

SECTION **DEF**
DEFOGGER

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000005629047

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.CHECK DTC

Perform self diagnosis with CONSULT-III

Is any DTC detected?

YES >> Refer to [DEF-60. "DTC Index"](#)

NO >> GO TO 3.

3.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 4.

4.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

Use "Symptom diagnosis" from the symptom inspection result in step 3. Then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 5.

5.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

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

>> GO TO 6.

6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

7.FINAL CHECK

Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 3.

Are all malfunctions corrected?

YES >> INSPECTION END

NO >> GO TO 4.

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REAR WINDOW DEFOGGER SYSTEM

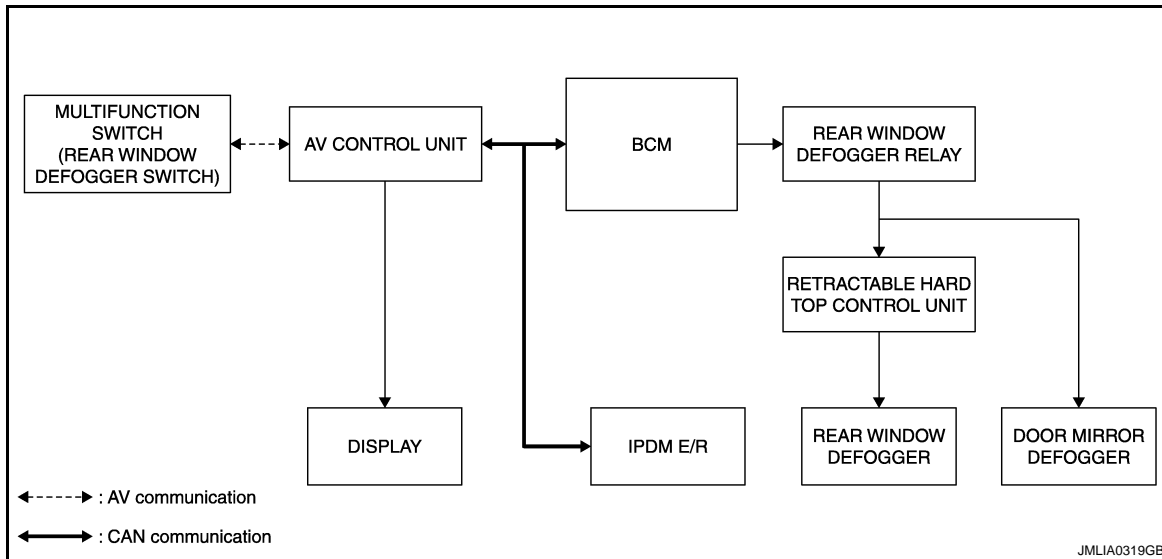
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

REAR WINDOW DEFOGGER SYSTEM

System Diagram

INFOID:000000005629048



System Description

INFOID:000000005629049

Operation Description

- Turn rear window defogger switch ON when the ignition switch is turned ON. Then multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication. AV control unit transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmit rear window defogger ON signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Door mirror defogger (with mirror defogger) are supplied with power and operate when rear window defogger relay turns ON.
- Rear window defogger relay sends power supply to retractable hard top control unit.
- Retractable hard top control unit detects roof state and controls rear window defogger operate.
- AV control unit transmit rear window defogger control signal to multifunction switch (rear window defogger switch) via AV communication.
- IPDM E/R transmits rear window defogger control signal to AV control unit via CAN communication.

Timer function

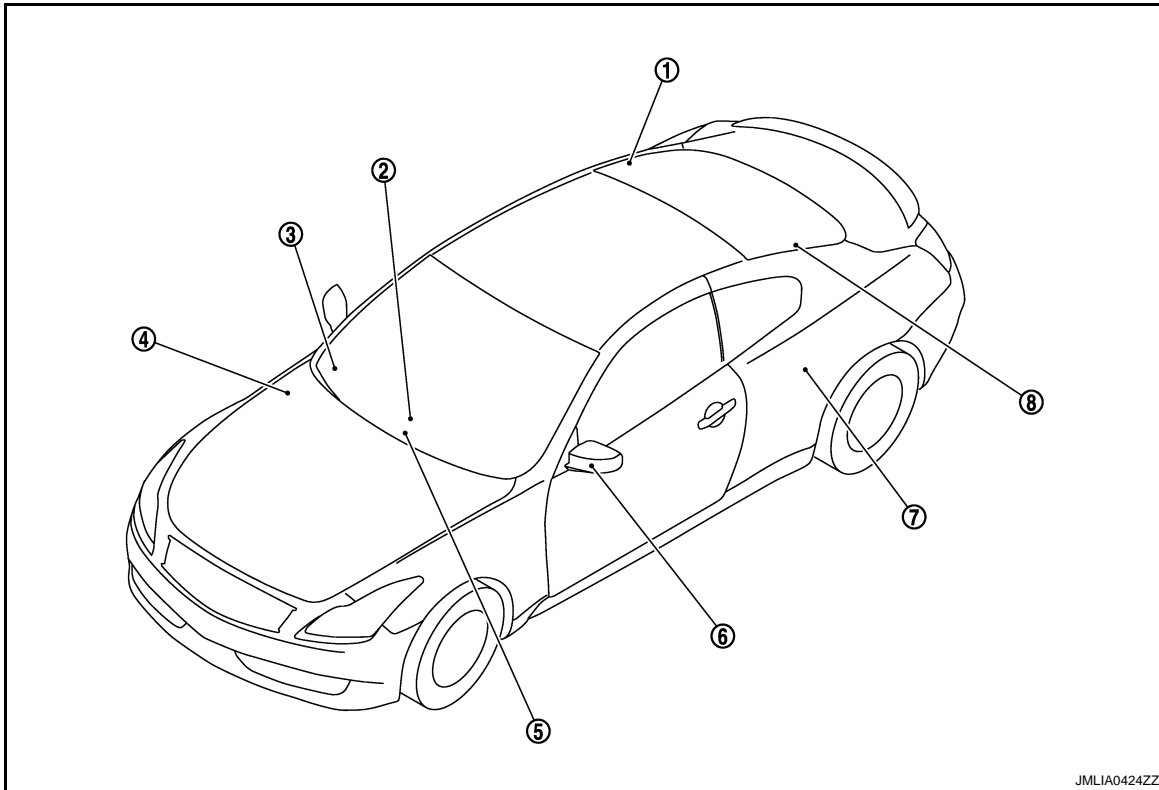
- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defogger (with mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same reaction also occurs during timer operation, if the ignition switch is turned OFF.

REAR WINDOW DEFOGGER SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000005629050



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|--|--|--|
| 1. Rear window defogger connector | 2. Rear window defogger switch (built-in multifunction switch) | 3. BCM
Refer to BCS-5, "Component Parts Location" |
| 4. IPDM E/R
Refer to PCS-4, "Component Parts Location" | 5. AV control unit | 6. Door mirror (driver side) (door mirror defogger) |
| 7. Retractable hard top control unit
Refer to RF-11, "Component Parts Location" | 8. Rear window defogger connector | |

Component Description

INFOID:000000005629051

DEF

BCM	<ul style="list-style-type: none"> Operates the rear window defogger with the operation of rear window defogger switch Performs the timer control of rear window defogger
Rear window defogger relay	Operates the rear window defogger and the door mirror defogger with the control signal from BCM
IPDM E/R	Transmit rear window defogger ON signal to AV control unit via CAN communication
Multifunction switch (Rear window defogger switch)	<ul style="list-style-type: none"> The rear window defogger switch is installed Turns the indicator lamp ON when detecting the operation of rear window defogger
AV control unit	Displays the rear window defogger ON to the display when detecting the operation of rear window defogger
Rear window defogger	Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up
Door mirror defogger	Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000005629052

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	This function is not used even though it is displayed.

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.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

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

FREEZE FRAME DATA (FFD) AND IGN COUNTER

Freeze Frame Data

The BCM records the following condition at the moment a particular DTC is detected.

- Vehicle Speed
- Odo/Trip Meter

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

- Vehicle Condition (BCM detected condition)

CONSULT screen terms	Description
SLEEP>LOCK	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

IGN counter indicates the number of times that ignition switch is turned ON after DTC is detected.

- 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.

REAR WINDOW DEFOGGER

REAR WINDOW DEFOGGER : CONSULT-III Function (BCM - REAR DEFOGGER)

INFOID:000000005629053

Data monitor

Monitor Item	Description
REAR DEF SW	This is displayed even when it is not equipped.
PUSH SW	Indicates [ON/OFF] condition of push switch.

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	This test is able to check rear window defogger operation. Rear window defogger operates when "ON" on CONSULT-III screen is touched.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:000000005629054

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	I(40A)
11		10(10A)

Is the inspection result normal?

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.

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

Is the inspection result 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		
M119	13		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH

Description

INFOID:000000005629055

- The rear window defogger is operated by turning the rear window defogger switch ON.
- The indicator lamp in the rear window defogger illuminates when the rear window defogger is operating.

Component Function Check

INFOID:000000005629056

1. CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

Check that the indicator lamp of rear window defogger illuminates when rear window defogger switch ON.

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
- NO >> Refer to [DEF-9, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000005629057

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Does multifunction switch operate normally?

- Base audio without navigation. Refer to [AV-18, "On Board Diagnosis Function"](#).
- Bose audio without navigation. Refer to [AV-137, "On Board Diagnosis Function"](#).
- Bose audio with navigation. Refer to [AV-285, "On Board Diagnosis Function"](#).

Is the inspection result normal?

- YES >> INSPECTION END.
- NO >> Replace multifunction switch (rear window defogger switch). Refer to [AV-117, "Removal and Installation"](#)

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REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

INFOID:000000005629058

Power is supplied to the rear window defogger with BCM control.

Component Function Check

INFOID:000000005629059

1.CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

- YES >> Rear window defogger relay power supply circuit is OK.
NO >> Refer to [DEF-10. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000005629060

1.CHECK FUSE

1. Turn ignition switch off.
2. Check the following.
 - 10A fuse (No.3, located in fuse block (J/B))

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

1. Turn ignition switch ON.
2. Check voltage between BCM harness connector and ground.

BCM		Ground	Condition		Voltage (V) (Approx.)
Connector	Terminal				
M123	151	Ground	Rear window defogger switch	ON	0
				OFF	Battery voltage

Is the inspection result normal?

- YES >> GO TO 6.
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect BCM connector and rear window defogger relay.
3. Check continuity between BCM harness connector and fuse block (J/B) harness connector.

BCM		Fuse block (J/B)		Continuity
Connector	Terminal	Connector	Terminal	
M123	151	M2	4B	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	151		Existed

Is the inspection result normal?

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

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

4.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-11, "Component Inspection"](#)

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear window defogger relay.

5.CHECK FUSE BLOCK (J/B)

1. Install the rear window defogger relay.
2. Turn ignition switch ON.
3. Check voltage between fuse block (J/B) (fuse block side) and ground.

Fuse block (J/B)		Ground	Voltage (V) (Approx.)
Connector	Terminal		
M2	4B	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace fuse block (J/B).

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-37, "Intermittent Incident"](#)

>> INSPECTION END.

Component Inspection

INFOID:000000005629061

1.CHECK REAR WINDOW DEFOGGER RELAY

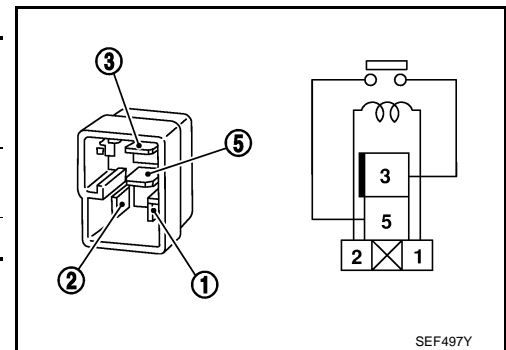
1. Turn ignition switch OFF.
2. Disconnect rear window defogger relay.
3. Check rear window defogger relay.

Terminal		Condition	Continuity
Rear window defogger relay			
3	5	12 V direct current supply between terminals 1 and 2.	Existed
		No current supply	Not existed

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace rear window defogger relay.



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RETRACTABLE HARD TOP CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

RETRACTABLE HARD TOP CONTROL UNIT

Description

INFOID:000000005629062

Retractable hard top control unit detects roof state and controls rear defogger.

Component Function Check

INFOID:000000005629063

1.CHECK REAR WINDOW DEFOGGER

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

- YES >> Retractable hard top control unit is OK.
NO >> Refer to [DEF-12. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000005629064

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following.
 - 20A fuse [No.14, located in fuse block (J/B)]
 - 20A fuse [No.15, located in fuse block (J/B)]

Is the inspection result normal

- YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK RETRACTABLE HARD TOP CONTROL UNIT CIRCUIT

1. Disconnect retractable hard top control unit connector and fuse block (J/B) connector.
2. Check continuity between retractable hard top control unit and fuse block (J/B) harness connector.

Fuse block (J/B)		Retractable hard top control unit		Continuity
Connector	Terminal	Connector	Terminal	
B6	10G	B84	70	Existed
	11G		69	

3. Check continuity between retractable hard top control unit and ground.

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
B6	10G		Existed
	11G		

Is the inspection result normal?

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

3.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) (fuse block side) and ground.

RETRACTABLE HARD TOP CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Condition	Voltage (V) (Approx.)
Fuse block (J/B)				
Connector	Terminal			
B6	10G	Ground	Rear window defogger switch	ON Battery voltage
	11G		OFF	0
			ON	Battery voltage
			OFF	0

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace fuse block (J/B).

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-37, "Intermittent Incident"](#)

>> INSPECTION END.

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REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER

Description

INFOID:000000005629065

Heats the heating wire with the power supply from the retractable hard top control unit to prevent the rear window from fogging up.

Component Function Check

INFOID:000000005629066

1.CHECK REAR WINDOW DEFOGGER

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

- YES >> Rear window defogger is OK.
NO >> Refer to [DEF-14, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000005629067

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between rear window defogger connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)	
Connector	Terminal				
B658	1	Ground	Rear window defogger switch	ON OFF	Battery voltage 0

Is the inspection result normal

- YES >> GO TO 2.
NO >> GO TO 3.

2.CHECK GROUND CIRCUIT

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

Rear window defogger		Ground	Continuity
Connector	Terminal		
B659	2		Existed

Is the inspection result normal?

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

3.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect retractable hard top control unit connector and rear window defogger connector.
3. Check continuity between retractable hard top control unit and rear window defogger harness connector.

Retractable hard top control unit		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
B84	71	B658	1	Existed
	72	B659		

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

4. Check continuity between retractable hard top control unit and ground.

Retractable hard top control unit		Ground	Continuity
Connector	Terminal		
B84	71		Existed
	72		

Is the inspection result normal?

YES >> Replace retractable hard top control unit. Refer to [RF-305. "Removal and Installation"](#).

NO >> Repair or replace harness and ground.

4.CHECK FILAMENT

Check filament.

Refer to [DEF-15. "Component Inspection"](#)

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair filament.

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-37. "Intermittent Incident"](#)

>> INSPECTION END.

Component Inspection

INFOID:000000005629068

1.CHECK FILAMENT

Check the filament for damage or blown.

Refer to [DEF-87. "Inspection and Repair"](#)

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Repair filament.

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DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Description

INFOID:000000005629069

Power is supplied to the door mirror defogger with BCM control.

Component Function Check

INFOID:000000005629070

1.CHECK DOOR MIRROR DEFOGGER

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that both side door mirror glass is getting warmer.

Is the inspection result normal?

- YES >> Door mirror defogger is OK.
NO >> Refer to [DEF-16. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000005629071

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following.
 - 10A fuse (No.13, located in fuse block (J/B))

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) (fuse block side) and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)	
Fuse block (J/B)					
Connector	Terminal				
M3	9C	Ground	Rear window de-fogger switch	ON	Battery voltage
			OFF	0	
	10C		ON	Battery voltage	
			OFF	0	

Is the inspection result normal?

- YES >> INSPECTION END.
NO >> Replace fuse block (J/B).

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000005629072

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

Component Function Check

INFOID:000000005629073

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the driver side door mirror glass is getting warmer.

Is the inspection result normal?

- YES >> Driver side door mirror defogger is OK.
NO >> Refer to [DEF-17, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000005629074

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror (driver side) harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)	
Connector	Terminal				
D3	4	Ground	Rear window de-fogger switch	ON	Battery voltage
			OFF	0	

Is the inspection result normal?

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

2.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Turn ignition switch ON.
4. Check voltage between fuse block (J/B) harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)	
Connector	Terminal				
M3	10C	Ground	Rear window de-fogger switch	ON	Battery voltage
			OFF	0	

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Replace fuse block (J/B).

3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between fuse block (J/B) harness connector and door mirror (driver side) harness connector.

