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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

WorkFlow

INFOID:000000005516821

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred) as much as possible when the customer brings the vehicle in.

>> GO TO 2.

2.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes.
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

Use "Symptom diagnosis" from the symptom inspection result in step 2 and then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 4.

4.IDENTIFY THE MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

Perform the diagnosis with "Component diagnosis" of the applicable system.

>> GO TO 5.

5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6.FINAL CHECK

Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 2.

Are the malfunctions corrected?

YES >> INSPECTION END

NO >> GO TO 3.

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000005516822

Initialization of system should be conducted after the following conditions.

- When the sunroof motor or sunshade motor is changed.
- When the sunroof or sunshade does not operate normally. (Incomplete initialization conditions)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000005516823

INITIALIZATION PROCEDURE

If the sunroof or sunshade does not close or open automatically, use the following procedure to return sunroof or sunshade operation to normal.

1. Close the sunroof and sunshade, then release the sunroof switch once.
2. Press and hold the sunroof switch CLOSE (1st or 2nd) again (for approx. 10 seconds), then sunroof will move to forward and it will be stopped mechanically.
3. Release the sunroof switch, and press and hold the sunroof switch CLOSE (1st or 2nd) again. then sunroof and sunshade will automatically move to fully closed⇒fully open⇒fully closed.
4. Release sunroof switch, after the sunroof is fully closed.
5. Check sunroof and sunshade operation.

CHECK ANTI-PINCH FUNCTION

1. Full open the sunroof.
2. Place a piece of wood near fully closed position.
3. Close the sunroof completely with auto-slide close.
4. Check that sunroof lowers for approximately 150 mm (5.91in) or 2 seconds with out pinching a piece of wood and stop.
5. Full open the sunshade.
6. Place a piece of wood near fully closed position.
7. Close the sunroof completely with auto-slide close.
8. Check that sunroof lowers for approximately 150 mm (5.91in) or 2 seconds with out pinching a piece of wood and stop.

CAUTION:

- **Never check with hands and other part of body because they may be pinched. Never get pinched.**
- **Depending on environment and driving conditions, if a similar impact or load is applied to the sunroof it may lower.**
- **Check that auto-slide operates before inspection when system initialization is performed.**
- **Perform initial setting when auto-slide operation or anti-pinch function does not operate normally.**

SUNROOF SYSTEM

< SYSTEM DESCRIPTION >

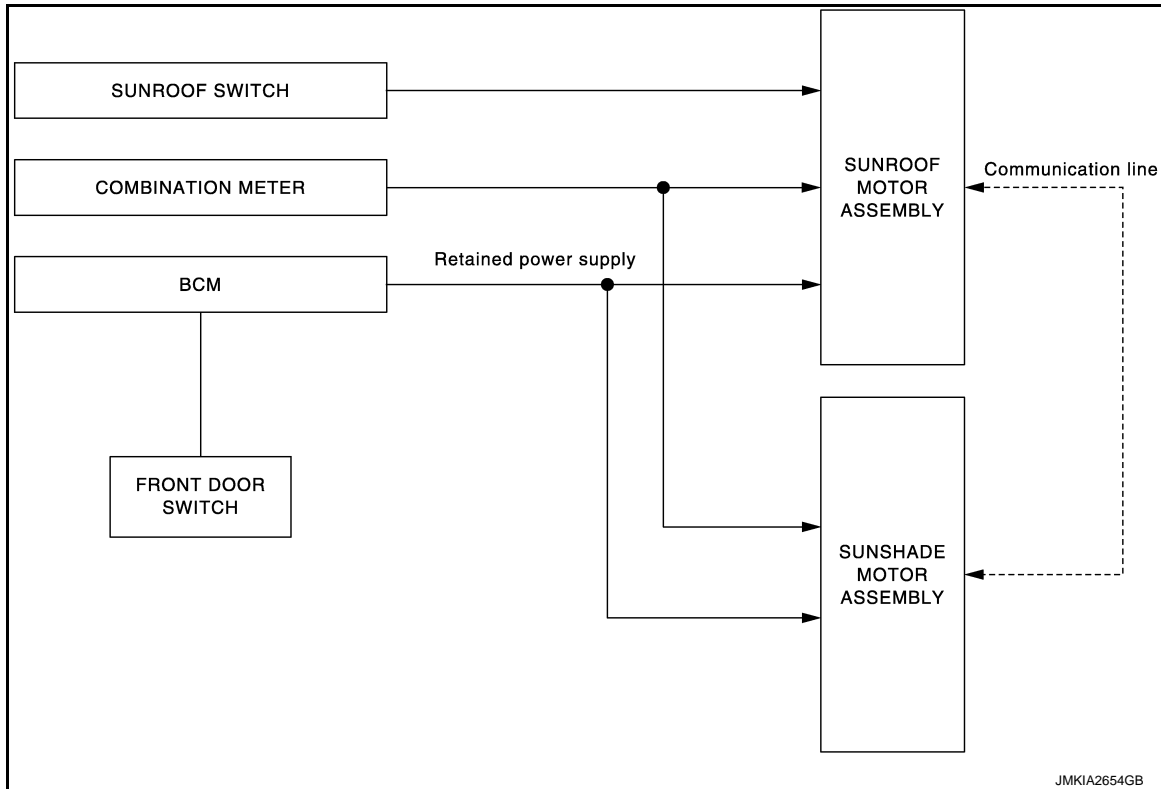
SYSTEM DESCRIPTION

SUNROOF SYSTEM

System Diagram

INFOID:000000005516824

SUNROOF



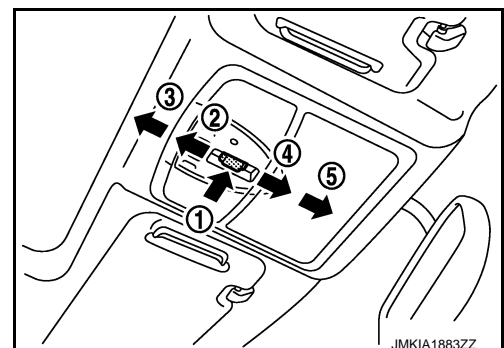
System Description

INFOID:000000005516825

DESCRIPTION

- Sunroof motor assembly and sunshade motor assembly operate with the power supplied from BCM while ignition switch is ON or retained power is operating.
- Sunroof motor assembly receives an operation signal from sunroof switch, and sends the signal to sunshade motor by communication line.
- Sunroof motor assembly and sunshade motor assembly receive a vehicle speed signal from combination meter and controls the sunroof motor and sunshade motor torque at the time of high speed operation.
- The sunroof switch can be operated in the directions of push , open (1st, 2nd) and close (1st, 2nd). It can operate the sunroof and sunshade by one switch.

- (1) **PUSH**
- (2) **OPEN 1st**
- (3) **OPEN 2nd**
- (4) **CLOSE 1st**
- (5) **CLOSE 2nd**

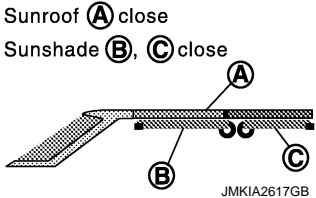

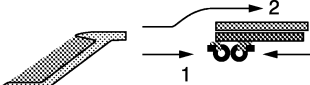
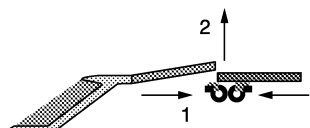
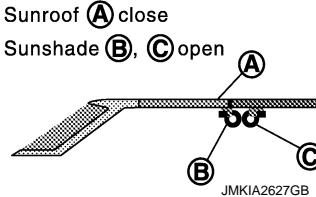
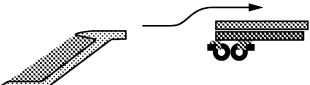
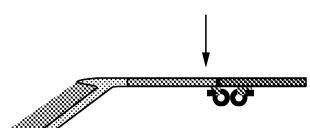
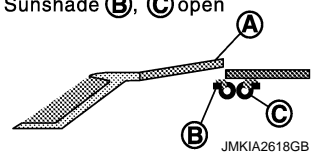
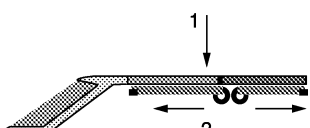


OPERATION DESCRIPTION

The sunroof and sunshade operate as per the following by operating the sunroof switch operation.

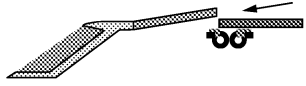
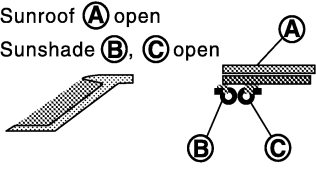
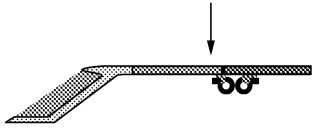
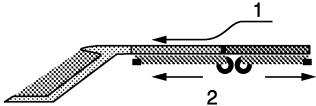
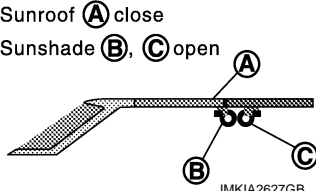
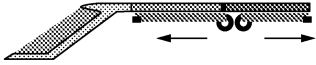
SUNROOF SYSTEM

< SYSTEM DESCRIPTION >

Before Operation	Switch condition	Roof and sunshade operation	After Operation
<p>Sunroof (A) close Sunshade (B), (C) close</p>  <p>JMKIA2617GB</p>	OPEN: 1st	Opens the sunshade	 <p>JMKIA2619ZZ</p>
	OPEN: 2nd	The sunshade opens, and then the sunroof opens.	 <p>JMKIA2620ZZ</p>
	PUSH	The sunshade opens, and then the sunroof tilts up.	 <p>JMKIA2621ZZ</p>
<p>Sunroof (A) close Sunshade (B), (C) open</p>  <p>JMKIA2627GB</p>	OPEN: 1st	Opens the sunroof	 <p>JMKIA2628ZZ</p>
	PUSH	Tilts down	 <p>JMKIA2622ZZ</p>
<p>Sunroof (A) tilt up Sunshade (B), (C) open</p>  <p>JMKIA2618GB</p>	CLOSE: 2nd	The sunroof tilts down, and then sunshade closes.	 <p>JMKIA2623ZZ</p>

SUNROOF SYSTEM

< SYSTEM DESCRIPTION >

Before Operation	Switch condition	Roof and sunshade operation	After Operation
	PUSH	Tilts up	 JMKIA2625ZZ
 Sunroof (A) open Sunshade (B), (C) open JMKIA2624GB	CLOSE: 1st	Closes the sunroof	 JMKIA2622ZZ
	CLOSE: 2nd	The sunroof closes, and then the sunshade closes.	 JMKIA2626ZZ
 Sunroof (A) close Sunshade (B), (C) open JMKIA2627GB	CLOSE: 1st	Closes the sunshade	 JMKIA2629ZZ

AUTO OPERATION

The sunroof or sunshade operates automatically to the fully-open or fully-close position by operating the sunroof switch to the OPEN (2nd) or CLOSE (2nd) position.

RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables sunroof system to operate for 45 seconds period after ignition switch is turned OFF.

Retained power function cancel conditions

- Front door CLOSE (door switch OFF)→OPEN (door switch ON)
- Ignition switch is ON again.
- Timer passed. (45 seconds)

ANTI-PINCH FUNCTION

CAUTION:

There are some small distances immediately before the closed position which cannot be detected.

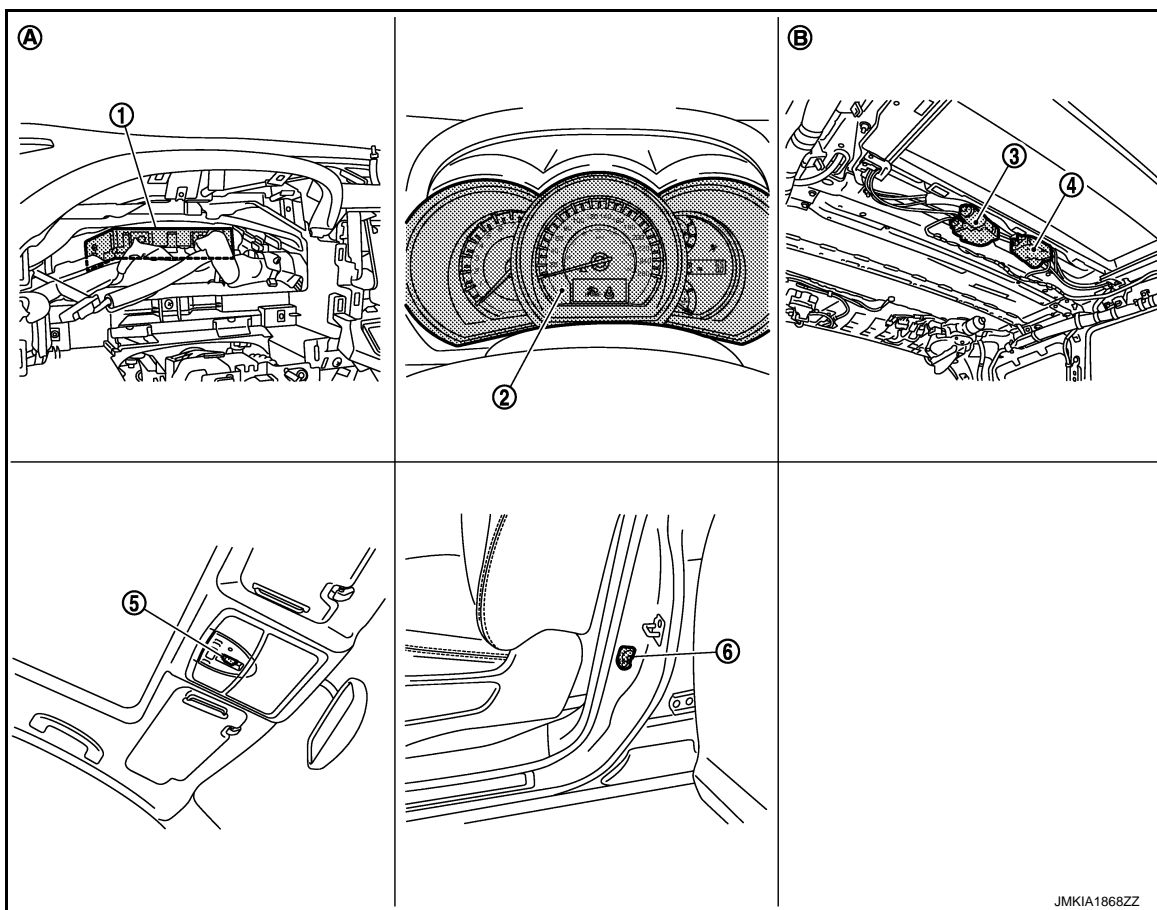
- The CPU of sunroof motor assembly monitor the sunroof condition by the signals from sunroof motor. When sunroof motor assembly detects an interruption during auto operation (close or tilt down operation), sunroof motor will tilt up or open [150 mm (5.91 in) or more] sunroof.
- The CPU of sunshade motor assembly monitor the sunshade condition by the signals from sunshade motor. When sunshade motor assembly detects an interruption during auto close operation, sunroof motor will open [150 mm (5.91 in) or more] sunshade.

Component Parts Location

INFOID:000000005516826

SUNROOF SYSTEM

< SYSTEM DESCRIPTION >



- | | | |
|---------------------------------|--------------------------|--|
| 1. BCM M118, M119, M123 | 2. Combination meter M34 | 3. Sunroof motor assembly R101 |
| 4. Sunshade motor assembly R102 | 5. Sunroof switch R6 | 6. Front door switch (driver side) B34 |
| A. Behind the combination meter | B. Behind headlining | |

Component Description

INFOID:000000005516827

Component	Function
BCM	Supplies power to sunroof motor assembly and sunshade motor assembly.
Combination meter	Transmits vehicle speed signal to sunroof motor assembly and sunshade motor assembly.
Sunroof motor assembly	It is sunroof motor and CPU integrated type that enables tilt up/down & slide open/close sunroof by sunroof switch operation. And sends sunroof switch operation signal to sunshade motor assembly via communication line.
Sunshade motor assembly	It is sunshade motor and CPU integrated type that enables open/close sunshade by sunroof switch operation.
Sunroof switch	Transmits switch operation signal to sunroof motor assembly.
Door switch	Detects door open/close condition and transmits to BCM.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:000000005516828

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

x: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	x	x	x
Rear window defogger	REAR DEFOGGER		x	x
Warning chime	BUZZER		x	x
Interior room lamp timer	INT LAMP	x	x	x
Remote keyless entry system	MULTI REMOTE ENT*1	x	x	x
Exterior lamp	HEAD LAMP	x	x	x
Wiper and washer	WIPER	x*2	x	x
Turn signal and hazard warning lamps	FLASHER	x	x	x
—	AIR CONDITONER*3			
<ul style="list-style-type: none"> Intelligent Key system Engine start system 	INTELLIGENT KEY	x	x	x
Combination switch	COMB SW		x	
Body control system	BCM	x		
NVIS - NATS	IMMU		x	x
Interior room lamp battery saver	BATTERY SAVER	x	x	x
Back door opener system	TRUNK		x	x
Vehicle security system	THEFT ALM	x	x	x
RAP system	RETAINED PWR		x	
Signal buffer system	SIGNAL BUFFER		x	x
TPMS	TPMS (AIR PRESSURE MONITOR)	x	x	x

NOTE:

- *1: At models with Intelligent Key system this item is displayed, but is not used.
- *2: At models with rain sensor this mode is displayed, but is not used.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

- *3: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT-III.

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"
	OFF>ACC		While turning power supply position from "OFF" to "ACC"
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
ON	Power supply position is "IGN" (Ignition switch ON with engine stopped)		
ENGINE RUN	Power supply position is "RUN" (Ignition switch ON with engine running)		
CRANKING	Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 	

RETAINED PWR

RETAINED PWR : CONSULT-III Function (BCM - RETAINED PWR)

INFOID:000000005516829

Data monitor

Monitor Item	Description
DOOR SW-DR	Indicates [ON/OFF] condition of driver side door switch.
DOOR SW-AS	Indicates [ON/OFF] condition of passenger side door switch.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:000000005516830

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

Signal name	Fuse and fusible link No.
Battery power supply	L (40 A)
	10 (10 A)

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check voltage between BCM harness connector and ground.

Terminals		Voltage (Approx.)
(+)	(-)	
BCM		Ground Battery voltage
Connector	Terminal	
M118	1	
M119	11	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		Existed
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

SUNROOF MOTOR ASSEMBLY

SUNROOF MOTOR ASSEMBLY : Diagnosis Procedure

INFOID:000000005516831

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect sunroof motor assembly connector.
3. Turn ignition switch ON.
4. Check voltage between sunroof motor assembly harness connector and ground.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Voltage (V) (Approx.)
Sunroof motor assembly			
Connector	Terminal	Ground	Battery voltage
R101	3		
	6		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK SUNROOF MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector and sunroof motor assembly harness connector.

BCM		Sunroof motor assembly		Continuity
Connector	Terminal	Connector	Terminal	
M118	2	R101	6	Existed
	3		3	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M118	2		Not existed
	3		

Is the inspection result normal?

YES >> Refer to [BCS-95, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between sunroof motor assembly harness connector and ground.

Sunroof motor assembly		Ground	Continuity
Connector	Terminal		
R101	1		Existed
	2		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

SUNSHADE MOTOR ASSEMBLY

SUNSHADE MOTOR ASSEMBLY : Diagnosis Procedure

INFOID:00000000516832

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect sunshade motor assembly connector.
3. Turn ignition switch ON.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

4. Check voltage between sunshade motor assembly harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Sunshade motor assembly			
Connector	Terminal	Ground	Battery voltage
R102	6		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK SUNSHADE MOTOR CIRCUIT

- Turn ignition switch OFF.
- Disconnect BCM connector.
- Check continuity between BCM harness connector and sunshade motor assembly harness connector.

BCM		Sunshade motor assembly		Continuity
Connector	Terminal	Connector	Terminal	
M118	2	R102	6	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M118	2		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-95. "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Check continuity between sunshade motor assembly harness connector and ground.

Sunshade motor assembly		Ground	Continuity
Connector	Terminal		
R102	1		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

COMMUNICATION SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMMUNICATION SIGNAL CIRCUIT

Description

INFOID:000000005516833

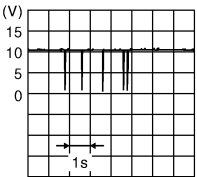
Detects door open/close condition.

Diagnosis Procedure

INFOID:000000005516834

1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sunshade motor assembly connector.
3. Turn ignition switch ON.
4. Check signal between sunshade motor assembly harness connector and ground with oscilloscope.

(+)		(-)	Voltage (V) (Approx.)
Sunshade motor assembly			
Connector	Terminal		
R102	7	Ground	 <p style="text-align: right; font-size: small;">JMKIA1869ZZ</p>

Is the inspection result normal?

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

2. CHECK COMMUNICATION SIGNAL CIRCUIT

1. Disconnect sunroof motor assembly connector.
2. Check continuity between sunshade motor assembly harness connector and sunroof motor assembly harness connector.

Sunshade motor assembly		Sunroof motor assembly		Continuity
Connector	Terminal	Connector	Terminal	
R102	7	R101	7	Existed

3. Check continuity between sunshade motor assembly harness connector and ground.

Sunshade motor assembly		Ground	Continuity
Connector	Terminal		
R102	7		Not existed

Is the inspection result normal?

- YES >> Replace sunroof motor assembly. Refer to [RF-100. "Removal and Installation"](#).
 NO >> Repair or replace harness.

SUNROOF SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SUNROOF SWITCH

Description

INFOID:00000000516835

Transmits switch operation signal to sunroof motor assembly.

Diagnosis Procedure

INFOID:00000000516836

1. CHECK SUNROOF SWITCH INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between sunroof motor assembly harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Sunroof motor assembly				
Connector	Terminals			
R101	4	Ground	Sunroof switch is operated PUSH	0
			Other than above	Battery voltage
	5		Sunroof switch is operated OPEN (1st or 2nd)	0
			Other than above	Battery voltage
	9		Sunroof switch is operated OPEN (2nd) or OPEN (2nd)	0
			Other than above	Battery voltage
	10		Sunroof switch is operated CLOSE (1st or 2nd)	0
			Other than above	Battery voltage

Is the inspection result normal?

- YES >> Replace sunroof motor. Refer to [RF-98, "Removal and Installation"](#).
 NO >> GO TO 2.

2. CHECK SUNROOF SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sunroof motor assembly connector and sunroof switch connector.
3. Check continuity between sunroof motor assembly harness connector and sunroof switch harness connector.

Sunroof motor assembly		Sunroof switch		Continuity
Connector	Terminal	Connector	Terminal	
R101	4	R6	5	Existed
	5		3	
	9		2	
	10		4	

4. Check continuity between sunroof motor assembly harness connector and ground.

Sunroof motor assembly		Ground	Continuity
Connector	Terminal		
R101	4	Ground	Not existed
	5		
	9		
	10		

Is the inspection result normal?

SUNROOF SWITCH

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 3.
 NO >> Repair or the replace harness.

3.CHECK SUNROOF SWITCH GROUND CIRCUIT

Check continuity between sunroof switch harness connector and ground.

Sunroof switch		Ground	Continuity
Connector	Terminal		
R6	1		Existed

Is the inspection result normal?

- YES >> GO TO 4.
 NO >> Repair or replace harness.

4.CHECK SUNROOF SWITCH

Check sunroof switch.

Refer to [RF-16, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
 NO >> Replace sunroof switch. Refer to [RF-116, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000005516837

SUNROOF SWITCH

1.CHECK SUNROOF SWITCH

1. Turn ignition switch OFF.
2. Disconnect sunroof switch connector.
3. Check continuity sunroof switch terminals.

Terminals	Condition	Continuity
2	Sunroof switch is operated OPEN (2nd) or CLOSE (2nd)	Existed
	Other than above	Not existed
3	Sunroof switch is operated OPEN (1st) or OPEN (2nd)	Existed
	Other than above	Not existed
4	Sunroof switch is operated CLOSE (1st) or CLOSE (2nd)	Existed
	Other than above	Not existed
5	Sunroof switch is operated PUSH	Existed
	Other than above	Not existed

Is the inspection result normal?

- YES >> INSPECTION END
 NO >> Replace sunroof switch. Refer to [RF-116, "Removal and Installation"](#).

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH

Description

INFOID:000000005516838

Detects door open/close condition.

Component Function Check

INFOID:000000005516839

1.CHECK FUNCTION

Check door switches ("DOOR SW-DR", "DOOR SW-AS") in Data Monitor" mode with CONSULT-III.

Monitor item	Condition		Status
DOOR SW-DR	Front door (driver side)	OPEN	ON
		CLOSE	OFF
DOOR SW-AS	Front door (passenger side)	OPEN	ON
		CLOSE	OFF

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to [RF-17. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005516840

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check signal between malfunctioning door switch harness connector and ground with oscilloscope.

