

SECTION DEF

DEFOGGER

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000004586115

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

Perform self-diagnosis with CONSULT-III

Are any DTC detected?

YES >> Refer to [BCS-79. "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.

A

B

C

D

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G

H

I

J

K

DEF

M

N

O

P

REAR WINDOW DEFOGGER SYSTEM

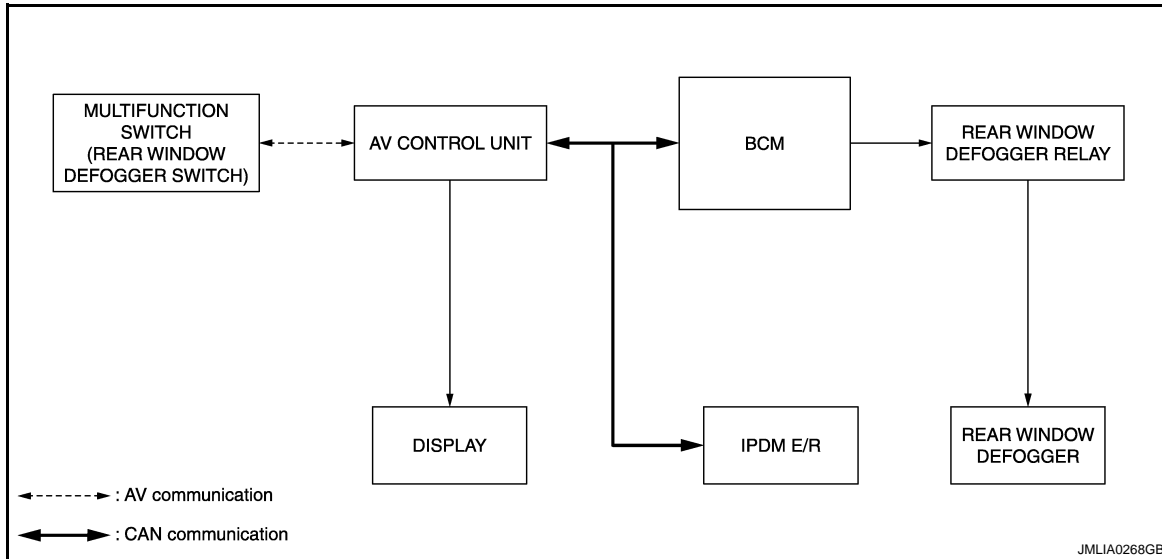
< FUNCTION DIAGNOSIS >

FUNCTION DIAGNOSIS

REAR WINDOW DEFOGGER SYSTEM WITH NAVIGATION

WITH NAVIGATION : System Diagram

INFOID:000000004586116



WITH NAVIGATION : System Description

INFOID:000000004586117

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 transmits rear window defogger control signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Rear window defogger is supplied with power and operate when rear window defogger relay turns ON.
- IPDM E/R transmits rear window defogger control signal to AV control unit via CAN communication.
- When receiving the signal, AV control unit indicates rear defogger ON on the display. At the same time, AV control unit transmits rear defogger control signal to multifunction switch (rear window defogger switch) via AV communication and illuminates rear defogger switch indicator.

TIMER FUNCTION

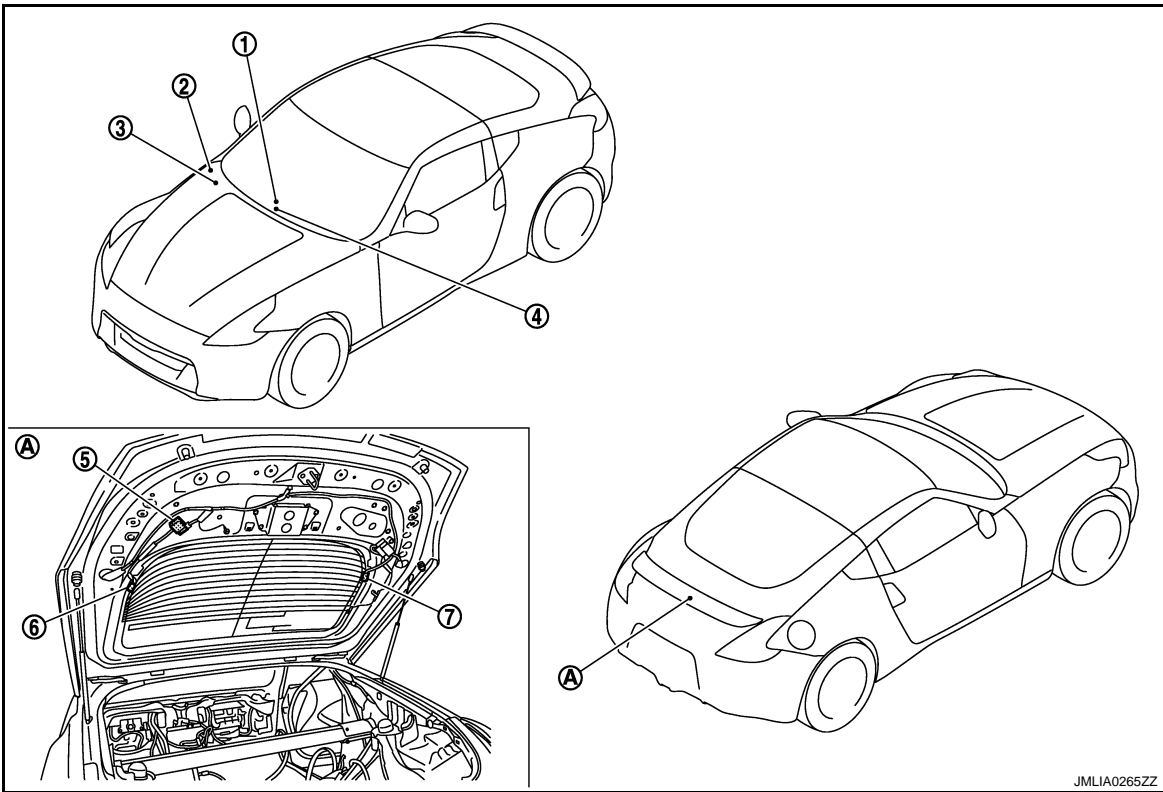
- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The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

REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >

WITH NAVIGATION : Component Parts Location

INFOID:000000004586118



1.

Multifunction switch (rear window defogger switch) M72
2.

IPDM E/R E6
Refer to [PCS-5, "Component Parts Location"](#)
3.

BCM M118, M119, M122, M123
Refer to [BCS-8, "Component Parts Location"](#)
4.

AV control unit M85, M86
Refer to [AV-156, "Component Parts Location"](#)
5.

Condenser D106
6.

Rear window defogger connector D107
7.

Rear window defogger connector D201
- A.

Behind back door assembly

WITH NAVIGATION : Component Description

INFOID:000000004586119

BCM	<div><div>• Operates the rear window defogger relay receiving rear window defogger switch signal</div><div>• Performs the timer control of rear window defogger</div></div>
Rear window defogger relay	Operates the rear window defogger with the control signal from BCM
IPDM E/R	Transmits rear window defogger control signal to AV control unit via CAN communication
Multifunction switch (Rear window defogger switch)	<div><div>• The rear window defogger switch is installed</div><div>• Turns the indicator lamp ON when detecting the operation of rear window defogger</div></div>
AV control unit	Displays the rear window defogger is ON on 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

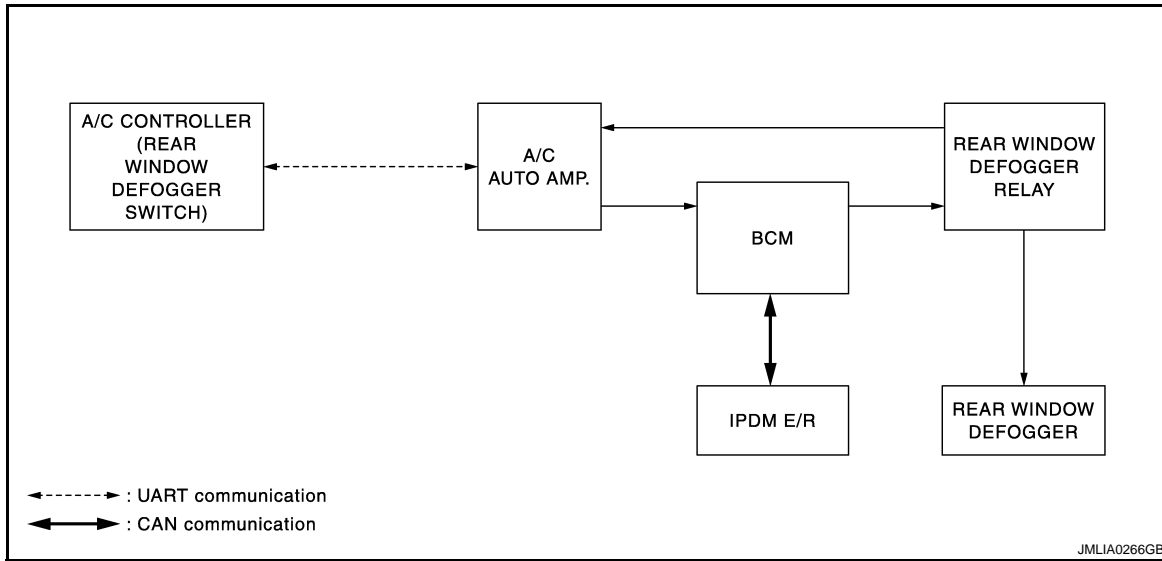
WITHOUT NAVIGATION

REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >

WITHOUT NAVIGATION : System Diagram

INFOID:000000004586120



WITHOUT NAVIGATION : System Description

INFOID:000000004586121

OPERATION DESCRIPTION

- Turn rear window defogger switch ON when the ignition switch is turned ON. Then A/C controller (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp. and BCM.
- BCM turns rear window defogger relay ON and transmits rear window defogger control signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Rear window defogger is supplied with power and operates when rear window defogger relay turns ON.
- Rear window defogger relay transmits rear window defogger control signal to A/C auto amp. when rear window defogger operates.
- At the same time, A/C auto amp. transmits rear defogger control signal to A/C controller (rear window defogger switch) and illuminates rear defogger switch indicator.

