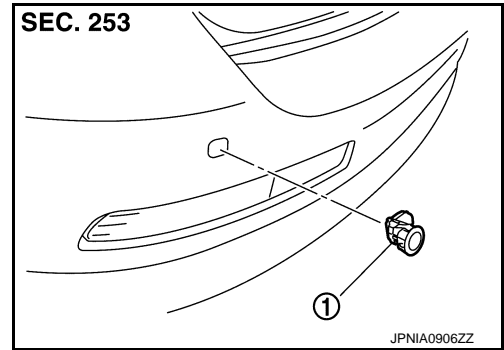
SONAR SENSOR

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

REAR : Exploded View

INFOID:000000004348030



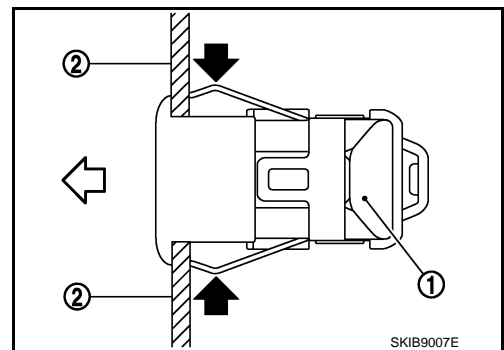
1. Sonar sensor (rear)

REAR : Removal and Installation

INFOID:000000004348031

REMOVAL

1. Remove sonar sensor connector.
2. Press the sonar sensor (1) outside (direction of white arrow) the rear bumper (2), pressing the metal clips on the back to the direction of black arrows.



INSTALLATION

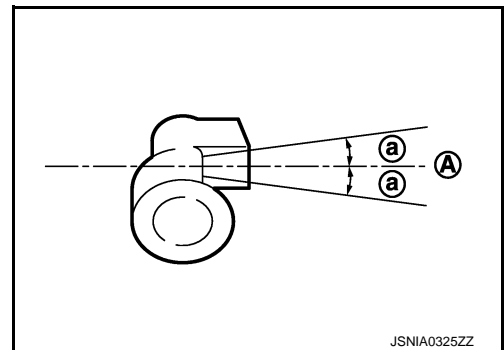
Install the bumper when the pawl engages.

CAUTION:

The connector direction is within $\pm 10^\circ$ from the horizontal position when assembling the bumper.

A : Horizontal position

a : 10°



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BUZZER

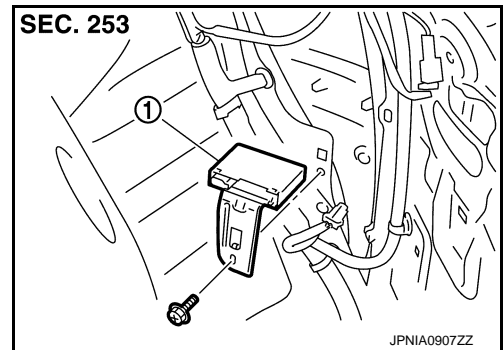
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

BUZZER

Exploded View

INFOID:000000004348032



1. Buzzer

Removal and Installation

INFOID:000000004348033

REMOVAL

1. Remove luggage side lower finisher (RH). Refer to [INT-34, "Exploded View"](#).
2. Remove buzzer mounting bolt.
3. Remove buzzer.

INSTALLATION

Install in the reverse order of removal.

STEERING ANGLE SENSOR

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

STEERING ANGLE SENSOR

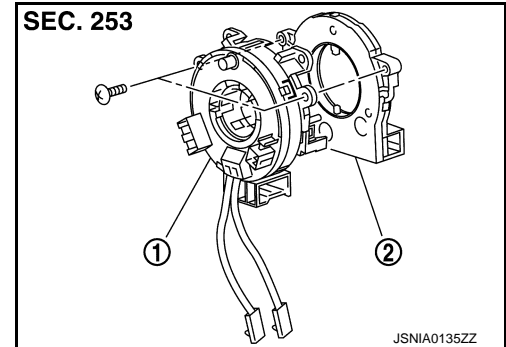
Exploded View

INFOID:000000004348034

REMOVAL

Refer to [SR-14](#), "[Exploded View](#)".