(+)			(-)	Voltage (V) (Approx.)
Door switch				
Connector		Terminal		
Driver side	B34	2	Ground	<p>JPMIA0011GB</p>
Passenger side	B220	2		<p>JPMIA0011GB</p>

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and door switch harness connector.

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BCM		Door switch		Continuity
Connector	Terminal	Connector	Terminal	
M123 (Driver side)	150	B34 (Driver side)	2	Existed
M123 (Passenger side)	124	B220 (Passenger side)		

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123 (Driver side)	150		Not existed
M123 (Passenger side)	124		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-95. "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to [RF-18. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to [DLK-360. "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000005516841

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect door switch connector.
3. Check door switch terminals.

Terminal		Condition	Continuity	
Door switch				
Each door	2	Ground part of door switch	Door switch pressed	Not existed
			Door switch released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction door switch. Refer to [DLK-360. "Removal and Installation"](#).

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000005681518

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW NOTE: For models with BOSE audio system this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of Intelligent Key is not pressed	Off
	LOCK button of Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
	BACK DOOR OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed and held	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off	A
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On	B
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	C
	Dark outside of the vehicle	Close to 0 V	
REQ SW -DR	Driver door request switch is not pressed	Off	D
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	E
	Passenger door request switch is pressed	On	
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	F
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	G
REQ SW -BD/TR	Back door request switch is not pressed	Off	H
	Back door request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	I
	Push-button ignition switch (push switch) is pressed	On	
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off	J
	Ignition switch in ON position	On	
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	K
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off	L
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off	M
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On	
BRAKE SW 2	The brake pedal is not depressed	Off	N
	Stop lamp switch 1 signal circuit is normal	On	
DETE/CANCL SW	Selector lever in P position	Off	O
	Selector lever in any position other than P	On	
SFT PN/N SW	Selector lever in any position other than P and N	Off	P
	Selector lever in P or N position	On	
S/L -LOCK NOTE: For models without steering lock unit this item is not displayed.	Steering is unlocked	Off	RF
	Steering is locked	On	
S/L -UNLOCK NOTE: For models without steering lock unit this item is not displayed.	Steering is locked	Off	L
	Steering is unlocked	On	
S/L RELAY-F/B NOTE: For models without steering lock unit this item is not displayed.	Ignition switch in OFF or ACC position	Off	M
	Ignition switch in ON position	On	
UNLK SEN -DR	Driver door is unlocked	Off	N
	Driver door is locked	On	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	O
	Push-button ignition switch (push-switch) is pressed	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM NOTE: For models without steering lock unit this item is not displayed.	Steering is unlocked	Off
	Steering is locked	On
S/L UNLK-IPDM NOTE: For models without steering lock unit this item is not displayed.	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-REQ NOTE: For models without steering lock unit this item is not displayed.	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK.	Off
	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK.	On
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Power supply position in LOCK position	Reset
	Power supply position in any position other than LOCK	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	Intelligent Key is not inserted into key slot	Off
	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—

BCM (BODY CONTROL MODULE)

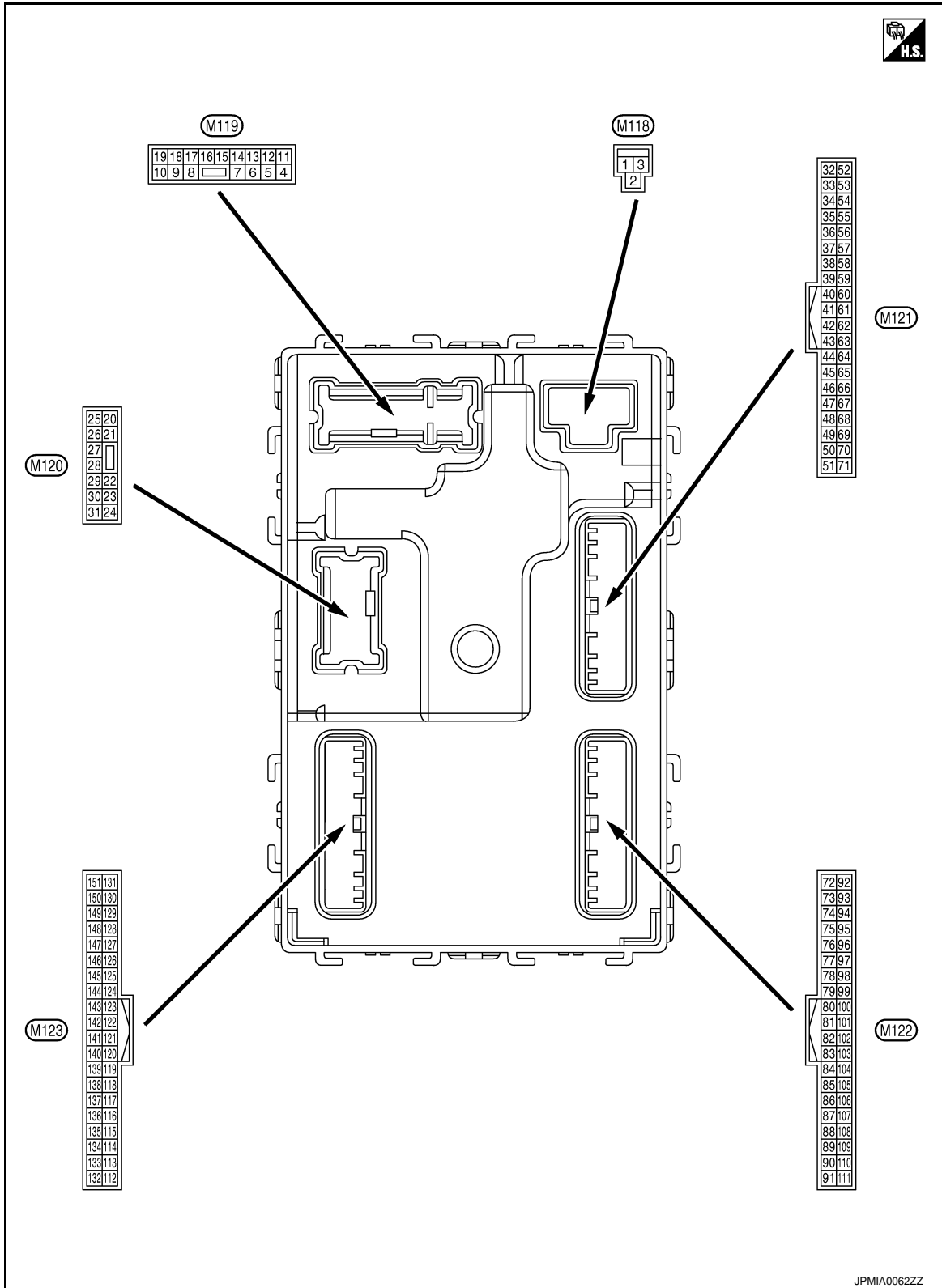
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
CONFIRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet	A
	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done	B
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet	C
	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done	
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet	D
	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done	
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet	E
	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done	
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet	F
	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done	
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet	H
	The ID of fourth Intelligent Key is registered to BCM	Done	
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet	I
	The ID of third Intelligent Key is registered to BCM	Done	
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet	J
	The ID of second Intelligent Key is registered to BCM	Done	
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet	J
	The ID of first Intelligent Key is registered to BCM	Done	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	RF
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	L
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	M
ID REGST FL1	ID of front LH tire transmitter is registered	Done	N
	ID of front LH tire transmitter is not registered	Yet	
ID REGST FR1	ID of front RH tire transmitter is registered	Done	O
	ID of front RH tire transmitter is not registered	Yet	
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	P
	ID of rear RH tire transmitter is not registered	Yet	
ID REGST RL1	ID of rear LH tire transmitter is registered	Done	P
	ID of rear LH tire transmitter is not registered	Yet	
WARNING LAMP	Tire pressure indicator OFF	Off	
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	
	Tire pressure warning alarm is sounding	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

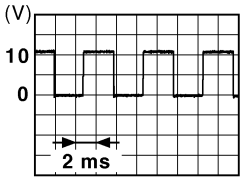
TERMINAL LAYOUT



PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

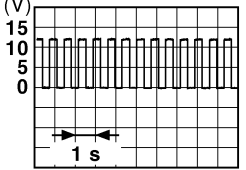
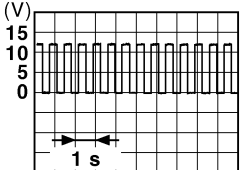
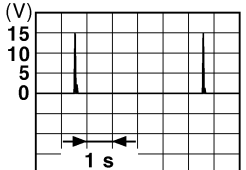
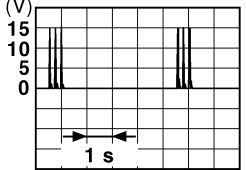
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (P)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (G)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (W)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (P)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p>
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage
					ACC	0 V

A
B
C
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RF
L
M
N
O
P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
17 (G)	Ground	Turn signal RH	Output	Ignition switch OFF	0 V	
				Ignition switch ON	Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
18 (BR)	Ground	Turn signal LH	Output	Ignition switch OFF	0 V	
				Ignition switch ON	Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
				ON	0 V	
23 (BR)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage
				Other than OPEN (Back door opener actuator is not activated)	0 V	
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
				ON (Operated)	Battery voltage	
34 (B)	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

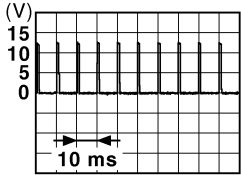
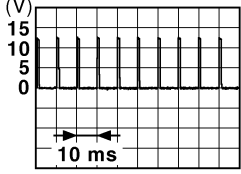
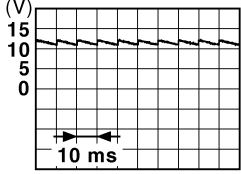
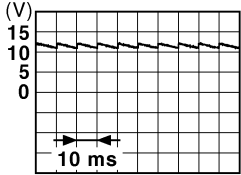
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
35 (W)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
38 (L)	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the back door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	Battery voltage
				OFF or ACC	0 V

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
52 (R)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0.3 V
				Ignition switch OFF	0 V	
61 (R)	Ground	Back door request switch	Input	Back door re- quest switch	ON (Pressed)	0 V
					OFF (Not pressed)	 1.0 V
64 (GR)	Ground	Warning buzzer	Output	Warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	 11.8 V
					ON (When back door opens)	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 11.8 V

BCM (BODY CONTROL MODULE)

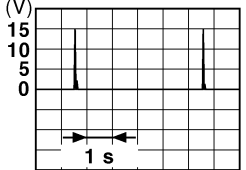
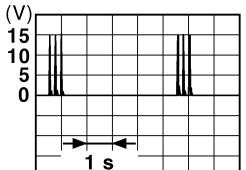
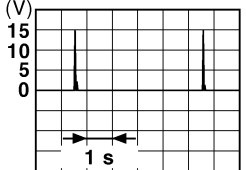
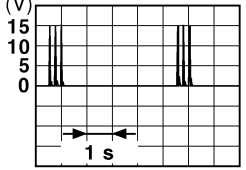
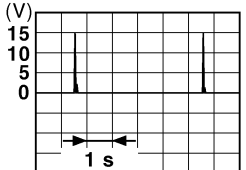
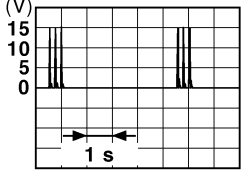
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	<p style="text-align: right;">JPMIA0011GB 11.8 V</p>
				OFF (When rear RH door closes)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	<p style="text-align: right;">JPMIA0011GB 11.8 V</p>
				OFF (When rear LH door closes)	0 V
72 (B)	Ground	Room antenna (-) (Center console)	Output	Ignition switch OFF	<p style="text-align: right;">JMKIA0062GB</p>
				When Intelligent Key is in the passenger compartment	<p style="text-align: right;">JMKIA0063GB</p>

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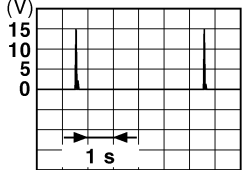
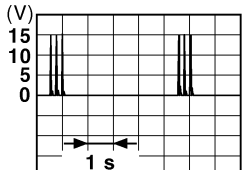
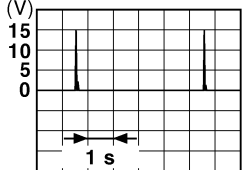
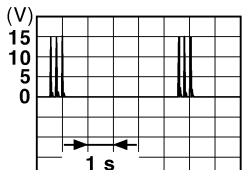
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
73 (W)	Ground	Room antenna (+) (Center console)	Output	Ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
74 (Y)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
75 (LG)	Ground	Passenger door an- tenna (+)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

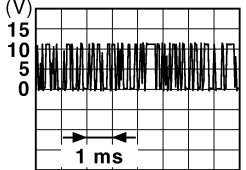
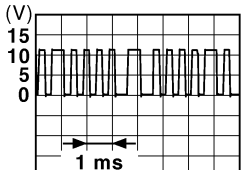

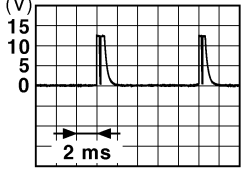

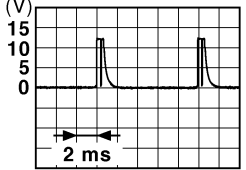
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
77 (P)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
				ON	Battery voltage	

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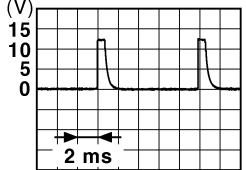
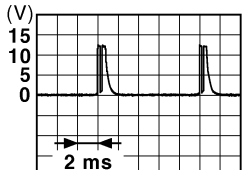
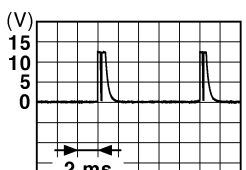
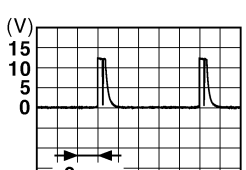

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
83 (P)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting	 <p style="text-align: right; font-size: small;">JMKIA0064GB</p>
				When operating either button on Intelligent Key	 <p style="text-align: right; font-size: small;">JMKIA0065GB</p>
87 (R)	Ground	Combination switch INPUT 5	Input	Combination switch	<p>All switches OFF (Wiper intermittent dial 4)</p>  <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
				Combination switch	<p>Front fog lamp switch ON (Wiper intermittent dial 4)</p>  <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
				Combination switch	<p>Rear wiper switch ON (Wiper intermittent dial 4)</p>  <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>
				Combination switch	<p>Any of the conditions below with all switches OFF</p> <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7  <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

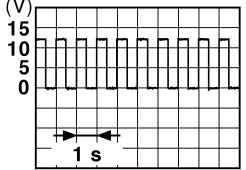
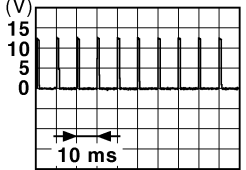
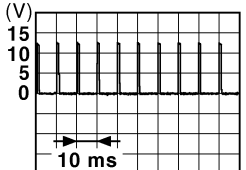
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: center;">1.4 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	 <p style="text-align: center;">1.3 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: center;">1.3 V</p>
					Rear washer switch ON (Wiper intermittent dial 4)	 <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF	 <p style="text-align: center;">1.3 V</p>
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
90 (P)	Ground	CAN - L	Input/ Output	—	—	
91 (L)	Ground	CAN - H	Input/ Output	—	—	

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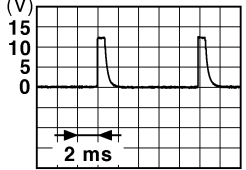
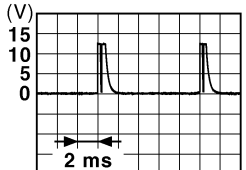

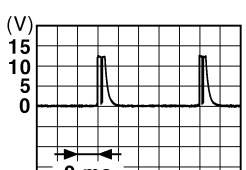

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
92 (R)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0 V
					Blinking	 <p style="text-align: right; font-size: small;">JPMA0015GB</p>
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output	—	Battery voltage	
97*1 (O)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98*1 (L)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (V)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: right; font-size: small;">JPMA0016GB</p>
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: right; font-size: small;">JPMA0016GB</p>
102 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF	Battery voltage	

BCM (BODY CONTROL MODULE)

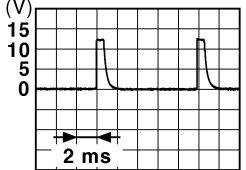
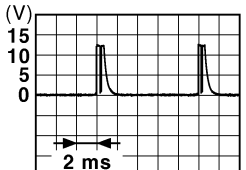
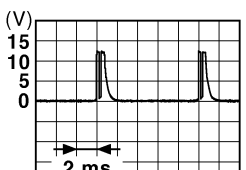
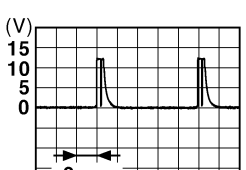
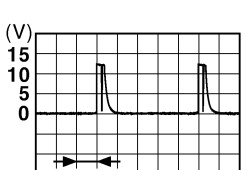
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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106*1 (Y)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 <p style="text-align: right; font-size: small;">JPMA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Turn signal switch LH	 <p style="text-align: right; font-size: small;">JPMA0037GB</p> <p style="text-align: center;">1.3 V</p>
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">JPMA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Front wiper switch LO	 <p style="text-align: right; font-size: small;">JPMA0038GB</p> <p style="text-align: center;">1.3 V</p>
					Front washer switch ON	 <p style="text-align: right; font-size: small;">JPMA0039GB</p> <p style="text-align: center;">1.3 V</p>

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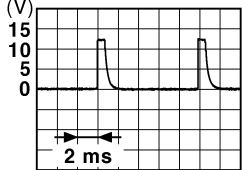
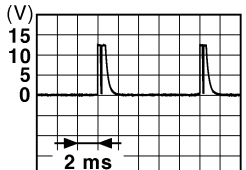

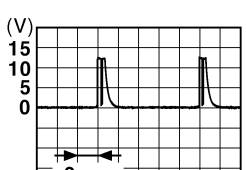

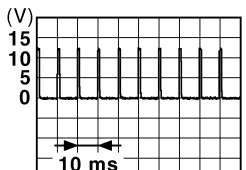
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Rear wiper switch INT (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF	 <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

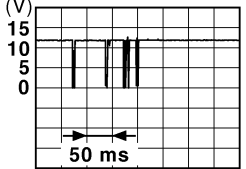
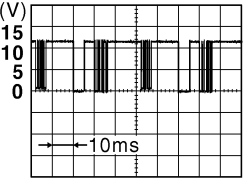
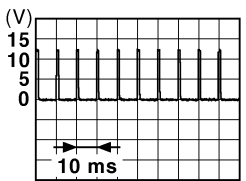
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 <p style="text-align: right;">1.4 V</p>
					Lighting switch PASS	 <p style="text-align: right;">1.3 V</p>
					Lighting switch 2ND	 <p style="text-align: right;">1.3 V</p>
					Front wiper switch INT/ AUTO	 <p style="text-align: right;">1.3 V</p>
					Front wiper switch HI	 <p style="text-align: right;">1.3 V</p>
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	 <p style="text-align: right;">1.1 V</p>

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BCM (BODY CONTROL MODULE)

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Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
111*1 (LG)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 <p style="text-align: right; font-size: small;">JMKIA0066GB</p>
					For 15 seconds after UN- LOCK	Battery voltage
				15 seconds or later after UNLOCK	0 V	
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON	 <p style="text-align: right; font-size: small;">JPMIA0156GB</p>	
					8.7 V	
113 (O)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
				When dark outside of the vehicle	Close to 0 V	
116 (GR)	Ground	Stop lamp switch 1	Input	—	Battery voltage	
118 (L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
119 (W)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sen- sor switch OFF)	 <p style="text-align: right; font-size: small;">JPMIA0012GB</p>
					UNLOCK status (unlock sensor switch ON)	1.1 V
					0 V	
121 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot	Battery voltage	
				When Intelligent Key is not inserted into key slot	0 V	
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
				ON	Battery voltage	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

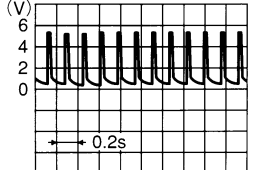

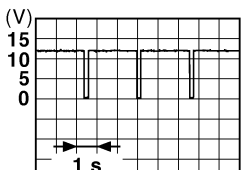
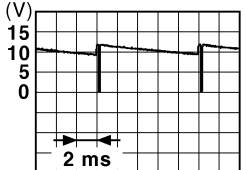
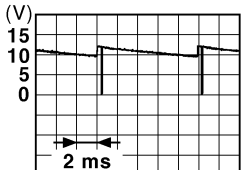
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	<p style="text-align: right;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p>	
				OFF (When passenger door closes)	0 V	
130*2 (BR)	Ground	Rear window defogger switch	Input	Ignition switch ON	<p style="text-align: right;">JPMIA0012GB</p> <p style="text-align: center;">1.1 V</p>	
				Rear window defogger switch OFF	0 V	
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON	<p style="text-align: right;">JPMIA0013GB</p> <p style="text-align: center;">10.2 V</p>	
				Ignition switch OFF or ACC	Battery voltage	
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	<p style="text-align: center;">NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.</p> <p style="text-align: right;">JPMIA0159GB</p>	
				ON (When tail lamps ON)	0 V	
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	Battery voltage	
				OFF (ACC and ON indicator lamps are not illuminated.)	0 V	
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON	0 V	
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
				ACC or ON	5.0 V	

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
139 (O)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state  OCC3881D
				When receiving the signal from the transmitter  OCC3880D	
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position Battery voltage
				Except P and N positions	0 V
141 (O)	Ground	Security indicator	Output	Security indicator	ON 0 V
				Blinking  JPMA0014GB 11.3 V	
				OFF Battery voltage	
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF 0 V
				Lighting switch 1ST	 JPMA0031GB 10.7 V
				Lighting switch HI	
				Lighting switch 2ND	
Turn signal switch RH					
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) 0 V
				Front wiper switch HI (Wiper intermittent dial 4)	 JPMA0032GB 10.7 V
				Rear wiper switch INT (Wiper intermittent dial 4)	
				Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
144 (P)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
145 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	
					Front wiper switch LO	
					Lighting switch AUTO	
146 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
149 (W)	Ground	Tire pressure warn- ing check switch	Input	Ignition switch ON		11.8 V
						11.8 V
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	11.8 V
					ON (When driver door opens)	0 V

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

NOTE:

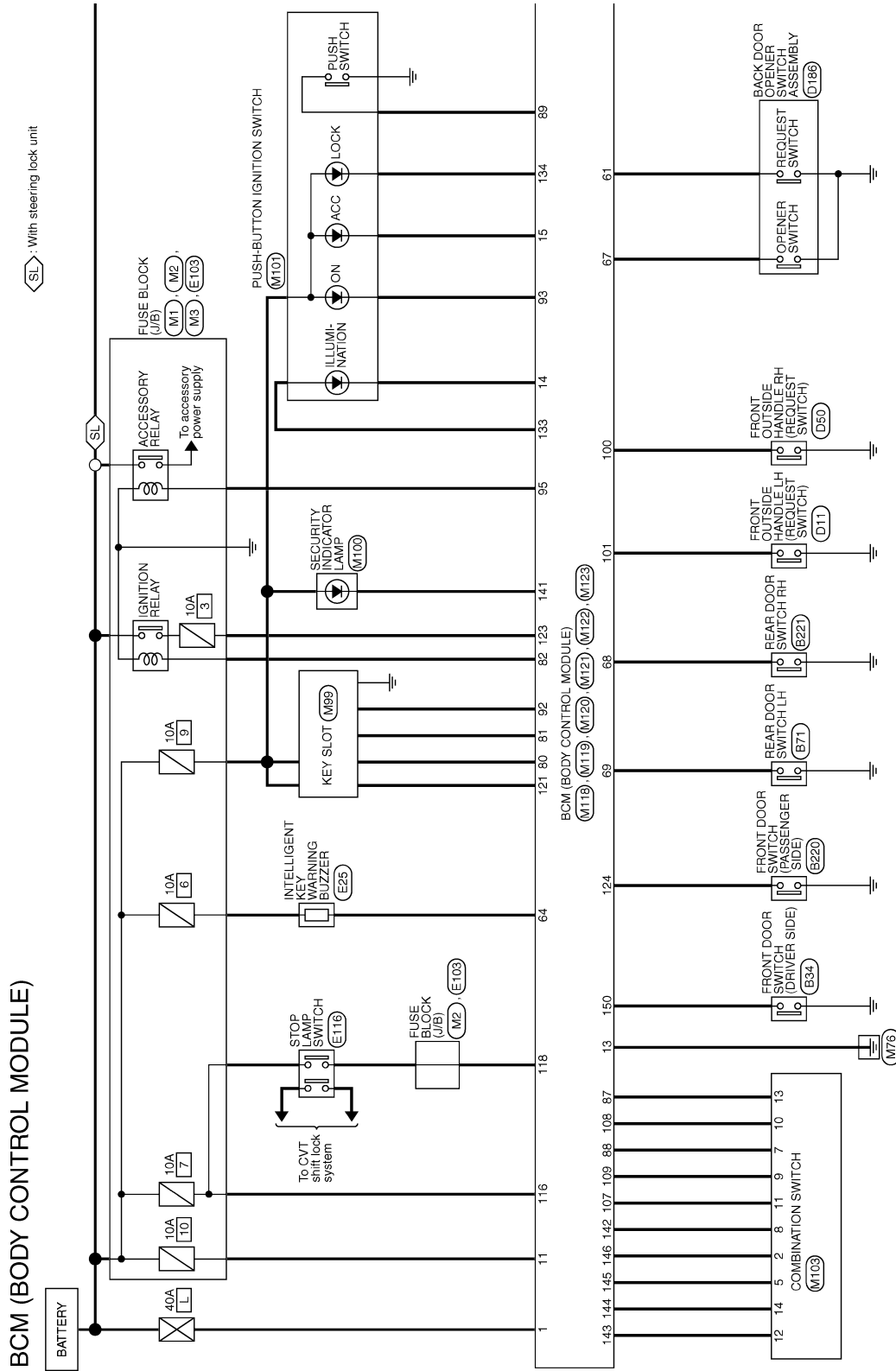
- *1: With steering lock unit
- *2: Without BOSE audio system