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Fuse block (J/B)		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	10C	D3	4	Existed

3. Check continuity between fuse block (J/B) harness connector and ground.

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
M3	10C	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

4.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror (driver side) harness connector and ground.

Door mirror (driver side)		Ground	Continuity
Connector	Terminal		
D3	8	Ground	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to [DEF-18, "Component Inspection"](#)

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace door mirror (driver side). Refer to [MIR-21, "DOOR MIRROR ASSEMBLY : Removal and Installation"](#)

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-37, "Intermittent Incident"](#)

Is the inspection result normal?

>> INSPECTION END.

Component Inspection

INFOID:000000005629075

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Check continuity between door mirror terminals.

Door mirror (driver side)			Continuity
Connector	Terminal		
D3	4	8	Existed

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace door mirror (driver side). Refer to [MIR-21, "DOOR MIRROR ASSEMBLY : Removal and Installation"](#)

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000005629076

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

Component Function Check

INFOID:000000005629077

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the passenger side door mirror glass is getting warmer.

Is the inspection result normal?

- YES >> Passenger side door mirror defogger is OK.
 NO >> Refer to [DEF-19, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000005629078

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror (passenger side) connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror (passenger side) harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Door mirror (Passenger side) Connector	Terminal			
D33	4	Ground	Rear window de-fogger switch	ON Battery voltage
			OFF	0

Is the inspection result normal?

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

2.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Turn ignition switch ON.
4. Check voltage between fuse block (J/B) harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Fuse block (J/B) Connector	Terminal			
M3	9C	Ground	Rear window de-fogger switch	ON Battery voltage
			OFF	0

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Replace fuse block (J/B).

3.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Check continuity between fuse block (J/B) harness connector and door mirror (passenger side) harness connector.

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Fuse block (J/B)		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	D33	4	Existed

3. Check continuity between fuse block (J/B) harness connector and ground.

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
M3	9C	Ground	Not existed

Is the inspection result normal?

- YES >> GO TO 6.
 NO >> Repair or replace harness.

4.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror (passenger side) harness connector and ground.

Door mirror (passenger side)		Ground	Continuity
Connector	Terminal		
D33	8	Ground	Existed

Is the inspection result normal?

- YES >> GO TO 5.
 NO >> Repair or replace harness.

5.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check passenger side door mirror defogger.
 Refer to [DEF-20, "Component Inspection"](#)

Is the inspection result normal?

- YES >> GO TO 6.
 NO >> Replace door mirror (passenger side). Refer to [MIR-21, "DOOR MIRROR ASSEMBLY : Removal and Installation"](#)

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
 Refer to [GI-37, "Intermittent Incident"](#)

>> INSPECTION END.

Component Inspection

INFOID:000000005629079

1.CHECK PASSENGER DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror (passenger side) connector.
3. Check continuity between door mirror terminals.

Door mirror (passenger side)			Continuity
Connector	Terminal		
D33	4	8	Existed

Is the inspection result normal?

- YES >> INSPECTION END.
 NO >> Replace door mirror (passenger side). Refer to [MIR-21, "DOOR MIRROR ASSEMBLY : Removal and Installation"](#).

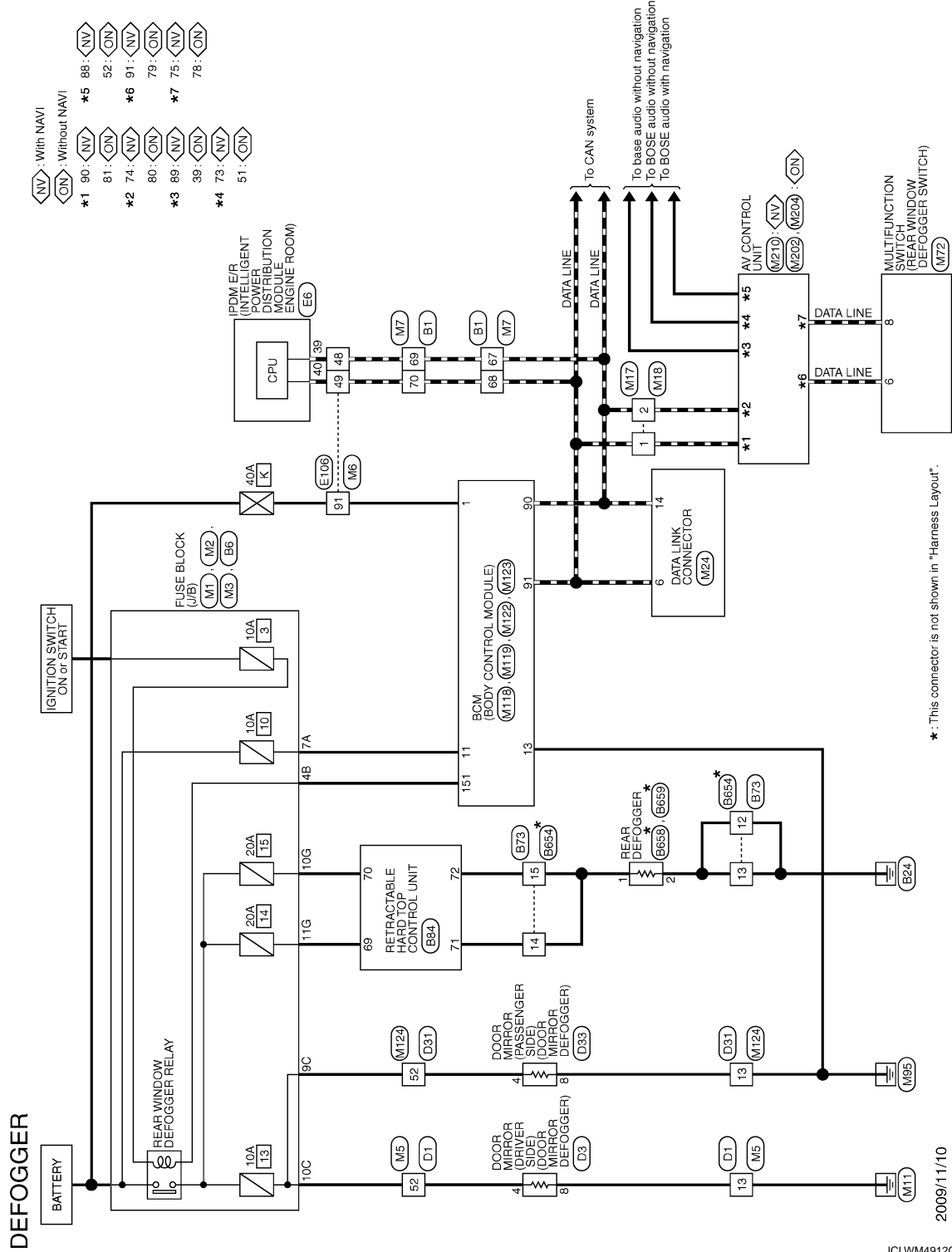
REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER SYSTEM

Wiring Diagram - DEFOGGER -

INFOID:000000005629080



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REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

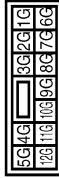
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	THB07V-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	L	-
3	R	-
4	V	-
5	W	-
6	B	-
8	G	-
10	BR	-
12	SHIELD	-
13	Y	-
14	L	-
15	R	-
16	W	-
17	BR	-
20	G	-
21	SB	-
22	GR	-
23	W	-
24	SB	-
25	BR	-
26	LG	-
27	Y	-
28	R	-
29	V	-
31	SHIELD	-
32	G	-
33	R	-
34	BG	-
35	GR	-
36	BR	-
37	P	- [With climate controlled seat]
37	Y	- [Without climate controlled seat]
38	V	- [With climate controlled seat]
38	GR	- [Without climate controlled seat]
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-

44	SB	-
45	V	-
46	W	-
47	SB	-
48	LG	-
49	LG	- [With BOSE system]
49	Y	- [Without BOSE system]
50	SB	- [With BOSE system]
50	LG	- [Without BOSE system]
51	SB	-
52	G	-
53	LG	-
54	BR	-
55	Y	-
56	W	-
57	V	-
60	R	-
61	BG	-
62	B	-
63	L	-
64	P	-
65	B	-
66	SB	-
67	P	-
68	L	-
69	P	-
70	L	-
80	G	-
81	V	-
82	R	-
83	BR	-
84	G	-
85	L	-
86	Y	-
87	GR	-
91	R	-
93	BG	-
94	LG	-
95	GR	-
96	GR	-
97	SB	-
99	Y	-
100	Y/B	-

Connector No.	B6
Connector Name	FUSE BLOCK (U/B)
Connector Type	NS1ZFBR-CS



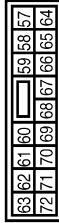
Terminal No.	Color of Wire	Signal Name [Specification]
4G	R	-
5G	LG	-
6G	G	-
10G	P	-
11G	G	-
12G	Y	-

Connector No.	B73
Connector Name	WIRE TO WIRE
Connector Type	NS18FGY-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	BG	-
4	Y	-
5	R	-
6	P	-
7	B	-
12	B	-
13	B	-
14	BR	-
15	W	-
16	GR	-

Connector No.	B84
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	NS18FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
57	Y	BAT
58	Y	BAT
59	Y	BAT
60	B	BAT
61	B	GND
62	GR	GND
63	Y	BAT (POWER WINDOW)
64	B	BAT (POWER WINDOW)
65	B	GND (POWER WINDOW)
66	P	SWITCHING VALVE 1
67	SB	SWITCHING VALVE 2
68	L	SWITCHING VALVE GND
69	G	REAR WINDOW DEF IN 2
70	P	REAR WINDOW DEF IN 1
71	BR	REAR WINDOW DEF OUT 1
72	W	REAR WINDOW DEF OUT 2

JCLWM4913GE

REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

Connector No.	B654
Connector Name	WIRE TO WIRE
Connector Type	NS16MGY-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-

Connector No.	B655
Connector Name	REAR DEFOGGER
Connector Type	P07FE-A



1

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

Connector No.	B659
Connector Name	REAR DEFOGGER
Connector Type	P07FB-A



2

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

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH4QPR-CS15



15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
29	28	27	26	25	24	23	22	21	20	19	18	17	16	15

Terminal No.	Color of Wire	Signal Name [Specification]
4	BR	-
5	P	- [With A/T]
6	B	- [With M/T]
7	SB	-
8	R	-
9	G	-
10	LG	-
11	W	-
12	L	-
13	B	-
14	V	-
15	Y	-
16	Y/B	-
17	Y	-
20	V	-
21	R	-
22	P	-
23	O	-
24	Y	-
25	SB	-

26	GR	-
27	GR	-
28	LG	-
29	G	-
30	Y	-
31	W	-
32	BR	-
33	L	-
34	R	-
35	V	-
37	B	-
38	O	-
39	GR	-
40	G	-
41	Y	-
42	LG	-
43	BR	-
44	V	-
45	P	-
46	W	-
47	P	-
48	W	-
49	SB	-
50	SB	-
51	R	-
52	L	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH12MW-NH



5	6	7	2	1	4
12	11	10	9	8	

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	- [With automatic drive positioner]
1	P	- [Without automatic drive positioner]
2	O	- [With automatic drive positioner]
2	SB	- [Without automatic drive positioner]
4	L	-
5	O	- [With automatic drive positioner]
5	W	- [Without automatic drive positioner]
6	GR	- [With automatic drive positioner]
6	BR	- [Without automatic drive positioner]
7	G	- [With automatic drive positioner]

7	V	- [Without automatic drive positioner]
8	B	-
9	P	-
10	BR	-
11	W	-
12	V	-

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH4QFW-CS15



15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
29	28	27	26	25	24	23	22	21	20	19	18	17	16	15

Terminal No.	Color of Wire	Signal Name [Specification]
6	BR	-
7	R	-
8	G	-
9	P	-
10	LG	-
11	W	-
12	L	-
13	B	-
14	Y	-
15	W	-
34	Y	-
35	Y/B	-
38	O	-
39	GR	-
40	G	-
41	Y	-
42	LG	-
43	BR	-
44	V	-
45	P	-
46	W	-
47	V	-
48	P	-
49	W	-
50	SB	-
51	R	-
52	L	-
53	O	-
54	GR	-
55	G	-

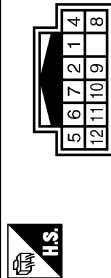
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REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

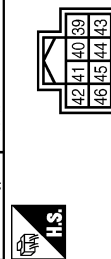
DEFOGGER

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH2MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	- [With automatic drive positioner]
2	Y	- [Without automatic drive positioner]
3	LG	- [With automatic drive positioner]
4	L	- [Without automatic drive positioner]
5	O	- [With automatic drive positioner]
6	GR	- [Without automatic drive positioner]
7	G	- [With automatic drive positioner]
8	B	- [Without automatic drive positioner]
9	P	-
10	BR	-
11	W	-
12	V	-

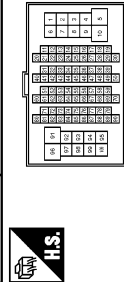
Connector No.	E6
Connector Name	SWAYER INTELLIGENT POWER DISTRIBUTION MODULE (DRIVE ROOM)
Connector Type	TH8BYV-NH



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

45	G	-
46	W	-

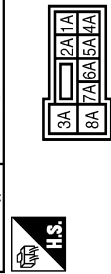
Connector No.	E108
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	B/G	-
3	B/W	-
4	G	-
5	B/G	-
6	LG	-
7	W	-
8	Y	-
9	W	-
10	V	-
11	R	-
12	L	-
13	GR	-
14	P	-
15	W	-
16	V	-
17	B/G	-
18	GR	-
19	LG	-
20	R	-
31	B/G	-
32	P	-
33	V	-
34	BR	-
35	W	-
36	Y	-
37	R	-
38	B	-
39	G	-
40	W	-
41	L	-
42	LG	-
43	SB	-
44	GR	-
45	B/G	-

46	LG	-
47	V	-
48	P	-
49	L	-
38	B	-
60	LG	-
67	SB	-
68	R	-
69	W	-
70	G	-
80	W	-
81	P	-
82	G	-
83	V	-
84	L	-
85	B/G	-
86	LG	-
87	Y	-
88	GR	-
89	W	-
90	W	-
91	G	-
92	B	-
93	GR	-
94	L	-
95	Y	-
97	BR	-
98	SHIELD	-
99	L	-
100	P	-

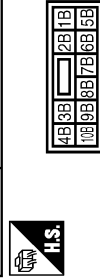
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2



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

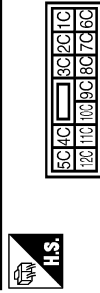
7A	GR	-
8A	L	-

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



Terminal No.	Color of Wire	Signal Name [Specification]
1B	R	-
3B	P	-
4B	G	-
5B	B/G	-
6B	Y	-
7B	P	-
8B	R	-
9B	SB	-

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



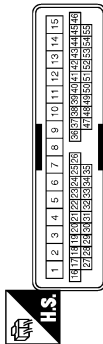
Terminal No.	Color of Wire	Signal Name [Specification]
6C	R	-
7C	B	-
8C	W	-
9C	B/G	-
10C	L	-
11C	LG	-
12C	R	-

REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

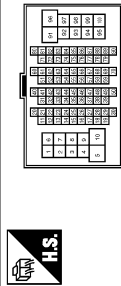
Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
4	R	-
5	B	-
6	EG	-
7	W	-
8	B	-
9	G	-
10	V	-
11	W	-
12	L	-
13	B	-
14	GR	-
15	Y	-
16	Y/B	-
17	Y	-
20	BG	-
21	W	-
22	P	-
23	EG	-
24	V	-
25	BR	-
26	R	-
27	P	-
28	LG	-
29	SB	-
30	G	-
31	V	-
32	BR	-
33	GR	-
34	G	-
35	L	-
37	B	-
38	L	- [With automatic drive positioner]
39	BR	- [Without automatic drive positioner]
39	BR	- [With automatic drive positioner]
40	L	- [Without automatic drive positioner]
41	BR	- [With automatic drive positioner]
41	G	- [Without automatic drive positioner]

42	R	-
43	G	-
44	Y	-
45	GR	-
46	BR	-
47	V	-
48	LG	-
49	P	-
50	SB	-
51	GR	-
52	L	-

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



Terminal No.	Color of Wire	Signal Name [Specification]
1	BG	-
3	R	-
4	G	-
5	G	-
6	BR	-
7	BR	-
8	Y	-
10	W	-
11	GR	-
12	R	-
13	L	-
14	G	-
15	P	-
16	W	-
17	BR	-
18	V	-
19	BG	-
20	L	-
30	R	-
31	L	-
32	Y	-
33	GR	-
34	P	-
35	BR	-
36	BR	-