TIMER FUNCTION

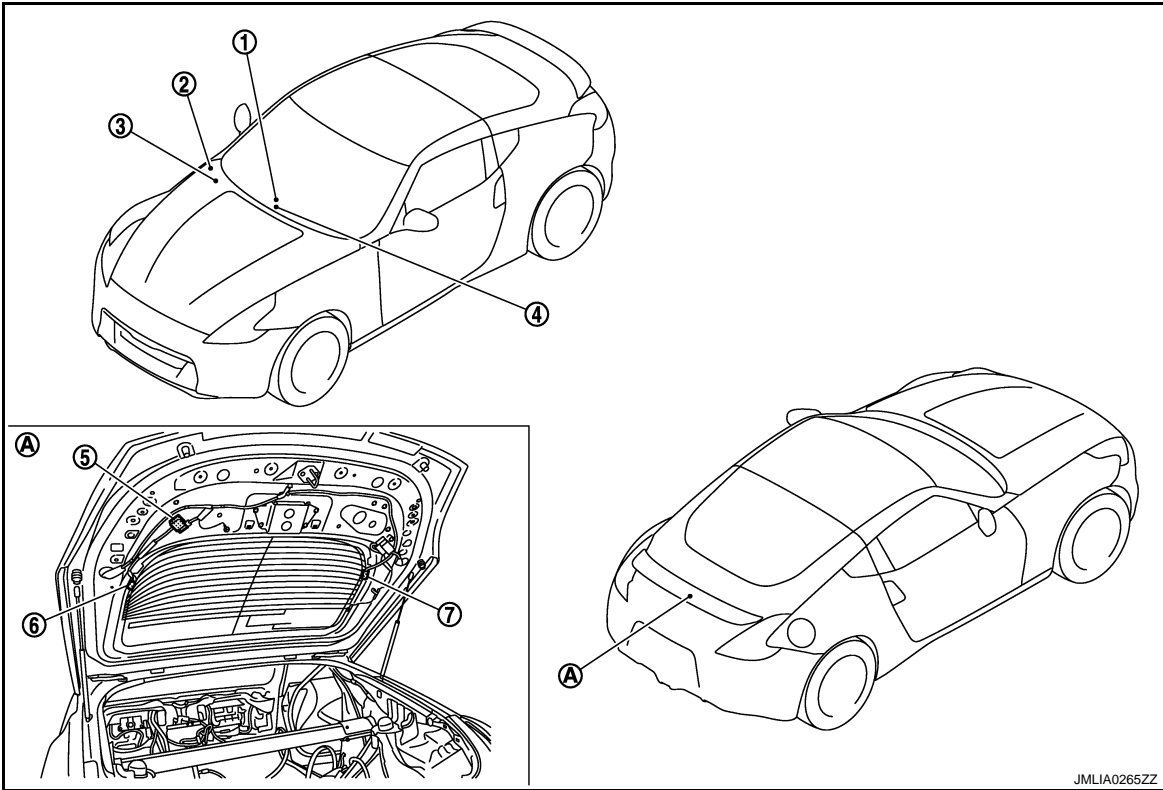
- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The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

REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >

WITHOUT NAVIGATION : Component Parts Location

INFOID:000000004586122



1. A/C controller M67

2. IPDM E/R E6
Refer to [PCS-5. "Component Parts Location"](#)

3. BCM M118, M119, M122, M123
Refer to [BCS-8. "Component Parts Location"](#)

4. A/C auto amp. M66
Refer to [HAC-22. "Component Parts Location"](#)

5. Condenser D106

6. Rear window defogger connector D107

7. Rear window defogger connector D201

A. Behind back door assembly

WITHOUT NAVIGATION : Component Description

INFOID:000000004586123

BCM	<div><div>• Operates the rear window defogger relay with the operation of rear window defogger switch</div><div>• Performs the timer control of rear window defogger</div></div>
Rear window defogger relay	Operates the rear window defogger with the control signal from BCM
IPDM E/R	Transmit rear window defogger control signal to ECM via CAN communication
A/C controller (Rear window defogger switch)	<div><div>• The rear window defogger switch is installed</div><div>• Turns the indicator lamp ON when detecting the operation of rear window defogger</div></div>
A/C auto amp.	Dietecting 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

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000004689142

APPLICATION ITEM

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

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: 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*			
<ul style="list-style-type: none"> Intelligent Key system Engine start system 	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk lid open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

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

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

CONSULT screen item	Indication/Unit	Description		
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected		A
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected		
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")	B
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	C
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"	
	ACC>ON		While turning power supply position from "ACC" to "IGN"	D
	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)	E
	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"	F
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"	
	OFF>ACC		While turning power supply position from "OFF" to "ACC"	G
	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	H
	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.)	I
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)	J
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	K
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	DEF
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 		M

REAR WINDOW DEFOGGER

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

INFOID:000000004586125

Data monitor

Monitor Item	Description
REAR DEF SW	<ul style="list-style-type: none"> • Without navigation: Displays "Press (ON)/other (OFF)" status determined with the rear window defogger switch • With navigation: This is displayed even when it is not equipped
PUSH SW	Indicates [ON/OFF] condition of push switch

ACTIVE TEST

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

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

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:000000004586126

1.CHECK FUSE AND FUSIBLE LINK

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

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
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 or replace harness.

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 or replace harness.

REAR WINDOW DEFOGGER SWITCH

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH WITH NAVIGATION

WITH NAVIGATION : Description

INFOID:000000004586127

- 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.

WITH NAVIGATION : Component Function Check

INFOID:000000004586128

1.CHECK FUNCTION

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

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
NO >> Refer to [DEF-12, "WITH NAVIGATION : Diagnosis Procedure"](#)

WITH NAVIGATION : Diagnosis Procedure

INFOID:000000004586129

1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check multifunction switch (rear window defogger switch) operate.

Refer to [AV-171, "Diagnosis Description"](#).

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Repair or replace the malfunctioning parts.

WITHOUT NAVIGATION

WITHOUT NAVIGATION : Description

INFOID:000000004586130

- 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.

WITHOUT NAVIGATION : Component Function Check

INFOID:000000004586131

1.CHECK FUNCTION

Check (REAR DEF SW) in "DATA MONITOR" mode with CONSULT-III when rear window defogger switch is ON.

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
NO >> Refer to [DEF-12, "WITHOUT NAVIGATION : Diagnosis Procedure"](#)

WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:000000004586132

1.CHECK A/C CONTROLLER (REAR WINDOW DEFOGGER SWITCH)

Check A/C control system.

Refer to [HAC-5, "Work Flow"](#).

Is the inspection result normal?

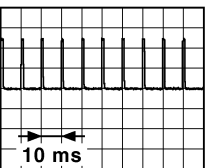
- YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect A/C auto amp. connector.
3. Turn ignition switch ON.
4. Check signal between A/C auto amp. harness connector and ground with oscilloscope.

REAR WINDOW DEFOGGER SWITCH

< COMPONENT DIAGNOSIS >

(+)		(-)	Signal (Reference value)
A/C auto amp.			
Connector	Terminal		
M66	27	Ground	<div><div>(V) 15 10 5 0</div><div></div><div>10 ms</div></div>

JPMIA0012GB

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to [HAC-85. "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation"](#).

NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector and A/C auto amp. connector.

BCM		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M123	130	M66	27	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	130		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-84. "Removal and Installation"](#).

NO >> Repair or replace harness.

DEF

REAR WINDOW DEFOGGER RELAY

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

INFOID:000000004586133

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

Component Function Check

INFOID:000000004586134

1.CHECK FUNCTION

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 function is OK.

NO >> Refer to [DEF-14. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000004586135

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 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 RELAY CIRCUIT 1

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

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect BCM connector and fuse block (J/B).
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		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

REAR WINDOW DEFOGGER RELAY

< COMPONENT DIAGNOSIS >

4.CHECK REAR WINDOW DEFOGGER RELAY

1. Disconnect rear window defogger relay,
2. Check rear window defogger relay.

Refer to [DEF-15. "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.

(+)		(-)	Voltage (V) (Approx.)
Fuse block (J/B)			
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-39. "Intermittent Incident"](#)

>> INSPECTION END

Component Inspection

INFOID:000000004586136

1.CHECK REAR WINDOW DEFOGGER RELAY

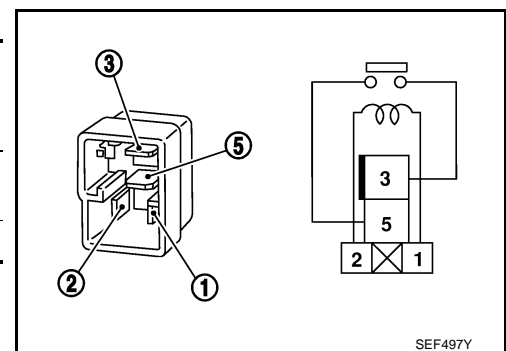
1. Turn ignition switch OFF.
2. Disconnect rear window defogger relay.
3. Check continuity between rear window defogger relay terminals.