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

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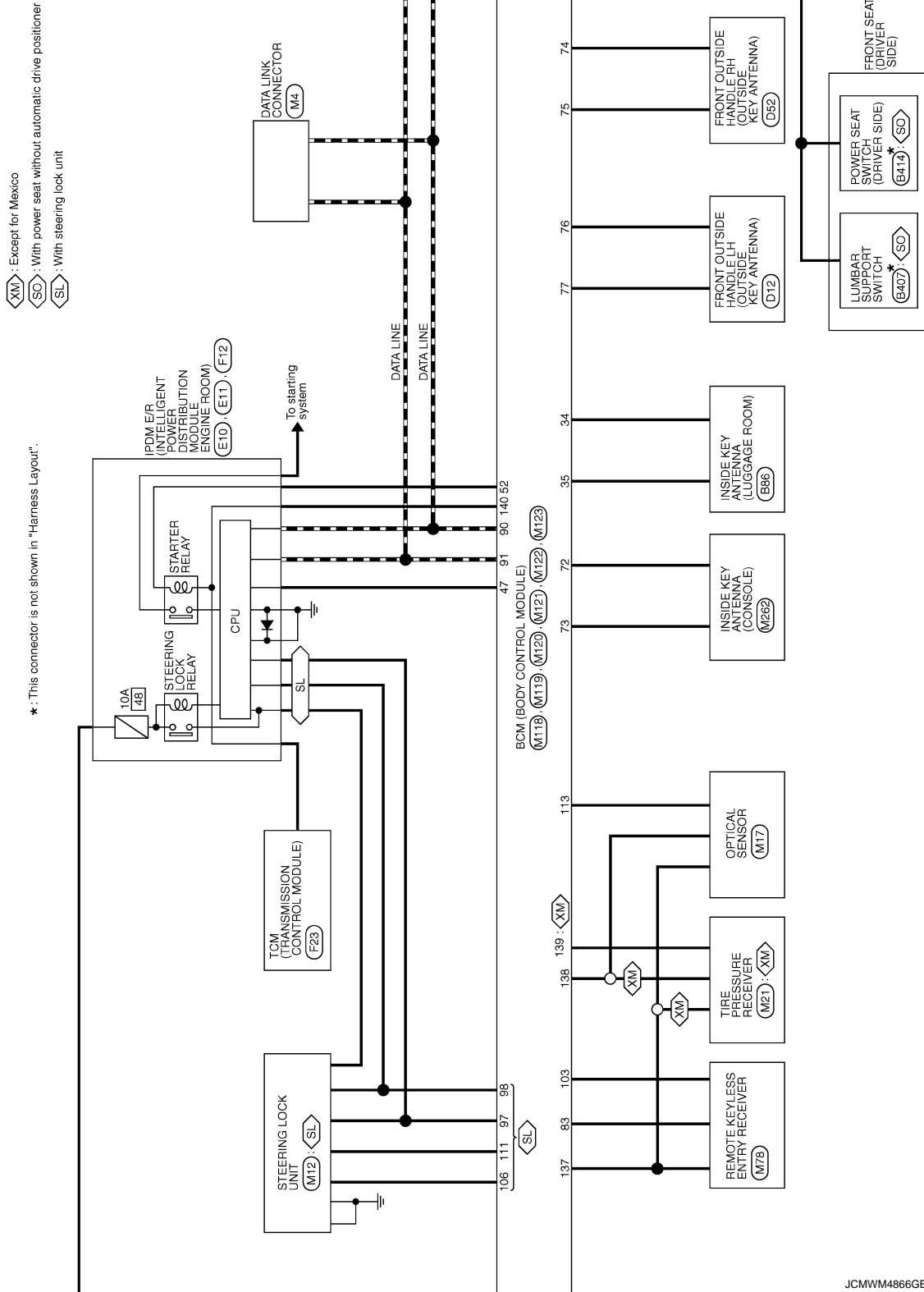
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JCMWMM4865GB

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



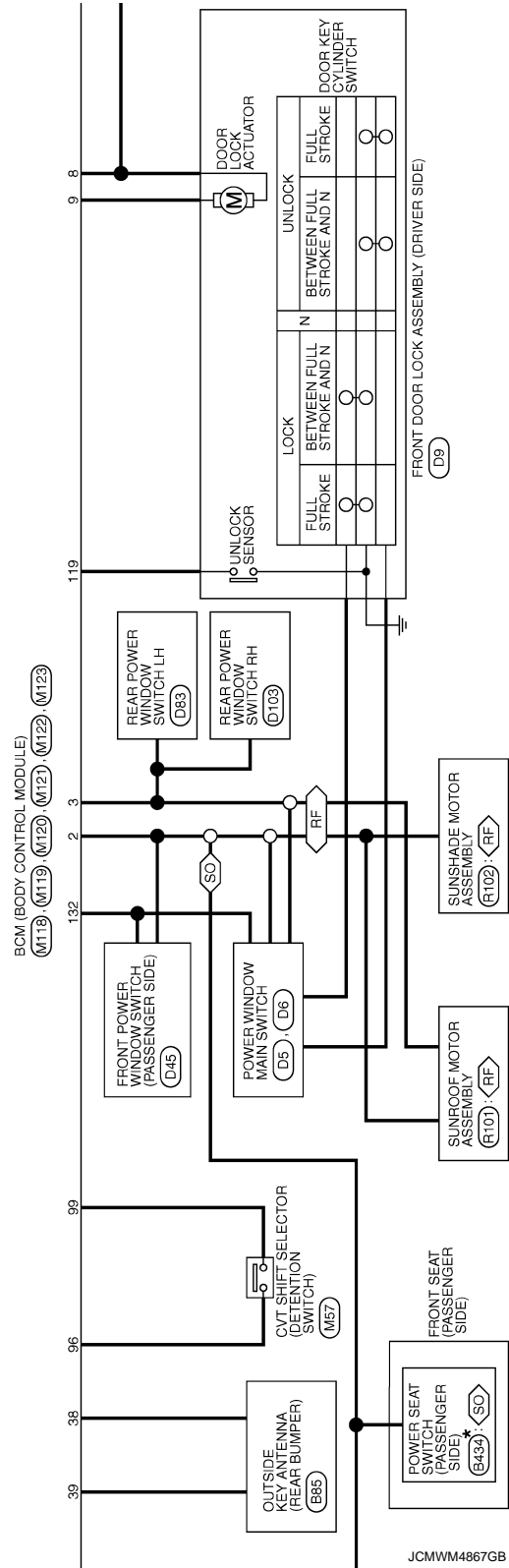
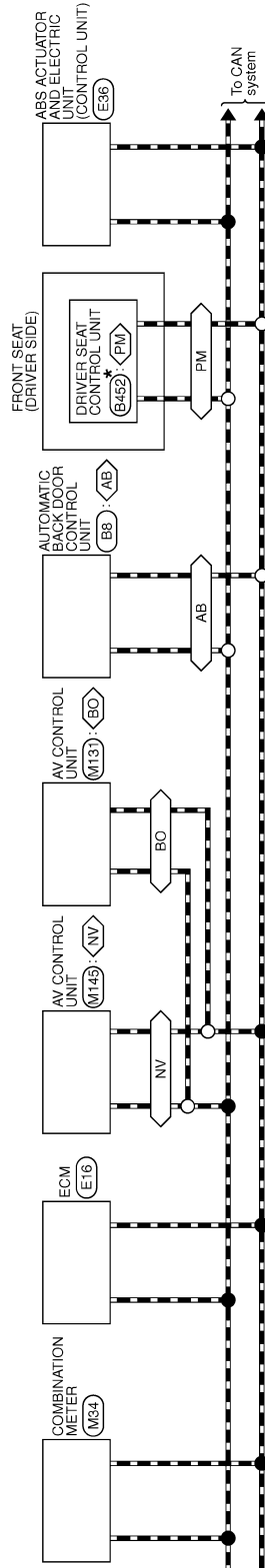
JCMWM4866GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

- ◊NV◊ : With navigation system
- ◊BO◊ : With BOSE system without navigation system
- ◊RF◊ : With sunroof
- ◊PM◊ : With automatic drive positioner
- ◊SO◊ : With power seat without automatic drive positioner
- ◊AB◊ : With automatic back door

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

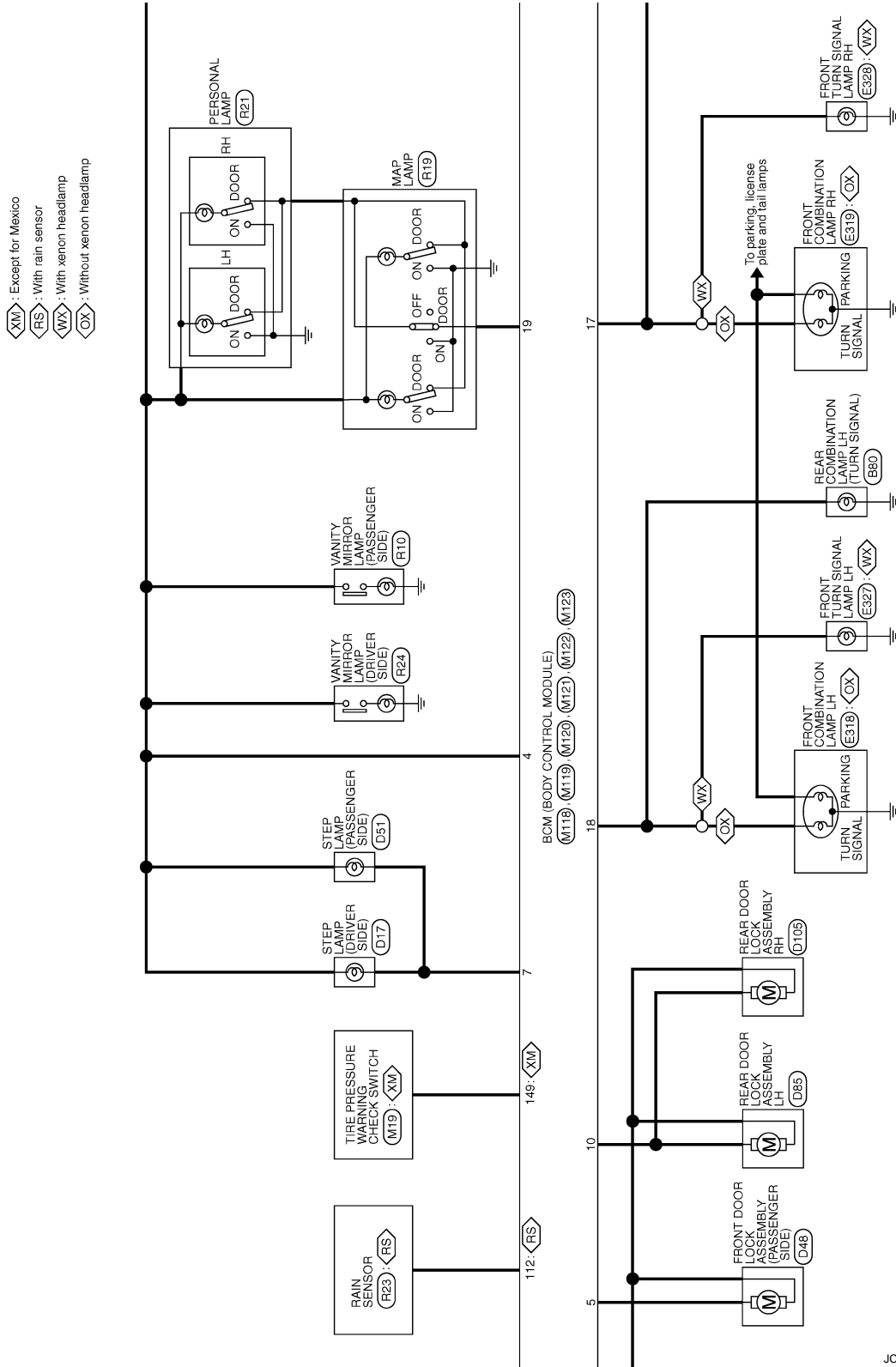


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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

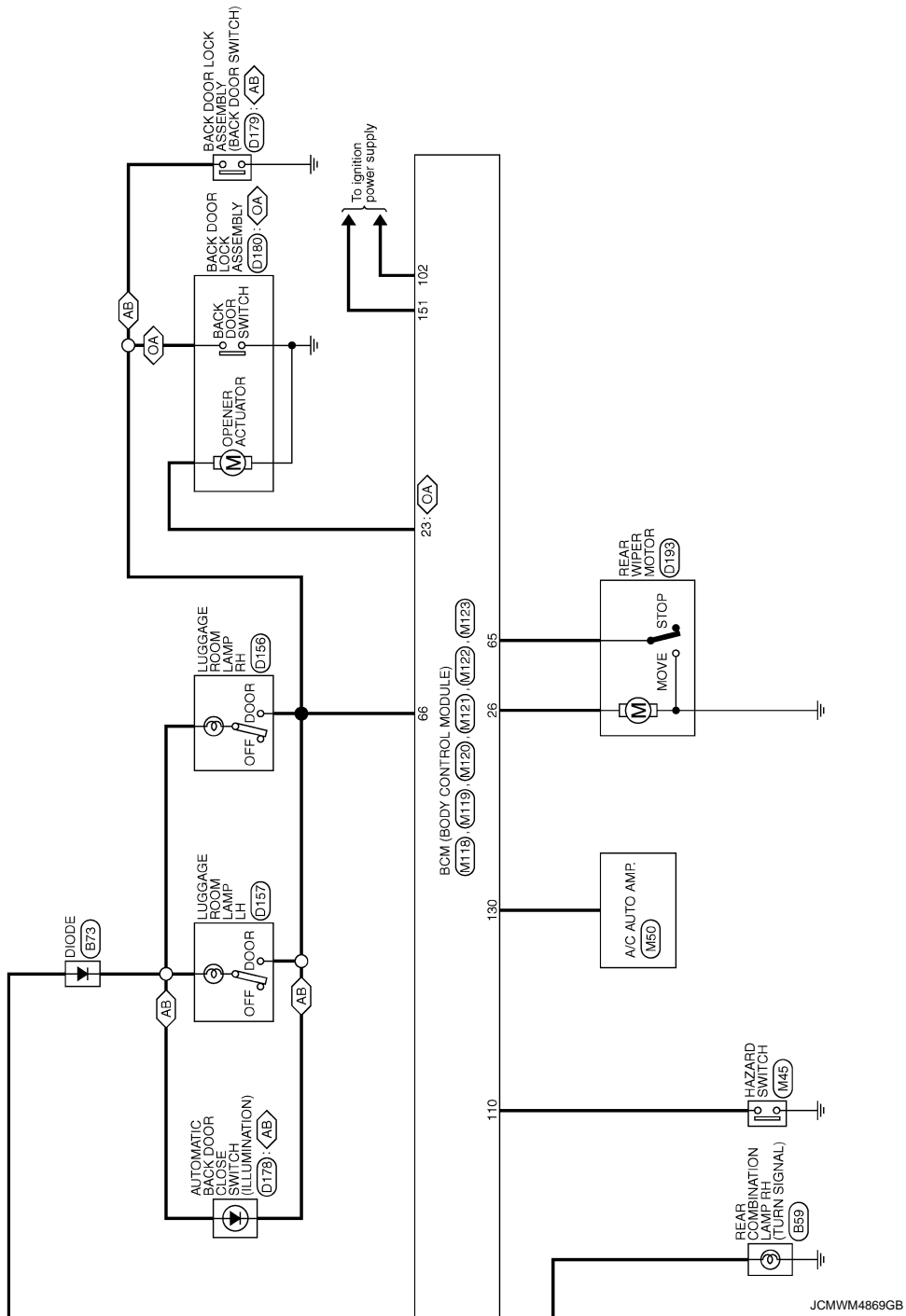


JCMWM4868GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

AB : With automatic back door
OA : Without automatic back door



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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)	
Connector No.	B8
Connector Name	AUTOMATIC BACK DOOR CONTROL UNIT
Connector Type	THE2FW-TE6

Terminal No.	12	11	10	9	8	7	6	5	4	3	2	1
Color of Wire	BR	Y	Y	Y	Y	L	P	P	LG	GR	GR	SB
Signal Name [Specification]	BUZZER	ABD SW	ABD CLOSE SW	CAN HI	CAN LOW	HALF LATCH SW	IGN	BAT	CLOSURE MTR (CLOSE)	CLOSURE MTR (OPEN)	TOUCH SENS LH	TOUCH SENS GND
									TOUCH SENS RH	MAIN SW	CLOSE SW	OPEN SW
									GND	GND	GND	GND
									ENCODER B	ENCODER A	ENCODER PWR	ENCODER PWR

Connector No.	B84
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

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

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

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS0MMW-CS

Terminal No.	1	2	3	4
Color of Wire	LG	B/W	BR	P
Signal Name [Specification]				

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW

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

Connector No.	B73
Connector Name	DIODE
Connector Type	24335-C902

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

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS0MMW-CS

Terminal No.	1	2	3	4
Color of Wire	B	Y	P	L
Signal Name [Specification]				

Connector No.	B85
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY

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

Connector No.	B86
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FGY

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

Connector No.	BZ20
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW

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

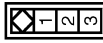
JCMWM4870GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	B221
Connector Name	REAR DOOR SWITCH RH
Connector Type	AS3FW



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

Connector No.	B407
Connector Name	LUMBAR SUPPORT SWITCH
Connector Type	NS4FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
11	O	-
12	LG	-
13	Y/W	-
14	Y	-

Connector No.	B414
Connector Name	POWER SEAT SWITCH (DRIVER SIDE)
Connector Type	NS10FW-CS



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

2	B	-
3	LG	-
4	G/R	-
5	V	-
6	R/L	-
7	L	-
8	L/W	-
9	L/R	-
10	L/B	-

Connector No.	B434
Connector Name	POWER SEAT SWITCH (PASSENGER SIDE)
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G	-
4	G/R	-
5	V	-
6	R/L	-

Connector No.	B452
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TR43FW



Terminal No.	Color of Wire	Signal Name [Specification]
11	G/B	-
12	G/W	-
13	R/G	-
14	R/W	-
15	Y/B	-

16	Y/R	-
17	LG/B	-
18	LC/R	-
19	G/Y	-
20	R/Y	-
21	L/Y	-
22	BR/Y	-
23	P	-
24	P/L	-
25	G/O	-
26	L/O	-
27	V	-
28	V/W	-
29	O/L	-
30	BR	-
31	BR/W	-
32	W/L	-
33	W	-

Connector No.	D5
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS16FW-CS



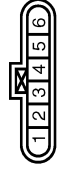
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	W	-
3	BR	-
4	L	-
5	SB	-
6	R	-
7	P	-
8	L	-
9	G	-
10	V	-
11	LG	-
13	Y	-
14	O	-
15	R	-

Connector No.	D6
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS33FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
17	B	-
19	LG	-

Connector No.	D8
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	EB6FGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	P	-
4	B	-
5	R	-
6	L	-

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	D11
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RK02FB



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

Connector No.	D12
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



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

Connector No.	D17
Connector Name	STEP LAMP (DRIVER SIDE)
Connector Type	G02FW



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

Connector No.	D45
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
3	W	-
4	R	-
8	L	-
9	LG	-
10	P	-
11	B	-
12	Y	-
13	G	-
16	O	-

Connector No.	D48
Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Type	E06FGY-RS



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

Connector No.	D50
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RK02FB



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

Connector No.	D51
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	G02FW



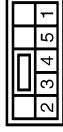
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D52
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



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

Connector No.	D83
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D85
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	E06FGY-RS



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

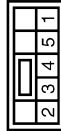
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	D103
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS88FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D105
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	ED8FCY-RS



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

Connector No.	D156
Connector Name	LUGGAGE ROOM LAMP RH
Connector Type	CJ04FW



Terminal No.	Color of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D157
Connector Name	LUGGAGE ROOM LAMP LH
Connector Type	CJ04FW



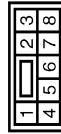
Terminal No.	Color of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D178
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Type	TK08FCY



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

Connector No.	D179
Connector Name	BACK DOOR LOCK ASSEMBLY WITH AUTOMATE BACK DOOR
Connector Type	NS88FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	V	-
4	G	-
5	L	-
6	W	-
7	LG	-
8	B	-

Connector No.	D180
Connector Name	BACK DOOR LOCK ASSEMBLY WITHOUT AUTOMATE BACK DOOR
Connector Type	NS88FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	B	-
3	LG	-
4	B	-

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type	TR04MFP-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	B	-
4	V	-

Connector No.	D193
Connector Name	REAR WIPER MOTOR
Connector Type	CJ04FW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	GR	-
4	O	-

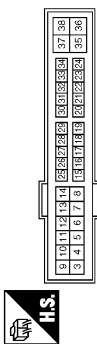
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	E10
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE I/PD/M)
Connector Type	TH20FW-CS12-M4-TV



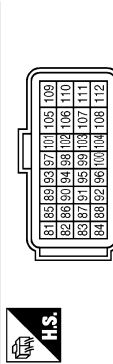
Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
18	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE I/PD/M)
Connector Type	TH20FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E16
Connector Name	ECM
Connector Type	RH24FB-RZ8-L-LH



Terminal No.	Color of Wire	Signal Name [Specification]
81	W	APSI
82	O	APSZ
83	BR	AVCC1-APSI
84	B	GND-APSI
85	Y	ASCD SW
86	SB	FTPRES
87	GR	AVCC2-APSZ
88	O	KLINE
91	L	AVCC2-FTPRES
92	BR	GND-ASQDSW
93	BR	IGN SW
94	GR	TACHO(GABIN)
95	Y	TF
96	GR	GND-FTPRES

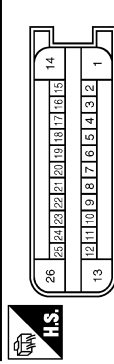
97	P	VEHCAN-L
98	L	VEHCAN-H
100	G	GND-APSZ
102	B	NEUT-T
104	SB	GND-TF
105	V	NBR
106	SB	BRAKE
107	B	GND
108	B	GND
109	W	ODCV
110	G	ENCSW
111	B	GND
112	B	GND

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03FB



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

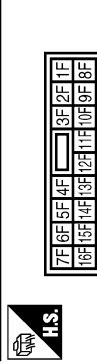
Connector No.	E36
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	AE22FB-AJZ4-LH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	VALVE/ECU SUPPLY
2	Y	WSS RL SIG(-)
3	L	WSS RL PWRC(-)
4	GR	CLUSTER SUPPLY
5	B	WSS FR PWRC(-)

6	W	WSS FR SIG(-)
7	LG	LIS
8	V	WSS FL SIG(-)
9	W	WSS FL PWRC(-)
10	SB	CLUSTER GND
11	P	WSS RR PWRC(-)
12	V	WSS RR SIG(-)
13	B/W	MOTOR GND
14	G	MOTOR SUPPLY
16	SB	BLS
18	O	DIAG K
19	BR	CAN2 H
20	GR	IGN
21	P	GAMI L
22	Y	VDC OFF SW
23	L	CAN2 H
25	W	CAN2 L
26	B/W	VALVE/ECU GND

Connector No.	E03
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS15FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1F	L	-
2F	LG	-
4F	BR	-
6F	Y	-
8F	R	-
9F	GR	-
11F	G	-
12F	V	-

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	E116
Connector Name	STOP LAMP SWITCH
Connector Type	MD4FW-LC



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

Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z08FER



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

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z08FER



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

Connector No.	E527
Connector Name	FRONT TURN SIGNAL LAMP LH
Connector Type	RS02FGY



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

Connector No.	E528
Connector Name	FRONT TURN SIGNAL LAMP RH
Connector Type	RS02FGY