37	Y	-
38	LG	-
38	SB	-
40	G	-
41	W	-
42	LG	-
43	P	-
44	GR	- [With A/T]
44	R	- [With M/T]
45	BG	-
46	G	-
47	P	-
48	P	-
49	L	-
59	B	-
66	Y	-
67	G	-
68	R	-
68	W	-
70	G	-
80	SB	-
81	R	-
82	V	-
83	W	-
84	L	-
85	BG	-
86	G	-
87	V	-
88	B	-
89	SB	-
90	G	-
91	W	-
92	B	-
93	G	-
94	L	-
95	BR	-
97	P	-
98	SHIELD	-
99	V	-
100	SB	-

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REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	BG	-
2	LG	-
3	G	-
4	V	-
5	L	-
6	B	-
8	L	-
10	BR	-
12	SHIELD	-
13	V	-
14	BR	-
15	GR	-
16	LG	-
17	L	-
20	BR	-
21	G	-
22	R	-
23	SB	-
24	B	-
25	W	-
26	Y	-
27	V	-
28	P	-
29	V	-
31	SHIELD	-
32	G	-
33	R	-
34	BG	-
35	GR	-
36	BR	-
37	P	- [With climate controlled seat]
37	L	- [Without climate controlled seat]
38	V	- [With climate controlled seat]
38	GR	- [Without climate controlled seat]
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-

44	Y	-
45	BR	-
46	SB	-
47	SB	-
48	LG	-
49	LG	- [With BOSE system]
49	SB	- [Without BOSE system]
50	SB	- [With BOSE system]
50	LG	- [Without BOSE system]
51	R	-
52	V	-
53	P	-
54	BR	-
55	Y	- [With A/T]
55	BG	- [Without A/T]
56	L	-
57	V	-
60	LG	-
61	BG	-
62	B	-
63	V	-
64	SB	-
65	BR	-
66	Y	-
67	P	-
68	L	-
69	P	-
70	L	-
80	G	-
81	LG	-
82	Y	-
83	BR	-
84	V	-
85	L	-
86	Y	-
87	GR	-
91	R	-
93	G	-
94	P	-
95	GR	-
96	Y	-
97	SB	-
99	Y	-
100	Y/B	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TKG2FW



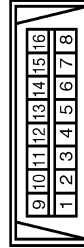
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TKG2MW



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

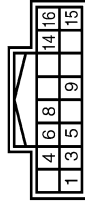
Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



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

5	BR	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	R	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
4	BG	ILL
5	V	ILL CONT
6	SB	AV COMM (H)
8	LG	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL
16	G	HAZARD ON

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



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

REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	HS16FW-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	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	P	PASSENGER DOOR UNLOCK OUTPUT
7	SB	STEP LAMP
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
11	GR	BAT. (USE)
13	B	GND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	EG	ACC IND
17	BR	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	ROOM LAMP TIMER CONTROL

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



21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
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Terminal No.	Color of Wire	Signal Name [Specification]
72	R	ROOM ANT 2-
73	G	ROOM ANT 2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT 1-
79	BR	ROOM ANT 1+
80	GR	NATS ANTENNA AMP
81	W	NATS ANTENNA AMP

Terminal No.	Color of Wire	Signal Name [Specification]
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	Y	COMBI SW INPUT 5
88	BG	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL
93	V	ON IND
95	BG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	SB	S/L CONDITION 2
99	R	SHIFT P (With A/T)
100	Y	ASGD/ICG CLUTCH SW (With M/T)
101	P	PASSENGER DOOR REQUEST SW
102	BG	DRIVER DOOR REQUEST SW
103	LG	BLOWER FAN MOTOR RELAY CONT
106	W	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	S/L UNIT POWER SUPPLY
108	R	COMBI SW INPUT 1
109	W	COMBI SW INPUT 4
110	G	HAZARD SW
111	Y	S/L UNIT COMM

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



113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
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Terminal No.	Color of Wire	Signal Name [Specification]
112	BR	RAIN SENSOR SERIAL LINK
113	G	OPTICAL SENSOR
114	R	CLUTCH INTERLOCK SW
116	SB	STOP LAMP SW 1
118	BR	STOP LAMP SW 2
119	GR	DR DOOR UNLOCK SENSOR
121	SB	KEY SLOT SW
123	W	IGN F/B
124	BG	PASSENGER DOOR SW
129	BG	TRUNK LID OPERER CANCEL SW
132	LG	P/W SW & RHT C/U COMM

Terminal No.	Color of Wire	Signal Name [Specification]
133	Y	PUSH-BUTTON IGNITION SW ILL POWER
134	LG	LOCK IND
137	BG	RECEIVER / SENSOR CMD
138	Y	RECEIVER / SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIFT IN/P
141	R	SECURITY INDICATOR LAMP
142	BR	COMBI SW OUTPUT 5
143	V	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
149	W	TIRE PRESSURE WARN CHECK SW
150	R	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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Terminal No.	Color of Wire	Signal Name [Specification]
6	BG	
7	R	
8	G	
9	P	
10	V	
11	SB	- [With BOSE system]
12	GR	- [Without BOSE system]
13	B	
14	G	
15	W	
34	Y	
35	Y/B	
38	W	
39	BG	
40	SB	
41	BR	- [With automatic drive positioner]
42	R	- [Without automatic drive positioner]
43	L	
44	Y	

Terminal No.	Color of Wire	Signal Name [Specification]
45	R	
46	W	
47	SB	
48	BR	
49	Y	
50	P	
51	LG	
52	BG	
53	Y	
54	L	
55	L	

Connector No.	M202
Connector Name	AV CONTROL UNIT
Connector Type	TH24FW-NH



36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
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Terminal No.	Color of Wire	Signal Name [Specification]
36	BG	SIGNAL YCC
37	LG	SIGNAL GND
38	R	HP
39	L	COMM (DISP->CONT)
40	B	RGB AREA (YS) SIGNAL
41	SHIELD	SHIELD
42	W	RGB SYNC
43	G	RGB (RED) SIGNAL
44	L	RGB (GREEN) SIGNAL
45	P	RGB (BLUE) SIGNAL
46	V	COMPOSITE IMAGE GND
47	SB	COMPOSITE IMAGE SIGNAL
48	Y	INVERTER VCC
49	BR	INVERTER GND
50	G	VP
51	LG	COMM (CONT->DISP)
52	B	SHIELD
57	SHIELD	SHIELD
58	SHIELD	SHIELD

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

REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

Connector No.	M204
Connector Name	AV CONTROL UNIT
Connector Type	TH22FV-NH



76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
82	83	94	95	96	97	98	99	101	102	103	104	105	106	107	108

Terminal No.	Color of Wire	Signal Name [Specification]
76	LG	AV COMM (L)
77	SB	AV COMM (H)
78	LG	AV COMM (L)
79	SB	AV COMM (H)
80	P	CAN-L
81	L	CAN-H
82	BR	SW GND
86	SHIELD	SHIELD
87	L	TEL VOICE SIGNAL (+)
88	P	TEL VOICE SIGNAL (-)
92	GR	VEHICLE SPEED (8-PULSE)
93	SB	PARKING BRAKE
94	EG	REVERSE
95	G	IGNITION
96	SB	DISK EJECT SIGNAL

Connector No.	M210
Connector Name	AV CONTROL UNIT
Connector Type	TH22FV-NH



61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92

Terminal No.	Color of Wire	Signal Name [Specification]
65	SB	PARKING BRAKE
67	P	COMPOSITE IMAGE GND
68	L	COMPOSITE IMAGE SIGNAL
71	SHIELD	MICROPHONE SHIELD
72	G	MICROPHONE VCC
73	LG	COMM (CONT->DISP)
74	P	CAN-L

75	LG	AV COMM (L)
76	LG	AV COMM (L)
79	L	ILLUMINATION
80	G	IGNITION
81	EG	REVERSE SIGNAL
82	GR	VEHICLE SPEED (8-PULSE)
83	SHIELD	SHIELD
87	R	MICROPHONE SIGNAL
88	B	SHIELD
89	L	COMM (DISP->CONT)
90	L	CAN-H
91	SB	AV COMM (H)
92	SB	AV COMM (H)

JCLWM4919GE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000005897697

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 volume dial is in a dial position 1 - 7	Wiper volume dial position
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
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	NOTE: The item is indicated, but not monitored.	Off

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off
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: The item is indicated, but not monitored.	Off
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off
	Trunk lid opener cancel switch ON	On
TR/BD OPEN SW	Trunk lid opener switch OFF	Off
	While the trunk lid opener switch is turned ON	On
TRNK/HAT MNTR	Trunk lid closed	Off
	Trunk lid opened	On
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
	LOCK button of the Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off
	TRUNK OPEN button of the Intelligent Key is pressed	On
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	A
REQ SW -BD/TR	Trunk lid opener request switch is not pressed	Off	B
	Trunk lid opener request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	C
	Push-button ignition switch (push switch) is pressed	On	
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off	D
	Ignition switch in ON position	On	
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	
CLUCH SW	The clutch pedal is not depressed	Off	E
	The clutch pedal is depressed	On	
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off	F
	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	G
	The brake pedal is depressed	On	
DETE/CANCL SW	<ul style="list-style-type: none"> • Selector lever in P position (Except M/T models) • The clutch pedal is depressed (M/T models) 	Off	H
	<ul style="list-style-type: none"> • Selector lever in any position other than P (Except M/T models) • The clutch pedal is not depressed (M/T models) 	On	
SFT PN/N SW	Selector lever in any position other than P and N	Off	I
	Selector lever in P or N position	On	
S/L -LOCK	Steering is unlocked	Off	J
	Steering is locked	On	
S/L -UNLOCK	Steering is locked	Off	K
	Steering is unlocked	On	
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off	DEF
	Ignition switch in ON position	On	
UNLK SEN -DR	Driver door is unlocked	Off	M
	Driver door is locked	On	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	N
	Push-button ignition switch (push-switch) is pressed	On	
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	O
	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	P
	Selector lever in P position	On	
SFT PN -IPDM	<ul style="list-style-type: none"> • Selector lever in any position other than P and N (Except M/T models) • The clutch pedal is not depressed (M/T models) 	Off	
	<ul style="list-style-type: none"> • Selector lever in P or N position • The clutch pedal is depressed 	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	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is unlocked	Off
	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
	Steering lock system are not 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 (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Steering is locked	Reset
	Steering is unlocked	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	The Intelligent Key is not inserted into key slot	Off
	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
CONFIRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

BCM (BODY CONTROL MODULE)

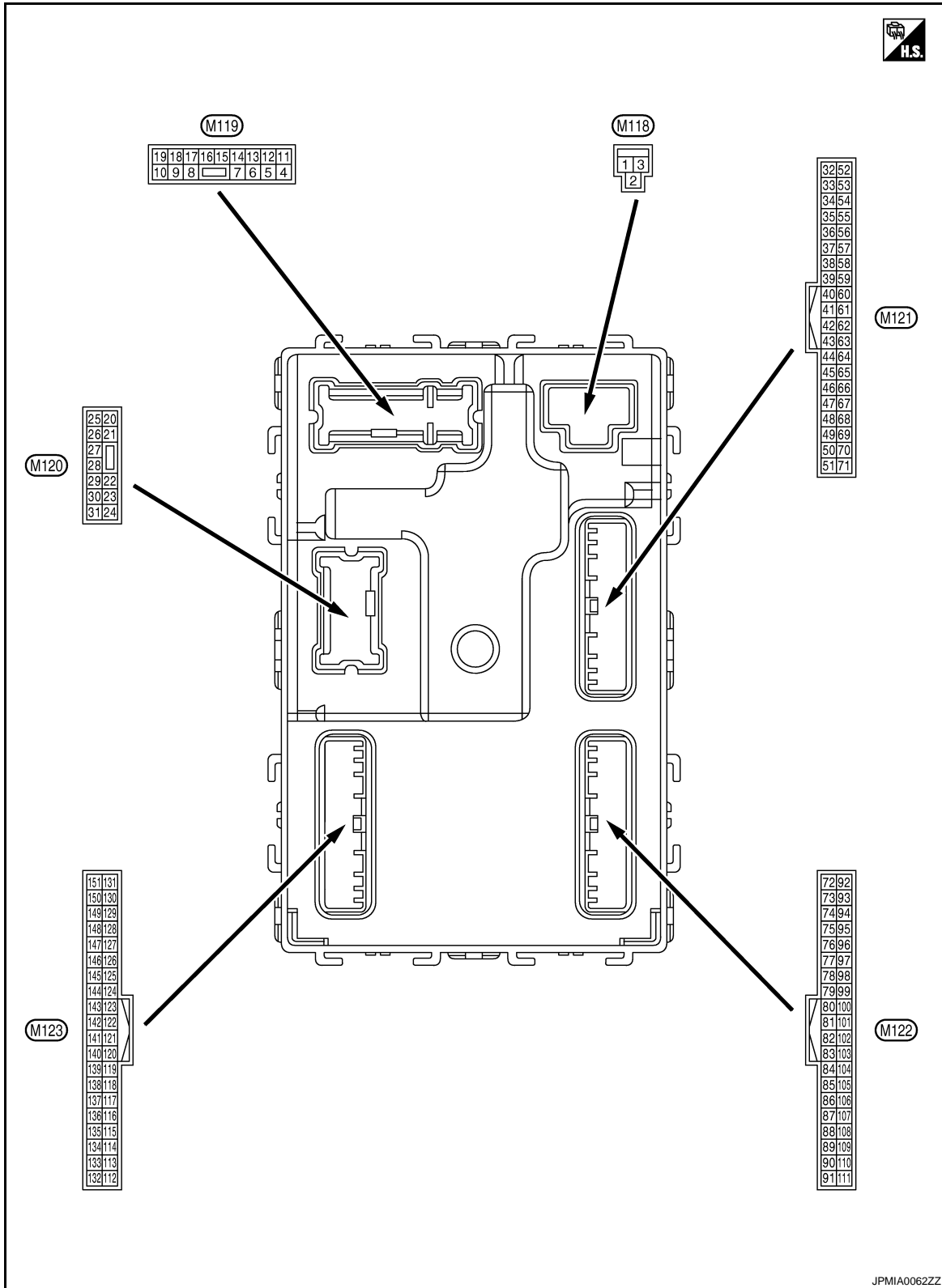
< ECU DIAGNOSIS INFORMATION >

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

BCM (BODY CONTROL MODULE)

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TERMINAL LAYOUT



PHYSICAL VALUES

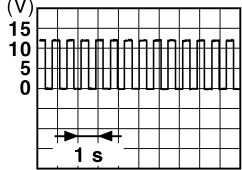
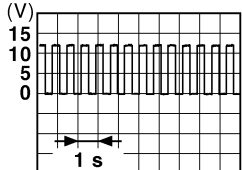
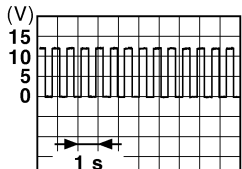
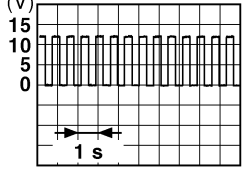
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		12 V
4 (LG)	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)		12 V
5 (P)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Ac- tuator is not activated)	0 V
7 (SB)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	12 V
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)	12 V
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door, fuel lid	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
11 (GR)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p style="text-align: center;">NOTE: When the illumination brighten- ing/dimming level is in the neutral position.</p> <p style="text-align: right; font-size: small;">JSNIA0010GB</p>
15 (BG)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC	0 V

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Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
17 (BR)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>	
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>	
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	12 V
				ON	0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>	
23 (Y)	Ground	Trunk lid open	Output	Trunk lid	OPEN (Trunk lid opener actuator is activated)	12 V
				Other than OPEN (Trunk lid opener actuator is not activated)	0 V	
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>	
30 (P)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0 V
				OFF	12 V	

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< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
34 (SB)	Ground	Trunk room antenna (-)	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>
35 (V)	Ground	Trunk room antenna (+)	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>
38 (B)	Ground	Rear bumper anten- na (-)	Output	When the trunk lid opener re- quest 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>