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.



DEF

REAR WINDOW DEFOGGER

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER

Description

INFOID:000000004586137

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

Component Function Check

INFOID:000000004586138

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-16, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000004586139

1.CHECK FUSE

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

*:Without navigation

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 POWER SUPPLY CIRCUIT

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

(+)		(-)	Condition		Voltage (V) (Approx.)
Rear window defogger					
Connector	Terminal				
D201	1	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

3.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		
D107	2		Existed

Is the inspection result normal?

- YES >> GO TO 7.
NO >> Repair or replace harness.

4.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect condenser connector and rear window defogger connector.

REAR WINDOW DEFOGGER

< COMPONENT DIAGNOSIS >

- Check continuity between condenser (condenser side) connector and rear window defogger harness connector.

Condenser		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
D106	1	D201	1	Existed

- Check continuity between condenser (condenser side) connector and ground.

Condenser		Ground	Continuity
Connector	Terminal		
D106	1		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace condenser. Refer to [DEF-69, "Removal and Installation"](#)

5.CHECK REAR WINDOW DEFOGGER CIRCUIT 2

- Disconnect fuse block (J/B) connector.
- Check continuity between fuse block (J/B) harness connector and condenser harness connector.

Fuse block (J/B)		Condenser		Continuity
Connector	Terminal	Connector	Terminal	
B6	10G	D106	1	Existed
	11G*			

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

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
B6	10G		Not existed
	11G*		

*:Without navigation

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK FUSE BLOCK (J/B)

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

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

*:Without navigation

Is the inspection result normal?

YES >> GO TO 8.

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

7.CHECK FILAMENT

Check filament.

REAR WINDOW DEFOGGER

< COMPONENT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace filament. Refer to [DEF-67, "Inspection and Repair"](#).

8.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

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

>> INSPECTION END

Component Inspection

INFOID:000000004586140

1.CHECK FILAMENT

Check the filament for damage.

Refer to [DEF-67, "Inspection and Repair"](#)

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair filament.

REAR WINDOW DEFOGGER ON SIGNAL

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER ON SIGNAL

Description

INFOID:000000004586150

Turns the indicator lamp in the rear window defogger switch ON when operating the rear window defogger.

Component Function Check

INFOID:000000004586151

1.CHECK FUNCTION

Check that the indicator lamps of rear window defogger switch are illuminated when turning the rear window defogger switch ON.

Is the inspection result normal?

YES >> Rear window defogger ON signal function is OK.

NO >> Refer to [DEF-19. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000004586152

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 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 REAR WINDOW DEFOGGER INDICATOR LAMP ON SIGNAL

1. Turn ignition switch ON.
2. Check voltage between A/C auto amp. harness connector ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
A/C auto amp.					
Connector	Terminal				
M66	26	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to [HAC-85. "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation"](#).

NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector and A/C auto amp. connector.
3. Check continuity between fuse block (J/B) harness connector and A/C auto amp. harness connector.

Fuse block (J/B)		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	M66	26	Existed

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

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

Is the inspection result normal?

YES >> Repair or replace fuse block (J/B).

NO >> Repair or replace harness.

REAR WINDOW DEFOGGER SYSTEM

< COMPONENT DIAGNOSIS >

DEFOGGER (WITH NAVI)

Connector No.	B6
Connector Name	FUSE BLOCK (W/B)
Connector Type	INS2FBE-CS



5G4G	3G2G1G
10G10G	9G8G7G6G

Terminal No.	Color of Wire	Signal Name [Specification]
10G	W	-
11G	W	-

Connector No.	B50
Connector Name	CONDENSER
Connector Type	MD2FW-LC



1	2
---	---

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

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	MD4MW-LC



1	2	3
---	---	---

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

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	MD4FW-LC



2	1	4	3
---	---	---	---

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

Connector No.	D106
Connector Name	CONDENSER
Connector Type	MD1FW-LC



1

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

Connector No.	D107
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A



2

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

Connector No.	D201
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A



1

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

Connector No.	E6
Connector Name	POWER (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH08FW-NH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-

JCLWA2658GB

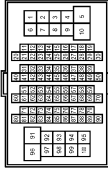
A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

REAR WINDOW DEFOGGER SYSTEM

< COMPONENT DIAGNOSIS >


DEFOGGER (WITH NAVI)

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
8	P	—
9	L	—
91	W	—

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




Terminal No.	Color of Wire	Signal Name [Specification]
7A	BR	—

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



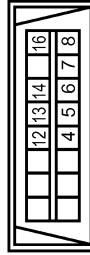
Terminal No.	Color of Wire	Signal Name [Specification]
4B	G	—

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-GS16-TM4



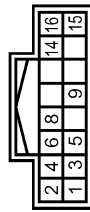
Terminal No.	Color of Wire	Signal Name [Specification]
8	P	—
9	L	—
91	W	—

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




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

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



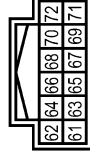
Terminal No.	Color of Wire	Signal Name [Specification]
6	LG	AV COMM (H)
8	V	AV COMM (L)

Connector No.	M85
Connector Name	AV CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
50	LG	AV COMM (H)
51	V	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M86
Connector Name	AV CONTROL UNIT
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
70	R	COMM (CONT->DISP)
71	G	COMM (DISP->CONT)

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REAR WINDOW DEFOGGER SYSTEM

< COMPONENT DIAGNOSIS >

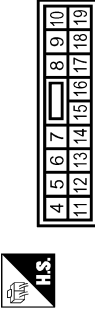
DEFOGGER (WITH NAVI)

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FE-LC



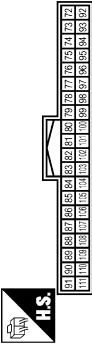
Terminal No.	1
Color of Wire	W
Signal Name [Specification]	BAT (F/L)

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



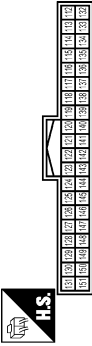
Terminal No.	11
Color of Wire	BR
Signal Name [Specification]	BAT (FUSE)
Terminal No.	13
Color of Wire	B
Signal Name [Specification]	GND

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



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

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



Terminal No.	151
Color of Wire	G
Signal Name [Specification]	REAR WINDOW DEFOGGER RELAY CONT

JCLWA2660GB

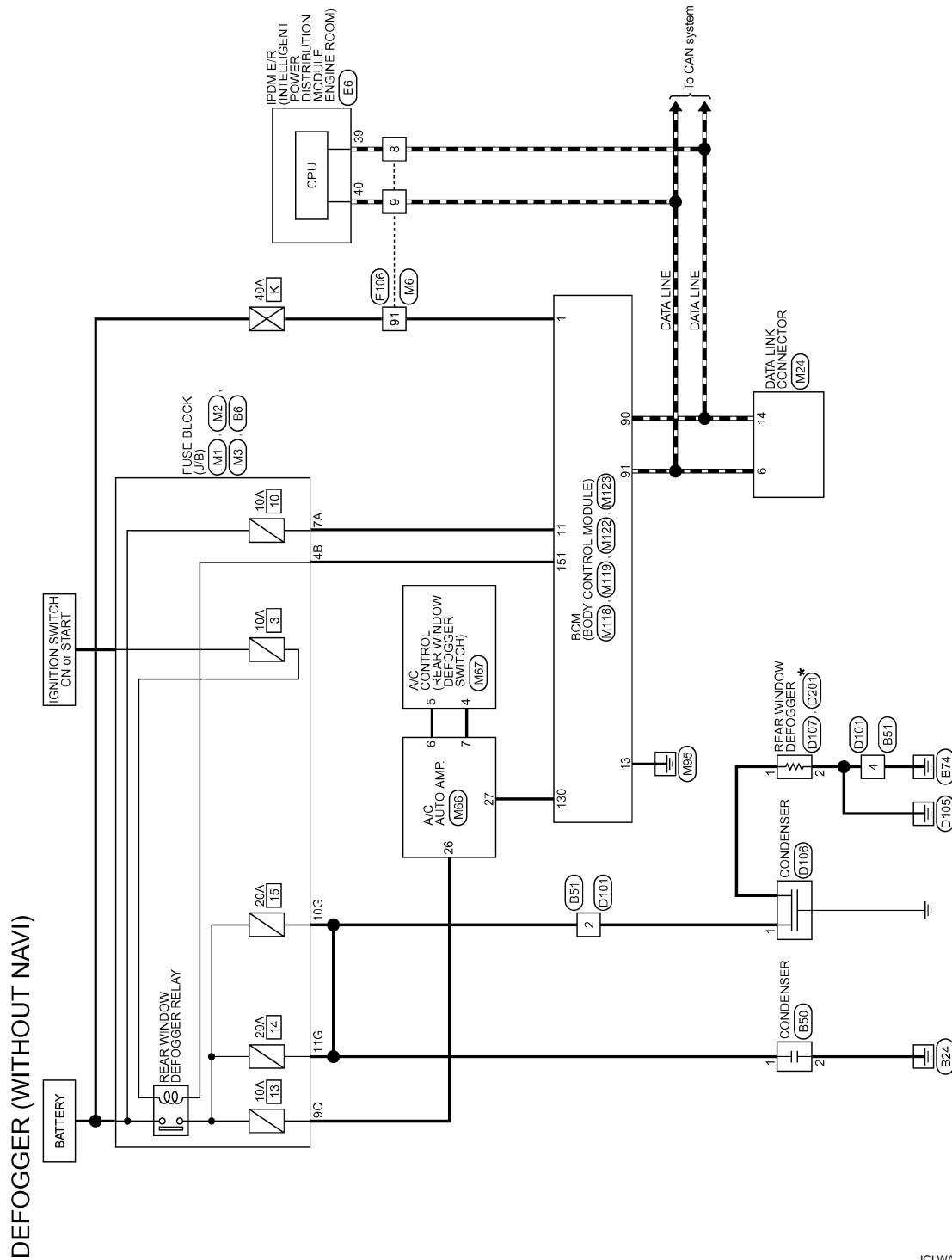
DEF

REAR WINDOW DEFOGGER SYSTEM

< COMPONENT DIAGNOSIS >

Wiring Diagram - DEFOGGER (WITHOUT NAVI) -

INFOID:000000004749364



2008/09/12

JCLWA2653GB

REAR WINDOW DEFOGGER SYSTEM

< COMPONENT DIAGNOSIS >

DEFOGGER (WITHOUT NAVI)