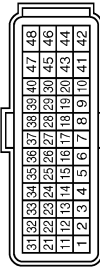
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	B	-

Connector No.	F12
Connector Name	BACK LIGHT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-CS12-M4



Terminal No.	Color of Wire	Signal Name [Specification]
48	W	-
49	R/B	-
51	LG	-
52	Y/G	-
53	R/W	-
54	G/W	-
55	W/L	-
56	R/Y	-
57	O	-
58	Y	-
69	W/B	-
70	O	-
72	R/B	-
75	LG	-
76	SB	-
77	GR	-
80	B	-

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	RM40FB-R2B-L-RH



Terminal No.	Color of Wire	Signal Name [Specification]
1	P/B	INH SW 2
2	P/L	INH SW 3
3	G/O	INH SW 4
4	GR	INH SW 3, MON
5	B	GND

Terminal No.	Color of Wire	Signal Name [Specification]
6	O	K-LINE
7	W	SENSOR GND
8	C/W	CLOCK (SEL2)
9	L/R	CHP-SELECT (SEL1)
10	BR/R	DATA I/O (SEL3)
11	BR/W	INH SW 1
13	V	ATF TEMP SENSOR
14	R/W	PRI PRESS SENSOR
15	V/W	SEC PRESS SENSOR
19	G/B	REV LAMP RELAY
20	R/B	STARTER RELAY
25	W/R	SENSOR GND
26	L/O	SENSOR POWER SOURCE(SV)
27	R/G	S/M-D
28	R	S/M-C
29	O/B	S/M-B
30	G/R	S/M-A
31	P	CAN-L
32	L	CAN-H
33	LG	PRI SPEED SENSOR
34	LG/R	SEC SPEED SENSOR
37	V/R	L/OASEL-ON/OFF SOL
38	L/W	L/OASEL LINEAR SOL
39	W/B	SEC LINEAR SOL
40	R/Y	PL LINEAR SOL
42	B	GND
46	Y	VIGN
47	L/R	BATT
48	Y	VIGN

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-MZ



Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



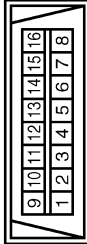
Terminal No.	Color of Wire	Signal Name [Specification]
1B	W	-
2B	L	-
3B	L	-
4B	G	-
5B	L	-
6B	Y	-
7B	R	-
8B	R	-
9B	GR	-

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



Terminal No.	Color of Wire	Signal Name [Specification]
6C	BR	-
7C	B	-
8C	G	-
9C	GR	-
10C	SR	-
11C	R	-
12C	O	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M12
Connector Name	STEERING LOCK UNIT
Connector Type	TK08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	S/L 12V MECHANICAL(V1)
2	LG	S/L COM
3	O	S/L CONDITION 1
5	B	GND 1
6	B	GND 2
7	Y	S/L 12V CP(V2)
8	L	S/L CONDITION 2

Connector No.	M17
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW



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

Connector No.	M19
Connector Name	TIRE PRESSURE WARNING CHECK SWITCH
Connector Type	TK02FW



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

Connector No.	M21
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW



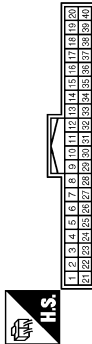
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GND
2	O	SIGNAL
4	V	POWER

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH4CFV-NH



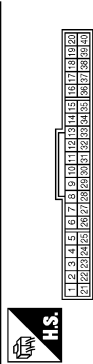
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SW ILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	V	ILLUMINATION CONTROL SWITCH (OFF/ON/automatic drive position)
15	Y	ILLUMINATION CONTROL SWITCH (OFF/ON/automatic drive position)
14	GR	ILLUMINATION CONTROL SWITCH (-)
15	GR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	ER	CHG
26	G	FUEL LEVEL SENSOR GROUND
27	V	PARKING BRAKE SWITCH
28	R	WASHER LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TK03FV



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	G	-
3	R	-
4	SB	-

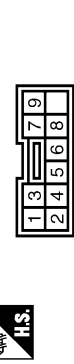
Connector No.	M60
Connector Name	A/C AUTO AMP.
Connector Type	ISAB0FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	CAN-H
2	P	CAN-L
6	L	TX (AMP)/SW (DISP)
7	P	RX (SW/AMP)
10	L	LANT SIG
11	R	VACTR
15	O	SUN SENS
16	G	INTAKE SENS
17	R	ACC
19	B	IGN
20	G	RR DEF F/B
26	GR	RR DEF F/B
27	BR	RR DEF ON
32	L	FAN PWM
34	P	AMB POWER
35	L	AMB SENS
36	LG	INCAR SENS
37	Y	SENS GND

39	B	GND(POWER)
40	Y	BAT

Connector No.	M57
Connector Name	CVT SHFT SELECTOR
Connector Type	TK10FW



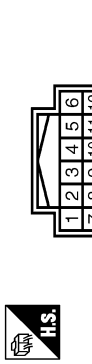
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
4	B	-
6	P	-
7	B	-
8	Y	-
9	V	-

Connector No.	M78
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GND
2	P	SIGNAL
4	L	+12V

Connector No.	M89
Connector Name	KEY SLOT
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	SB	GLOCK
3	O	DATA
5	GR	ILL BAT
6	B	ILL
7	B	GND
11	Y	KEY SWITCH SIGNAL

Connector No.	MT00
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TK02FBR



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

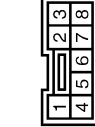
A B C D E F G H I J RF L M N O P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

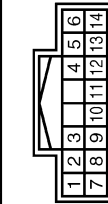
BCM (BODY CONTROL MODULE)

Connector No.	M101
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FR



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	O	-
3	W	-
4	BR	-
5	R	-
6	L	-
7	B	-
8	GR	-

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



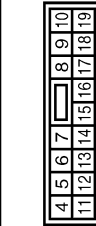
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MS03FB-LC



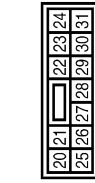
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (TRAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



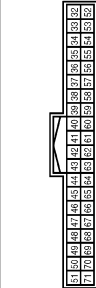
Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT (FUSE)
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



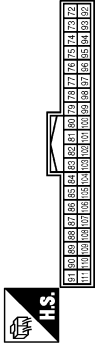
Terminal No.	Color of Wire	Signal Name [Specification]
23	BR	BACK DOOR OPEN OUTPUT
28	G	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	THM0FY-NH



Terminal No.	Color of Wire	Signal Name [Specification]
34	B	LUGGAGE ROOM ANT1-
35	W	LUGGAGE ROOM ANT1+
38	L	REAR BUMPER ANT+
39	BR	REAR BUMPER ANT-
47	L	IGN RELAY EDM L/R CONT
52	R	STARTER RELAY CONT
61	R	BACK DOOR OPENER REQUEST SW
64	GR	REQUEST SW BUZZER
65	O	REAR WIPER STOP POSITION
66	Y	BACK DOOR SW
67	LG	BACK DOOR OPENER SW
68	W	REAR RH DOOR SW
69	R	REAR LH DOOR SW

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



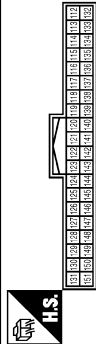
Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBILIZER ANTENNA CONTROL
81	O	IMMOBILIZER ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	PUSH SW
89	BR	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

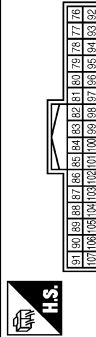
BCM (BODY CONTROL MODULE)

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



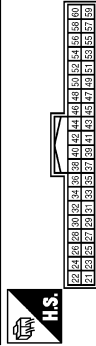
Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN P/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS. RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

Connector No.	M131
Connector Name	AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)
Connector Type	TH32FP-NH



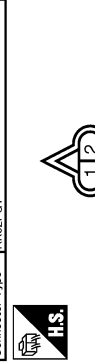
Terminal No.	Color of Wire	Signal Name [Specification]
79	L	TEL VOICE SIGNAL (-)
80	R	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	W	SOUND SIGNAL RH (-) [With DVD player]
82	W	#Red SOUND SIGNAL RH (-) [Without DVD player]
83	R	SOUND SIGNAL RH (+) [With DVD player]
83	R	#Red SOUND SIGNAL RH (+) [Without DVD player]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	R	AV COMM (H)
88	R	AV COMM (L)
89	L	AV COMM (L)
90	G	AV COMM (H)
91	L	AV COMM (L)
95	R	AUX SOUND SIGNAL RH (+)
96	B	AUX SOUND SIGNAL LH (+)
97	W	AUX SOUND SIGNAL GND
98	G	SOUND SIGNAL LH (-) [With DVD player]
98	L	#Red SOUND SIGNAL LH (-) [Without DVD player]
99	B	SOUND SIGNAL LH (+) [With DVD player]
99	BR	#Red SOUND SIGNAL LH (+) [Without DVD player]
100	SHIELD	SHIELD [With DVD player]
100	SHIELD	SHIELD [Without DVD player]
101	V	SW GND
103	W	EJECT SIGNAL
104	G	IGNITION
105	SB	REVERSE
106	G	PARKING BRAKE
107	V	VEHICLE SPEED (8-PULSE)

Connector No.	M145
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
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	R	ACC
26	B	MICROPHONE VCC
21	SHIELD	MICROPHONE GND
21	W	MICROPHONE SIGNAL
35	G	IGNITION
36	G	PARKING BRAKE
37	SB	REVERSE
38	V	VEHICLE SPEED (8-PULSE)
40	P	CONNECTION RECOGNITION
42	B	CONTROL SIGNAL
43	B	CONTROL SIGNAL
48	G	AV COMM (H)
49	R	AV COMM (L)
50	R	AV COMM (H)
51	L	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M202
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	IK02FGY



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

Connector No.	B
---------------	---

Connector No.	RI0
Connector Name	VANITY MIRROR LAMP (PASSENGER SIDE)
Connector Type	MC402FW



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

Connector No.	RI9
Connector Name	MAP LAMP
Connector Type	TK00BFGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	P/W	-
2	Y	-
3	B	-
4	SB	-
5	R/Y	-
6	R/L	-

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

RF

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	R21
Connector Name	PERSONAL LAMP
Connector Type	THRMFV-NH



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

Connector No.	R22
Connector Name	RAIN SENSOR
Connector Type	AA8D9FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y/R	-
2	R	-
3	B	-

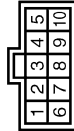
Connector No.	R24
Connector Name	VANITY MIRROR LAMP (DRIVER SIDE)
Connector Type	MC4U2FW



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

1	B
2	P/W

Connector No.	R101
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA10FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	O	GND
3	Y	IGN
4	Y	PUSH SW
5	LG	OPEN SW
6	R	BAT
7	P	COMM
8	BR	SPEED(SP)
9	W	2ND SW
10	V	CLOSE SW

Connector No.	R102
Connector Name	SUNSHADE MOTOR ASSEMBLY
Connector Type	YEA10FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
6	G	BAT
7	P	COMM
8	BR	SPEED(SP)

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

JCMWM4880GB

INFOID:000000005681520

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation	A
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC	A
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC	B
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC	B
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC	C
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC	C
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC	D
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF	D
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms	E
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal 	E
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent <ul style="list-style-type: none"> • Selector lever P position switch signal • P range signal (CAN) 	F
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more 	G
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V) 	H
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF 	I
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position <ul style="list-style-type: none"> - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON 	J
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal) 	RF

BCM (BODY CONTROL MODULE)

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Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> • Starter motor relay control signal • Starter relay status signal (CAN)
B2609: S/L STATUS	<ul style="list-style-type: none"> • Inhibit engine cranking • Inhibit steering lock 	When the following steering lock conditions agree <ul style="list-style-type: none"> • BCM steering lock control status • Steering lock condition No. 1 signal status • Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	<ul style="list-style-type: none"> • Inhibit engine cranking • Inhibit steering lock 	When any of the following conditions are fulfilled <ul style="list-style-type: none"> • Steering lock unit status signal (CAN) is received normally • The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	<ul style="list-style-type: none"> • Inhibit engine cranking • Inhibit steering lock 	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled <ul style="list-style-type: none"> • Steering condition No. 1 signal: LOCK (0V) • Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF ⇒ ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

1. More than 1 minute is passed after the rear wiper stop.

BCM (BODY CONTROL MODULE)

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2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

A

DTC Inspection Priority Chart

INFOID:000000005681521

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

B

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> • U1000: CAN COMM • U1010: CONTROL UNIT(CAN)
3	<ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING
4	<ul style="list-style-type: none"> • B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG

C

D

E

F

G

H

I

J

RF

L

M

N

O

P

BCM (BODY CONTROL MODULE)

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Priority	DTC
5	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	<ul style="list-style-type: none"> • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

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NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [BCS-17. "COMMON ITEM : CONSULT-III Function \(BCM - COMMON ITEM\)"](#).

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-38
U1010: CONTROL UNIT(CAN)	—	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L*	×	×	—	—	SEC-51
B2014: CHAIN OF S/L-BCM*	×	×	—	—	SEC-52
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-43
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-46
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-47
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-49
B2195: ANTI SCANNING	×	—	—	—	SEC-50
B2553: IGNITION RELAY	—	×	—	—	PCS-48
B2555: STOP LAMP	—	×	—	—	SEC-55
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-57
B2557: VEHICLE SPEED	×	×	×	—	SEC-59
B2560: STARTER CONT RELAY	×	×	×	—	SEC-60
B2562: LOW VOLTAGE	—	×	—	—	BCS-41
B2601: SHIFT POSITION	×	×	×	—	SEC-61
B2602: SHIFT POSITION	×	×	×	—	SEC-64
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-66
B2604: PNP SW	×	×	×	—	SEC-69

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2605: PNP SW	×	×	×	—	SEC-71
B2606: S/L RELAY*	×	×	×	—	SEC-73
B2607: S/L RELAY*	×	×	×	—	SEC-74
B2608: STARTER RELAY	×	×	×	—	SEC-76
B2609: S/L STATUS*	×	×	×	—	SEC-78
B260A: IGNITION RELAY	×	×	×	—	PCS-50
B260B: STEERING LOCK UNIT*	—	×	×	—	SEC-82
B260C: STEERING LOCK UNIT*	—	×	×	—	SEC-83
B260D: STEERING LOCK UNIT*	—	×	×	—	SEC-84
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-85
B2612: S/L STATUS*	×	×	×	—	SEC-88
B2614: ACC RELAY CIRC	—	×	×	—	PCS-52
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-55
B2616: IGN RELAY CIRC	—	×	×	—	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-92
B2618: BCM	×	×	×	—	PCS-61
B2619: BCM*	×	×	×	—	SEC-94
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-95
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-98
B2622: INSIDE ANTENNA	—	×	—	—	DLK-91
B2623: INSIDE ANTENNA	—	×	—	—	DLK-93
B26E9: S/L STATUS*	×	×	× (Turn ON for 15 seconds)	—	SEC-86
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-87
C1704: LOW PRESSURE FL	—	—	—	×	WT-25
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-27
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-30
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-32
C1734: CONTROL UNIT	—	—	—	×	WT-34

NOTE:

*: For models without steering lock unit this DTC is not applied.

SUNROOF MOTOR ASSEMBLY

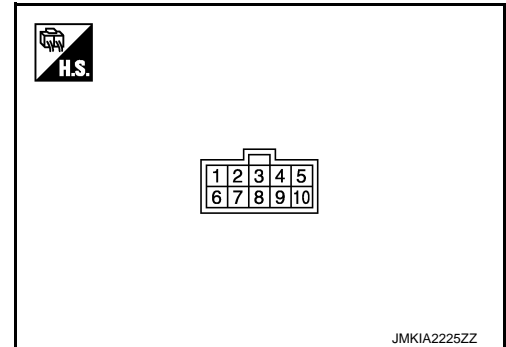
< ECU DIAGNOSIS INFORMATION >

SUNROOF MOTOR ASSEMBLY

Reference Value

INFOID:00000000516847

TERMINAL LAYOUT



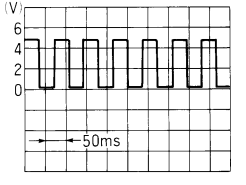
PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage (V) (Approx.)
+	-	Signal name	Input/ Output		
1 (B)	Ground	Ground	—	—	0
2 (O)	Ground	Ground	—	—	0
3 (L)	Ground	RAP signal	Input	Ignition switch ON	Battery voltage
				Within 45 second after ignition switch is turned to OFF.	Battery voltage
				When driver side or passenger side door is opened during retained power operation or retained power operation is finished.	0
4 (Y)	Ground	Sunroof switch signal (PUSH)	Input	Sunroof switch	PUSH 0 Other than above Battery voltage
				Sunroof switch	OPEN (1st and 2nd) 0 Other than above Battery voltage
5 (LG)	Ground	Sunroof switch signal (OPEN)	Input	Sunroof switch	OPEN (1st and 2nd) 0 Other than above Battery voltage
6 (R)	Ground	Battery voltage	—	—	Battery voltage
7 (P)	Ground	Communication line	Input/ Output	Ignition switch ON	

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SUNROOF MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Voltage (V) (Approx.)				
+	-	Signal name	Input/ Output						
8 (BR)	Ground	Vehicle speed signal (2-pulse)	Input	Speed meter operated [When vehicle speed is approx. 40km/h (25MPH)]					
9 (W)	Ground	Sunroof switch signal (2nd)	Input	Sunroof switch	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">OPEN or CLOSE (2nd)</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">Other than above</td> <td style="text-align: center;">Battery voltage</td> </tr> </table>	OPEN or CLOSE (2nd)	0	Other than above	Battery voltage
				OPEN or CLOSE (2nd)	0				
Other than above	Battery voltage								
Sunroof switch	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CLOSE (1st and 2nd)</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">Other than above</td> <td style="text-align: center;">Battery voltage</td> </tr> </table>	CLOSE (1st and 2nd)	0	Other than above	Battery voltage				
CLOSE (1st and 2nd)	0								
Other than above	Battery voltage								
10 (V)	Ground	Sunroof switch signal (CLOSE)	Input	Sunroof switch	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CLOSE (1st and 2nd)</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">Other than above</td> <td style="text-align: center;">Battery voltage</td> </tr> </table>	CLOSE (1st and 2nd)	0	Other than above	Battery voltage
				CLOSE (1st and 2nd)	0				
Other than above	Battery voltage								
Sunroof switch	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CLOSE (1st and 2nd)</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">Other than above</td> <td style="text-align: center;">Battery voltage</td> </tr> </table>	CLOSE (1st and 2nd)	0	Other than above	Battery voltage				
CLOSE (1st and 2nd)	0								
Other than above	Battery voltage								

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

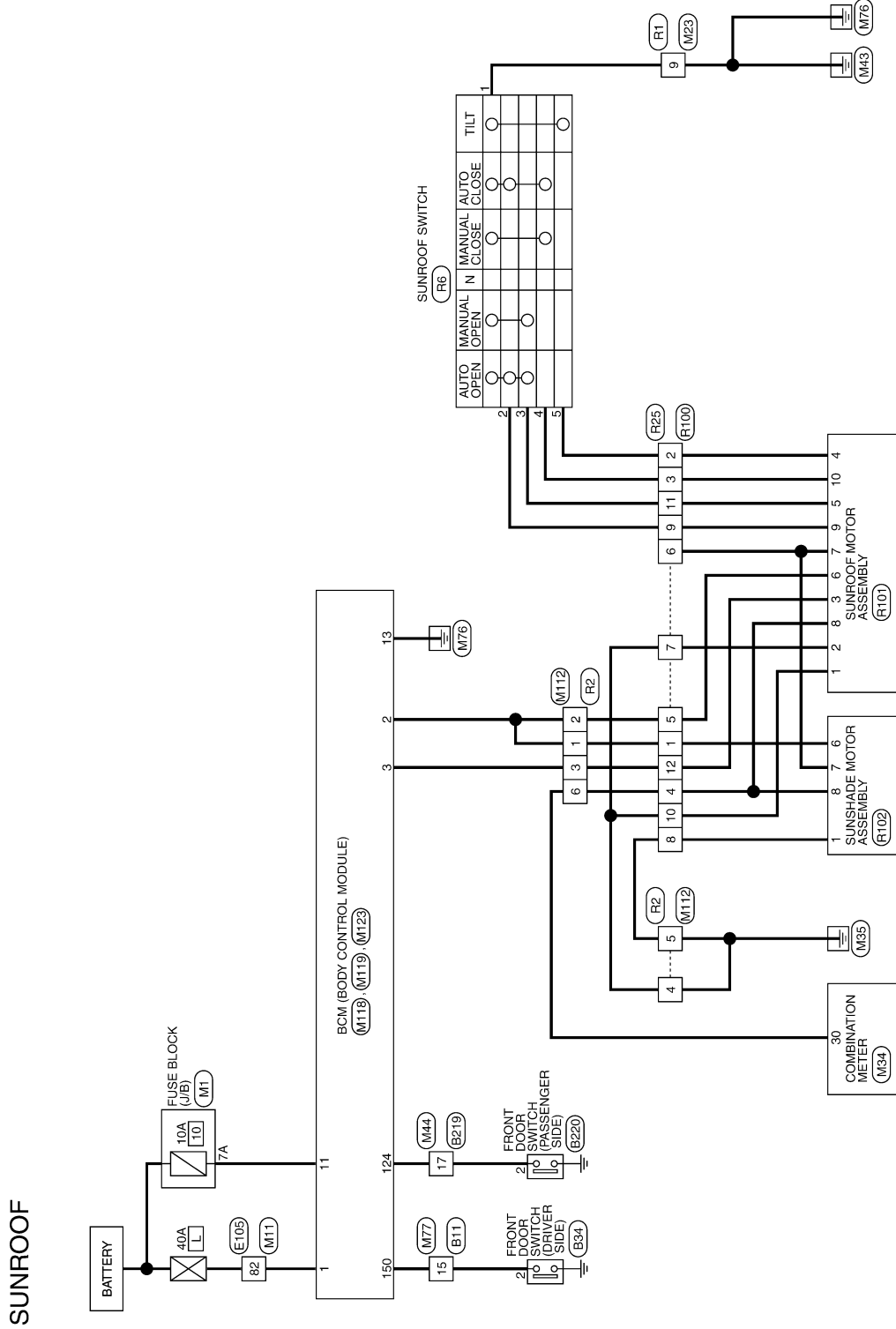
RF

SUNROOF MOTOR ASSEMBLY

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Wiring Diagram - SUNROOF CONTROL SYSTEM -

INFOID:00000000516848



2008/09/23

JCKWM2258GB

SUNROOF MOTOR ASSEMBLY

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Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-	44	BR	-
2	B	-	45	L	-
3	R/L	-	46	GR	-
4	R/W	-	47	GR	-
5	SB	-	48	GR	- [With rear view camera and telephone]
6	P	-	49	BR	- [With rear view camera without telephone]
7	Y	-	50	SHIELD	-
8	SHIELD	-	51	B	-
9	BR/L	-	52	B	-
10	Y/G	-	53	Y	-
11	Y/L	-	54	LG	-
12	W/L	-	55	BR	-
13	L	-	56	P	-
14	BR	-	57	L	-
15	SB	-	58	R	-
16	BR	-	59	SHIELD	-
17	V	-	60	B	-
18	SB	-	61	R/L	-
19	R	-	62	R/W	-
20	P	-	63	LG	-
21	LG	-	64	Y	-
22	W	-	66	GR	-
23	Y	-	67	G	-
24	GR	-	68	R	-
25	Y	-	69	SHIELD	-
27	V	-	70	W/R	-
28	W/L	-	71	B/R	-
30	P	-	72	Y	-
31	O	-	73	LG	-
32	BR	-	74	SB	-
34	SB	-	75	L	-
35	SHIELD	-	76	G	-
36	L/O	-	77	R	-
37	LG	-	78	SHIELD	-
40	Y	-	79	B	-
41	O	-	80	W	-
42	SB	-	81	R	-
43	G	-	82	L	-
			83	BR	-
			84	O	-
			85	G	-
			86	SB	-
			87	R	-
			88	G	-
			89	GR	-
			90	Y	-
			91	G	-
			92	BR	-
			93	G	-
			94	V	-
			95	BR	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

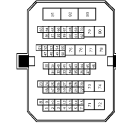
Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11		

SUNROOF MOTOR ASSEMBLY

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SUNROOF

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
43	P	-
46	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

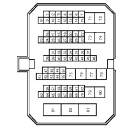
67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FY-M2



Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH10FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-
24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-

67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	SHIELD	- [With telephone and navigation system]
2	R	- [With telephone without navigation system]
3	B	-
4	SHIELD	-
6	R	-
7	Y	-
8	Y	-
9	B	-
10	Y	-
11	P	-
12	L	-
13	SB	-
15	G	-
16	R	-

SUNROOF MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

SUNROOF

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH4CPV-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SW ILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	Y	ILLUMINATION CONTROL SWITCH (With automatic drive positioner)
14	GR	ILLUMINATION CONTROL SWITCH (-)
15	BR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	GROUND
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
26	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