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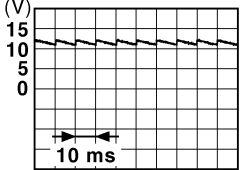
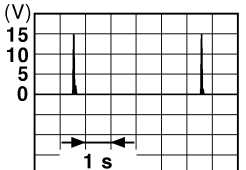
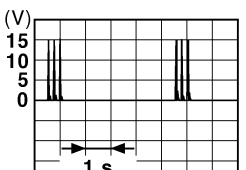
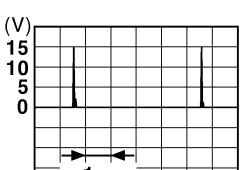
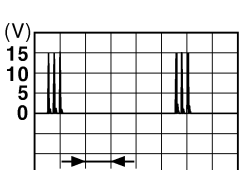
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)				
+	-	Signal name	Input/ Output						
39 (W)	Ground	Rear bumper antenna (+)	Output	When Intelligent Key is in the antenna detection area					
				When the trunk lid opener request switch is operated with ignition switch OFF					
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	<table border="1"> <tr> <td>OFF or ACC</td> <td>12 V</td> </tr> <tr> <td>ON</td> <td>0 V</td> </tr> </table>	OFF or ACC	12 V	ON	0 V
				OFF or ACC	12 V				
ON	0 V								
50 (G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	<table border="1"> <tr> <td>OFF (Trunk lid is closed)</td> <td> </td> </tr> <tr> <td>ON (Trunk lid is opened)</td> <td>0 V</td> </tr> </table>	OFF (Trunk lid is closed)		ON (Trunk lid is opened)	0 V
				OFF (Trunk lid is closed)					
ON (Trunk lid is opened)	0 V								
52 (BR)	Ground	Starter relay control	Output	Ignition switch ON (A/T models)	12 V				
				Ignition switch ON (M/T models)	0 V				
			Input	When selector lever is in P or N position	12 V				
				When selector lever is not in P or N position	0 V				
61 (SB)	Ground	Trunk lid opener request switch	Input	Trunk lid opener request switch	<table border="1"> <tr> <td>ON (Pressed)</td> <td>0 V</td> </tr> <tr> <td>OFF (Not pressed)</td> <td> </td> </tr> </table>	ON (Pressed)	0 V	OFF (Not pressed)	
				ON (Pressed)	0 V				
OFF (Not pressed)									
64 (G)	Ground	Intelligent Key warning buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	<table border="1"> <tr> <td>Sounding</td> <td>0 V</td> </tr> <tr> <td>Not sounding</td> <td>12 V</td> </tr> </table>	Sounding	0 V	Not sounding	12 V
				Sounding	0 V				
Not sounding	12 V								

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Pressed	0 V
					Not pressed	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p>
72 (R)	Ground	Room antenna 2 (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 <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>
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 <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>

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
74 (SB)	Ground	Passenger door antenna (-)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the passenger door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
75 (BR)	Ground	Passenger door antenna (+)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the passenger door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the driver door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

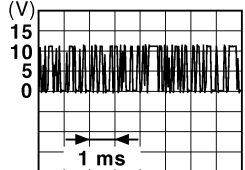
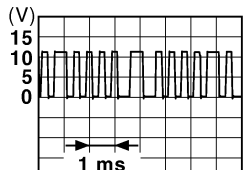

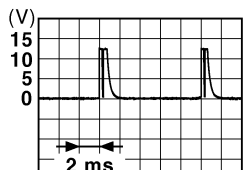
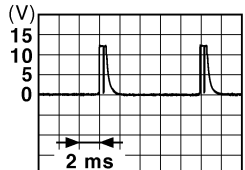
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
78 (Y)	Ground	Room antenna 1 (-) (Instrument panel)	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>
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	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>

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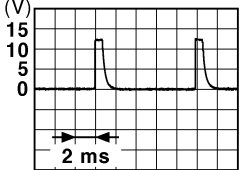

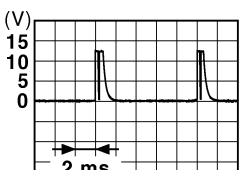

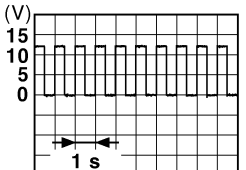
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
83 (Y)	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 the Intelligent Key		 <p style="text-align: right; font-size: small;">JMKIA0065GB</p>
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper volume dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Front fog lamp switch ON (Wiper volume dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume 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 (BG)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper volume dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch HI (Wiper volume dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 2ND (Wiper volume dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>
89 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ignition switch (push switch)	Pressed 0 V Not pressed Battery voltage	
				89 (P)	Ground	CAN-L
91 (L)	Ground	CAN-H	Input/ Output	—	—	
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	OFF	0 V
					Blinking	 <p style="text-align: right; font-size: small;">JPMIA0015GB</p> <p style="text-align: center;">6.5 V</p>
					ON	12 V

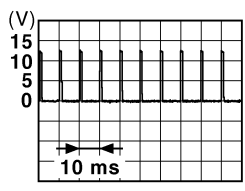
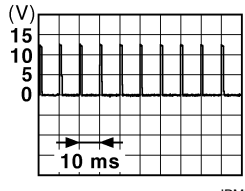
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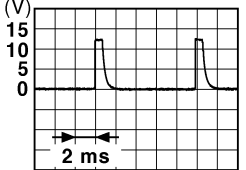

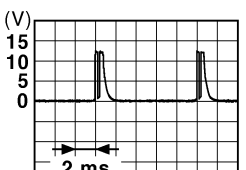

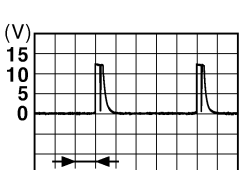
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	—	—	12 V
97 (L)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	12 V
98 (SB)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	12 V
					UNLOCK status	0 V
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	12 V
		ASCD clutch switch (M/T models without ICC)		ASCD clutch switch	OFF (Clutch pedal is depressed)	0 V
					ON (Clutch pedal is not depressed)	12 V
		ICC clutch switch (M/T models with ICC)		ICC clutch switch	OFF (Clutch pedal is depressed)	0 V
					ON (Clutch pedal is not depressed)	12 V
100 (Y)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	
101 (P)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF	—	12 V
106 (W)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

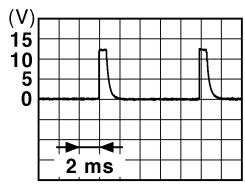
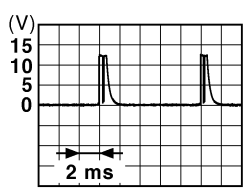
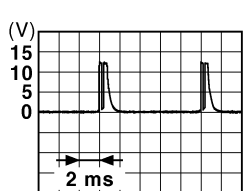
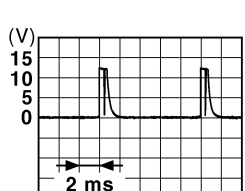
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper volume dial 4)	All switches OFF	 <p style="text-align: right;">1.4 V</p>
					Turn signal switch LH	 <p style="text-align: right;">1.3 V</p>
					Turn signal switch RH	 <p style="text-align: right;">1.3 V</p>
					Front wiper switch LO	 <p style="text-align: right;">1.3 V</p>
					Front washer switch ON	 <p style="text-align: right;">1.3 V</p>

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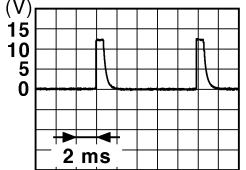

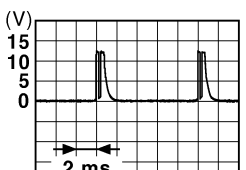
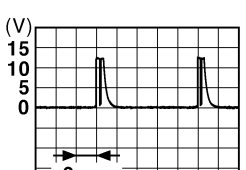

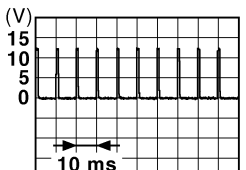
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper volume 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 volume 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 volume dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6 	 <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

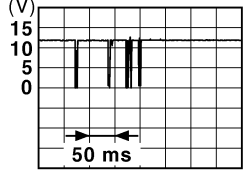
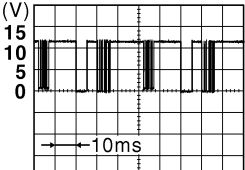
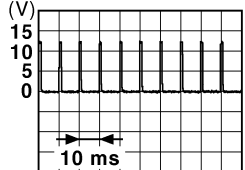
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Terminal No. (Wire color)		Description		Condition	Value (Approx.)		
+	-	Signal name	Input/ Output				
109 (W)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper volume dial 4)	All switches OFF	 <p style="text-align: right;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>	A
					Lighting switch PASS	 <p style="text-align: right;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>	B
					Lighting switch 2ND	 <p style="text-align: right;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>	C
					Front wiper switch INT/ AUTO	 <p style="text-align: right;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p>	D
					Front wiper switch HI	 <p style="text-align: right;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>	E
					ON	0 V	
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	 <p style="text-align: right;">JPMIA0012GB</p> <p style="text-align: center;">1.1 V</p>	F

DEF

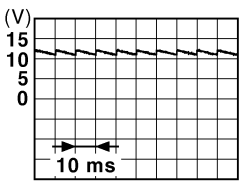
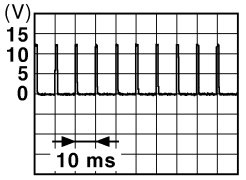
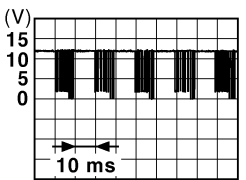
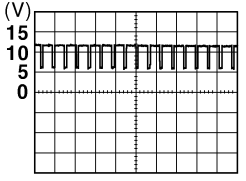
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	12 V
					LOCK or UNLOCK	 <small>JMKIA0066GB</small>
					For 15 seconds after UN- LOCK	12 V
				15 seconds or later after UNLOCK	0 V	
112 (BR)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON	 <small>JPMIA0156GB</small>	
					8.7 V	
113 (G)	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
114 (R)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V
					ON (Clutch pedal is de- pressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input	—	Battery voltage	
118 (BR)	Ground	Stop lamp switch 2 (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
		Stop lamp switch 2 (With ICC)		Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF	0 V	
				Stop lamp switch ON (Brake pedal is de- pressed) or ICC brake hold relay ON	Battery voltage	
119 (GR)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 <small>JPMIA0012GB</small>
					UNLOCK status (Unlock switch sensor ON)	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

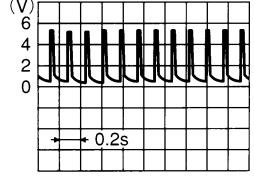

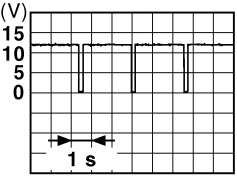
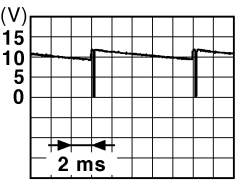
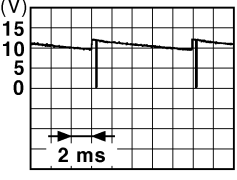
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
121 (SB)	Ground	Key slot switch	Input	When the Intelligent Key is inserted into key slot	12 V	
				When the Intelligent Key is not inserted into key slot	0 V	
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (BG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)	0 V
129 (BG)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 <small>JPMIA0012GB</small> 1.1 V
					ON	0 V
132 (LG)	Ground	Power window switch and R.H.T. control unit communication	Input/ Output	Ignition switch ON	 <small>JPMIA0013GB</small> 10.2 V	
				Ignition switch OFF or ACC	12 V	
133 (Y)	Ground	Push-button ignition switch illumination	Output	ON (Tail lamps OFF)	9.5 V	
				ON (Tail lamps ON)	<p style="text-align: center;">NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.</p>  <small>JPMIA0159GB</small>	
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
				ON	0 V	
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON	0 V	

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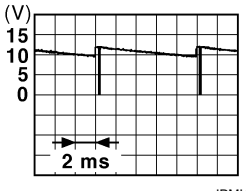
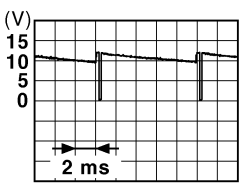
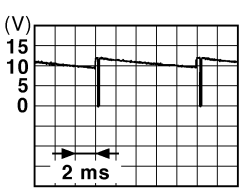
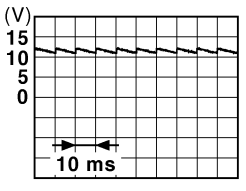
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
138 (Y)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
139 (L)	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 (A/T models)	Input	Selector lever	P or N position	12 V
					Except P and N positions	0 V
141 (R)	Ground	Security indicator lamp	Output	Security indicator lamp	ON	0 V
					Blinking	 JPMIA0014GB
					OFF	12 V
142 (BR)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper volume dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB
					Lighting switch HI	
					Lighting switch 2ND	
Turn signal switch RH	10.7 V					
143 (V)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper volume dial 4)	0 V
					Front wiper switch HI (Wiper volume dial 4)	 JPMIA0032GB
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 • Wiper volume dial 6 • Wiper volume dial 7 	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)		
+	-	Signal name	Input/ Output				
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper volume dial 4)	0 V	
					Front washer switch ON (Wiper volume dial 4)		
					Any of the conditions below with all switches OFF		10.7 V
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper volume dial 4)	All switches OFF	0 V	
					Front wiper switch INT/ AUTO		
					Front wiper switch LO		10.7 V
					Lighting switch AUTO		
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper volume dial 4)	All switches OFF	0 V	
					Front fog lamp switch ON		
					Lighting switch 2ND		10.7 V
					Lighting switch PASS		
					Turn signal switch LH		
149 (W)	Ground	Tire pressure warning check switch	Input	—	12 V		
150 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)		
					ON (Door open)		0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window defogger	Active	0 V	
				Not activated	Battery voltage		

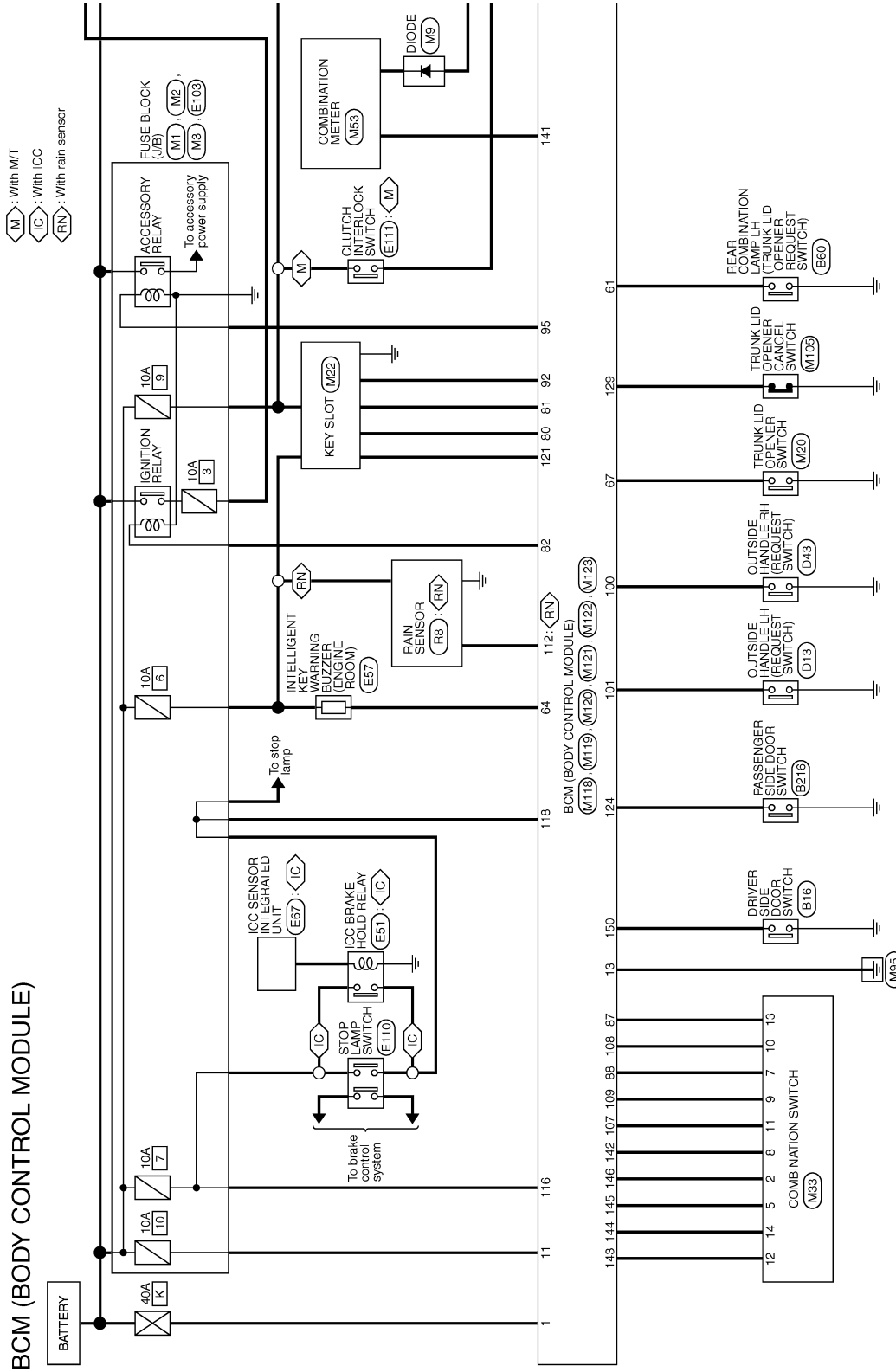
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