Connector No.	B6
Connector Name	FUSE BLOCK (W/B)
Connector Type	INS2FBE-CS



5G4G	3G2G1G
10G	10G9G8G7G6G

Terminal No.	Color of Wire	Signal Name [Specification]
10G	W	-
11G	W	-

Connector No.	B50
Connector Name	CONDENSER
Connector Type	MD2FW-LC



1	2
---	---

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

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	MD4MW-LC



1	2	3
---	---	---

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

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	MD4FW-LC



2	1	4	3
---	---	---	---

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

Connector No.	D106
Connector Name	CONDENSER
Connector Type	MD1FW-LC



1

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

Connector No.	D107
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A



2

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

Connector No.	D201
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A



1

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

Connector No.	E6
Connector Name	POWER (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH08FW-NH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-

JCLWA2654GB

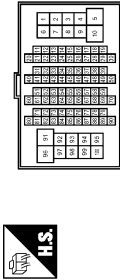
A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

REAR WINDOW DEFOGGER SYSTEM

< COMPONENT DIAGNOSIS >

DEFOGGER (WITHOUT NAVI)

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM44



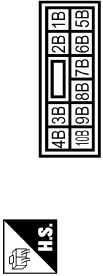
Terminal No.	Color of Wire	Signal Name [Specification]
8	P	—
9	L	—
91	W	—

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



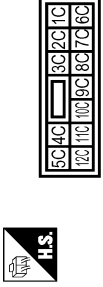
Terminal No.	Color of Wire	Signal Name [Specification]
7A	BR	—

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



Terminal No.	Color of Wire	Signal Name [Specification]
4B	G	—

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



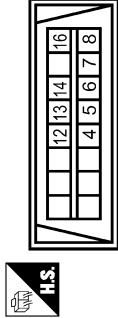
Terminal No.	Color of Wire	Signal Name [Specification]
9C	R	—

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM44



Terminal No.	Color of Wire	Signal Name [Specification]
8	P	—
9	L	—
91	W	—

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



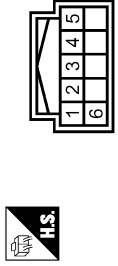
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	—
14	P	—

Connector No.	M66
Connector Name	A/C AUTO AMP.
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	TX(AMP>CONT)
7	P	RX(CONT>AMP)
26	R	REAR WINDOW DEFOGGER FEEDBACK SIGNAL
27	L	REAR WINDOW DEFOGGER ON SIGNAL

Connector No.	M67
Connector Name	A/C CONTROL
Connector Type	TH10FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
4	P	TX(SW>AMP)
5	L	RX(AMP>SW)

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REAR WINDOW DEFOGGER SYSTEM

< COMPONENT DIAGNOSIS >

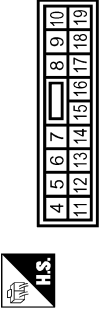
DEFOGGER (WITHOUT NAVI)

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FE-LC



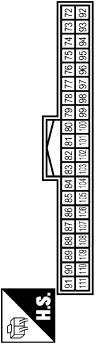
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)

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



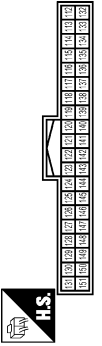
Terminal No.	Color of Wire	Signal Name [Specification]
11	BR	BAT (FUSE)
13	B	GND

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



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

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



Terminal No.	Color of Wire	Signal Name [Specification]
130	L	REAR DEFOGGER SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

JCLWA2656GB

DEF

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000004749368

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	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
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	NOTE: The item is indicated, but not monitored.	Off
RR FOG SW	Rear fog lamp switch OFF	Off
	Rear fog lamp switch ON	On
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 >

Monitor Item	Condition	Value/Status	
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off	A
DOOR SW-BK	Back door closed	Off	B
	Back door opened	On	
CDL LOCK SW	Other than door lock and unlock switch LOCK	Off	C
	Door lock and unlock switch LOCK	On	
CDL UNLOCK SW	Other than door lock and unlock switch UNLOCK	Off	D
	Door lock and unlock switch UNLOCK	On	
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off	E
	Driver door key cylinder LOCK position	On	
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off	F
	Driver door key cylinder UNLOCK position	On	
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off	F
HAZARD SW	Hazard switch is OFF	Off	G
	Hazard switch is ON	On	
REAR DEF SW NOTE: At models with NAVI this item is not monitored.	Rear window defogger switch OFF	Off	H
	Rear window defogger switch ON	On	
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off	I
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off	I
TR/BD OPEN SW	Back door opener switch OFF	Off	J
	While the back door opener switch is turned ON	On	
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off	K
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off	DEF
	LOCK button of the Intelligent Key is pressed	On	
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off	DEF
	UNLOCK button of the Intelligent Key is pressed	On	
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off	M
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off	N
	PANIC button of the Intelligent Key is pressed	On	
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off	O
	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	P
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On	
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	P
	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	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW NOTE: At A/T models this item is not monitored.	The clutch pedal is not depressed	Off
	The clutch pedal is depressed	On
BRAKE SW 1	Stop lamp switch 1 signal circuit is open	Off
	Stop lamp switch 1 signal circuit is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	The brake pedal is depressed	On
DETE/CANCL SW NOTE: At M/T models with SynchroRev Match mode this item is not monitored.	<ul style="list-style-type: none"> Selector lever in P position (A/T models) The clutch pedal is depressed (M/T models without SynchroRev Match mode) 	Off
	<ul style="list-style-type: none"> Selector lever in any position other than P (A/T models) The clutch pedal is not depressed (M/T models without SynchroRev Match mode) 	On
SFT PN/N SW NOTE: At M/T models without SynchroRev Match mode this item is not monitored.	<ul style="list-style-type: none"> Selector lever in any position other than P and N (A/T models) Control lever in any position other than neutral position (M/T models with SynchroRev Match mode) 	Off
	<ul style="list-style-type: none"> Selector lever in P or N position (A/T models) Control lever in neutral position (M/T models with SynchroRev Match mode) 	On
S/L -LOCK	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
SFT PN -IPDM	<ul style="list-style-type: none"> Selector lever in any position other than P and N (A/T models) The clutch pedal is not depressed (M/T models) 	Off	A
	<ul style="list-style-type: none"> Selector lever in P or N position (A/T models) The clutch pedal is depressed (M/T models) 	On	B
SFT P -MET	Selector lever in any position other than P	Off	C
	Selector lever in P position	On	
SFT N -MET	Selector lever in any position other than N	Off	D
	Selector lever in N position	On	
ENGINE STATE	Engine stopped	Stop	E
	While the engine stalls	Stall	
	At engine cranking	Crank	
	Engine running	Run	
S/L LOCK-IPDM	Steering is unlocked	Off	F
	Steering is locked	On	
S/L UNLK-IPDM	Steering is locked	Off	G
	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	H
	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	I
VEH SPEED 2	While driving	Equivalent to speedometer reading	
DOOR STAT-DR	Driver door is locked	LOCK	J
	Wait with selective UNLOCK operation (60 seconds)	READY	
	Driver door is unlocked	UNLOCK	
DOOR STAT-AS	Passenger door is locked	LOCK	K
	Wait with selective UNLOCK operation (60 seconds)	READY	
	Passenger door is unlocked	UNLOCK	
ID OK FLAG	Steering is locked	Reset	DEF
	Steering is unlocked	Set	
PRMT ENG STRT	The engine start is prohibited	Reset	M
	The engine start is permitted	Set	
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset	N
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off	
	The Intelligent Key is inserted into key slot	On	O
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.	—	P
CONFRM 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	