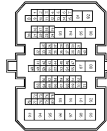
Connector No.	M44
Connector Name	WIRE TO WIRE
Connector Type	TH32FPV-MH



16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	G	
2	R	
3	SHIELD	
4	B	
5	W	
6	SHIELD	
7	L	
8	R	
9	SHIELD	
10	V	
11	LG	
12	SHIELD	
13	P	
15	LG	
16	L	
17	R	
18	W	
29	LG	
30	O	
31	Y	
32	V	

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80PW-OS19



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

Terminal No.	Color of Wire	Signal Name [Specification]
59	SHIELD	
60	B	
61	R	
62	W	
63	O	
64	Y	
66	L	
67	R	
68	G	
69	SHIELD	
70	L	
71	R	
72	LG	
73	Y	
74	R	
75	P	
76	L	
77	BR	
78	SHIELD	
79	B	
80	W	
81	LG	
82	L	
83	W	
83	GR	
84	R	
85	V	
85	GR	
86	W	
87	R	
88	G	
89	B	
90	G	
91	G	
92	BR	
93	P	
94	V	
95	O	
96	SB	
97	L	
98	LG	
99	Y	

Terminal No.	Color of Wire	Signal Name [Specification]
2	B	
3	W	
4	R	
5	Y	
6	W	
7	G	
8	SHIELD	
9	W	
10	R	
11	G	
12	B	
13	O	
14	R	
15	SB	
16	R	
17	V	
18	P	
19	P	
20	LG	
21	Y	
22	O	
23	LG	
24	SB	
25	Y	
27	Y	
28	R	
30	Y	
31	W	
32	BR	
34	Y	
35	SHIELD	
36	G	
37	Y	
40	O	
41	O	
42	SB	
43	L	
44	V	
45	P	
46	R	
47	Y	
48	L	
49	G	
50	SHIELD	
51	W	
52	B	
53	BR	
54	B	
55	G	
56	P	
57	L	
58	SB	

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SUNROOF MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

SUNROOF

Connector No.	M112
Connector Name	WIRE TO WIRE
Connector Type	NS08AW-CS



1	2
3	4
5	6

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
3	L	-
4	B	-
5	B	-
6	P	-

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



1	3
2	

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (E/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19					

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LC	BAT (FUSE)
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FC-NH



11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFROGGER SW

Terminal No.	Color of Wire	Signal Name [Specification]
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	B	LOCK IND
137	B	RECEIVER SENSOR CHD
138	V	RECEIVER SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT IN/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFROGGER RELAY

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



8	7	6	5	4	3	2	1
16	15	14	13	12	11	10	9

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-
2	SHIELD	-[With telephone and navigation system]
2	R/L	-[With telephone without navigation system]
3	B	-
4	SHIELD	-
6	R/L	-
7	Y/R	-
8	B/Y	-
9	B	-
10	Y	-
11	P/W	-
12	B	-
13	R/Y	-
15	B/R	-
16	R	-

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS



2	1
6	5
4	3

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/Y	-
2	R/Y	-
3	L/W	-
4	B	-
5	B	-
6	L/B	-

Connector No.	R6
Connector Name	SUNROOF SWITCH
Connector Type	TH08FW-NH



1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	W/R	-
3	L/G	-
4	V	-
5	Y	-

SUNROOF MOTOR ASSEMBLY


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SUNROOF

Connector No.	R25
Connector Name	WIRE TO WIRE
Connector Type	NS12PW-CS



5	4	3	2	1		
12	11	10	9	8	7	6


Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12
Color of Wire	R/Y	Y	V	L/B	R/Y	B	B	W/R	B	LG	L/W	-
Signal Name [Specification]	-	-	-	-	-	-	-	-	-	-	-	-



Terminal No.	1	2	3	4	5	6	7	8	9	10
Color of Wire	B	O	Y	LG	R	P	BR	W	2ND SW	V
Signal Name [Specification]	GND	GND	IGN	PUSH SW	OPEN SW	BAT	COMM	SPEED(P)	2ND SW	CLOSE SW

SUNROOF

Connector No.	R101
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEAT0FGY




1	2	3	4	5
6	7	8	9	10




Terminal No.	1	2	3	4	5	6	7	8
Color of Wire	B	G	P	BR	COMM	SPEED(P)	-	-
Signal Name [Specification]	GND	BAT	COMM	SPEED(P)	-	-	-	-

SUNROOF

Connector No.	R100
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS




1	2	3	4	5		
6	7	8	9	10	11	12




Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12
Color of Wire	G	Y	V	BR	R	P	O	B	W	B	LG	-
Signal Name [Specification]	-	-	-	-	-	-	-	-	-	-	-	-

SUNROOF

Connector No.	R102
Connector Name	SUNSHADE MOTOR ASSEMBLY
Connector Type	YEAT0FGY



1	2	3	4	5		
6	7	8	9	10	11	12



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

JCKWM3415GB

SUNSHADE MOTOR ASSEMBLY

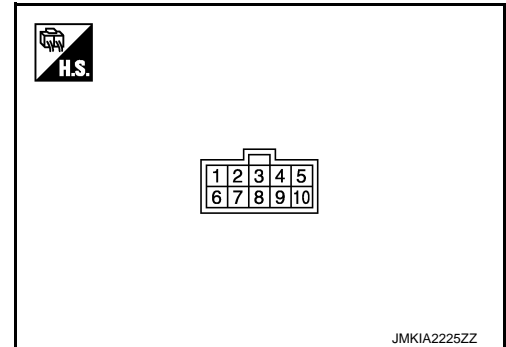
< ECU DIAGNOSIS INFORMATION >

SUNSHADE MOTOR ASSEMBLY

Reference Value

INFOID:000000005516849

TERMINAL LAYOUT



PHYSICAL VALUES

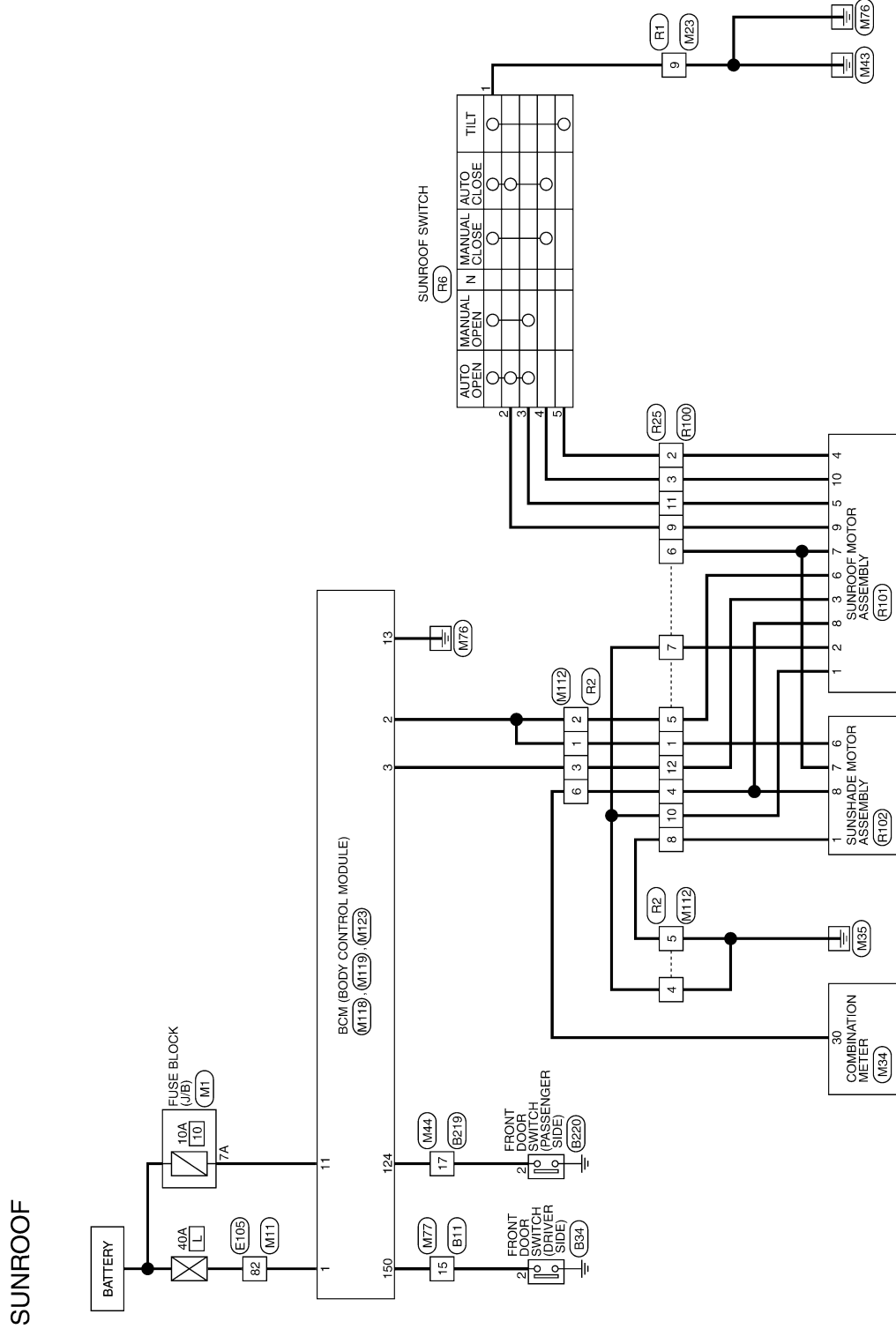
Terminal No. (Wire color)		Description		Condition	Voltage (V) (Approx.)
+	-	Signal name	Input/ Output		
1 (B)	Ground	Ground	—	—	0
6 (G)	Ground	Battery voltage	—	—	Battery voltage
7 (P)	Ground	Communication line	Input/ Output	Ignition switch ON	<p>JMKIA1869ZZ</p>
8 (BR)	Ground	Vehicle speed signal (2-pulse)	Input	Speed meter operated [When vehicle speed is approx. 40km/h (25MPH)]	<p>ELF1080D</p>

SUNSHADE MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - SUNROOF CONTROL SYSTEM -

INFOID:000000005712981



2008/09/23

JCKWM2258GB


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SUNSHADE MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

SUNROOF

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	THB0MW-CS19




Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R/L	-
4	R/W	-
5	SB	-
6	P	-
7	V	-
8	SHIELD	-
9	BR/L	-
10	Y/G	-
11	Y/L	-
12	W/L	-
13	L	-
14	BR	-
15	SB	-
16	BR	-
17	V	-
18	SB	-
19	R	-
20	P	-
21	LG	-
22	W	-
23	Y	-
24	GR	-
25	Y	-
27	V	-
28	W/L	-
30	P	-
31	O	-
32	BR	-
34	SB	-
35	SHIELD	-
36	L/O	-
37	LG	-
40	Y	-
41	O	-
42	SB	-
43	G	-

44	BR	-
45	L	-
46	GR	-
47	V	-
48	GR	[With rear view camera and telephone]
48	BR	[With rear view camera without telephone]
49	Y	-
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-
63	LG	-
64	L	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-
75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-

FRONT DOOR SWITCH (DRIVER SIDE)


Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



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

FRONT DOOR SWITCH (PASSENGER SIDE)


Connector No.	B20
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



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

WIRE TO WIRE

Connector No.	B219
Connector Name	WIRE TO WIRE
Connector Type	THS2MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
14	SB	-
15	SB	-
16	Y	-

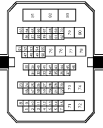
JCKWM3411GB

SUNSHADE MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

SUNROOF

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
47	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-


67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS50FW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

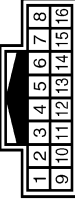
Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH70FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-
24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-

67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	SHIELD	- [With telephone and navigation system]
3	R	- [With telephone and navigation system]
4	SHIELD	-
6	R	-
7	Y	-
8	Y	-
9	B	-
10	Y	-
11	P	-
12	L	-
13	SB	-
15	G	-
16	R	-

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SUNSHADE MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

SUNROOF

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH45FW-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	25	26	27	28	29	30	31	32
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Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
6	SB	TRIP RESET SWITCH
7	W	SW ILLUMINATOR
8	O	METER CONTROL SW GND
9	L	ENTER SWITCH
10	L	SELECT SWITCH
11	Y	ILLUMINATION CONTROL SWITCH (-) (With automatic drive positioner)
12	R	ILLUMINATION CONTROL SWITCH (-) (Without automatic drive positioner)
13	Y	ILLUMINATION CONTROL SWITCH (-)
14	GR	ILLUMINATION CONTROL SWITCH (-)
15	BR	AIR BAG
16	L	AMBIENT SENSOR
17	P	AMBIENT SENSOR POWER
18	P	AMBIENT SENSOR GROUND
19	P	AMBIENT SENSOR GROUND
20	Y	CAN-H
21	L	CAN-L
22	P	GROUND
23	B	FUEL LEVEL SENSOR GROUND
24	W	GROUND
25	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
28	R	WASHER LEVEL SWITCH
29	P	VEHICLE SPEED (2-PULSE)
30	P	VEHICLE SPEED (8-PULSE)
31	V	OD OFF/SPORTS
32	LG	FUEL LEVEL SENSOR
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

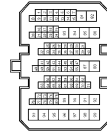
Connector No.	M44
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	G	
2	R	
3	SHIELD	
4	B	
5	W	
6	SHIELD	
7	L	
8	R	
9	SHIELD	
10	V	
11	LG	
12	SHIELD	
13	P	
14	LG	
15	L	
16	L	
17	R	
18	W	
19	SHIELD	
20	LG	
21	Y	
22	O	
23	LG	
24	SB	
25	Y	
27	Y	
28	R	
30	Y	
31	W	
32	V	

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-C519



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

Terminal No.	Color of Wire	Signal Name [Specification]
2	B	
3	W	
4	R	
5	W	
6	W	
7	G	
8	SHIELD	
9	W	
10	R	
11	G	
12	B	
13	O	
14	R	
15	SB	
16	R	
17	V	
18	P	
19	P	
20	LG	
21	Y	
22	O	
23	LG	
24	SB	
25	Y	
27	Y	
28	R	
30	Y	
31	W	
32	BR	
34	Y	
35	SHIELD	
38	G	
39	B	
40	Y	
41	O	
42	SB	
43	L	
44	V	
45	P	
46	R	
47	Y	
48	L	
49	G	
50	SHIELD	
51	W	
52	B	
53	BR	
54	B	
55	G	
56	P	
57	L	
58	SB	

Terminal No.	Color of Wire	Signal Name [Specification]
59	SHIELD	
60	B	
61	R	
62	W	
63	O	
64	Y	
66	L	
67	R	
68	G	
69	SHIELD	
70	L	
71	R	
72	LG	
73	Y	
74	R	
75	P	
76	L	
77	BR	
78	SHIELD	
79	B	
80	W	
81	LG	
82	L	
83	W	
83	GR	
84	R	
85	V	
85	GR	
86	W	
87	R	
88	G	
89	B	
90	G	
91	G	
92	BR	
93	P	
94	V	
95	O	
96	SB	
97	L	
98	LG	
99	Y	

SUNSHADE MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

SUNROOF

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FT-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
3	L	-
4	B	-
5	B	-
6	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT FUSE
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
3	L	-
4	B	-
5	B	-
6	P	-

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS03FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/Y	-
2	R/Y	-
3	L/W	-
4	B	-
5	B	-
6	L/B	-

Connector No.	R6
Connector Name	SUNROOF SWITCH
Connector Type	TH00FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	W/R	-
3	LG	-
4	V	-
5	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
3	L	-
4	B	-
5	B	-
6	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-
2	SHIELD	-[With telephone and navigation system]
2	R/L	-[With telephone without navigation system]
3	B	-
4	SHIELD	-
6	R/L	-
7	Y/R	-
8	B/Y	-
9	B	-
10	Y	-
11	P/W	-
12	B	-
13	R/Y	-
15	B/R	-
16	R	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-
2	SHIELD	-[With telephone and navigation system]
2	R/L	-[With telephone without navigation system]
3	B	-
4	SHIELD	-
6	R/L	-
7	Y/R	-
8	B/Y	-
9	B	-
10	Y	-
11	P/W	-
12	B	-
13	R/Y	-
15	B/R	-
16	R	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-
2	SHIELD	-[With telephone and navigation system]
2	R/L	-[With telephone without navigation system]
3	B	-
4	SHIELD	-
6	R/L	-
7	Y/R	-
8	B/Y	-
9	B	-
10	Y	-
11	P/W	-
12	B	-
13	R/Y	-
15	B/R	-
16	R	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-
2	SHIELD	-[With telephone and navigation system]
2	R/L	-[With telephone without navigation system]
3	B	-
4	SHIELD	-
6	R/L	-
7	Y/R	-
8	B/Y	-
9	B	-
10	Y	-
11	P/W	-
12	B	-
13	R/Y	-
15	B/R	-
16	R	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/W	-
2	SHIELD	-[With telephone and navigation system]
2	R/L	-[With telephone without navigation system]
3	B	-
4	SHIELD	-
6	R/L	-
7	Y/R	-
8	B/Y	-
9	B	-
10	Y	-
11	P/W	-
12	B	-
13	R/Y	-
15	B/R	-
16	R	-

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RF

SUNSHADE MOTOR ASSEMBLY

< ECU DIAGNOSIS INFORMATION >

Terminal No.	Color of Wire	Signal Name [Specification]
1	R/Y	-
2	Y	-
3	V	-
4	L/B	-
5	R/Y	-
7	B	-
8	B	-
9	W/R	-
10	B	-
11	LG	-
12	L/W	-

12	L	-
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Connector No.	R25
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

1	5
2	14
3	11
4	10
5	9
6	8
7	7
8	6
9	3
10	2
11	1
12	16

Terminal No.	Color of Wire <td>Signal Name [Specification]</td>	Signal Name [Specification]
1	B	GND
2	O	GND
3	L	IGN
4	Y	PUSH SW
5	LG	OPEN SW
6	R	BAT
7	P	COMM
8	BR	SPEED(SP)
9	W	2ND SW
10	V	CLOSE SW

Connector No.	R101
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA10FGY

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

Connector No.	R100
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS

1	1
2	2
3	3
4	4
5	5
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10	10
11	11
12	12

Terminal No.	Color of Wire <td>Signal Name [Specification]</td>	Signal Name [Specification]
1	B	GND
6	G	BAT
7	P	COMM
8	BR	SPEED(SP)

Connector No.	R102
Connector Name	SUNSHADE MOTOR ASSEMBLY
Connector Type	YEA10FGY

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

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

JCKWM3415GB

SUNROOF DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

SUNROOF DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:000000005516851

1.CHECK SUNROOF MECHANISM

Check the following.

- Operation malfunction caused by sunroof mechanism deformation, pinched harness or other foreign materials
- Operation malfunction and interference with other parts by poor installation

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SUNROOF MOTOR ASSEMBLY POWER SUPPLY AND GROUND CIRCUIT

Check sunroof motor assembly power supply and ground circuit.

Refer to [RF-11, "SUNROOF MOTOR ASSEMBLY : Diagnosis Procedure"](#)

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK SUNROOF SWITCH

Check sunroof switch.

Refer to [RF-15, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39, "Intermittent Incident"](#).

NO >> GO TO 1.

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SUNSHADE SYSTEM DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

SUNSHADE SYSTEM DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:000000005516852

1.CHECK SUNSHADE MECHANISM

Check the following.

- Operation malfunction caused by sunshade mechanism deformation, pinched harness or other foreign materials
- Operation malfunction and interference with other parts by poor installation

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SUNSHADE MOTOR ASSEMBLY POWER SUPPLY AND GROUND CIRCUIT

Check sunshade motor assembly power supply and ground circuit.

Refer to [RF-12. "SUNSHADE MOTOR ASSEMBLY : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK COMMUNICATION CIRCUIT

Check communication circuit.

Refer to [RF-14. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39. "Intermittent Incident"](#).

NO >> GO TO 1.

AUTO OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTO OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000005516853

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [RF-4, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#).

Is the inspection result normal?

YES >> Sunroof and sunshade system is normal.

NO >> GO TO 2.

2.CHECK SUNROOF SWITCH

Check sunroof switch.

Refer to [RF-15, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39, "Intermittent Incident"](#).

NO >> GO TO 1.

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RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:000000005516854

1.CHECK DOOR SWITCH

Check door switch.

Refer to [RF-17, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39, "Intermittent Incident"](#).

NO >> GO TO 1.

ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:00000000516855

1.CHECK SUNROOF AND SUNSHADE MECHANISM

Check the following.

- Operation malfunction caused by sunroof and sunshade mechanism deformation, pinched harness or other foreign materials
- Operation malfunction and interference with other parts by poor installation

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.PERFORM INITIALIZATION

Perform initialization procedure.

Refer to [RF-4, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#).

Is the inspection result normal?

YES >> Sunroof and sunshade system is normal.

NO >> GO TO 1.

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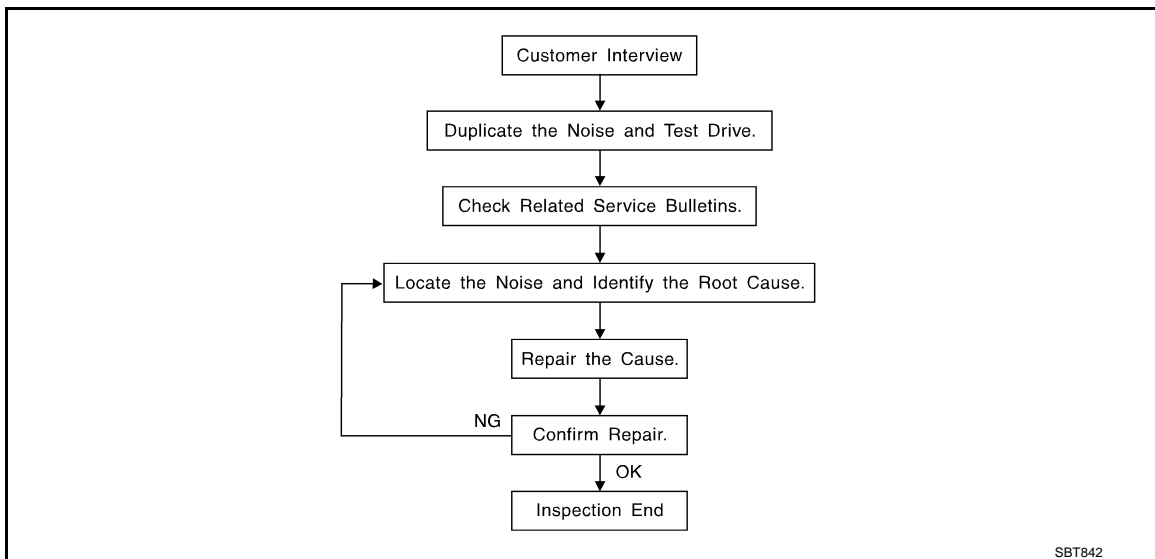
SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:00000000516856



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to [RF-88, "Diagnostic Worksheet"](#). This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak – (Like tennis shoes on a clean floor)
Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak – (Like walking on an old wooden floor)
Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle – (Like shaking a baby rattle)
Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock – (Like a knock on a door)
Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick – (Like a clock second hand)
Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump – (Heavy, muffled knock noise)
Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz – (Like a bumblebee)
Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when the repair is reconfirmed.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

- 1) Close a door.
 - 2) Tap or push/pull around the area where the noise appears to be coming from.
 - 3) Rev the engine.
 - 4) Use a floor jack to recreate vehicle "twist".
 - 5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
 - 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
 - If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.

If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - Removing the components in the area that is are suspected to be the cause of the noise.
Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
 - Tapping or pushing/pulling the component that is are suspected to be the cause of the noise.
Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
 - Placing a piece of paper between components that are suspected to be the cause of the noise.
 - Looking for loose components and contact marks.
Refer to [RF-86. "Inspection Procedure"](#).

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
 - Separate components by repositioning or loosening and retightening the component, if possible.
 - Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.

CAUTION:

Never use excessive force as many components are constructed of plastic and may be damaged.

NOTE:

Always check with the Parts Department for the latest parts information.

The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02: 15 × 25 mm (0.59 × 0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-

50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

68370-4B000: 15 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll

The following materials, not found in the kit, can also be used to repair squeaks and rattles.

UHMW (TEFLON) TAPE

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

Insulates where slight movement is present. Ideal for instrument panel applications.

SILICONE GREASE

Used in place of UHMW tape that is be visible or does not fit. Will only last a few months.

SILICONE SPRAY

Used when grease cannot be applied.

DUCT TAPE

Used to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:000000005516857

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the following:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer.