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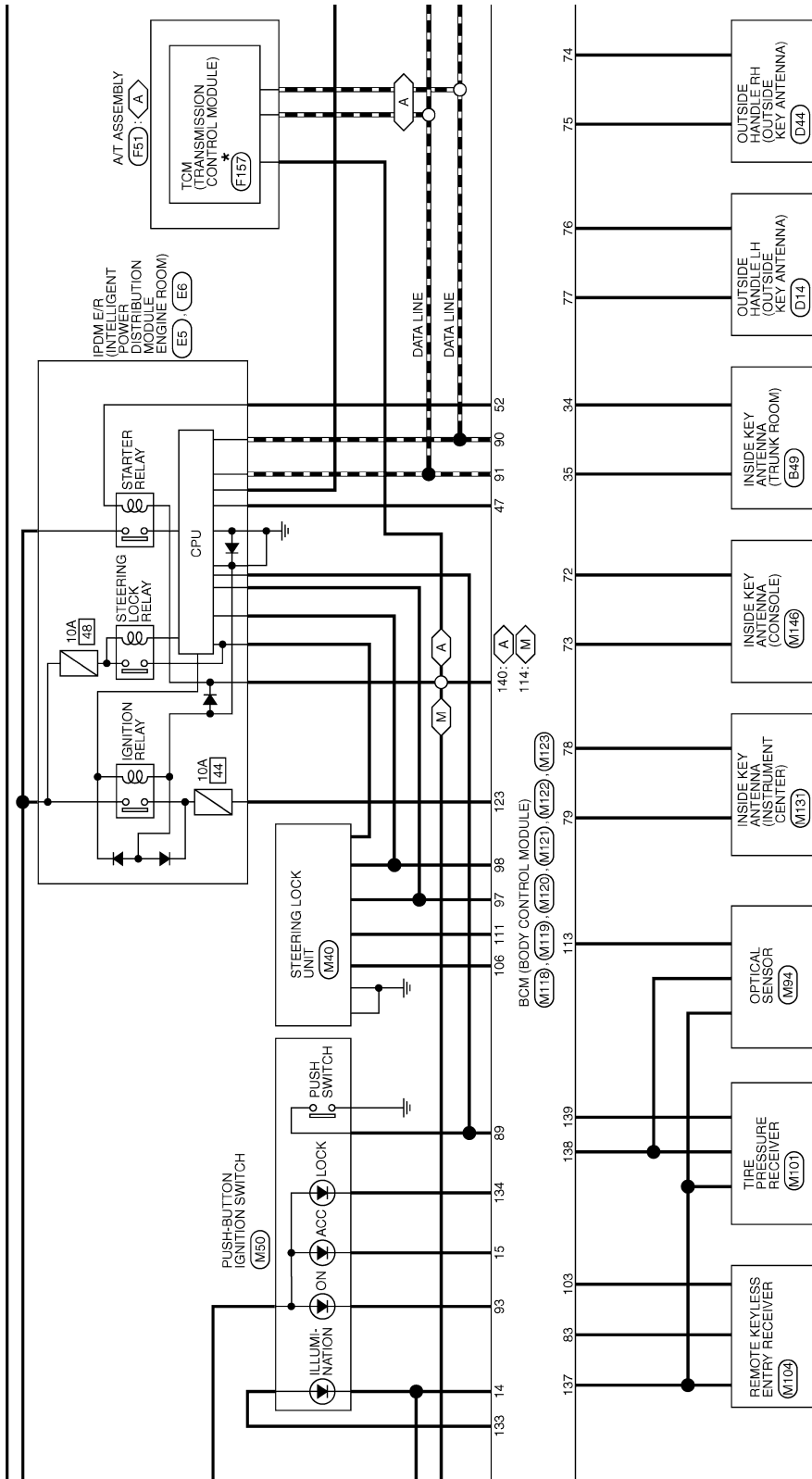
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JCMWM6284G

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

A : With A/T
M : With M/T



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

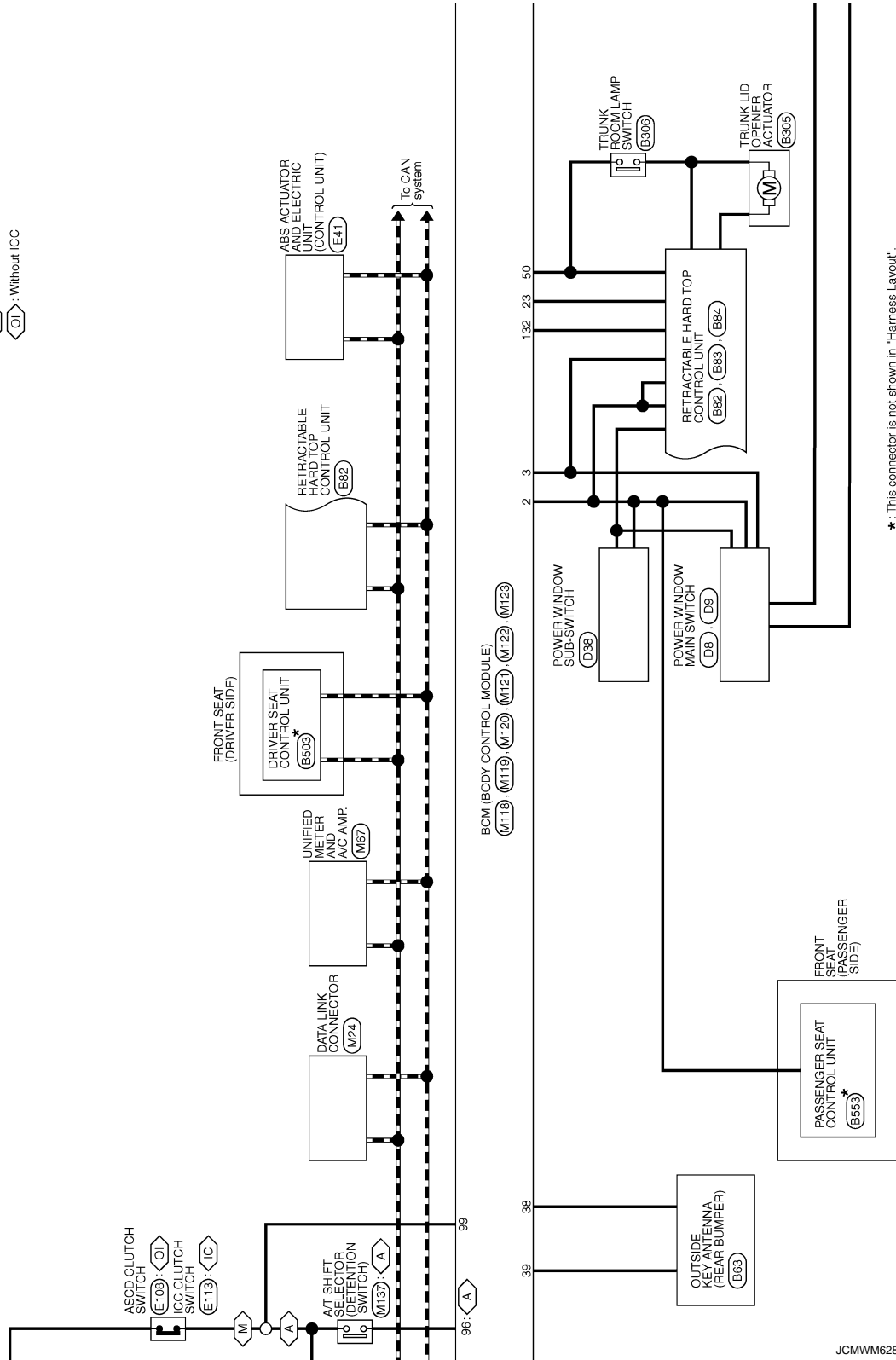
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BCM (BODY CONTROL MODULE)

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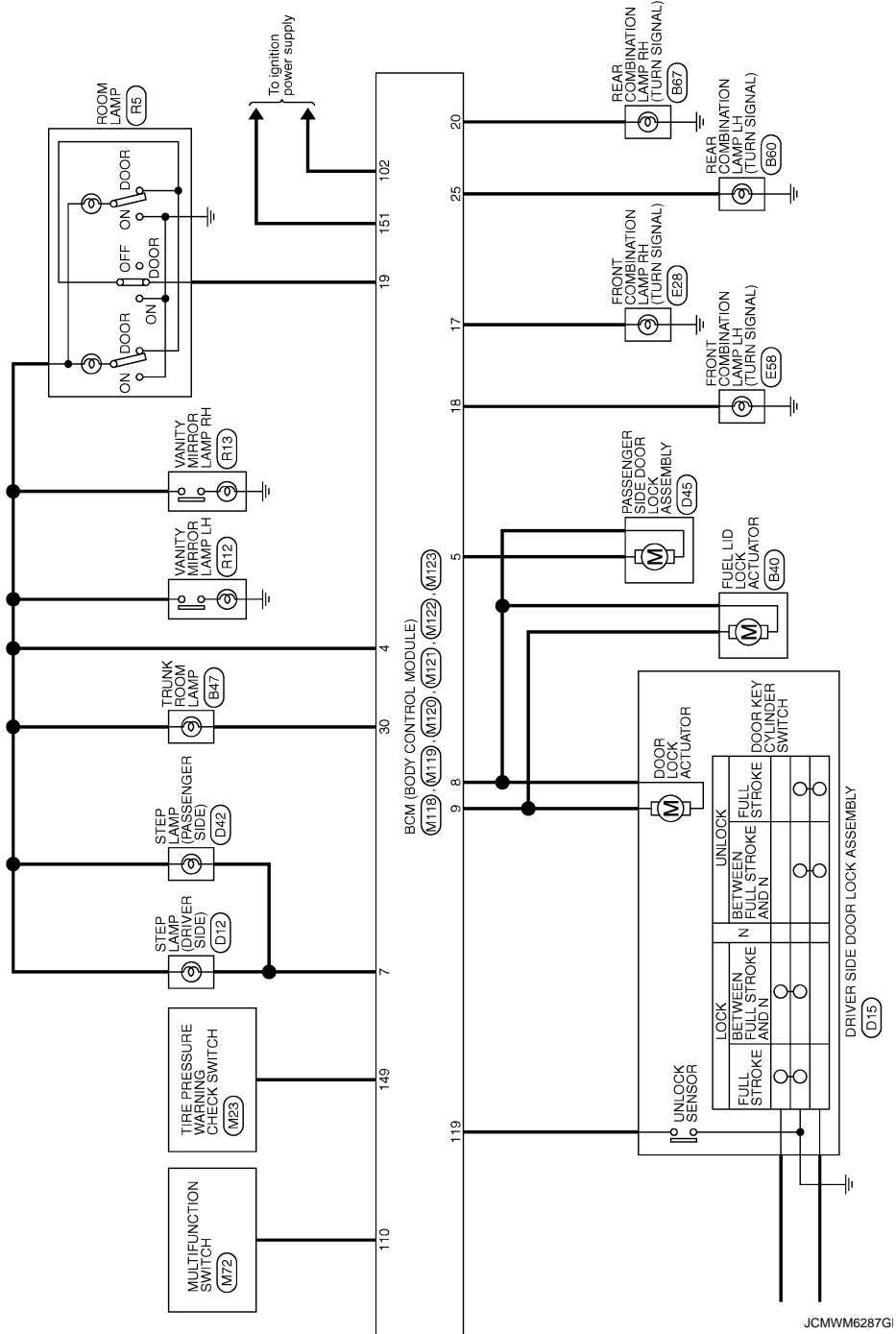
- : With A/T
- : With M/T
- : With ICC
- : Without ICC



JCMWM6286G

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



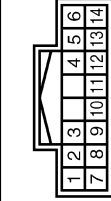
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



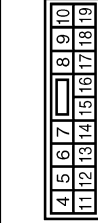
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	FR WASHER (-)
2	SB	OUTPUT 4
3	L	OUTPUT 3
4	B	GND
5	B	INPUT 3
6	EG	OUTPUT 5
7	ER	INPUT 2
8	W	INPUT 4
9	R	INPUT 1
10	LG	OUTPUT 1
11	V	INPUT 5
12	Y	OUTPUT 2
13	Y	OUTPUT 2
14	G	OUTPUT 2

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



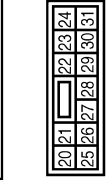
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	Y	POWER WINDOW POWER SUPPLY (BAT)
3	EG	POWER WINDOW POWER SUPPLY (RAP)

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



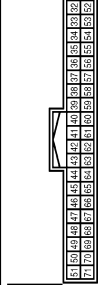
Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	P	PASSENGER DOOR UNLOCK OUTPUT
6	SB	STEP LAMP
7	V	ALL DOOR FUEL LID LOCK OUTPUT
8	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
9	GR	BAT (FUSE)
10	B	GND
11	W	PUSH BUTTON IGNITION SW ILL GND
12	EG	ACC IND
13	BR	TURN SIGNAL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

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



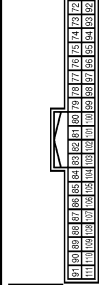
Terminal No.	Color of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
21	Y	TRUNK LID OPEN OUTPUT
22	Y	TURN SIGNAL LH (REAR)
23	Y	TRUNK ROOM LAMP
24	P	TRUNK ROOM LAMP

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH



Terminal No.	Color of Wire	Signal Name [Specification]
34	SB	TRUNK ROOM ANT-
35	V	TRUNK ROOM ANT-
36	B	REAR BUMPER ANT-
37	W	REAR BUMPER ANT+
38	Y	IGN RELAY (BDM E/P) CONT
39	G	TRUNK ROOM LAMP SW
40	G	STARTER RELAY CONT
41	SB	TRUNK LID OPENER REQUEST SW
42	G	F-KEY WARN BUZZER (ENG ROOM)
43	GR	TRUNK LID OPENER SW

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



Terminal No.	Color of Wire	Signal Name [Specification]
67	R	ROOM ANT 2-
68	G	ROOM ANT 2+
69	SB	PASSENGER DOOR ANT-
70	BR	PASSENGER DOOR ANT-
71	V	DRIVER DOOR ANT-
72	LG	DRIVER DOOR ANT+
73	Y	ROOM ANT 1-
74	BR	ROOM ANT 1+
75	GR	NATS ANTENNA AMP
76	W	NATS ANTENNA AMP
77	R	IGN RELAY (E/B) CONT
78	Y	KEYLESS ENTRY RECEIVER COMM

87	Y	COMBI SW INPUT 5
88	EG	COMBI SW INPUT 3
89	BR	FLUSH SW
90	P	CAN-H
91	L	CAN-H
92	LG	KEY/SLOT ILL
93	V	IGN IND
94	EG	ACC RELAY CONT
95	GR	A/T SHIFT SELECTOR POWER SUPPLY
96	L	S/L CONDITION 1
97	L	S/L CONDITION 2
98	SB	SHIFT P (With A/T)
99	R	ASGD/ICC CLUTCH SW (With M/T)
100	Y	PASSENGER DOOR REQUEST SW
101	P	DRIVER DOOR REQUEST SW
102	EG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
104	W	S/L UNIT POWER SUPPLY
105	W	S/L UNIT POWER SUPPLY
106	W	COMBI SW INPUT 1
107	LG	COMBI SW INPUT 4
108	R	COMBI SW INPUT 2
109	W	HAZARD SW
110	G	S/L UNIT COMM
111	Y	S/L UNIT COMM

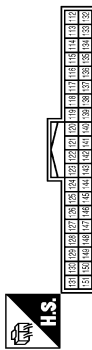
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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BCM (BODY CONTROL MODULE)

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-1M



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

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Fail-safe

FAIL-SAFE CONTROL BY DTC

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
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
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)
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 (12 V) • Vehicle speed: 4 km/h (2.5 MPH) or more
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 (12 V) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP/CLUTCH 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 (12 V) - 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
B2605: PNP/CLUTCH 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: 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 (12 V) - PNP switch signal (CAN): ON
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)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
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 (12 V) • 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: BCM	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
B26E8: CLUTCH SW	Inhibit engine cranking	When any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Clutch switch signal (CAN from ECM): ON - Clutch interlock switch signal: OFF (0 V) • Status 2 <ul style="list-style-type: none"> - Clutch switch signal (CAN from ECM): OFF - Clutch interlock switch signal: ON (Battery voltage)
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 (0 V) • Steering condition No. 2 signal: LOCK (12 V)

DTC Inspection Priority Chart

INFOID:000000005897700

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

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
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/CLUTCH SW • B2605: PNP/CLUTCH 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: BCM • B2615: BCM • B2616: BCM • B2617: BCMC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E8: CLUTCH SW • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED
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"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:000000005897701

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-15. "COMMON ITEM : CONSULT-III Function \(BCM - COMMON ITEM\)".](#)