DISASSEMBLY



1. Spiral cable
2. Steering angle sensor

Removal and Installation

INFOID:000000004348035

REMOVAL

1. Remove spiral cable.
2. Remove steering angle sensor mounting screws.
3. Remove steering angle sensor.

INSTALLATION

Installation is the reverse order of removal.

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ANTENNA FEEDER

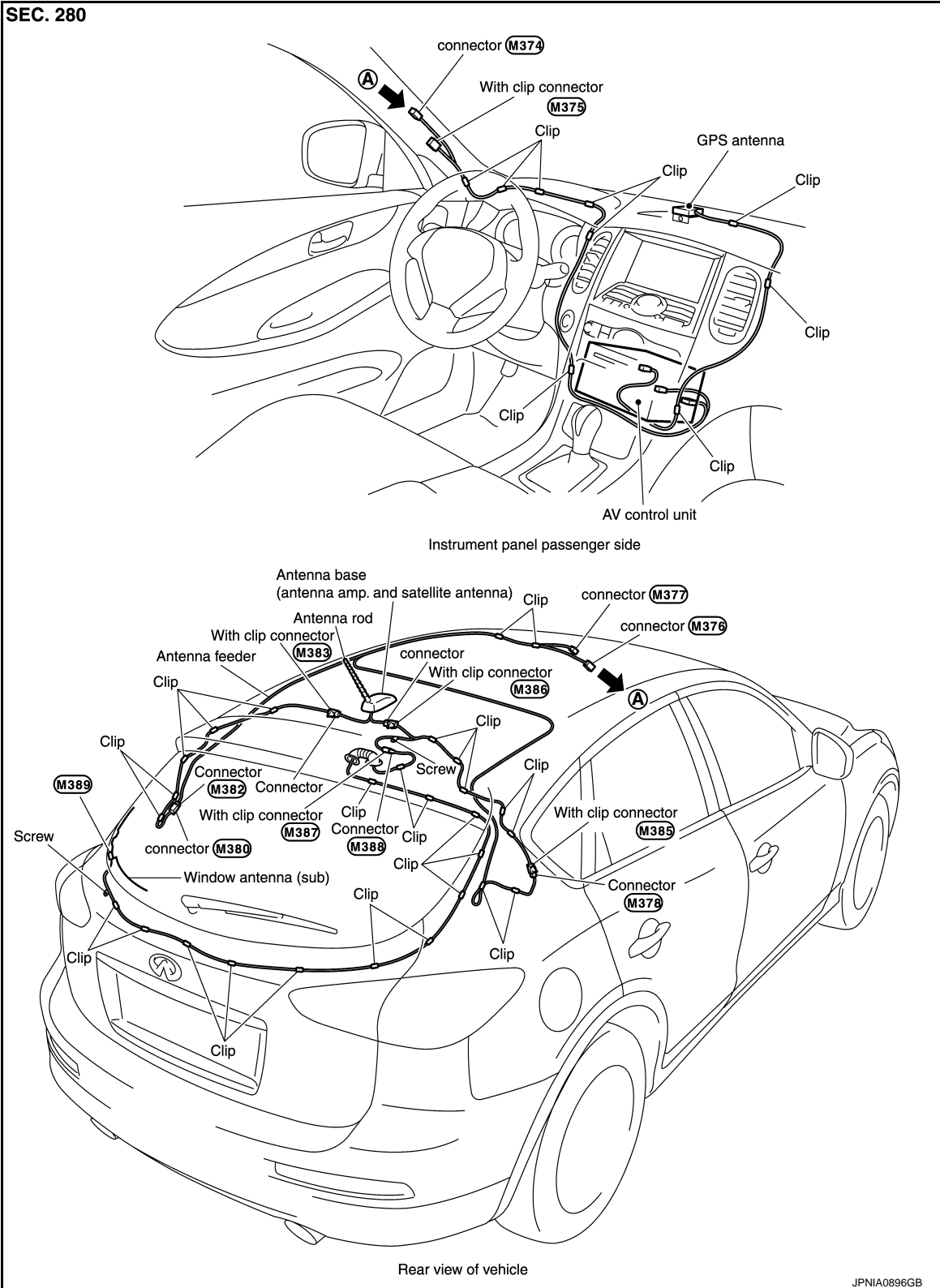
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

ANTENNA FEEDER

Harness Layout

INFOID:000000004348036



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