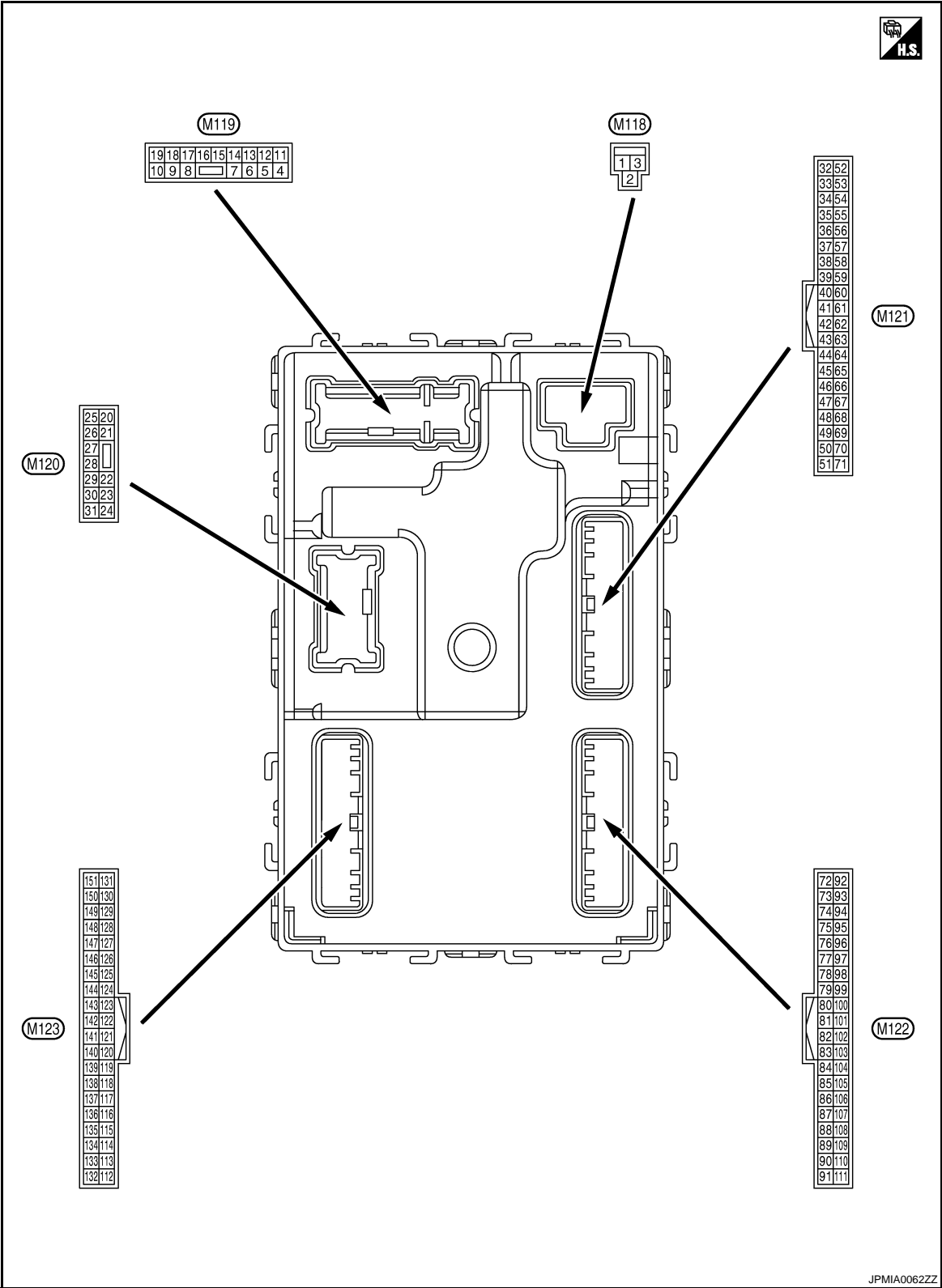
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
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
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	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
	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
	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
	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
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
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
	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
	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
	Tire pressure warning alarm is sounding	On

BCM (BODY CONTROL MODULE)

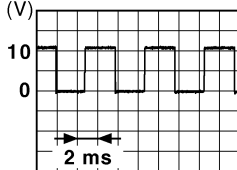
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TERMINAL LAYOUT



PHYSICAL VALUES

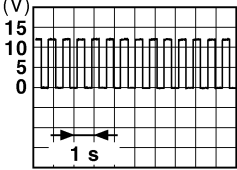
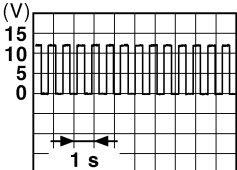
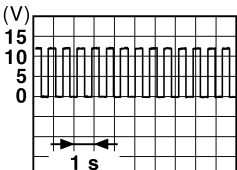
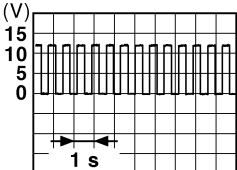
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		12 V
4 (R)	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 (G)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 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 (BR)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (R)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p>NOTE: When the illumination brightening/dimming level is in the neutral position.</p>  <p>JSNIA0010GB</p>
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front and side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 6.5 V
18 (O)	Ground	Turn signal LH (Front and side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 6.5 V
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	 6.5 V
23 (L)	Ground	Back door open	Output	Back door	OPEN (Back door opener actua- tor is activated)	12 V
					Other than OPEN (Back door opener actua- tor is not activated)	0 V
24*1 (O)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
25 (LG)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 6.5 V
30 (R)	Ground	Luggage room lamp	Output	Luggage room lamp	ON	0 V
					OFF	12 V

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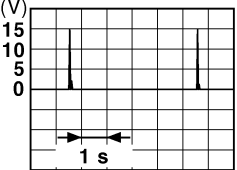
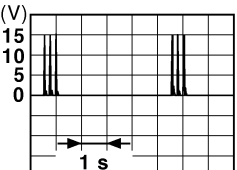
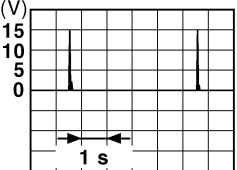
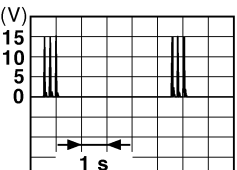
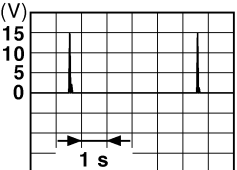
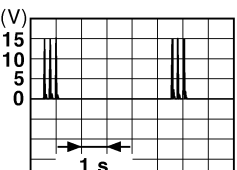
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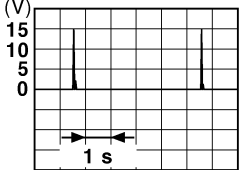
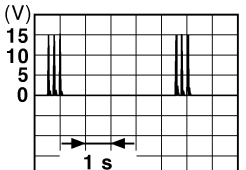
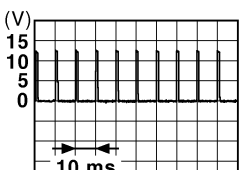
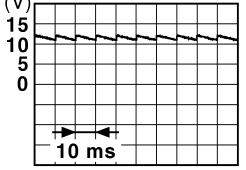
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
34 (G)	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (R)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (B)	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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	 JMKIA0062GB
				When the back door request switch is operated with ignition switch OFF	 JMKIA0063GB
47 (V)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch OFF or ACC	12 V
				ON	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON (A/T models) When selector lever is in P or N position	12 V
				Ignition switch ON (A/T models) When selector lever is not in P or N position	0 V
				Ignition switch ON (M/T models) When the clutch pedal is depressed	Battery voltage
				Ignition switch ON (M/T models) When the clutch pedal is not depressed	0 V
61 (W)	Ground	Back door request switch	Input	ON (Pressed)	0 V
				OFF (Not pressed)	 JPMIA0016GB
64 (G)	Ground	Intelligent Key warning buzzer	Output	Intelligent Key Sounding	0 V
				Intelligent Key Not sounding	12 V
66 (R)	Ground	Back door switch	Input	Back door switch OFF (Door close)	 JPMIA0011GB
				Back door switch ON (Door open)	0 V

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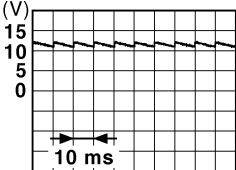
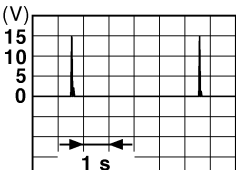
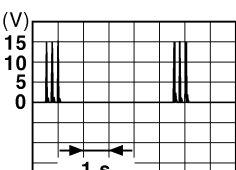
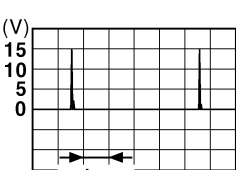
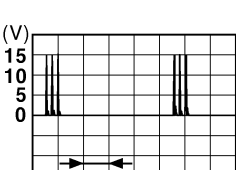
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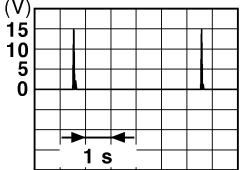
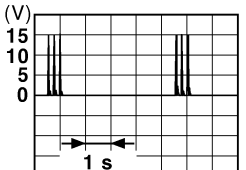
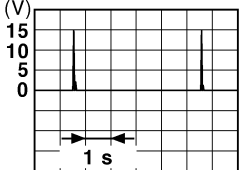
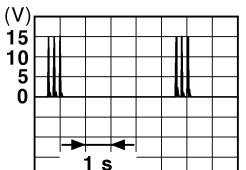
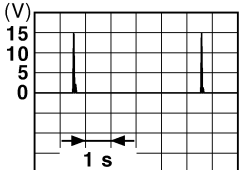
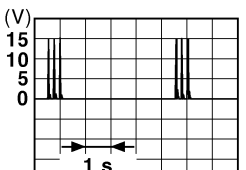
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB
72 (L)	Ground	Room antenna (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB
73 (P)	Ground	Room antenna (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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	 JMKIA0062GB
				When the passenger door request switch is operated with ignition switch OFF	 JMKIA0063GB
75 (BR)	Ground	Passenger door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the passenger door request switch is operated with ignition switch OFF	 JMKIA0063GB
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the driver door request switch is operated with ignition switch OFF	 JMKIA0063GB