In addition look for the following:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

1. Headrest rods and holder
2. A squeak between the seat pad cushion and frame
3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet

INFOID:00000000516858



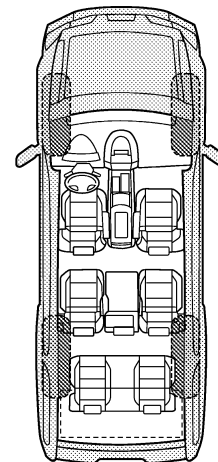
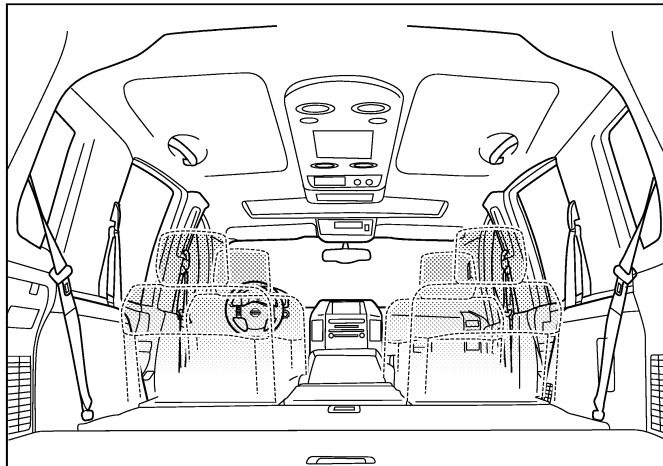
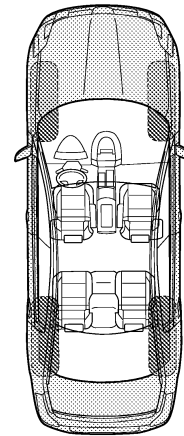
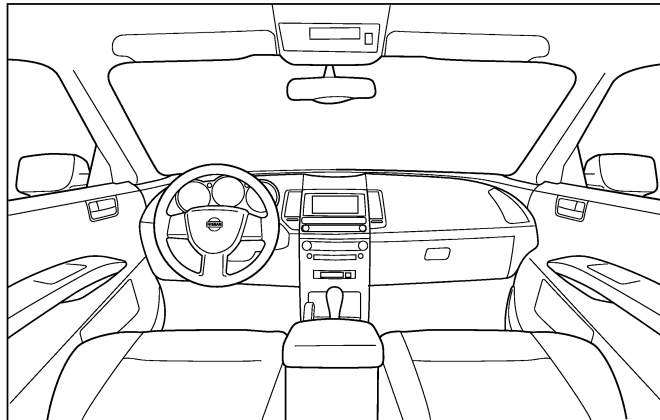
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- | | |
|---|--|
| <input type="checkbox"/> anytime | <input type="checkbox"/> after sitting out in the rain |
| <input type="checkbox"/> 1st time in the morning | <input type="checkbox"/> when it is raining or wet |
| <input type="checkbox"/> only when it is cold outside | <input type="checkbox"/> dry or dusty conditions |
| <input type="checkbox"/> only when it is hot outside | <input type="checkbox"/> other: |

III. WHEN DRIVING:

- through driveways
- over rough roads
- over speed bumps
- only about ____ mph
- on acceleration
- coming to a stop
- on turns: left, right or either (circle)
- with passengers or cargo
- other: _____
- after driving ____ miles or ____ minutes

IV. WHAT TYPE OF NOISE

- squeak (like tennis shoes on a clean floor)
- creak (like walking on an old wooden floor)
- rattle (like shaking a baby rattle)
- knock (like a knock at the door)
- tick (like a clock second hand)
- thump (heavy, muffled knock noise)
- buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise verified on test drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise source located and repaired	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Follow up test drive performed to confirm repair	<input type="checkbox"/>	<input type="checkbox"/>	_____

VIN: _____ Customer Name: _____
W.O.# _____ Date: _____

This form must be attached to Work Order

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

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

INFOID:000000005716187

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 which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS 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.

FOR USA AND CANADA : Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000005716242

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

2. Turn the push-button ignition switch to ACC position.
(At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.

PRECAUTIONS

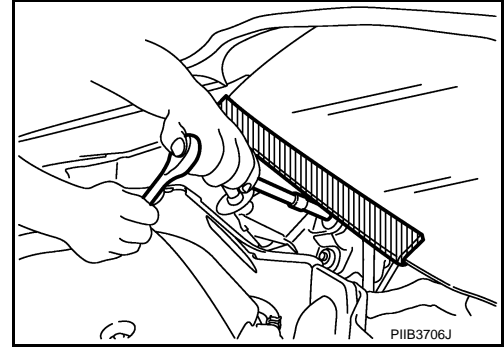
< PRECAUTION >

- When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
- Perform self-diagnosis check of all control units using CONSULT-III.

FOR USA AND CANADA : Precaution for Procedure without Cowl Top Cover

INFOID:000000005716201

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc.



FOR MEXICO

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

INFOID:000000005716188

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS 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 which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS 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.

FOR MEXICO : Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000005716246

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

PRECAUTIONS

< PRECAUTION >

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

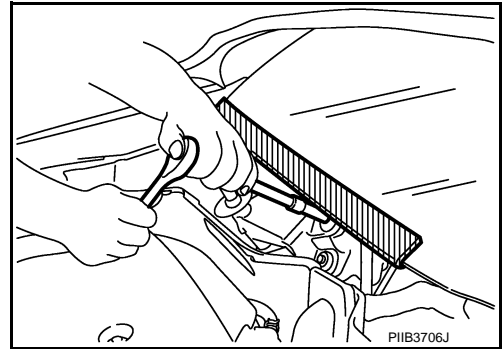
Supply power using jumper cables if battery is discharged.

2. Turn the push-button ignition switch to ACC position.
(At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

FOR MEXICO : Precaution for Procedure without Cowl Top Cover

INFOID:000000005716202

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc.



PREPARATION

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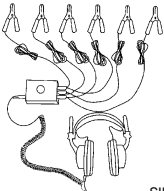
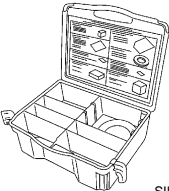
PREPARATION

PREPARATION

Special Service Tool

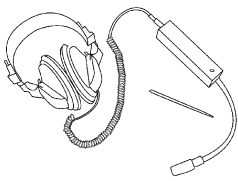
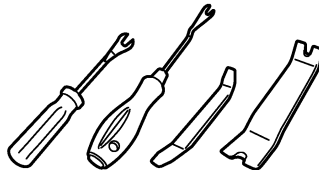
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
(J39570) Chassis ear  SIIA0993E	Locates the noise
(J43980) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairs the cause of noise

Commercial Service Tool

INFOID:000000005516863

Tool name	Description
Engine ear  SIIA0995E	Locates the noise
Remover tool  JMKIA3050ZZ	Removes the clips, pawls and metal clips

GLASS LID

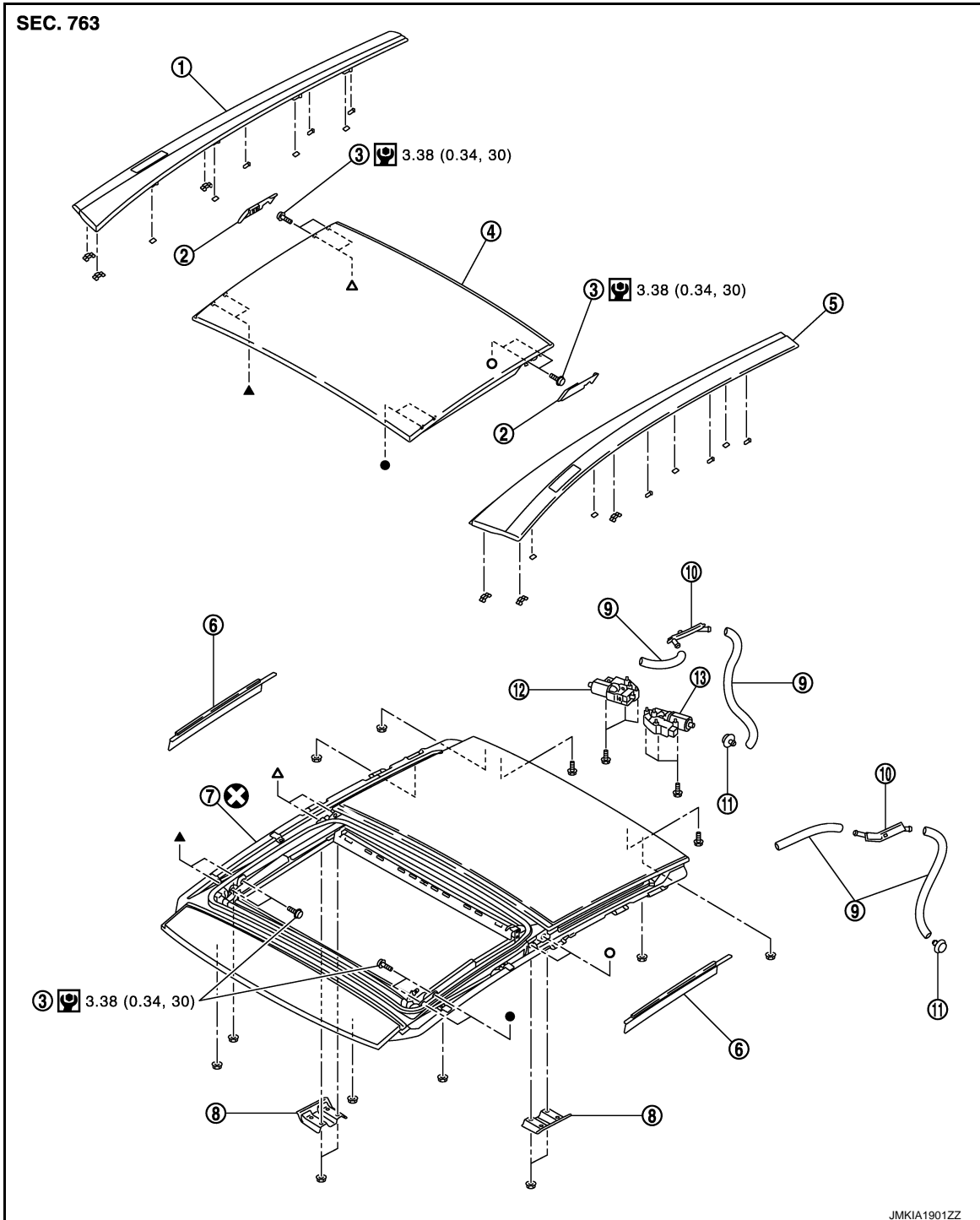
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

GLASS LID

Exploded View

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- | | | |
|--------------------------|--------------------------|----------------------------|
| 1. Roof side finisher RH | 2. Rear link cover | 3. TORX bolt |
| 4. Glass lid | 5. Roof side finisher LH | 6. Inner blind |
| 7. Sunroof unit assembly | 8. Sunroof bracket | 9. Drain hose |
| 10. Drain connector | 11. Drain plug | 12. Sunroof motor assembly |

GLASS LID

< REMOVAL AND INSTALLATION >

13. Sunshade motor assembly

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation


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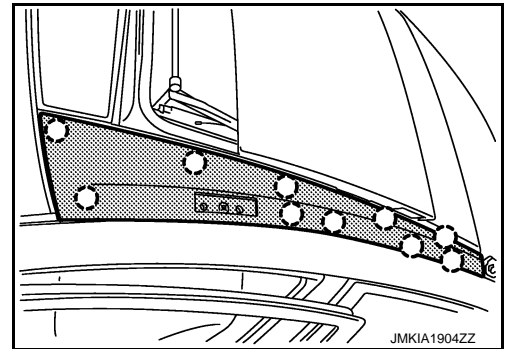
REMOVAL

CAUTION:

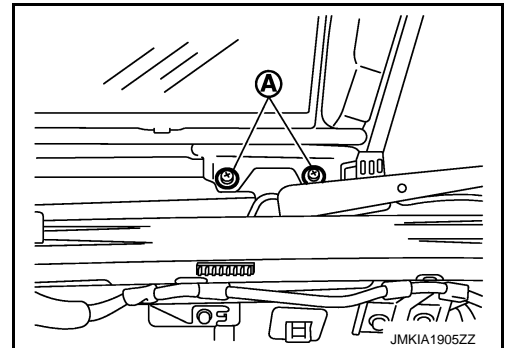
Always work with a helper.

1. Remove the roof rail assembly. Refer to [EXT-29, "Removal and Installation"](#).
2. Remove the roof side finisher.
Remove the clips, and then pull out roof side finisher.


 : Clip

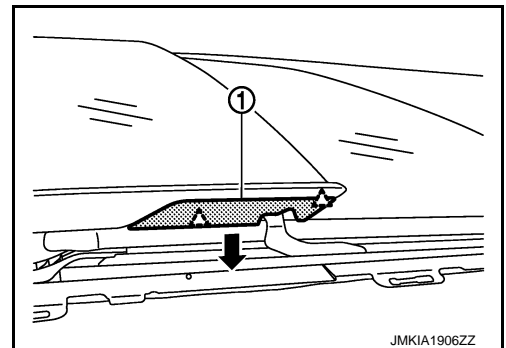


3. Half open the glass lid.
4. Remove the TORX bolts from inner side.
 - Remove the inner blind.
 - Remove the TORX bolts (A).



5. Remove the TORX bolts from outer side.
 - Remove the pawls, and then pull down rear link cover (1).

 : Pawl

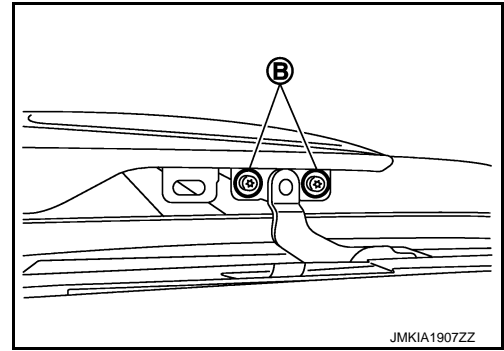


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GLASS LID

< REMOVAL AND INSTALLATION >

- Remove the TORX bolts (B).



JMKIA1907ZZ

6. Remove the glass lid from the vehicle.

INSTALLATION

CAUTION:

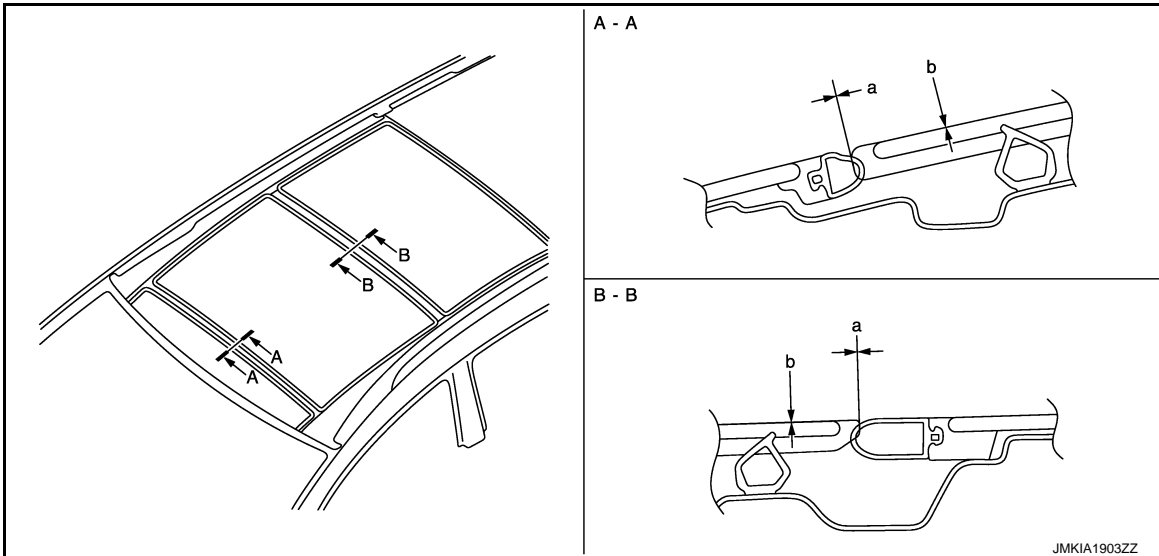
After installing the glass lid, perform the leak test and check that there is no malfunction.

NOTE:

After installation carry out fitting adjustment. Refer to [RF-96, "Adjustment"](#).
Install in the reverse order of removal.

Adjustment

INFOID:000000005516866



JMKIA1903ZZ

WEATHER-STRIP OVERLAP ADJUSTMENT AND SURFACE MISMATCH ADJUSTMENT

1. Tilt up glass lid, and then remove inner blind and rear link cover.
2. After loosening glass lid from TORX bolts (left and right), tilt down glass lid.
3. Adjust glass lid from outside of vehicle so it resembles "A - A" "B - B" as shown in the figure.

	a	b
A - A	0.2 - 4.6 mm (0.008 - 0.181 in)	-1.5 - 1.5 mm (-0.059 - 0.059 in)
B - B	0.5 - 4.9 mm (0.020 - 0.193 in)	-1.5 - 1.5 mm (-0.059 - 0.059 in)

4. To prevent glass lid from moving after adjustment, first tighten the TORX bolts of front left, and then tighten the TORX bolts of rear right.
5. Tighten remaining TORX bolts, being careful to prevent glass lid from moving.
6. Tilt glass lid up and down several times to check that it moves smoothly.

NOTE:

After adjustment the sunroof unit assembly, perform additional service. Refer to [RF-4, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#).

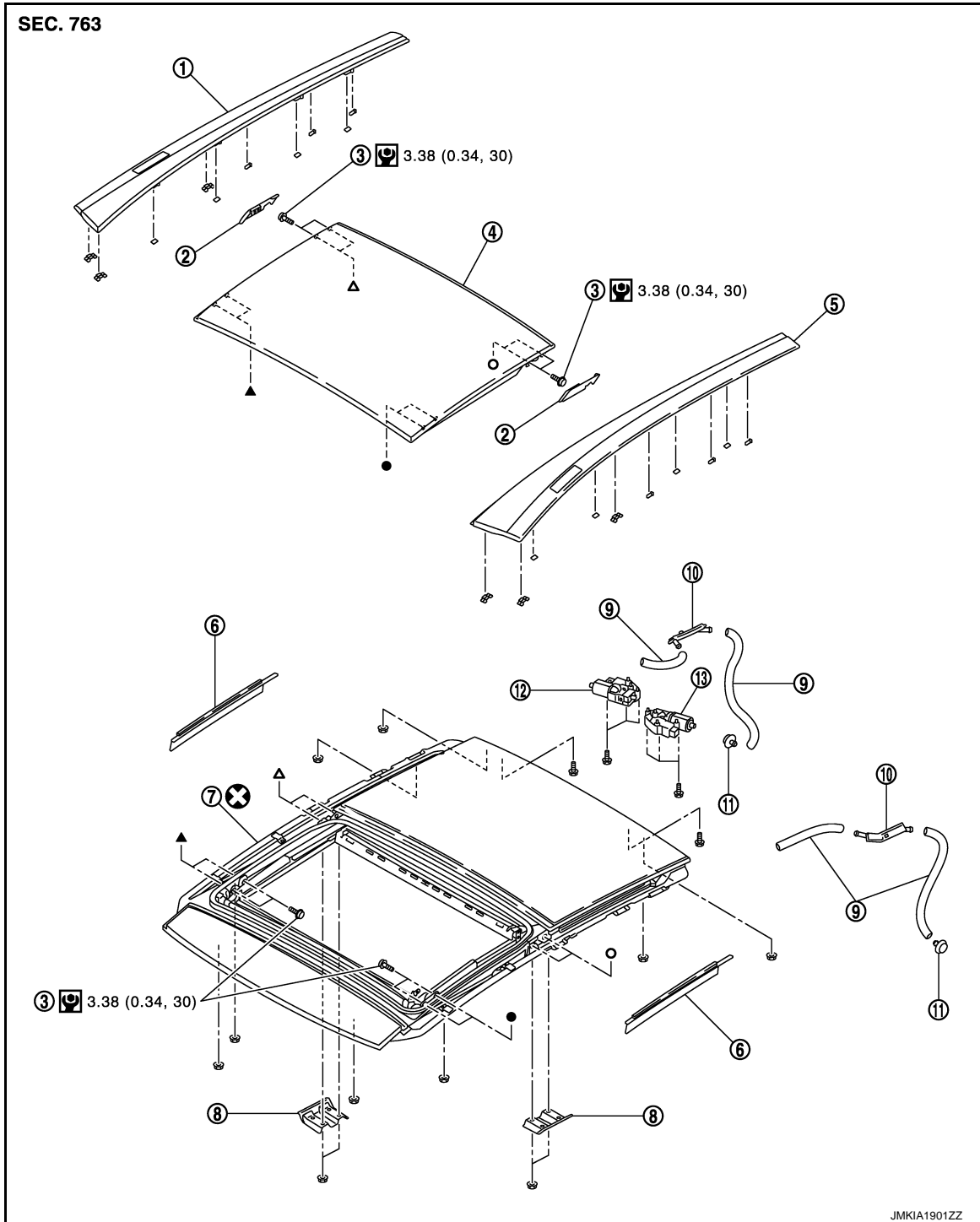
SUNROOF MOTOR ASSEMBLY

< REMOVAL AND INSTALLATION >

SUNROOF MOTOR ASSEMBLY

Exploded View

INFOID:000000005516867



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|-----------------------------|--------------------------|----------------------------|
| 1. Roof side finisher RH | 2. Rear link cover | 3. TORX bolt |
| 4. Glass lid | 5. Roof side finisher LH | 6. Inner blind |
| 7. Sunroof unit assembly | 8. Sunroof bracket | 9. Drain hose |
| 10. Drain connector | 11. Drain plug | 12. Sunroof motor assembly |
| 13. Sunshade motor assembly | | |

Refer to [GI-4, "Components"](#) for symbols in the figure.

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SUNROOF MOTOR ASSEMBLY

< REMOVAL AND INSTALLATION >

Removal and Installation

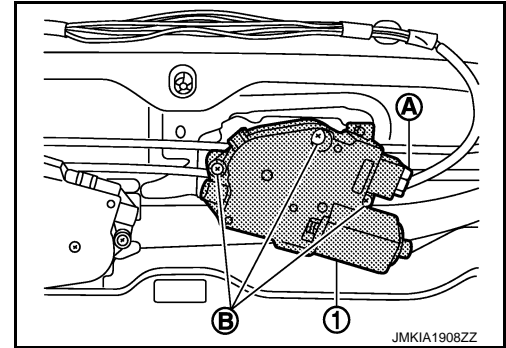
INFOID:00000000516868

REMOVAL

CAUTION:

- Before removing sunroof motor, check that glass lid is fully closed.
- After removing sunroof motor, never attempt to rotate sunroof motor assembly as a single unit.

1. Remove the headlining. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).
2. Disconnect connector (A) from sunroof motor assembly (1). Remove sunroof motor assembly mounting screws (B), and then remove sunroof motor assembly.



INSTALLATION

CAUTION:

Before installing the sunroof motor assembly, be sure to place the link and wire assembly in the symmetrical and fully closed position.

1. Move the sunroof motor assembly laterally by little so that the gear is completely engaged into the wire on the sunroof unit assembly and mounting surface becomes parallel. Then secure the sunroof motor assembly with screws.
2. Install the headlining. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).