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	Refer- ence page
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-34
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-35
U0415: VEHICLE SPEED	—	—	—	—	BCS-36
B2013: ID DISCORD BCM-S/L	×	×	—	—	SEC-46
B2014: CHAIN OF S/L-BCM	×	×	—	—	SEC-47
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-38
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-41
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-42
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-44
B2195: ANTI-SCANNING	×	—	—	—	SEC-45
B2553: IGNITION RELAY	—	×	—	—	PCS-48
B2555: STOP LAMP	—	×	—	—	SEC-50
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-52
B2557: VEHICLE SPEED	×	×	×	—	SEC-54
B2560: STARTER CONT RELAY	×	×	×	—	SEC-55
B2562: LOW VOLTAGE	—	×	—	—	BCS-37
B2601: SHIFT POSITION	×	×	×	—	SEC-56
B2602: SHIFT POSITION	×	×	×	—	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-61
B2604: PNP/CLUTCH SW	×	×	×	—	SEC-64
B2605: PNP/CLUTCH SW	×	×	×	—	SEC-66
B2606: S/L RELAY	×	×	×	—	SEC-68
B2607: S/L RELAY	×	×	×	—	SEC-69
B2608: STARTER RELAY	×	×	×	—	SEC-71
B2609: S/L STATUS	×	×	×	—	SEC-73
B260A: IGNITION RELAY	×	×	×	—	PCS-50
B260B: STEERING LOCK UNIT	—	×	×	—	SEC-77
B260C: STEERING LOCK UNIT	—	×	×	—	SEC-78
B260D: STEERING LOCK UNIT	—	×	×	—	SEC-79
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-80
B2612: S/L STATUS	×	×	×	—	SEC-85
B2614: BCM	—	×	×	—	PCS-52
B2615: BCM	—	×	×	—	PCS-55
B2616: BCM	—	×	×	—	PCS-58
B2617: BCM	×	×	×	—	SEC-89
B2618: BCM	×	×	×	—	PCS-61
B2619: BCM	×	×	×	—	SEC-91
B261A: PUSH-BTN IGN SW	—	×	×	—	PCS-62
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-92

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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	Refer- ence page
B2621: INSIDE ANTENNA	—	×	—	—	DLK-61
B2622: INSIDE ANTENNA	—	×	—	—	DLK-63
B2623: INSIDE ANTENNA	—	×	—	—	DLK-65
B26E8: CLUTCH SW	×	×	×	—	SEC-81
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	—	SEC-83
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-84
C1704: LOW PRESSURE FL	—	—	—	×	WT-26
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-28
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-31
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-33
C1734: CONTROL UNIT	—	—	—	×	WT-35

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

RETRACTABLE HARD TOP CONTROL UNIT

Reference Value

INFOID:000000005893384

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Status/Value	
LATCH LOCK SEN	State of roof latch	Lock	ON
		Other than above	OFF
		Roof latch lock sensor circuit is short	NG
LATCH STATE SEN	State of roof latch motor	Operate	ON ⇔ OFF
		Stop	ON or OFF
		Roof latch lock sensor circuit is short	NG
LATCH OUT(ULK)	Operation of roof latch motor	Unlock is in operation	ON
		Other than above	OFF
		Roof latch motor (UNLOCK) circuit is short	NG
LATCH OUT(LCK)	Operation of roof latch motor	Lock is in operation	ON
		Other than above	OFF
		Roof latch motor (LOCK) circuit is short	NG
LATCH VALUE	State of roof latch	Lock	0
		Halfway position	1-77
		Unlock	78 or more
LATCH LIMIT SW	State of roof latch	Roof is fully close and roof latch is in LOCK	CLOSE
		Other than above	OPEN
LATCH STATE	State of roof latch	Initialization is not complete	NG
		LOCK	CLOSE
		Halfway position	MID
		UNLOCK	OPEN
PS VALUE(DRAW)	State of parcel shelf	Top	Retractable hard top fully open state: 2246 Retractable hard top fully closed state: 2220
		Bottom	1000
PS VALUE(ROTA)	State of parcel shelf	Vertical	3190
		Horizontal	Retractable hard top fully open state: 1340 Retractable hard top fully closed state: 1000
PS OUT(UP)	Operation of parcel shelf	Up operation is in operation	ON
		Other than above	OFF
		Parcel shelf (UP) circuit is short	NG
PS OUT(DOWN)	Operation of parcel shelf	DOWN operation is in operation	ON
		Other than above	OFF
		Parcel shelf (DOWN) circuit is short	NG
PS OUT(VERT)	Operation of parcel shelf	Vertical operation is in operation	ON
		Other than above	OFF
		Parcel shelf (VERTICAL) circuit is short	NG

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RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Status/Value
PS OUT(HORI)	Operation of parcel shelf	Horizontal operation is in operation	ON
		Other than above	OFF
		Parcel shelf (HORIZONTAL) circuit is short	NG
PS STATE(DRAW)	State of parcel shelf	For the details, refer to RF-33. "PARCEL SHELF FUNCTION : System Description"	1-6
		State of parcel shelf status sensor (DRAW) is not recognized	NG
PS STATE(ROTA)	State of parcel shelf	For the details, refer to RF-33. "PARCEL SHELF FUNCTION : System Description"	1-4
		State of parcel shelf status sensor (ROTATE) is not recognized	NG
ROOF VALUE	Roof status sensor signal		0-1023
PUMP OUT(RH)	Operation of hydraulic pump motor	Turning clockwise	ON
		Other than above	OFF
		Hydraulic pump motor (RH) circuit is short	NG
PUMP OUT(LH)	Operation of hydraulic pump motor	Turning counterclockwise	ON
		Other than above	OFF
		Hydraulic pump motor (LH) circuit is short	NG
SWITCH VLV 1 OUT	Operation of switching valve 1	Operate	ON
		Stop	OFF
		Switching valve 1 circuit is short	NG
SWITCH VLV 2 OUT	Operation of switching valve 2	Operate	ON
		Stop	OFF
		Switching valve 2 circuit is short	NG
ROOF STATE	State of roof	For the details, refer to RF-16. "RETRACTABLE HARD TOP SYSTEM : System Description"	1-42
		State of roof is not recognized	NG
HYDRAULIC STATE	State of hydraulic system	For the details, refer to RF-27. "HYDRAULIC SYSTEM CONTROL FUNCTION : System Description"	1-22
		State of hydraulic system is not recognized	NG
ROOF SW(OPEN)	State of roof open/close switch	OPEN operation is in operation	ON
		Other than above	OFF
ROOF SW(CLOSE)	State of roof open/close switch	CLOSE operation is in operation	ON
		Other than above	OFF
ROOF LINK STATE	State of roof link	For the details, refer to RF-27. "HYDRAULIC SYSTEM CONTROL FUNCTION : System Description"	1-8
		State of roof is not recognized	NG
TRUNK LINK SEN(RH)	State of trunk link lock (RH)	LOCK	ON
		Other than above	OFF
		Trunk link lock (RH) circuit is short or open	NG
TRUNK LINK SEN(LH)	State of trunk link lock (LH)	LOCK	ON
		Other than above	OFF
		Trunk link lock (LH) circuit is short or open	NG
TR ROOM LAMP SW	State of trunk lid (trunk room lamp switch)	Open	ON
		Other than above	OFF

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Status/Value	
TRUNK STATUS SEN	State of trunk lid	Fully OPEN	ON	A
		Other than above	OFF	
		Trunk status sensor circuit is short or open	NG	B
TRUNK OPEN OUT	Operation of trunk lid opener actuator	OPEN operation is in operation	ON	
		Other than above	OFF	C
		Trunk lid opener actuator circuit is short	NG	
FLPD LIMIT SW(DWN)	State of flipper door	Both of flipper door (LH/RH) are in DOWN position	ON	D
		Other than above	OFF	
FLPD LIMIT SW(UP)	State of flipper door	Both of flipper door (LH/RH) are in UP position	ON	E
		Other than above	OFF	
FLPD OUT(UP)	Operation of flipper door	UP operation is in operation	ON	F
		Other than above	OFF	
		Flipper door motor (UP) circuit is short	NG	
FLPD OUT(DWN)	Operation of flipper door	DOWN operation is in operation	ON	G
		Other than above	OFF	
		Flipper door motor (DOWN) circuit is short	NG	
FLPD STATE	State of flipper door	For the details, refer to RF-35. "FLIPPER DOOR FUNCTION : System Description"	1, 2, 4	H
		State of flipper door is not recognized	NG	
R WIN LH OUT(UP)	Operation of rear power window (LH)	UP operation is in operation	ON	I
		Other than above	OFF	
		Rear power window LH (UP) circuit is short	NG	J
R WIN LH OUT(DWN)	Operation of rear power window (LH)	DOWN operation is in operation	ON	
		Other than above	OFF	K
		Rear power window LH (DOWN) circuit is short	NG	
R WIN RH OUT(UP)	Operation of rear power window (RH)	UP operation is in operation	ON	DEF
		Other than above	OFF	
		Rear power window RH (UP) circuit is short	NG	
R WIN RH OUT(DWN)	Operation of rear power window (RH)	DOWN operation is in operation	ON	M
		Other than above	OFF	
		Rear power window RH (DOWN) circuit is short	NG	
REAR DEF ON SIG	State of rear window defogger switch	While operating	ON	N
		Stop	OFF	
REAR DEF OUT	State of rear window defogger system	Operate	ON	O
		Stop	OFF	
		Rear window defogger circuit is short	NG	P
R WIN CURENT(LH)	Current value to rear power window motor (LH)		0-25.5 (A)	
R WIN CURENT(RH)	Current value to rear power window motor (RH)		0-25.5 (A)	
RR WIN STATE(LH)	State of rear power window (LH)	Upper	UP	
		Halfway	MID	
		Lower end	DOWN	

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

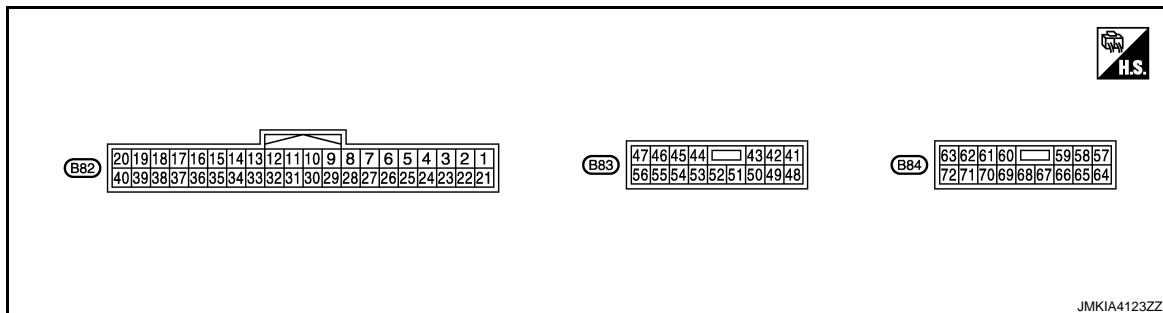
Monitor Item	Condition	Status/Value
RR WIN STATE(RH)	State of rear power window (RH)	Upper
		Halfway
		Lower end
RAP SIGNAL	State of RAP	Operate
		Stop
TR MODE SIGNAL	State of trunk mode signal	Output
		Stop
ROOF STATE(AUDIO)	State of roof	State of fully open
		Other than above
		Roof state signal (audio) circuit is short
ROOF BUZZER OUT	State of roof warning buzzer	Operate
		Stop
		Roof warning buzzer circuit is short
LOCAL COMM 1	State of local communication 1	Normal
		It is in sleep mode
		Communication error
LOCAL COMM 2	State of local communication 2	Normal
		It is in sleep mode
		Communication error
ROOF MODE	Roof operation mode	Normal
		Only close operation is possible
		Operation is stop
		Operation is inhibited
POP-UP BAR DPLOY	State of pop-up bar	Normal
		State of deployment
POP-UP BAR DIAG	Self-diagnosis result of pop-up bar	Normal
		Malfunctioning is detected
SWITCH VLV COND	Diagnosis result of retractable hard top control unit	Diagnosis result of retractable hard top control unit
		Switching valve (1/2) system is malfunctioning
PWR SOURCE COND	Power supply voltage state of retractable hard top control unit	Normal
		Malfunction
CPU COND	Diagnosis result of retractable hard top control unit	CPU is normal
		CPU is not normal
ROOF COND	Diagnosis result of retractable hard top control unit	Roof position is normal
		Roof position is not normal
SENSOR COND	Diagnosis result of retractable hard top control unit	Hole sensor system is normal
		Hole sensor system is not normal
IGN ON SIG(BCM)	Power position signal (via CAN from BCM)	ON
		Other than above
VHCL STOP-METER	Vehicle speed signal (via CAN from meter and A/C amp.)	0km/h
		Other than above

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Status/Value
CIRCUIT COND	Diagnosis result of retractable hard top control unit	Circuit system is normal	OK
		Circuit system is not normal	NG
ROOF TIMEOUT	State of roof operation	Normal	OK
		Malfunction	NG
CAN COMM	CAN communication status	Normal	OK
		Malfunction	NG
THERMO PROTECT 1	Thermo protection (Stage1)	In non-operation	OK
		In operation	NG
SHIFT R SIG	Shift position	Other than R position	OK
		R position	NG
PRMIT ENG ST(BCM)	Permit engine start signal	Signal is not received	OK
		Signal is in receiving	NG
THERMO PROTECT-2	Thermo protection (Stage2)	In non-operation	OK
		In operation	NG
TONNEAU SW	Tonneau board	Set	OK
		Other than above	NG
BRK LAMP SW(BCM)	Brake lamp switch signal (via CAN from BCM)	Brake is depressed	OK
		Brake is released	NG
THERMO VALUE	Conversion value of thermo protection		0-65535
PWR SOURCE VALUE	Power supply voltage value of retractable hard top control unit		0-20 (V)
ROOF INITIAL(OPEN)	State of performing roof position initialization	Registration of full open position is complete	OK
		Registration of full open position is not complete	NG
ROOF INITIAL(CLOSE)	State of performing roof position initialization	Registration of full closed position is complete	OK
		Registration of full closed position is not complete	NG
PSHELF INITIAL(ROTA)	State of performing parcel shelf position initialization	Registration of rotation position is complete	OK
		Registration of rotation position is not complete	NG
PSHELF INITIAL(DRAW)	State of performing parcel shelf position initialization	Registration of draw position is complete	OK
		Registration of draw position is not complete	NG

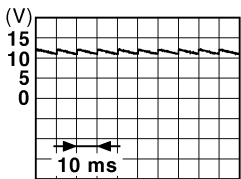
TERMINAL LAYOUT



PHYSICAL VALUES

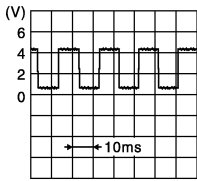
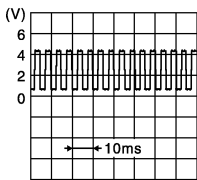
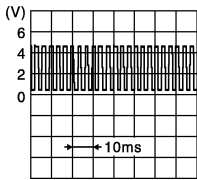
RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition			Value (Approx.)
+	-	Signal name	Input/ Output				
1 (G)	Ground	Roof open/close switch (OPEN)	Input	Ignition switch ON	Roof open/close switch (OPEN)	Pressed	0 V
						Released	Battery voltage
2 (BR)	Ground	Roof open/close switch (CLOSE)	Input	Ignition switch ON	Roof open/close switch (CLOSE)	Pressed	0 V
						Released	Battery voltage
3 (B)	Ground	Flipper door limit switch ground	—	Ignition switch ON	—		0 V
4 (L)	Ground	Tonneau board switch	Input	Ignition switch ON	Tonneau board	Hooked	Battery voltage
						Released	0 V
5 (SB)	Ground	Trunk room lamp switch	Input	Ignition switch ON	Trunk lid	Locked	 <small>JPMIA0011GB</small>
						Other than above	0 V
6 (L)	Ground	Roof latch limit switch	Input	Ignition switch ON	Roof	Close	0 V
						Other than above	Battery voltage
7 (W)	Ground	Flipper door limit switch (UP)	Input	Ignition switch ON	Flipper door LH and RH	Top	0 V
						Other than above	Battery voltage
8 (G)	Ground	Flipper door limit switch (DOWN)	Input	Ignition switch ON	Flipper door LH and RH	Bottom	0 V
						Other than above	Battery voltage
11 (W)	Ground	RAP signal	Input	Ignition switch ON	RAP function	Active	Battery voltage
						Inactive	0 V
12 (Y)	Ground	Back up lamp signal	Input	Ignition switch ON	Shift position	R position	Battery voltage
						Other than above	0 V
13 (BG)	Ground	Sensor power supply	Output	Ignition switch OFF	—		5 V
14 (P)	Ground	Trunk link sensor (LH)	Input	Ignition switch ON	Trunk link lock (LH)	LOCK	0.3 V
						Other than above	1.5 V
15 (SB)	Ground	Trunk link sensor (RH)	Input	Ignition switch ON	Trunk link lock (RH)	LOCK	0.3 V
						Other than above	1.5 V