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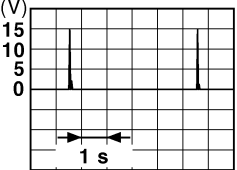
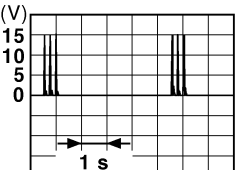
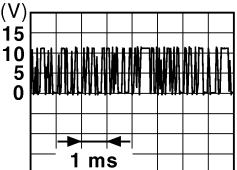
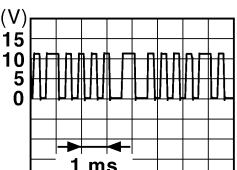
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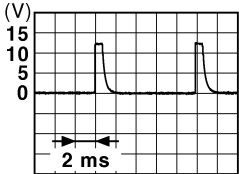

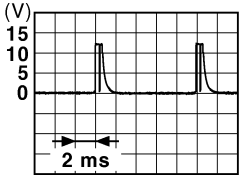
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
80 (GR)	Ground	NATS antenna amp (Built in key slot)	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 (Built in key slot)	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 (GR)	Ground	Remote keyless entry receiver communication	Input/ Output		During waiting	 JMKIA0064GB
					When operating either button on the Intelligent Key	 JMKIA0065GB

BCM (BODY CONTROL MODULE)

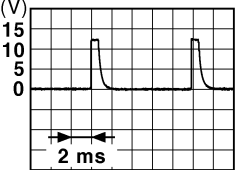
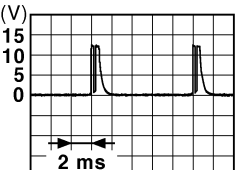
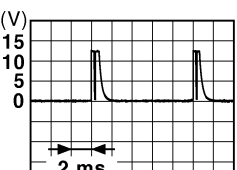

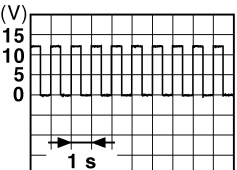
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 1.4 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 1.3 V

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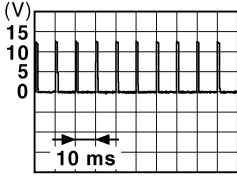
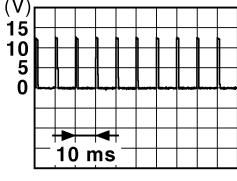
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p>JPMIA0041GB</p> <p>1.4 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	 <p>JPMIA0036GB</p> <p>1.3 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p>JPMIA0037GB</p> <p>1.3 V</p>
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 	 <p>JPMIA0040GB</p> <p>1.3 V</p>
89 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ig- nition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
90 (P)	Ground	CAN-L	Input/ Output	—	—	—
91 (L)	Ground	CAN-H	Input/ Output	—	—	—
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	OFF	0 V
					Blinking	 <p>JPMIA0015GB</p> <p>6.5 V</p>
					ON	12 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
96*2 (Y)	Ground	Control device (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 (P)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	12 V
					UNLOCK status	0 V
99*3 (R)*2 (BR)*4	Ground	Selector lever P position switch (A/T models)	Input	Selector lever	P position	0 V
					Any position other than P	12 V
		Clutch pedal position switch (M/T models without SynchroRev Match mode)	Input	Clutch pedal position switch	OFF (Clutch pedal is depressed)	0 V
					ON (Clutch pedal is not depressed)	Battery voltage
100 (GR)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 1.0 V
101 (Y)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 1.0 V
102 (O)	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

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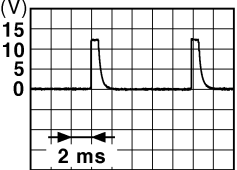

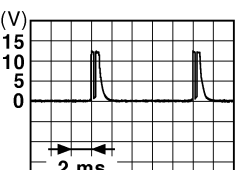

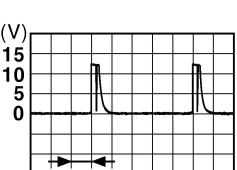
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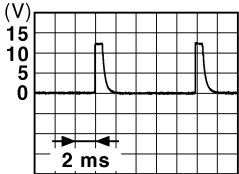


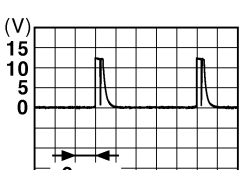
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	 <p>JPMIA0041GB</p> <p>1.4 V</p>
					 <p>JPMIA0037GB</p> <p>1.3 V</p>
					 <p>JPMIA0036GB</p> <p>1.3 V</p>
					 <p>JPMIA0038GB</p> <p>1.3 V</p>
					 <p>JPMIA0039GB</p> <p>1.3 V</p>

BCM (BODY CONTROL MODULE)

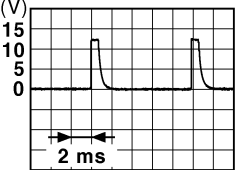

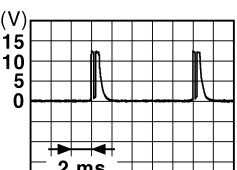

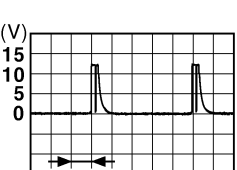
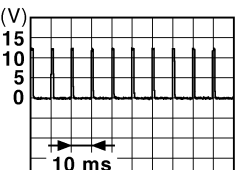
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	<div><p>All switches OFF (Wiper intermittent dial 4)</p><p>JPMIA0041GB</p><p>1.4 V</p></div>
				Combination switch	<div><p>Lighting switch AUTO (Wiper intermittent dial 4)</p><p>JPMIA0038GB</p><p>1.3 V</p></div>
				Combination switch	<div><p>Lighting switch 1ST (Wiper intermittent dial 4)</p><p>JPMIA0036GB</p><p>1.3 V</p></div>
				Combination switch	<div><p>Any of the conditions below with all switches OFF</p><ul style="list-style-type: none">• Wiper intermittent dial 1• Wiper intermittent dial 5• Wiper intermittent dial 6<p>JPMIA0039GB</p><p>1.3 V</p></div>

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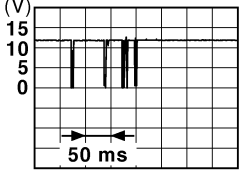
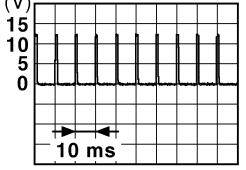
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF  <small>JPMIA0041GB</small> 1.4 V
					Lighting switch PASS  <small>JPMIA0037GB</small> 1.3 V
					Lighting switch 2ND  <small>JPMIA0036GB</small> 1.3 V
					Front wiper switch INT  <small>JPMIA0038GB</small> 1.3 V
					Front wiper switch HI  <small>JPMIA0040GB</small> 1.3 V
110 (P)	Ground	Hazard switch	Input	Hazard switch	ON 0 V
				OFF	 <small>JPMIA0012GB</small> 1.1 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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	 JMKIA0066GB
					For 15 seconds after UN- LOCK	12 V
					15 seconds or later after UNLOCK	0 V
113 (O)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
114*5 (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 (P)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 JPMIA0012GB
					UNLOCK status (Unlock switch sensor ON)	0 V
						1.1 V
121 (R)	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

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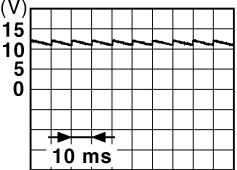
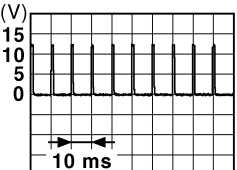
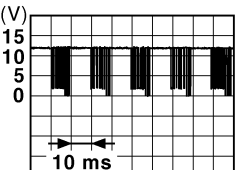
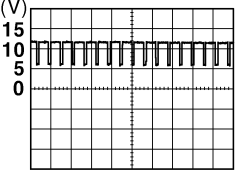
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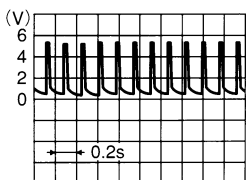
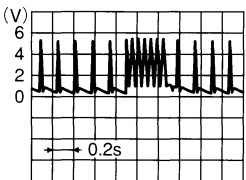
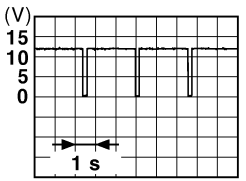
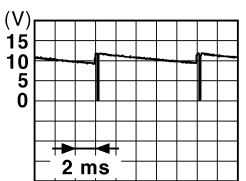
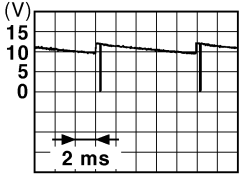
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
130*6 (L)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
132 (Y)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		12 V
133 (G)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps OFF)	9.5 V
					ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
139 (L)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
				Ignition switch ON	When receiving the signal from the transmitter	 OCC3880D
140*7 (G)	Ground	Selector lever P/N position (A/T models)	Input	Selector lever	P or N position	12 V
				Selector lever	Except P and N positions	0 V
		Park/neutral position switch (M/T models with SynchroRev Match mode)	Input	Ignition switch ON	Control lever in neutral position	Battery voltage
				Ignition switch ON	Control lever in any position other than neutral	0 V
141 (Y)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB
					OFF	12 V
					OFF	12 V
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	