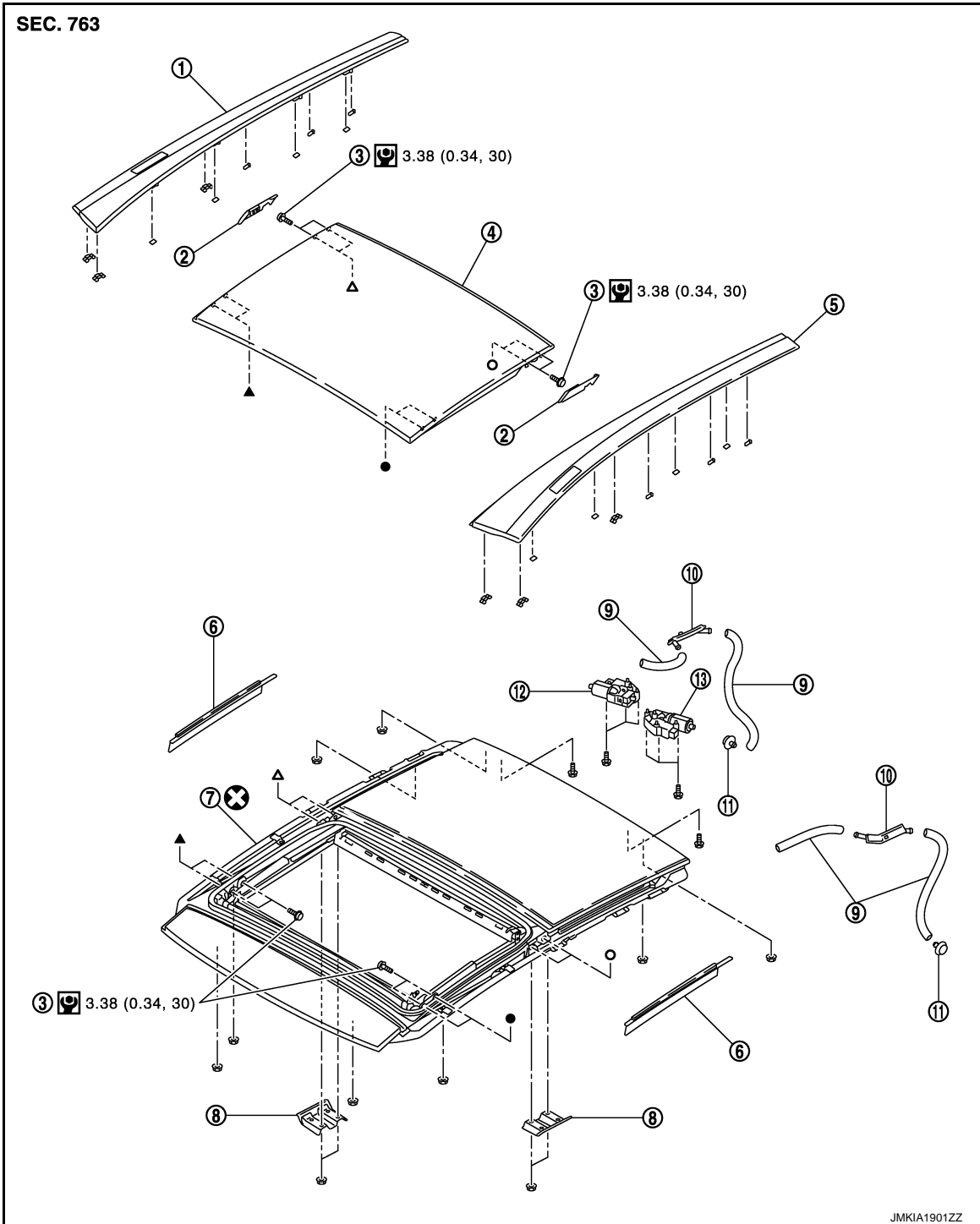
SUNSHADE MOTOR ASSEMBLY

< REMOVAL AND INSTALLATION >

SUNSHADE MOTOR ASSEMBLY

Exploded View

INFOID:000000005516869



- | | | |
|-----------------------------|--------------------------|----------------------------|
| 1. Roof side finisher RH | 2. Rear link cover | 3. TORX bolt |
| 4. Glass lid | 5. Roof side finisher LH | 6. Inner blind |
| 7. Sunroof unit assembly | 8. Sunroof bracket | 9. Drain hose |
| 10. Drain connector | 11. Drain plug | 12. Sunroof motor assembly |
| 13. Sunshade motor assembly | | |

Refer to [GI-4, "Components"](#) for symbols in the figure.

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SUNSHADE MOTOR ASSEMBLY

< REMOVAL AND INSTALLATION >

Removal and Installation

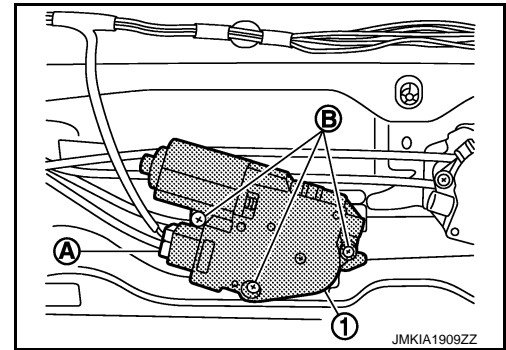
INFOID:000000005516870

REMOVAL

CAUTION:

- Before removing sunshade motor, check that glass lid is fully closed.
- After removing sunshade motor, never attempt to rotate sunshade motor assembly as a single unit.

1. Remove the headlining. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).
2. Disconnect connector (A) from sunshade motor assembly (1). Remove sunshade motor assembly mounting screws (B), and then remove sunshade motor assembly.



INSTALLATION

CAUTION:

Before installing the sunshade motor assembly, be sure to place the link and wire assembly in the symmetrical and fully closed position.

1. Move the sunshade motor assembly laterally by little so that the gear is completely engaged into the wire on the sunroof unit assembly and mounting surface becomes parallel. Then secure the sunshade motor assembly with screws.
2. Install the headlining. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).

SUNROOF UNIT ASSEMBLY

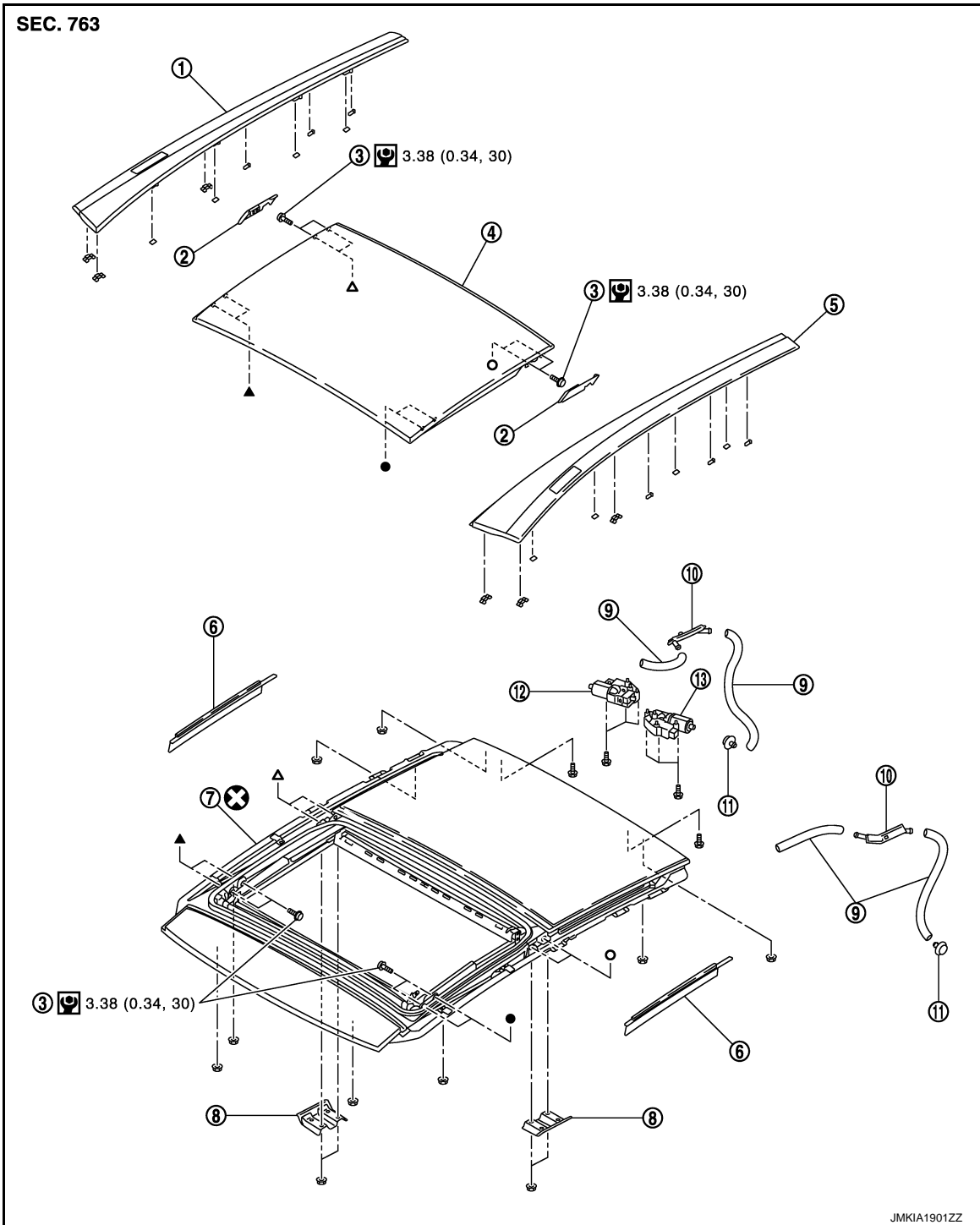
< REMOVAL AND INSTALLATION >

SUNROOF UNIT ASSEMBLY

Exploded View

INFOID:000000005516871

REMOVAL



- | | | |
|--------------------------|--------------------------|----------------------------|
| 1. Roof side finisher RH | 2. Rear link cover | 3. TORX bolt |
| 4. Glass lid | 5. Roof side finisher LH | 6. Inner blind |
| 7. Sunroof unit assembly | 8. Sunroof bracket | 9. Drain hose |
| 10. Drain connector | 11. Drain plug | 12. Sunroof motor assembly |

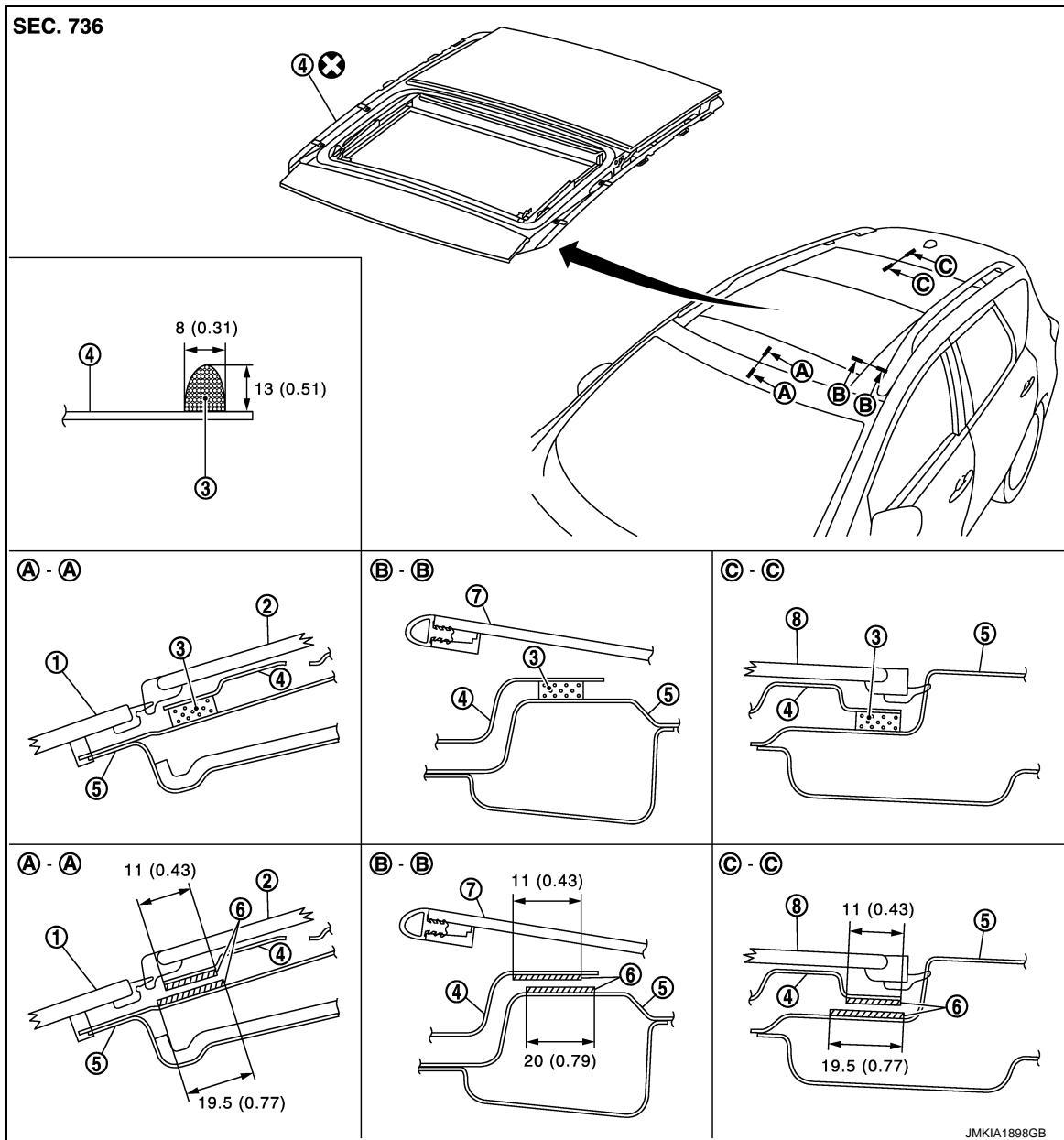
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SUNROOF UNIT ASSEMBLY

< REMOVAL AND INSTALLATION >

13. Sunshade motor assembly

Refer to [GI-4, "Components"](#) for symbols in the figure.



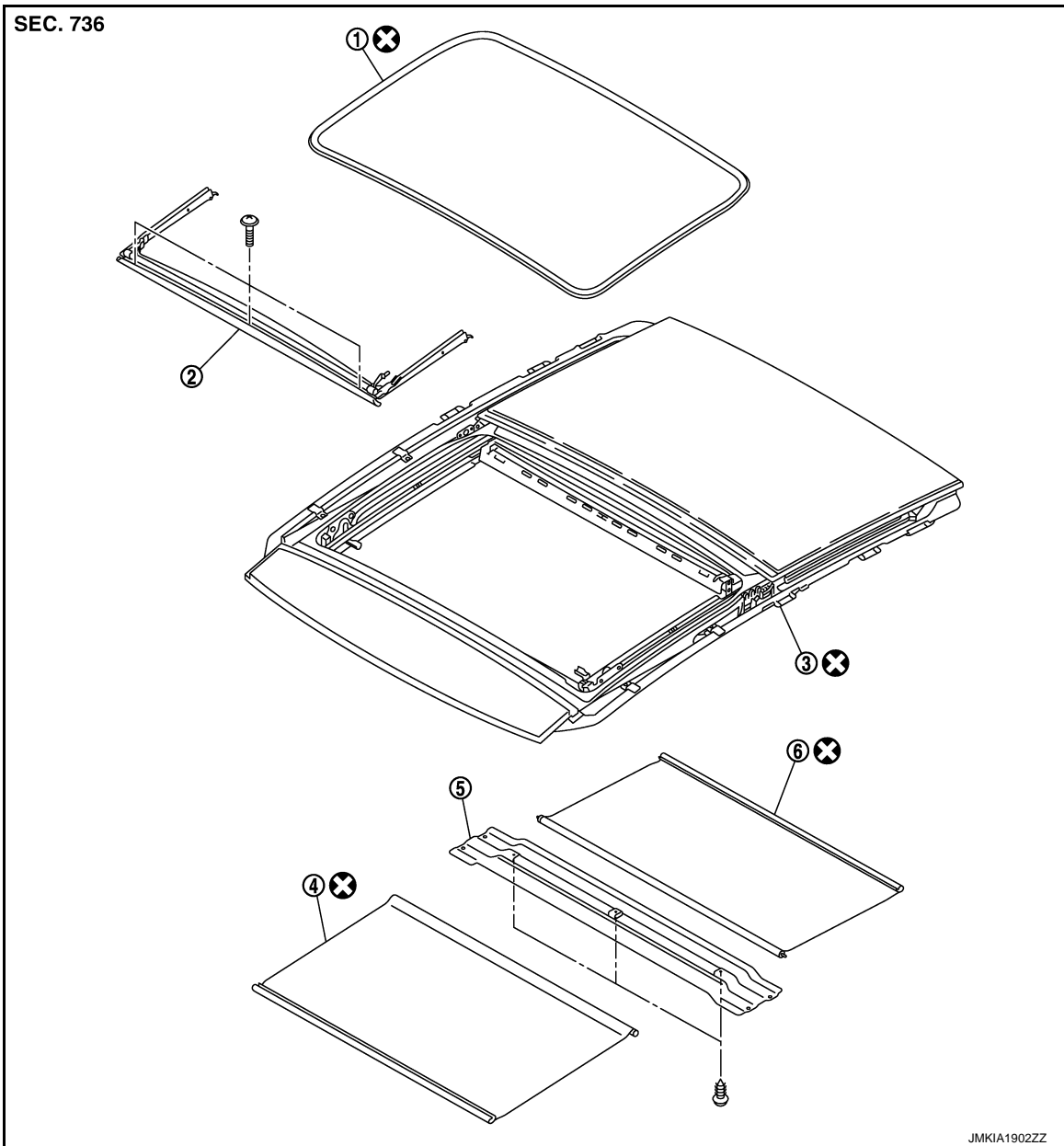
- | | | |
|-----------------------|------------------------|-------------|
| 1. Windshield glass | 2. Front sunroof glass | 3. Adhesive |
| 4. Sunroof frame | 5. Roof panel | 6. Primer |
| 7. Roof side finisher | 8. Rear sunroof glass | |

Refer to [GI-4, "Components"](#) for symbols in the figure.

DISASSEMBLY

SUNROOF UNIT ASSEMBLY

< REMOVAL AND INSTALLATION >



- | | | |
|-------------------|-------------------|------------------|
| 1. Weather-strip | 2. Wind deflector | 3. Sunroof frame |
| 4. Front sunshade | 5. Sunshade cover | 6. Rear sunshade |

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005516872

REMOVAL

CAUTION:

- Always work with a helper.
- When taking sunroof unit assembly out, use cloths to protect the seats and trim from damage.
- Never reuse the front and rear sunroof glass which has been removed once.

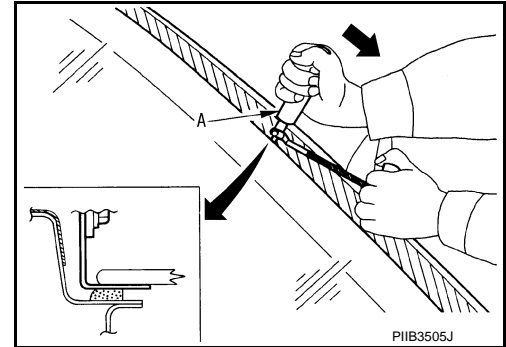
1. Remove the headlining. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).
2. Remove the glass lid. Refer to [RF-95, "Removal and Installation"](#).
3. Disconnect drain hoses.
4. Remove the sunroof brackets (LH/RH).
5. Remove nuts and bolts from the front end, side rail and rear end.

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SUNROOF UNIT ASSEMBLY

< REMOVAL AND INSTALLATION >

6. Point matching marks on body before removing the sunroof unit assembly.
7. Apply protective tape around the roof panel to protect the surface from damage.
8. Remove the front sunroof glass. Refer to [RF-106, "Removal and Installation"](#).
9. Cut adhesive.
 - Cut the adhesive using windshield cutter (A).



- Pass piano wire through the adhesive with a wire pierce.
 - Tie piano wire both ends to wire grip.
 - Pull piano wire in turn and cut off adhesive.
10. Remove sunroof unit assembly from vehicle.

INSTALLATION

WARNING:

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Never let them in contact with the skin and eyes.
- Use in an open, well ventilated location. Never breathe the vapors. They may be harmful if inhaled. Move immediately to an area with fresh air if affected by vapor inhalation.

CAUTION:

After installing the sunroof unit assembly and glass lid, perform the leak test and check that there is no malfunction.

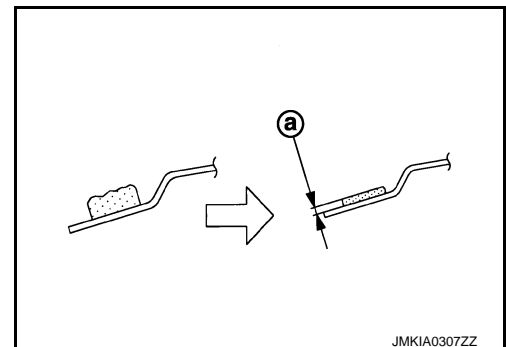
NOTE:

- Use a genuine Nissan Urethane Adhesive Kit (if available) or an equivalent and follow the instructions furnished with it.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (approximately 24 hours). Curing time varies with temperature and humidity.

1. Using a knife or spatula, trim the adhesive (sealant) remaining on body down to approximately 2 mm (0.08 in) thick (a) so that the contour becomes smooth.

CAUTION:

If bonded area on body is scratched, be sure to repair it with a 2-component urethane. Never use lacquer.



2. Clean bonded area on sunroof frame with white gasoline.
3. Apply paint primer along the entire circumference of sunroof frame.

CAUTION:

There are 2 types of primer. Never confuse the application methods.

Paint primer: for painted surfaces

Glass primer: for glass

4. Apply paint primer on areas where adhesive contacts on the side of vehicle body.

CAUTION:

If paint primer adheres to a painted surface other than bonding area, or if it overflows, quickly remove it with white gasoline.

SUNROOF UNIT ASSEMBLY

< REMOVAL AND INSTALLATION >

5. After applying primers, apply the adhesive along the entire circumference of the sunroof unit assembly as shown in the figure, and within the time specified in the instructions for the adhesive.
Open adhesive by cutting off the nozzle tip and set it in a sealant gun. A
6. Align mating marks on body and sunroof unit assembly. Install sunroof unit assembly to the body. B
7. Press entire surface of sunroof unit assembly lightly to fit it completely. B
8. Using a spatula, repair any adhesive overflow or shortage to make the surface smooth. B
9. Remove protective tape. C
10. Temporarily tighten the mounting bolts and nuts to the of sunroof unit assembly. C
11. Tighten the installation points diagonally excluding the installation point of the sunroof bracket around the roof opening. D
12. Tighten the mounting bolts and nuts to the sunroof bracket. D
13. Connect drain hoses. E
14. Install the glass lid. Refer to [RF-95, "Removal and Installation"](#). E
NOTE:
After installation, carry out fitting adjustment. Refer to [RF-96, "Adjustment"](#).
15. Install the headlining. Refer to [INT-30, "SUNROOF : Removal and Installation"](#). F
16. Check for water leaks. F
NOTE:
 - Perform the water leakage check more than 2 hours after sunroof unit assembly installation.
 - After glass lid fitting adjustment, carry out water leakage check by spreading water in the whole roof. G

Disassembly and Assembly

INFOID:000000005516873

DISASSEMBLY

1. Remove the wind deflector. Refer to [RF-112, "Removal and Installation"](#). H
2. Remove the front sunshade and rear sunshade. Refer to [RF-114, "Removal and Installation"](#). I

ASSEMBLY

Assemble in the reverse order of disassembly. J

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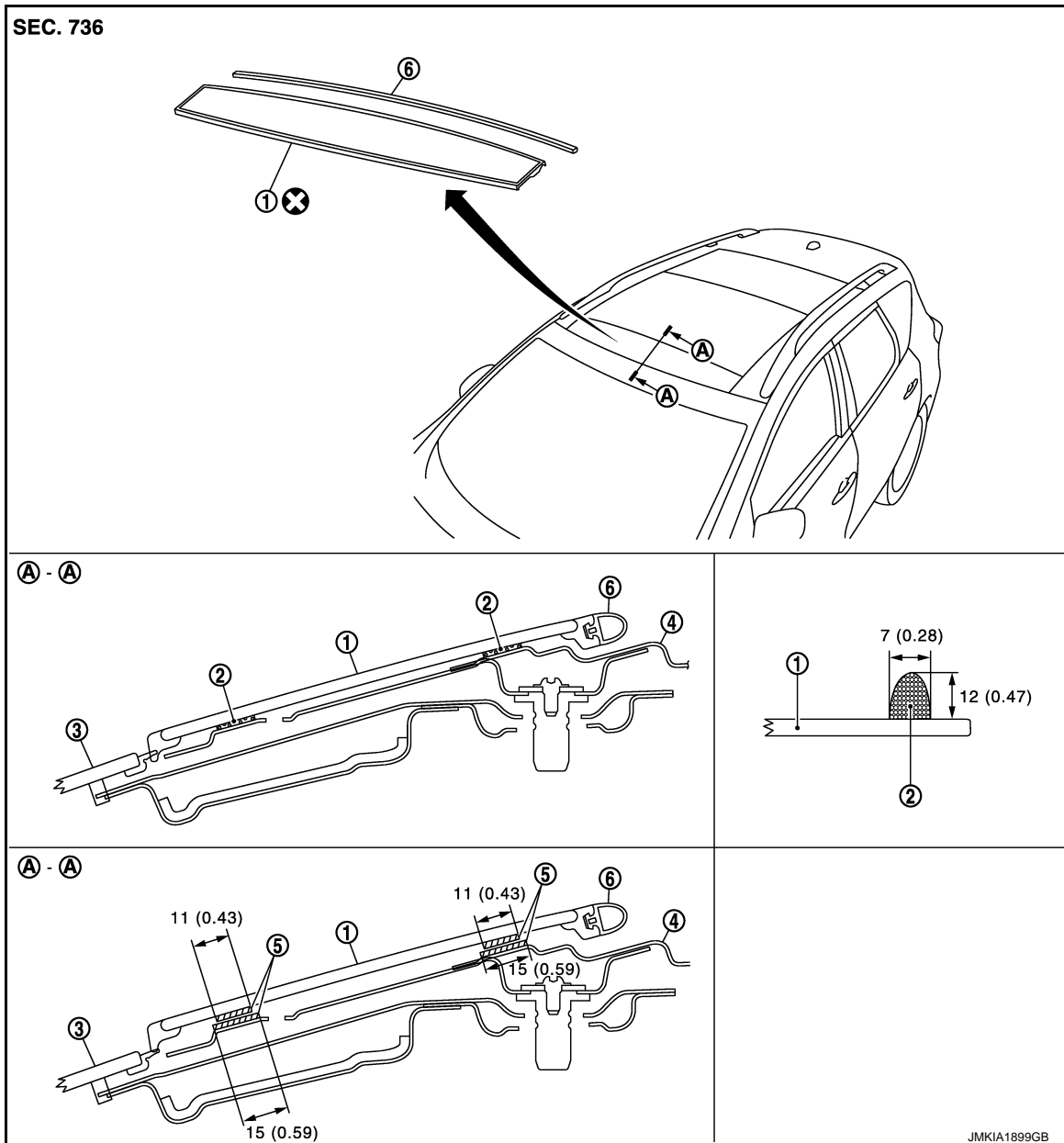
FRONT SUNROOF GLASS

< REMOVAL AND INSTALLATION >

FRONT SUNROOF GLASS

Exploded View

INFOID:000000005516874



- | | | |
|------------------------|-------------|---------------------|
| 1. Front sunroof glass | 2. Adhesive | 3. Windshield glass |
| 4. Sunroof frame | 5. Primer | 6. Weather-strip |

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005516875

REMOVAL

1. Remove the roof rail assembly. Refer to [EXT-29, "Removal and Installation"](#).
2. Remove the roof side finisher. Refer to [RF-95, "Removal and Installation"](#).
3. Fully open the glass lid.
4. Paint matching marks on body before removing the front sunroof glass.
5. Apply protective tape around the roof panel and front sunroof glass to protect the surface from damage.