RETRACTABLE HARD TOP CONTROL UNIT

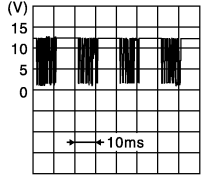
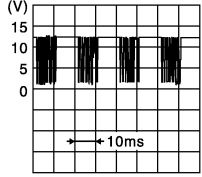
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition			Value (Approx.)
+	-	Signal name	Input/ Output				
16 (GR)	Ground	Roof latch status sensor	Input	Ignition switch ON	Roof latch	Operate	 <small>JMKIA4021GB</small>
						Stop	0.5 or 4.5 V
17 (G)	Ground	Roof latch lock sensor	Input	Ignition switch ON	Roof latch	LOCK	1.0 V
						Other than above	3.8 V
18 (LG)	Ground	Trunk status sensor	Input	Ignition switch ON	Trunk lid (front)	Fully open	1.0 V
						Other than above	3.8 V
22 (V)	Ground	Roof status sensor power supply	Output	Ignition switch ON	—		5 V
23 (B)	Ground	Roof status sensor ground	—	Ignition switch ON	—		0 V
24 (GR)	Ground	Parcel shelf status sensor (DRAW)	Input	Ignition switch ON	Parcel shelf motor (DRAW)	Active	 <small>JMKIA4022GB</small>
						Inactive	0.5 V or 5 V
25 (R)	Ground	Parcel shelf status sensor (ROTATION)	Input	Ignition switch ON	Parcel shelf motor (ROTATE)	Active	 <small>JMKIA4023GB</small>
						Inactive	0.5 V or 5 V
26 (P)	Ground	Roof status sensor signal	Input	Ignition switch ON	Roof	Fully close → Fully open	0.5 V → 5 V
27 (Y)	Ground	Trunk lid open request signal (BCM)	Output	—	Trunk opener	Operate	0 V → Battery voltage → 0 V
						Other than above	0 V
28 (BG)	Ground	Flipper door motor ground	—	Ignition switch ON	—		0 V

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RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)	
+	-	Signal name	Input/ Output				
29 (V)	Ground	Local communication (BCM)	Input/ Output	Ignition switch ON	—	 JMKIA4024GB	
30 (GR)	Ground	Local communication (POWER WINDOW)	Input/ Output	Ignition switch ON	—	 JMKIA4024GB	
31 (L)	Ground	CAN-H	Input/ Output	—	—	—	
32 (P)	Ground	CAN-L	Input/ Output	—	—	—	
33 (V)	Ground	Roof status signal (AUDIO)	Output	Ignition switch ON	Retractable hard top	Fully open	Battery voltage
						Other than above	0 V
34 (R)	Ground	Roof status signal (TRUNK)	Input	Ignition switch ON	Trunk	Fully close	Battery voltage
							Other than above
35 (B)	Ground	Roof warning buzzer	Output	Ignition switch ON	Roof warning buzz- er	Sounds	0 V
							Not sounds
36 (Y)	Ground	Hydraulic pump relay (RH)	—	Ignition switch ON	Hydraulic pump mo- tor (RH)	Active	0 V
							Inactive
37 (W)	Ground	Hydraulic pump relay (LH)	—	Ignition switch ON	Hydraulic pump mo- tor (LH)	Active	0 V
							Inactive
38 (BR)	Ground	Hydraulic pump relay ground	—	Ignition switch ON	—	0 V	
41 (SB)	Ground	Parcel shelf motor (UP)	Output	Ignition switch ON	Parcel shelf motor (DRAW-UP)	Active	Battery voltage
							Inactive
42 (W)	Ground	Parcel shelf motor (DOWN)	Output	Ignition switch ON	Parcel shelf motor (DRAW-DOWN)	Active	Battery voltage
							Inactive
43 (BR)	Ground	Hydraulic pump pow- er supply relay	Output	Ignition switch ON	Retractable hard top system	Active	Battery voltage
							Inactive
44 (R)	Ground	Parcel shelf motor (HORIZONTAL)	Output	Ignition switch ON	Parcel shelf motor (ROTATION-HORI- ZONTAL)	Active	Battery voltage
							Inactive
45 (BR)	Ground	Parcel shelf motor (VERTICAL)	Output	Ignition switch ON	Parcel shelf motor (ROTATION-VER- TICAL)	Active	Battery voltage
							Inactive

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition			Value (Approx.)	
+	-	Signal name	Input/ Output					
46 (G)	Ground	Flipper door motor (UP)	Output	Ignition switch ON	Flipper door motor (UP)	Active	Battery voltage	A
						Inactive	0 V	B
47 (L)	Ground	Flipper door motor (DOWN)	Output	Ignition switch ON	Flipper door motor (DOWN)	Active	Battery voltage	C
						Inactive	0 V	
48 (R)	Ground	Roof latch motor (OPEN)	Output	Ignition switch ON	Roof latch motor (OPEN)	Active	Battery voltage	D
						Inactive	0 V	
49 (Y)	Ground	Roof latch motor (CLOSE)	Output	Ignition switch ON	Roof latch motor (CLOSE)	Active	Battery voltage	E
						Inactive	0 V	
51 (SB)	Ground	Trunk lid opener ac- tuator	Output	—	Trunk lid opener	Operate	0 V → Battery voltage → 0 V	F
						Stop	0 V	
52 (V)	Ground	Trunk lid opener ac- tuator ground	—	Ignition switch ON	—		0 V	G
53 (BG)	Ground	Rear power window motor LH (UP)	Output	Ignition switch ON	Rear power window motor LH (UP)	Active	Battery voltage	
						Inactive	0 V	H
54 (LG)	Ground	Rear power window motor LH (DOWN)	Output	Ignition switch ON	Rear power window motor LH (DOWN)	Active	Battery voltage	
						Inactive	0 V	I
55 (GR)	Ground	Rear power window motor RH (UP)	Output	Ignition switch ON	Rear power window motor RH (UP)	Active	Battery voltage	
						Inactive	0 V	J
56 (P)	Ground	Rear power window motor RH (DOWN)	Output	Ignition switch ON	Rear power window motor RH (DOWN)	Active	Battery voltage	
						Inactive	0 V	K
57 (Y)	Ground	Power source (ROOF)	Input	—	—		Battery voltage	
58 (Y)	Ground	Power source (ROOF)	Input	—	—		Battery voltage	DEF
59 (Y)	Ground	Power source (ROOF)	Input	—	—		Battery voltage	
60 (B)	Ground	Ground (ROOF)	—	Ignition switch ON	—		0 V	M
61 (B)	Ground	Ground (ROOF)	—	Ignition switch ON	—		0 V	N
62 (GR)	Ground	Power source (POWER WINDOW)	Input	—	—		Battery voltage	O
63 (Y)	Ground	Power source (POWER WINDOW)	Input	—	—		Battery voltage	P
64 (B)	Ground	Ground (POWER WINDOW)	—	Ignition switch ON	—		0 V	
65 (B)	Ground	Ground (POWER WINDOW)	—	Ignition switch ON	—		0 V	

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition			Value (Approx.)
+	-	Signal name	Input/ Output				
66 (P)	Ground	Switching valve 1	Output	Ignition switch ON	Switching valve 1	Active	Battery voltage
						Inactive	0 V
67 (SB)	Ground	Switching valve 2	Output	Ignition switch ON	Switching valve 2	Active	Battery voltage
						Inactive	0 V
68 (L)	Ground	Switching valve ground	—	Ignition switch ON	—		0 V
69 (G)	Ground	Power source (REAR WINDOW DEFOGGER)	Input	—	—		Battery voltage
70 (P)	Ground	Power source (REAR WINDOW DEFOGGER)	Input	—	—		Battery voltage
71 (BR)	Ground	Rear window defog- ger power supply	Output	Ignition switch ON	Rear defogger switch ON and roof is fully closed		Battery voltage
72 (W)	Ground	Rear window defog- ger power supply	Output	Ignition switch ON	Rear defogger switch ON and roof is fully closed		Battery voltage

Fail-safe

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FAIL-SAFE CONTROL BY DTC

Retractable hard top control unit performs fail-safe control when any DTC are detected.

Display contents of CONSULT-III		Fail-safe	Cancellation
U1000	CAN COMM CIRCUIT	Inhibit retractable hard top operation.	Communication is normal
U1010	CONTROL UNIT (CAN)	Inhibit retractable hard top operation.	Communication is normal
U0140	LOCAL COMM-1	Inhibit retractable hard top operation.	Communication is normal
U0215	LOCAL COMM-1	Inhibit retractable hard top operation.	Communication is normal
B1701	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Replace retractable hard top control unit.
B1702	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Replace retractable hard top control unit.
B1709	ROOF SWITCH(OPEN)	Inhibit retractable hard top operation.	Detects roof open/close switch (OPEN) is OFF
B170A	ROOF SWITCH(CLOSE)	Inhibit retractable hard top operation.	Detects roof open/close switch (CLOSE) is OFF
B170B	ROOF SWITCH	Inhibit retractable hard top operation.	Detects roof open/close switch (OPEN/CLOSE) is OFF
B170C	TRUNK LINK SEN- SOR(LH)	Inhibit retractable hard top operation.	Detects normal value
B170D	TRUNK LINK SEN- SOR(RH)	Inhibit retractable hard top operation.	Detects normal value
B170F	SENSOR POWER SUP- PLY	Inhibit retractable hard top operation.	Detects normal value
B1710	LATCH STATUS SENSOR	Inhibit retractable hard top operation.	Detects normal value
B1711	LATCH LOCK SENSOR	Inhibit retractable hard top operation.	Detects normal value
B1712	TRUNK STATUS SENSOR	Inhibit retractable hard top operation.	Detects normal value
B1715	ROOF STATUS SEN PWR	Inhibit retractable hard top operation.	Detects normal value
B1716	PS STATUS SEN(DRAW)	Inhibit retractable hard top operation.	Detects normal value

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT-III		Fail-safe	Cancellation	
B1718	PS STATUS SEN(ROTA)	Inhibit retractable hard top operation.	Detects normal value	A
B1719	ROOF STATUS SEN	Inhibit retractable hard top operation.	Detects normal value	B
B171A	HYDRAULIC PMP(LH)	Inhibit retractable hard top operation.	Detects normal value	
B171B	HYDRAULIC PMP(RH)	Inhibit retractable hard top operation.	Detects normal value	
B171C	SWITCHING VALVE 1	Inhibit retractable hard top operation.	Detects normal value	C
B171D	SWITCHING VALVE 2	Inhibit retractable hard top operation.	Detects normal value	
B171E	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	
B171F	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	D
B1720	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	
B1721	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	E
B1722	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	
B1723	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	
B1724	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	F
B1725	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	
B1726	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	G
B1728	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	
B1729	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	
B172A	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	H
B172B	ROOF STATE SIG(AUDIO)	Inhibit retractable hard top operation.	Detects normal value	
B172C	ROOF STATE SIG(TRUNK)	Inhibit retractable hard top operation.	Detects normal value	I
B172D	ROOF WARNING BUZZER	Inhibit retractable hard top operation.	Detects normal value	
B172E	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value	J
B172F	REAR PWR WINDOW(LH)	Inhibit retractable hard top operation.	Detects normal value	
B1730	REAR PWR WINDOW(RH)	Inhibit retractable hard top operation.	Detects normal value	K
B1731	HYDRAULIC STATE 1	Inhibit retractable hard top operation.	Turn ignition switch OFF	DEF
B1732	HYDRAULIC STATE 2	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1733	HYDRAULIC STATE 3	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1734	HYDRAULIC STATE 4	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1735	HYDRAULIC STATE 5	Inhibit retractable hard top operation.	Turn ignition switch OFF	M
B1736	HYDRAULIC STATE 6	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1737	HYDRAULIC STATE 7	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1738	HYDRAULIC STATE 8	Inhibit retractable hard top operation.	Turn ignition switch OFF	N
B1739	HYDRAULIC STATE 9	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B173A	HYDRAULIC STATE 10	Inhibit retractable hard top operation.	Turn ignition switch OFF	O
B173B	HYDRAULIC STATE 11	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B173C	HYDRAULIC STATE 12	Inhibit retractable hard top operation.	Turn ignition switch OFF	P
B173D	HYDRAULIC STATE 13	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B173E	HYDRAULIC STATE 14	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B173F	HYDRAULIC STATE 15	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1740	HYDRAULIC STATE 16	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1741	HYDRAULIC STATE 17	Inhibit retractable hard top operation.	Turn ignition switch OFF	
B1742	HYDRAULIC STATE 18	Inhibit retractable hard top operation.	Turn ignition switch OFF	

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT-III		Fail-safe	Cancellation
B1743	HYDRAULIC STATE 19	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1744	HYDRAULIC STATE 20	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1745	HYDRAULIC STATE 21	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1746	HYDRAULIC STATE 22	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1747	P SHELF (DRAW) STATE 1	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1748	P SHELF (DRAW) STATE 2	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1749	P SHELF (DRAW) STATE 3	Inhibit retractable hard top operation.	Turn ignition switch OFF
B174A	P SHELF (DRAW) STATE 4	Inhibit retractable hard top operation.	Turn ignition switch OFF
B174B	P SHELF (DRAW) STATE 5	Inhibit retractable hard top operation.	Turn ignition switch OFF
B174C	P SHELF (DRAW) STATE 6	Inhibit retractable hard top operation.	Turn ignition switch OFF
B174D	P SHELF (ROT) STATE 1	Inhibit retractable hard top operation.	Turn ignition switch OFF
B174E	P SHELF (ROT) STATE 2	Inhibit retractable hard top operation.	Turn ignition switch OFF
B174F	P SHELF (ROT) STATE 3	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1750	P SHELF (ROT) STATE 4	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1751	ROOF LATCH STATE 1	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1752	ROOF LATCH STATE 2	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1753	ROOF LATCH STATE 3	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1754	FLIPPER DOOR STATE 1	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1755	FLIPPER DOOR STATE 2	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1756	FLIPPER DOOR STATE 3	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1757	FLIPPER DOOR STATE 4	Inhibit retractable hard top operation.	Turn ignition switch OFF
B1758	THERMO PROTECTION	Inhibit retractable hard top operation.	It is not in thermo protection area (Refer to RF-16. "RETRACTABLE HARD TOP SYSTEM : System Description")
B175C	PWR SOURCE(ROOF)	Inhibit retractable hard top operation.	Power source is 11.4 (V) or more for 0.5 second
B175D	PWR SOURCE(ROOF)	Inhibit retractable hard top operation.	Power source is 14.5 (V) or more for 4 seconds
B175E	PWR SOURCE(WINDOW)	Inhibit retractable hard top operation and rear power window operation.	Power source (power window) is 9.5 (V) or less
B175F	PWR SOURCE(WINDOW)	Inhibit retractable hard top operation and rear power window operation.	Power source (power window) is 15.5 (V) or more
B1760	ROOF CONTROL UNIT	Inhibit rear window defogger operation.	Detects normal value
B1761	ROOF CONTROL UNIT	Inhibit retractable hard top operation.	Detects normal value
B1762	ROOF STATE	Inhibit retractable hard top operation.	Detects normal value
B1763	HYDRAULIC STATE	Inhibit retractable hard top operation.	Detects normal value
B1764	ROOF LATCH STATE	Inhibit retractable hard top operation.	Detects normal value
B1765	FLIPPER DOOR STATE	Inhibit retractable hard top operation.	Detects normal value

DTC Inspection Priority Chart

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

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Priority	Display contents of CONSULT-III	
1	U1000	CAN COMM CIRCUIT
	U1010	CONTROL UNIT (CAN)
2	B175C	PWR SOURCE(ROOF)
	B175D	PWR SOURCE(ROOF)
	B175E	PWR SOURCE(WINDOW)
	B175F	PWR SOURCE(WINDOW)
3	B1701	ROOF CONTROL UNIT
	B1702	ROOF CONTROL UNIT
	B171E	ROOF CONTROL UNIT
	B171F	ROOF CONTROL UNIT
	B1720	ROOF CONTROL UNIT
	B1721	ROOF CONTROL UNIT
	B1722	ROOF CONTROL UNIT
	B1723	ROOF CONTROL UNIT
	B1724	ROOF CONTROL UNIT
	B1725	ROOF CONTROL UNIT
	B1726	ROOF CONTROL UNIT
	B1728	ROOF CONTROL UNIT
	B1729	ROOF CONTROL UNIT
	B172A	ROOF CONTROL UNIT
	B172E	ROOF CONTROL UNIT
	B1760	ROOF CONTROL UNIT
B1761	ROOF CONTROL UNIT	
4	B170F	SENSOR POWER SUPPLY