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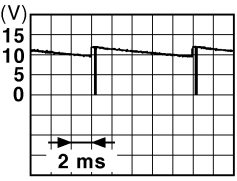
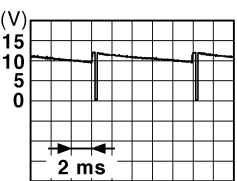
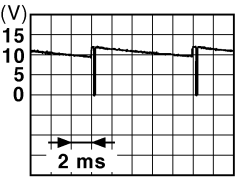
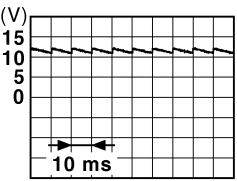
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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 intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF	
					<ul style="list-style-type: none"> Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6 	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT	
					Front wiper switch LO	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
149 (W)	Ground	Tire pressure warning check switch	Input	—		12 V
150 (GR)	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

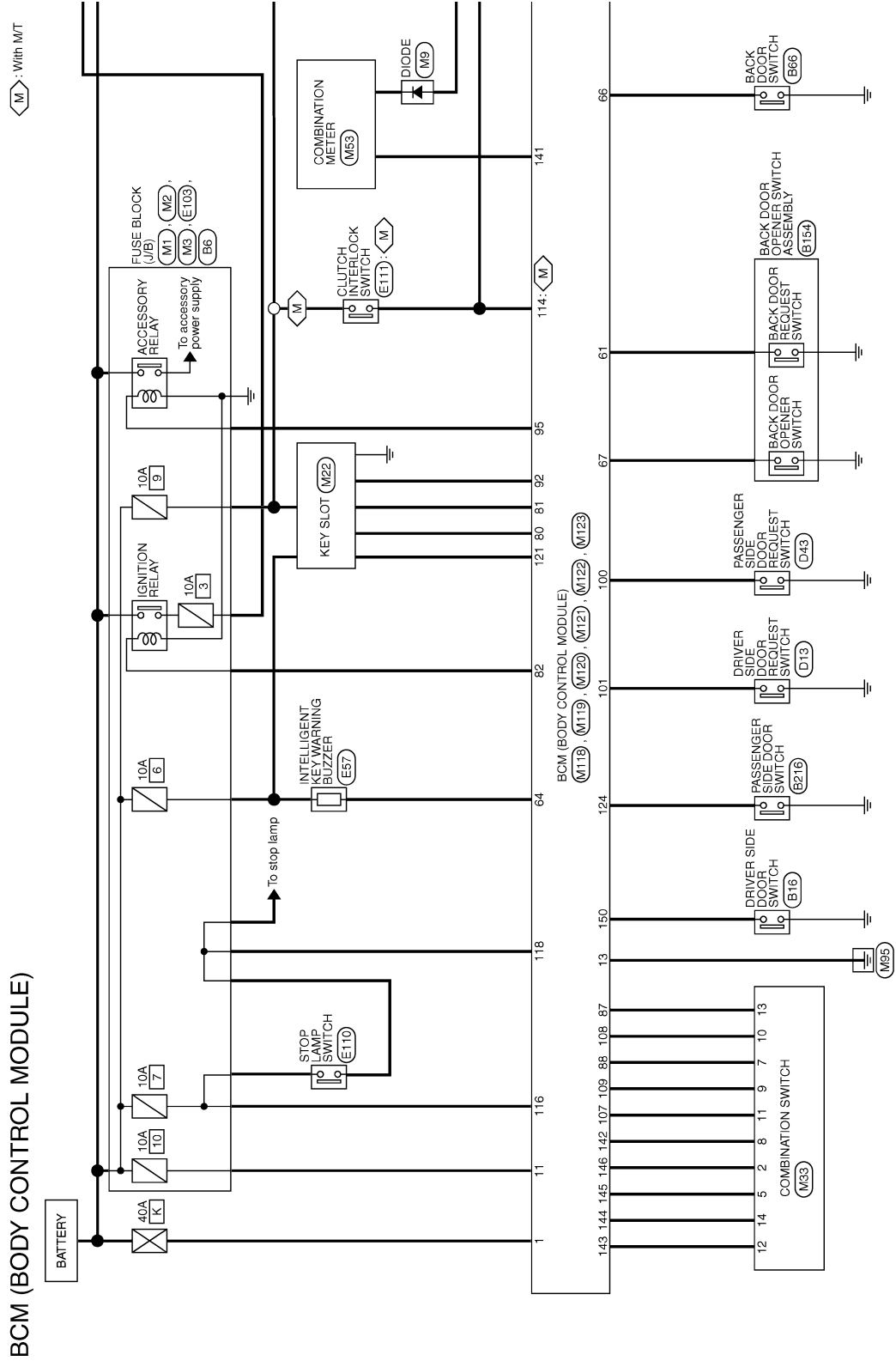
- *1: For Canada
- *2: A/T models
- *3: Except M/T models with SynchroRev Match mode
- *4: M/T models without SynchroRev Match mode
- *5: M/T models
- *6: Without NAVI
- *7: Except M/T models without SynchroRev Match mode

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Wiring Diagram - BCM -

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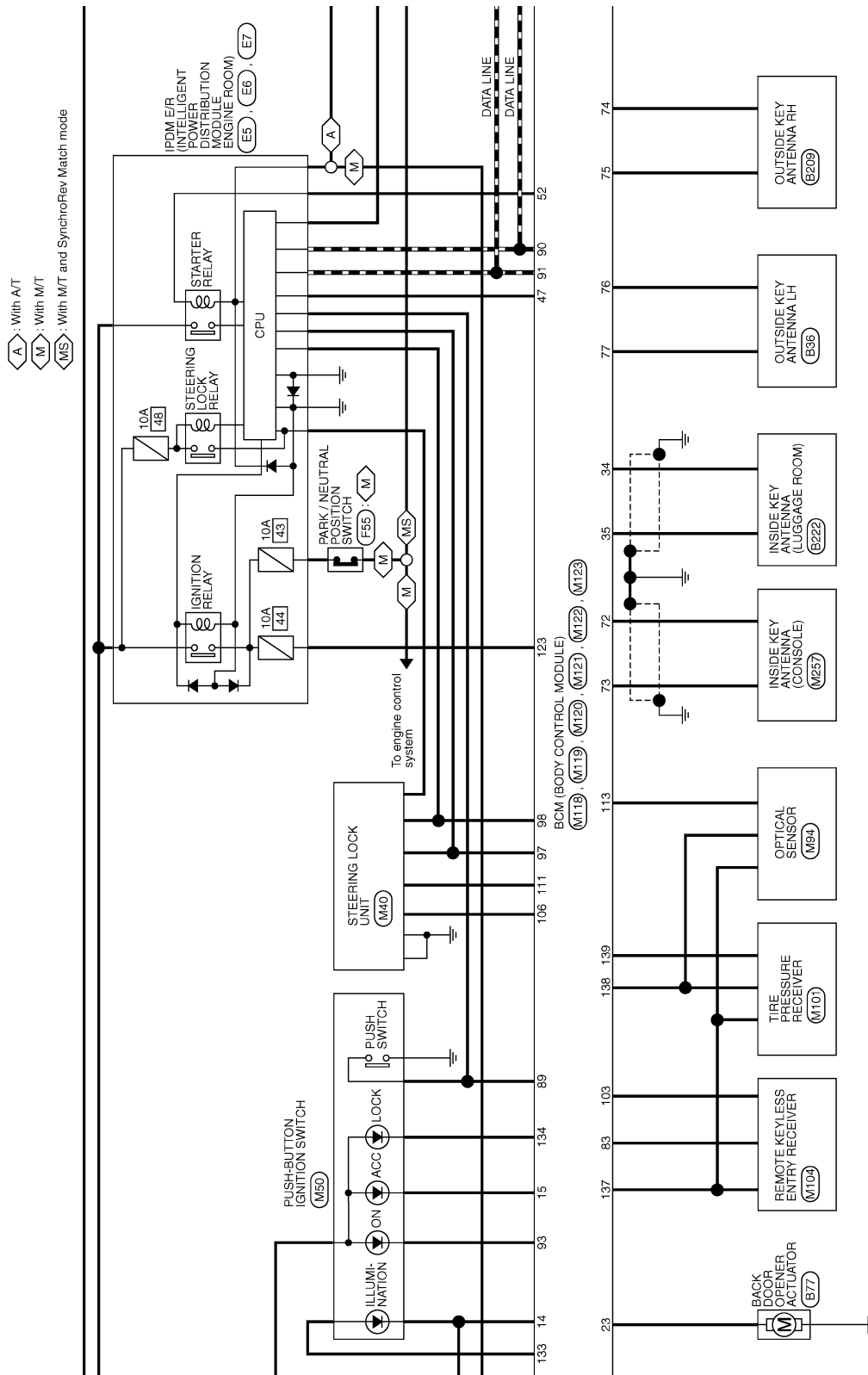


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JCMWA3235GE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