FRONT SUNROOF GLASS

< REMOVAL AND INSTALLATION >

6. Remove weather-strip.
7. Cut adhesive.
 - Pass piano wire through the adhesive the adhesive with a wire pierce.
 - Tie piano wire both ends to wire grip.
 - Pull piano wire in turn and cut off adhesive.
8. Remove front sunroof glass from vehicle using suction lifter.

WARNING:

Always wear safety glasses and heavy gloves to help prevent glass splinters from entering your eyes or cutting your hands when cutting the glass from the vehicle.

CAUTION:

Never reuse the front sunroof glass which has been removed once.

INSTALLATION

WARNING:

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Never let them in contact with the skin and eyes.
- Use in an open, well ventilated location. Never breathe the vapors. They may be harmful if inhaled. Move immediately to an area with fresh air if affected by vapor inhalation.

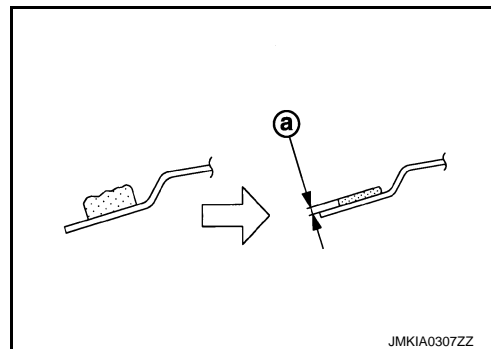
NOTE:

- Use a genuine Nissan Urethane Adhesive Kit (if available) or an equivalent and follow the instructions furnished with it.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (approximately 24 hours). Curing time varies with temperature and humidity.

1. Using a knife or spatula, trim the adhesive (sealant) remaining on body down to approximately 2 mm (0.08 in) thick (a) so that the contour becomes smooth.

CAUTION:

If bonded area on body is scratched, be sure to repair it with a 2-component urethane. Never use lacquer.

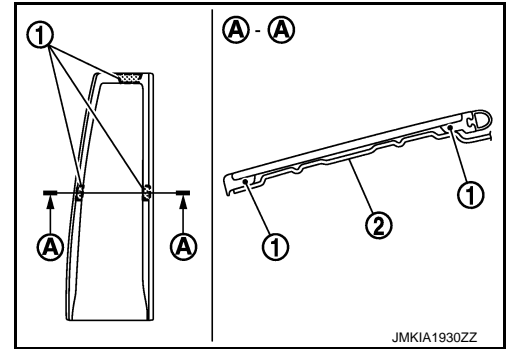


2. Clean bonded area on glass with white gasoline.
3. Apply glass primer along the entire circumference of glass.
CAUTION:
There are 2 types of primer. Never confuse the application methods.
Paint primer: for painted surfaces
Glass primer: for glass
4. Apply paint primer on areas where adhesive contacts on the side of sunroof frame.
CAUTION:
If paint primer adheres to a painted surface other than bonding area, or if it overflows, quickly remove it with white gasoline.
5. After applying primers, apply the adhesive along the entire circumference of the glass as shown in the figure, and within the time specified in the instructions for the adhesive.
 - Open adhesive by cutting off the nozzle tip and set it in a sealant gun.
6. After setting suction lifter to glass, align mating marks on sunroof frame and glass. Install glass to the sunroof frame.

FRONT SUNROOF GLASS

< REMOVAL AND INSTALLATION >

7. Press glass till positioning ribs (1) faces with a sunroof frame (2).



8. Using a spatula, repair any adhesive overflow or shortage to make the surface smooth.
9. Remove protective tape.
10. Install roof side finisher. Refer to [RF-95, "Removal and Installation"](#).
11. Install roof rail assembly. Refer to [EXT-29, "Removal and Installation"](#).

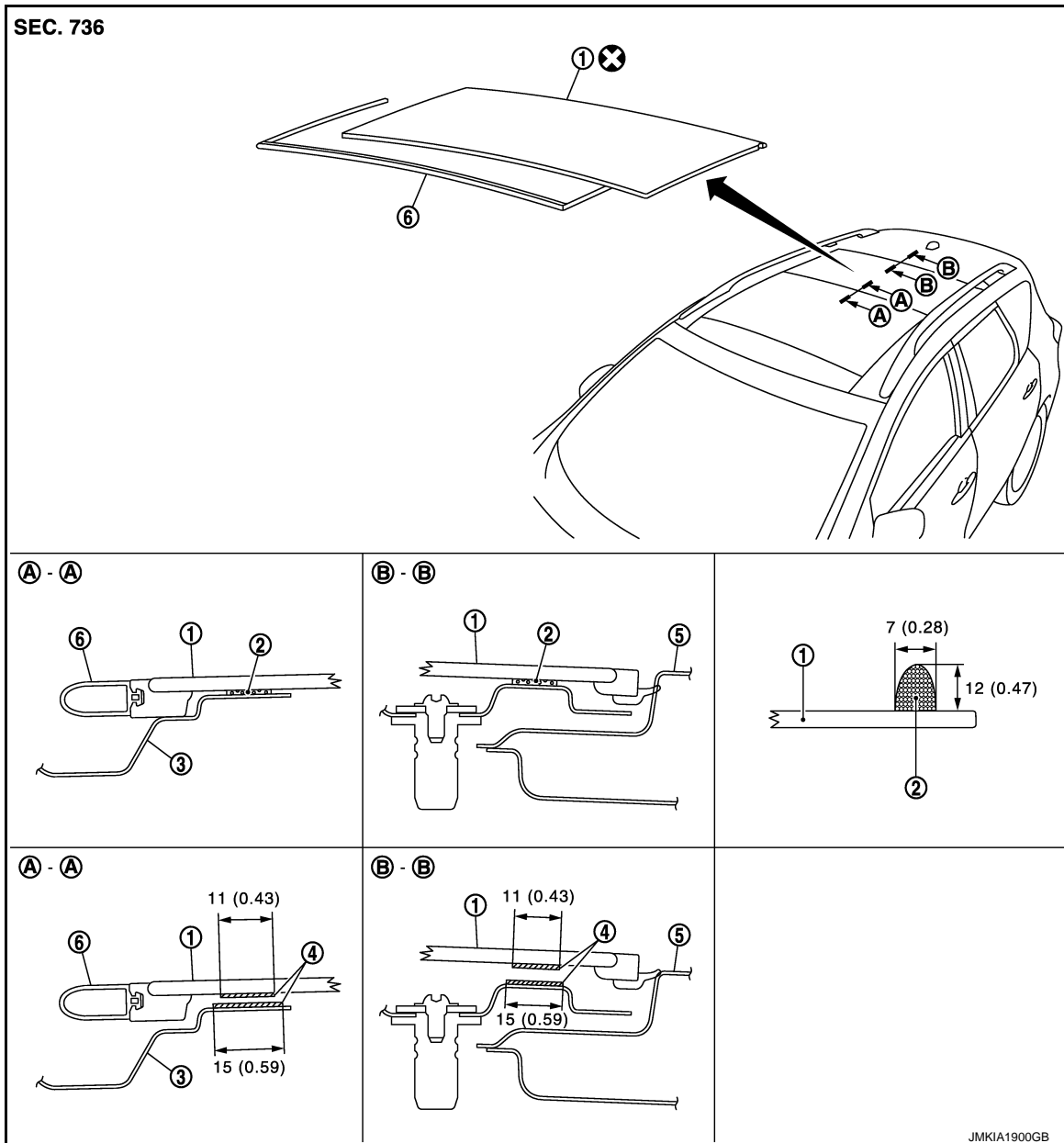
REAR SUNROOF GLASS

< REMOVAL AND INSTALLATION >

REAR SUNROOF GLASS

Exploded View

INFOID:000000005516876



- | | | |
|-----------------------|---------------|------------------|
| 1. Rear sunroof glass | 2. Adhesive | 3. Sunroof frame |
| 4. Primer | 5. Roof panel | 6. Weather-strip |

Refer to [GI-4. "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005516877

REMOVAL

1. Remove the roof rail assembly. Refer to [EXT-29. "Removal and Installation"](#).
2. Remove the roof side finisher. Refer to [RF-95. "Removal and Installation"](#).
3. Remove the glass lid. Refer to [RF-95. "Removal and Installation"](#).
4. Paint matching marks on body before removing the rear sunroof glass.
5. Apply protective tape around the roof panel and sunroof unit to protect the surface from damage.

REAR SUNROOF GLASS

< REMOVAL AND INSTALLATION >

6. Remove weather-strip.
7. Cut adhesive.
 - Pass piano wire through the adhesive with a wire pierce.
 - Tie piano wire both ends to wire grip.
 - Pull piano wire in turn and cut off adhesive.
8. Remove rear sunroof glass from vehicle using suction lifter.

WARNING:

Always wear safety glasses and heavy gloves to help prevent glass splinters from entering your eyes or cutting your hands when cutting the glass from the vehicle.

CAUTION:

Never reuse the rear sunroof glass which has been removed once.

INSTALLATION

WARNING:

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Never let them in contact with the skin and eyes.
- Use in an open, well ventilated location. Never breathe the vapors. They may be harmful if inhaled. Move immediately to an area with fresh air if affected by vapor inhalation.

CAUTION:

After installing the rear sunroof glass, perform the leak test and check that there is no malfunction.

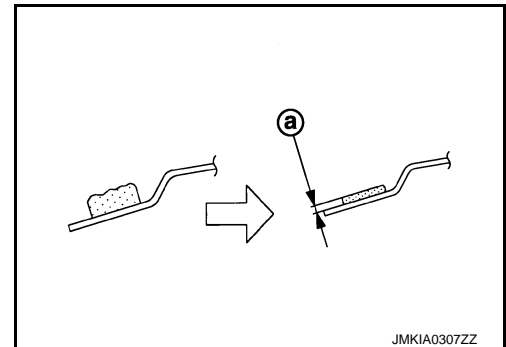
NOTE:

- Use a genuine Nissan Urethane Adhesive Kit (if available) or an equivalent and follow the instructions furnished with it.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (approximately 24 hours). Curing time varies with temperature and humidity.

1. Using a knife or spatula, trim the adhesive (sealant) remaining on body down to approximately 2 mm (0.08 in) thick (a) so that the contour becomes smooth.

CAUTION:

If bonded area on body is scratched, be sure to repair it with a 2-component urethane. Never use lacquer.



2. Clean bonded area on glass with white gasoline.
3. Apply glass primer along the entire circumference of glass.

CAUTION:

There are 2 types of primer. Never confuse the application methods.

Paint primer: for painted surfaces

Glass primer: for glass

4. Apply paint primer on areas where adhesive contacts on the side of sunroof fram.

CAUTION:

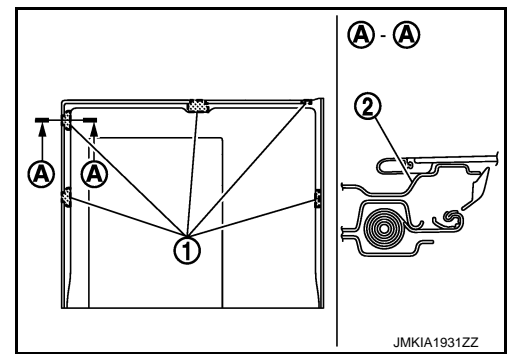
If paint primer adheres to a painted surface other than bonding area, or if it overflows, quickly remove it with white gasoline.

5. After applying primers, apply the adhesive along the entire circumference of the glass as shown in the figure, and within the time specified in the instructions for the adhesive. Open adhesive by cutting off the nozzle tip and set it in a sealant gun.
6. After setting suction lifter to glass, align mating marks on sunroof fram and glass. Install glass to the sunroof fram.

REAR SUNROOF GLASS

< REMOVAL AND INSTALLATION >

7. Press glass till positioning ribs (1) faces with a sunroof frame (2).



8. Using a spatula, repair any adhesive overflow or shortage to make the surface smooth.
9. Remove protective tape.
10. Install glass lid. Refer to [RF-95, "Removal and Installation"](#).
11. Install roof side finisher. Refer to [RF-95, "Removal and Installation"](#).
12. Install roof rail assembly. Refer to [EXT-29, "Removal and Installation"](#).
13. Check for water leaks.

NOTE:

- Perform the water leakage check more than 2 hours after rear sunroof glass installation.
- After glass lid fitting adjustment, carry out water leakage check by spreading water in the whole roof.

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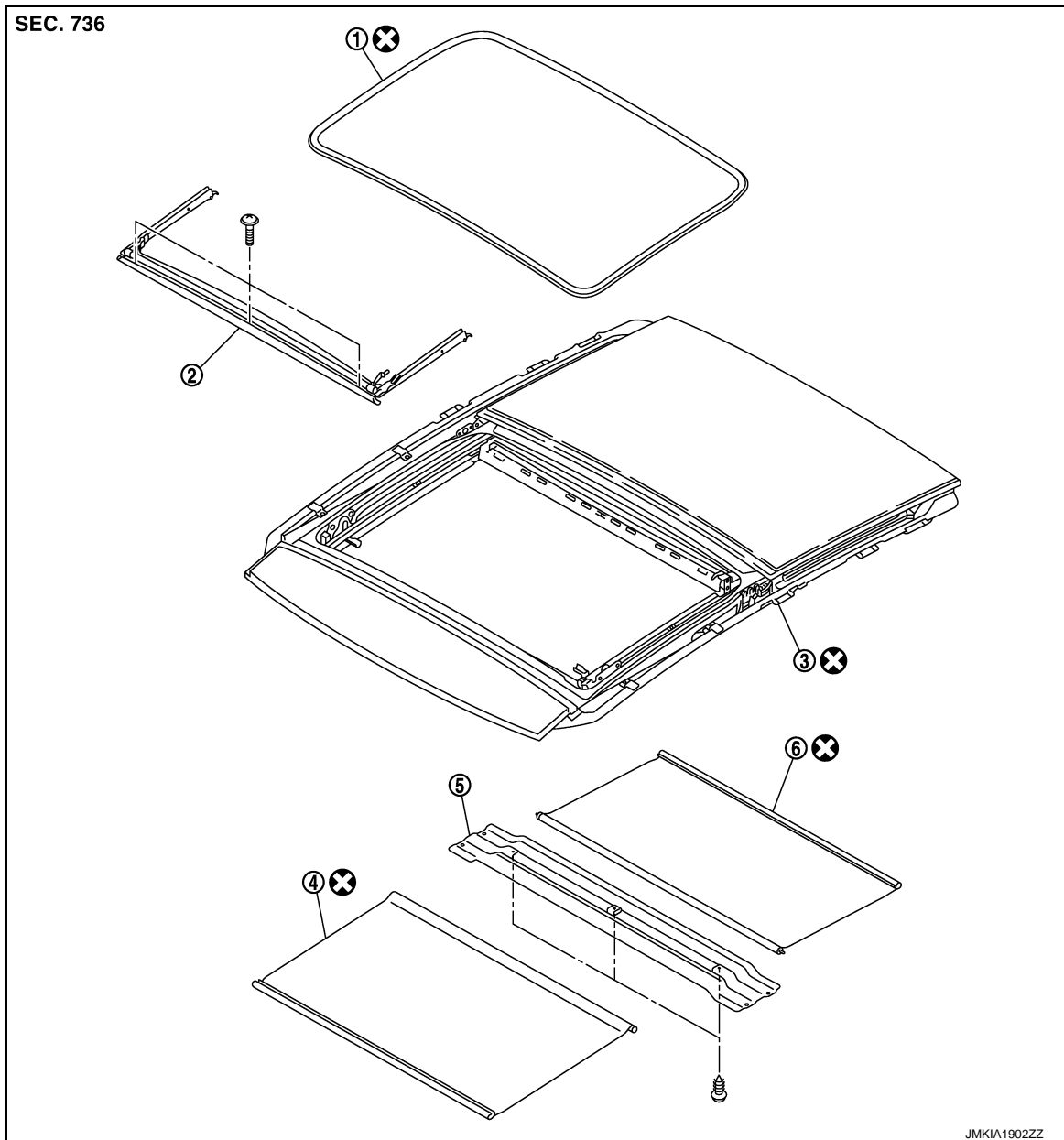
WIND DEFLECTOR

< REMOVAL AND INSTALLATION >

WIND DEFLECTOR

Exploded View

INFOID:000000005516878



- | | | |
|-------------------|-------------------|------------------|
| 1. Weather-strip | 2. Wind deflector | 3. Sunroof frame |
| 4. Front sunshade | 5. Sunshade cover | 6. Rear sunshade |

Refer to [GI-4. "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005516879

REMOVAL

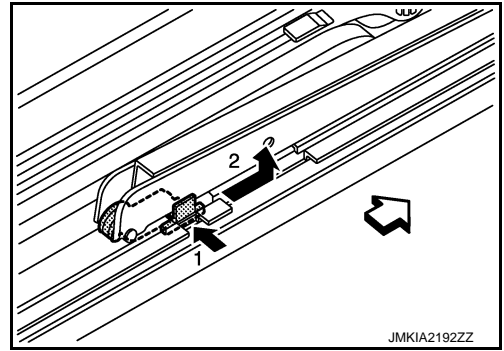
1. Fully open the glass lid.
2. Remove the wind deflector.

WIND DEFLECTOR

< REMOVAL AND INSTALLATION >

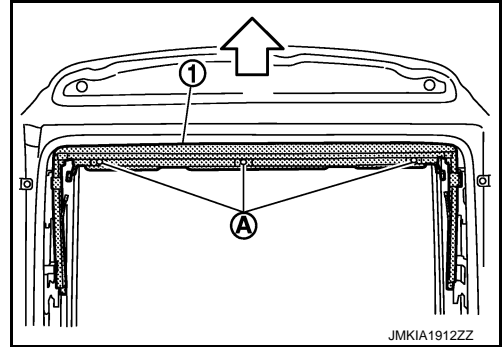
- Push and slide the fastener as shown by the arrows (1) and (2) in the figure to remove.

← : Vehicle front



- Remove the screws (A), and then remove wind deflector (1).

← : Vehicle front



INSTALLATION

Install in the reverse order of removal.

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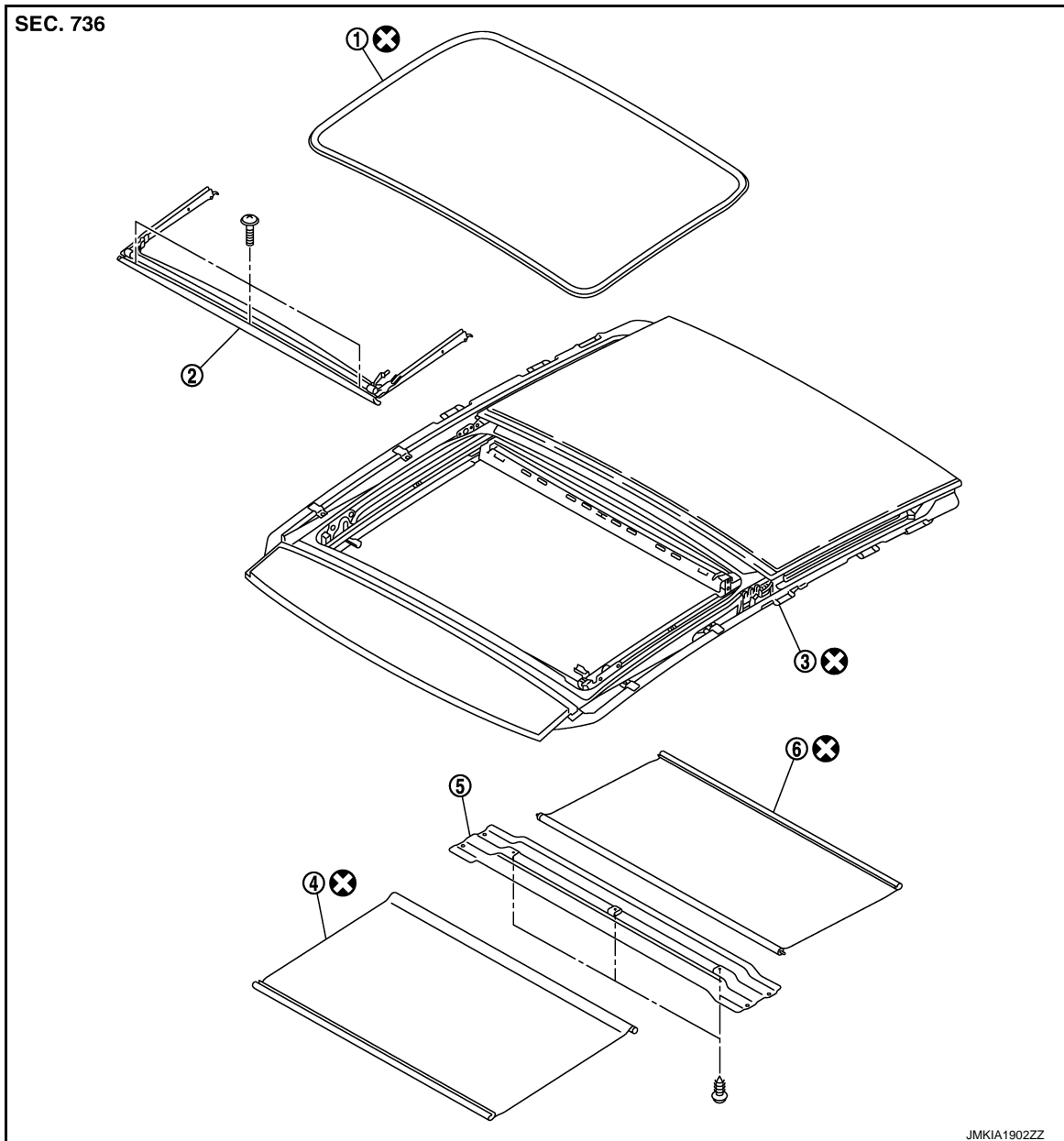
SUNSHADE

< REMOVAL AND INSTALLATION >

SUNSHADE

Exploded View

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- | | | |
|-------------------|-------------------|------------------|
| 1. Weather-strip | 2. Wind deflector | 3. Sunroof frame |
| 4. Front sunshade | 5. Sunshade cover | 6. Rear sunshade |

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005516881

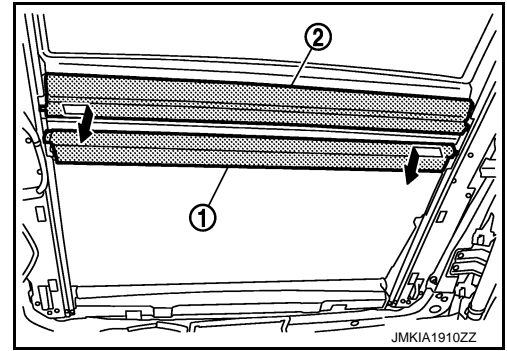
REMOVAL

1. Remove the headlining. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).
2. Remove the sunshade cover.
 - Remove the sunroof brackets (LH/RH).
 - Remove the screw, and then sunshade cover.
3. Remove the front sunshade and rear sunshade.

SUNSHADE

< REMOVAL AND INSTALLATION >

Remove it to the lower part while pushing a front sunshade (1) and rear sunshade (2) to the arrow direction of the figure.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be careful not to release the spring when installing the sunshade.

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SUNROOF SWITCH

< REMOVAL AND INSTALLATION >

SUNROOF SWITCH

Exploded View

INFOID:00000000516882

Refer to [INT-30, "SUNROOF : Exploded View"](#).

Removal and Installation

INFOID:00000000516883

Removal

Remove the sunroof switch. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).

Installation

Install in the reverse order of removal.