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RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Priority	Display contents of CONSULT-III	
5	U0140	LOCAL COMM-1
	U0215	LOCAL COMM-1
	B1709	ROOF SWITCH(OPEN)
	B170A	ROOF SWITCH(CLOSE)
	B170B	ROOF SWITCH
	B1758	THERMO PROTECTION
	B171A	HYDRAULIC PMP(LH)
	B171B	HYDRAULIC PMP(RH)
	B171C	SWITCHING VALVE 1
	B171D	SWITCHING VALVE 2
	B172F	REAR PWR WINDOW(LH)
	B1730	REAR PWR WINDOW(RH)
	B1715	ROOF STATE SEN PWR
	B170C	TRUNK LINK SENSOR(LH)
	B170D	TRUNK LINK SENSOR(RH)
	B1710	LATCH STATUS SENSOR
	B1711	LATCH LOCK SENSOR
	B1712	TRUNK STATUS SENSOR
	B1716	PS STATUS SEN(ROTA)
	B1718	PS STATUS SEN(DRAW)
B1719	ROOF STATUS SEN	
6	B172D	ROOF WARNING BUZZER

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Priority	Display contents of CONSULT-III		
7	B1731	HYDRAULIC STATE 1	A
	B1732	HYDRAULIC STATE 2	
	B1733	HYDRAULIC STATE 3	B
	B1734	HYDRAULIC STATE 4	
	B1735	HYDRAULIC STATE 5	
	B1736	HYDRAULIC STATE 6	C
	B1737	HYDRAULIC STATE 7	
	B1738	HYDRAULIC STATE 8	D
	B1739	HYDRAULIC STATE 9	
	B173A	HYDRAULIC STATE 10	
	B173B	HYDRAULIC STATE 11	E
	B173C	HYDRAULIC STATE 12	
	B173D	HYDRAULIC STATE 13	
	B173E	HYDRAULIC STATE 14	F
	B173F	HYDRAULIC STATE 15	
	B1740	HYDRAULIC STATE 16	G
	B1741	HYDRAULIC STATE 17	
	B1742	HYDRAULIC STATE 18	
	B1743	HYDRAULIC STATE 19	H
	B1744	HYDRAULIC STATE 20	
	B1745	HYDRAULIC STATE 21	I
	B1746	HYDRAULIC STATE 22	
	B1747	P SHELF (DRAW) STATE 1	
	B1748	P SHELF (DRAW) STATE 2	J
	B1749	P SHELF (DRAW) STATE 3	
	B174A	P SHELF (DRAW) STATE 4	K
	B174B	P SHELF (DRAW) STATE 5	
	B174C	P SHELF (DRAW) STATE 6	
	B174D	P SHELF (ROT) STATE 1	DEF
	B174E	P SHELF (ROT) STATE 2	
	B174F	P SHELF (ROT) STATE 3	
	B1750	P SHELF (ROT) STATE 4	M
B1751	ROOF LATCH STATE 1		
B1752	ROOF LATCH STATE 2	N	
B1753	ROOF LATCH STATE 3		
B1754	FLIPPER DOOR STATE 1		
B1755	FLIPPER DOOR STATE 2	O	
B1756	FLIPPER DOOR STATE 3		
B1757	FLIPPER DOOR STATE 4	P	
8	B1707	ROOF OPEN STATE	
	B1708	ROOF CLOSE STATE	
9	B1764	ROOF LATCH STATE	
	B1765	FLIPPER DOOR STATE	
10	B1762	ROOF STATE	

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Priority	Display contents of CONSULT-III	
11	B1763	HYDRAULIC STATE
12	B172B	ROOF STATE SIG(AUDIO)
	B172C	ROOF STATE SIG(TRUNK)

DTC Index

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NOTE:

For details of Freeze Frame Data, refer to [RF-41. "CONSULT-III Function"](#).

Display contents of CONSULT-III		Fail-safe	Freeze Frame Data	Reference page
No DTC is detected. Further testing may be required.		—	—	—
U1000	CAN COMM CIRCUIT	×	×	RF-90
U1010	CONTROL UNIT (CAN)	×	×	RF-91
U0140	LOCAL COMM-1	×	×	RF-92
U0215	LOCAL COMM-2	×	×	RF-93
B1701	ROOF CONTROL UNIT	×	×	RF-95
B1702	ROOF CONTROL UNIT	×	×	RF-96
B1707	ROOF OPEN STATE	—	×	RF-97
B1708	ROOF CLOSE STATE	—	×	RF-99
B1709	ROOF SWITCH(OPEN)	×	×	RF-101
B170A	ROOF SWITCH(CLOSE)	×	×	RF-103
B170B	ROOF SWITCH	×	×	RF-105
B170C	TRUNK LINK SENSOR(LH)	×	×	RF-107
B170D	TRUNK LINK SENSOR(RH)	×	×	RF-109
B170F	SENSOR POWER SUPPLY	×	×	RF-111
B1710	LATCH STATUS SENSOR	×	×	RF-114
B1711	LATCH LOCK SENSOR	×	×	RF-116
B1712	TRUNK STATUS SENSOR	×	×	RF-118
B1715	ROOF STATUS SEN PWR	×	×	RF-120
B1716	PS STATUS SEN(DRAW)	×	×	RF-122
B1718	PS STATUS SEN(ROTA)	×	×	RF-124
B1719	ROOF STATUS SEN	×	×	RF-126
B171A	HYDRAULIC PMP(LH)	×	×	RF-128
B171B	HYDRAULIC PMP(RH)	×	×	RF-130
B171C	SWITCHING VALVE 1	×	×	RF-132
B171D	SWITCHING VALVE 2	×	×	RF-134
B171E	ROOF CONTROL UNIT	×	×	RF-136
B171F	ROOF CONTROL UNIT	×	×	RF-137
B1720	ROOF CONTROL UNIT	×	×	RF-138
B1721	ROOF CONTROL UNIT	×	×	RF-139
B1722	ROOF CONTROL UNIT	×	×	RF-140
B1723	ROOF CONTROL UNIT	×	×	RF-141
B1724	ROOF CONTROL UNIT	×	×	RF-142
B1725	ROOF CONTROL UNIT	×	×	RF-143
B1726	ROOF CONTROL UNIT	×	×	RF-144

RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT-III		Fail-safe	Freeze Frame Data	Reference page
B1728	ROOF CONTROL UNIT	×	×	RF-145
B1729	ROOF CONTROL UNIT	×	×	RF-146
B172A	ROOF CONTROL UNIT	×	×	RF-147
B172B	ROOF STATE SIG(AUDIO)	×	×	RF-148
B172C	ROOF STATE SIG(TRUNK)	×	×	RF-150
B172D	ROOF WARNING BUZZER	×	×	RF-152
B172E	ROOF CONTROL UNIT	×	×	RF-154
B172F	REAR PWR WINDOW(LH)	×	×	RF-155
B1730	REAR PWR WINDOW(RH)	×	×	RF-157
B1731	HYDRAULIC STATE 1	×	×	RF-159
B1732	HYDRAULIC STATE 2	×	×	RF-161
B1733	HYDRAULIC STATE 3	×	×	RF-163
B1734	HYDRAULIC STATE 4	×	×	RF-165
B1735	HYDRAULIC STATE 5	×	×	RF-167
B1736	HYDRAULIC STATE 6	×	×	RF-169
B1737	HYDRAULIC STATE 7	×	×	RF-170
B1738	HYDRAULIC STATE 8	×	×	RF-171
B1739	HYDRAULIC STATE 9	×	×	RF-172
B173A	HYDRAULIC STATE 10	×	×	RF-173
B173B	HYDRAULIC STATE 11	×	×	RF-174
B173C	HYDRAULIC STATE 12	×	×	RF-175
B173D	HYDRAULIC STATE 13	×	×	RF-176
B173E	HYDRAULIC STATE 14	×	×	RF-177
B173F	HYDRAULIC STATE 15	×	×	RF-178
B1740	HYDRAULIC STATE 16	×	×	RF-179
B1741	HYDRAULIC STATE 17	×	×	RF-182
B1742	HYDRAULIC STATE 18	×	×	RF-183
B1743	HYDRAULIC STATE 19	×	×	RF-185
B1744	HYDRAULIC STATE 20	×	×	RF-187
B1745	HYDRAULIC STATE 21	×	×	RF-189
B1746	HYDRAULIC STATE 22	×	×	RF-191
B1747	P SHELF (DRAW) STATE 1	×	×	RF-193
B1748	P SHELF (DRAW) STATE 2	×	×	RF-194
B1749	P SHELF (DRAW) STATE 3	×	×	RF-195
B174A	P SHELF (DRAW) STATE 4	×	×	RF-196
B174B	P SHELF (DRAW) STATE 5	×	×	RF-197
B174C	P SHELF (DRAW) STATE 6	×	×	RF-198
B174D	P SHELF (ROT) STATE 1	×	×	RF-199
B174E	P SHELF (ROT) STATE 2	×	×	RF-200
B174F	P SHELF (ROT) STATE 3	×	×	RF-201
B1750	P SHELF (ROT) STATE 4	×	×	RF-202
B1751	ROOF LATCH STATE 1	×	×	RF-203
B1752	ROOF LATCH STATE 2	×	×	RF-204
B1753	ROOF LATCH STATE 3	×	×	RF-205

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RETRACTABLE HARD TOP CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT-III		Fail-safe	Freeze Frame Data	Reference page
B1754	FLIPPER DOOR STATE 1	×	×	RF-206
B1755	FLIPPER DOOR STATE 2	×	×	RF-207
B1756	FLIPPER DOOR STATE 3	×	×	RF-208
B1757	FLIPPER DOOR STATE 4	×	×	RF-209
B1758	THERMO PROTECTION	×	×	RF-210
B175C	PWR SOURCE(ROOF)	×	×	RF-211
B175D	PWR SOURCE(ROOF)	×	×	RF-212
B175E	PWR SOURCE(WINDOW)	×	×	RF-213
B175F	PWR SOURCE(WINDOW)	×	×	RF-215
B1760	ROOF CONTROL UNIT	×	×	RF-217
B1761	ROOF CONTROL UNIT	×	×	RF-218
B1762	ROOF STATE	×	×	RF-219
B1763	HYDRAULIC STATE	×	×	RF-222
B1764	ROOF LATCH STATE	×	×	RF-224
B1765	FLIPPER DOOR STATE	×	×	RF-225

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

Diagnosis Procedure

INFOID:000000005629091

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.

Refer to [DEF-8. "BCM \(BODY CONTROL MODULE\) : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.

Refer to [DEF-9. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-10. "Component Function Check"](#).

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 inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37. "Intermittent Incident"](#).

NO >> GO TO 1.

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REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DEFOGGER OPERATE.

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DEFOGGER OPERATE.

Diagnosis Procedure

INFOID:000000005629092

1. CHECK RETRACTABLE HARD TOP CONTROL UNIT CIRCUIT

Check retractable hard top control unit circuit.
Refer to [DEF-12, "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR WINDOW DEFOGGER

Check rear window defogger.
Refer to [DEF-14, "Component Function Check"](#).

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 inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).
- NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE BUT REAR WINDOW DEFOGGER OPERATE

< SYMPTOM DIAGNOSIS >

DOOR MIRROR DEFOGGER DOES NOT OPERATE BUT REAR WINDOW DEFOGGER OPERATE

BOTH SIDES

BOTH SIDES : Diagnosis Procedure

INFOID:000000005629093

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.

Refer to [DEF-16, "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 inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:000000005629094

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to [DEF-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 inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000005629095

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.

Refer to [DEF-19, "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 inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> GO TO 1.

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ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT IS OPERATED

< SYMPTOM DIAGNOSIS >

ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT IS OPERATED

Diagnosis Procedure

INFOID:000000005629096

1.CHECK AV CONTROL UNIT FUNCTION

Check that the AV control unit is operating normally.

Base audio without navigation refer to [AV-65, "Work Flow"](#).

Bose audio without navigation refer to [AV-195, "Work Flow"](#).

Bose audio with navigation refer to [AV-339, "Work Flow"](#).

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 inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#) .

NO >> GO TO 1.

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:000000005629097

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check rear window defogger operate.

- YES >> Replace multifunction switch (rear window defogger switch). Refer to [AV-117. "Removal and Installation"](#)
- NO >> Check rear window defogger system. Refer to [DEF-3. "Work Flow"](#)

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000005629098

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.

FILAMENT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

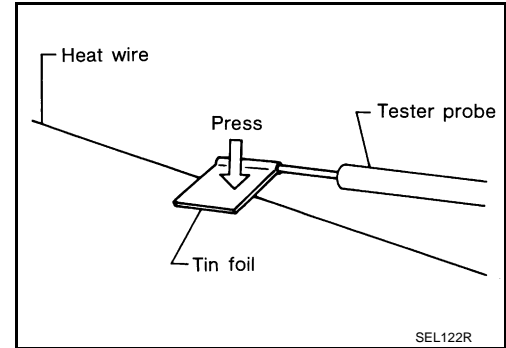
FILAMENT

Inspection and Repair

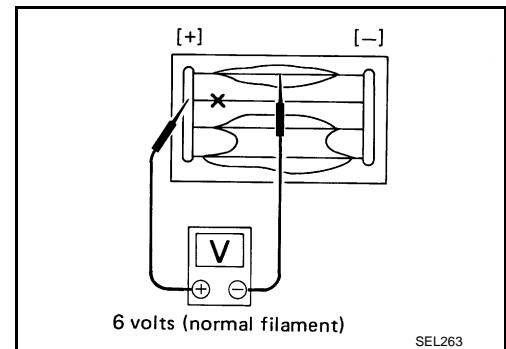
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INSPECTION

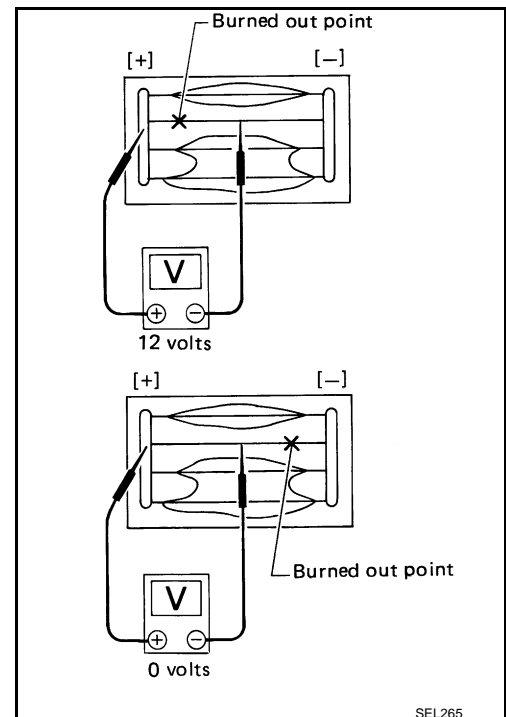
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



2. Attach probe circuit tester (in Volt range) to middle portion of each filament.



3. If a filament is burned out, circuit tester registers 0 or battery voltage.
4. To locate burned out point, move probe to left and right along filament. Test needle will swing abruptly when probe passes the point.



REPAIR

REPAIR EQUIPMENT

- Conductive silver composition (Dupont No. 4817 or equivalent)

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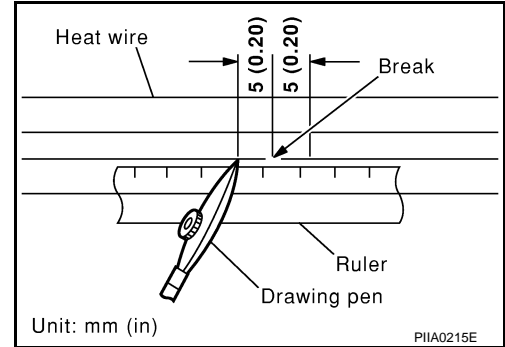
FILAMENT

< REMOVAL AND INSTALLATION >

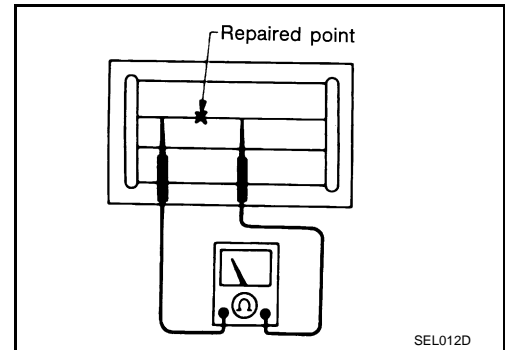
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen. Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on break with drawing pen. Slightly overlap existing heat wire on both sides [preferably 5 mm (0.20 in)] of the break.



4. After repair has been completed, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited. Do not touch repaired area while test is being conducted.



5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and hot air outlet. If a heat gun is not available, let the repaired area dry for 24 hours.