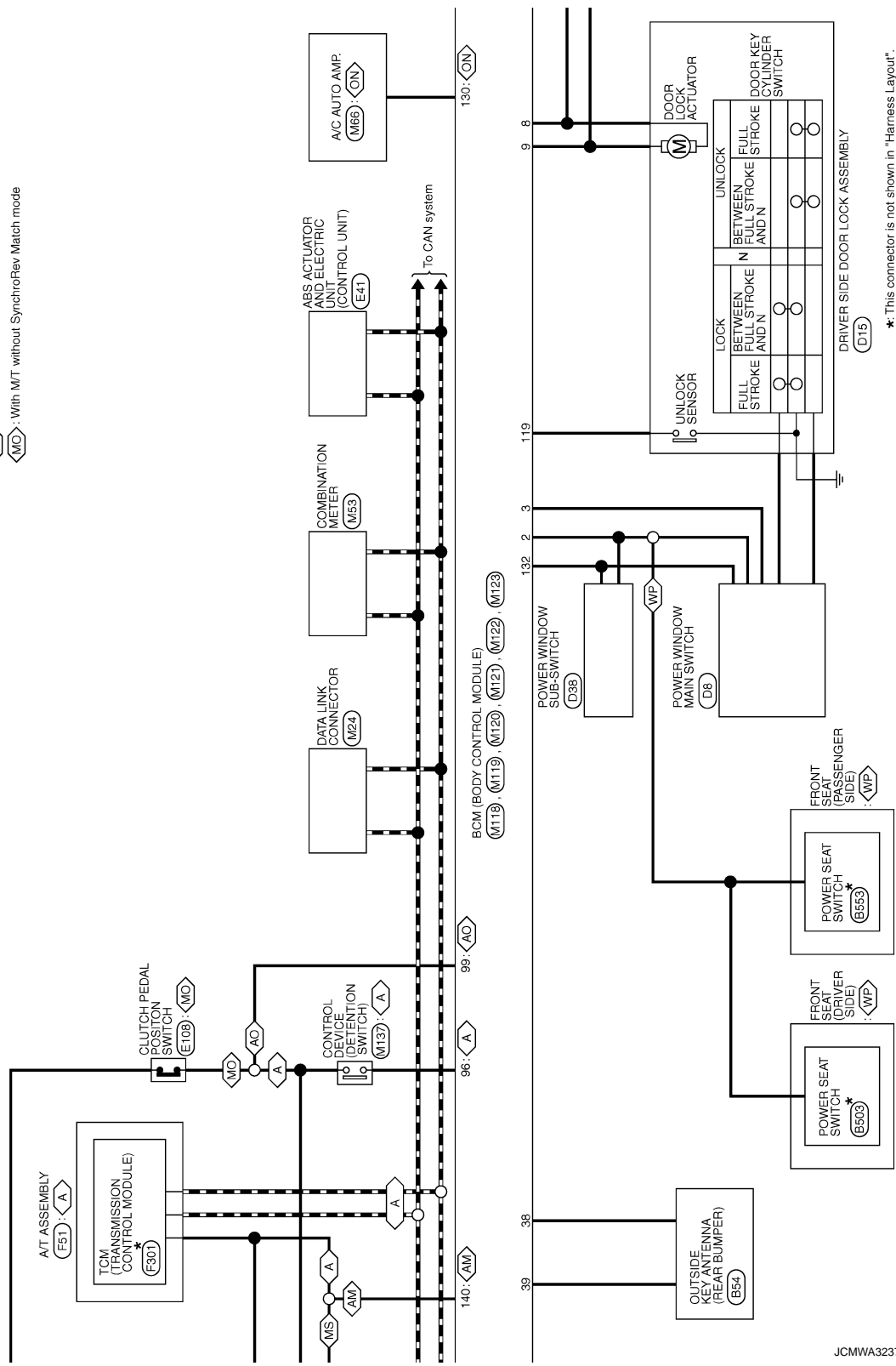


JCMWA3236GE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

- A** : With A/T
- WP** : With power seat
- ON** : Without NAVI
- AM** : With A/T or with M/T and SynchroRev Match mode
- AO** : With A/T or with M/T without SynchroRev Match mode
- MS** : With M/T and SynchroRev Match mode
- MO** : With M/T without SynchroRev Match mode

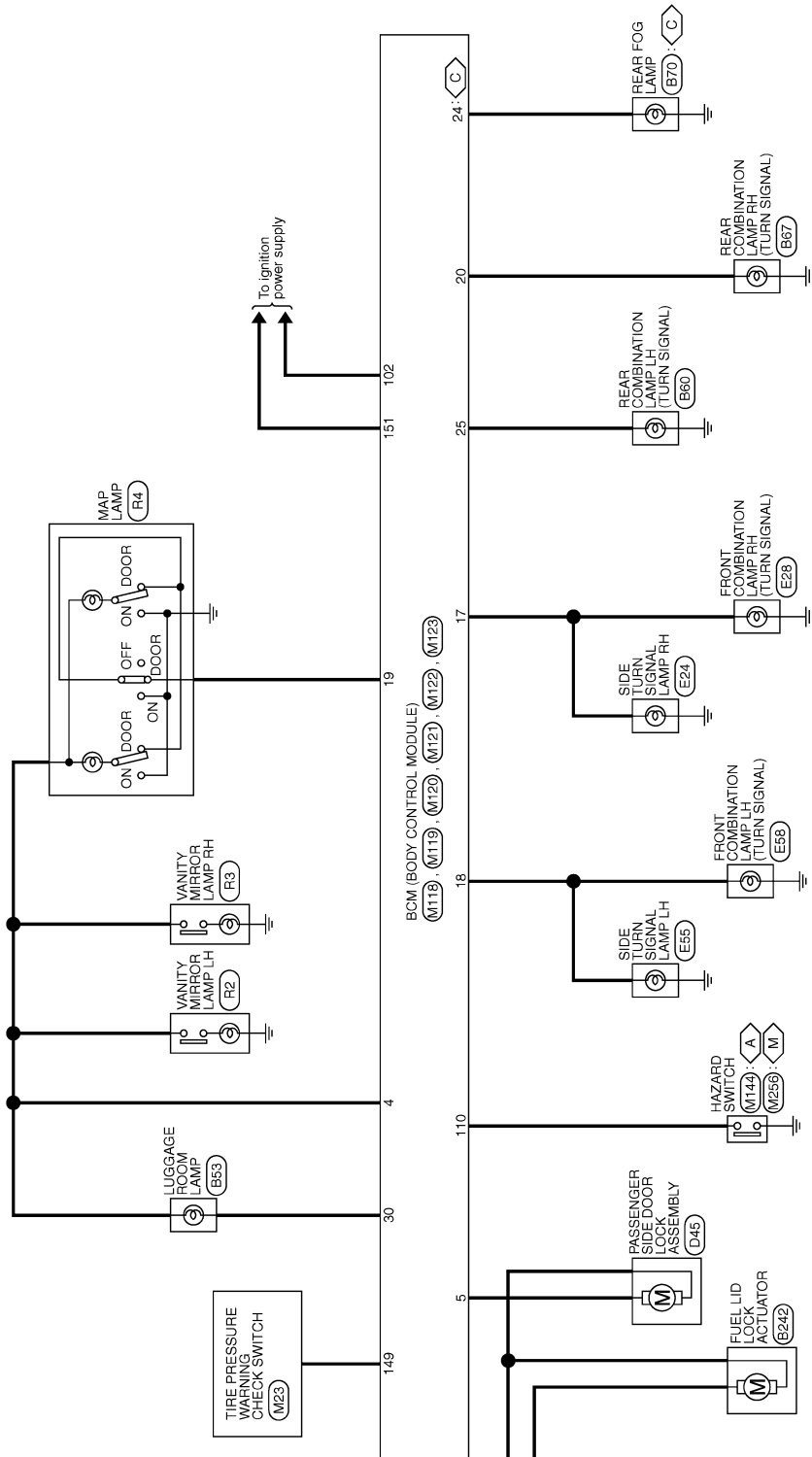


*: This connector is not shown in "Harness Layout".

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

A : With A/T
 M : With M/T
 C : For Canada



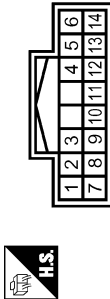
JCMWA3238Gf

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

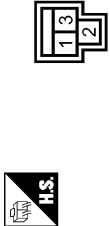
BCM (BODY CONTROL MODULE)

Connector No.	M43
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



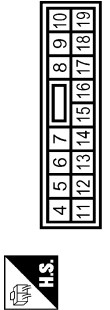
Terminal No.	Color of Wire	Signal Name [Specification]
2	SB	OUTPUT 4
5	L	OUTPUT 3
7	V	INPUT 3
8	O	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

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



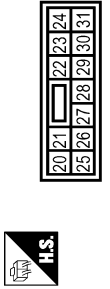
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (+/L)
2	W	POWER WINDOW POWER SUPPLY (BAT)
3	Y	POWER WINDOW POWER SUPPLY (RAP)

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



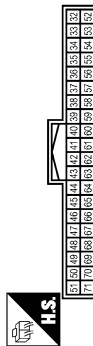
Terminal No.	Color of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
11	BR	BAT (FUSE)
13	B	GND
14	R	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ASC IND
17	W	TURN SIGNAL RH (FRONT,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

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



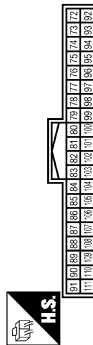
Terminal No.	Color of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
23	L	BACK DOOR OPEN OUTPUT
24	O	REAR FOG OUTPUT
25	LG	TURN SIGNAL LH (REAR)
30	R	LUGGAGE ROOM LAMP OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH16FY-NH



Terminal No.	Color of Wire	Signal Name [Specification]
34	G	LUGGAGE ROOM ANT-
35	R	LUGGAGE ROOM ANT+
36	B	BACK DOOR ANT-
39	W	BACK DOOR ANT+
47	V	IGN RELAY (IPDM F/R) CONT
52	SB	STARTER RELAY CONT
61	W	BACK DOOR OPENER REQUEST SW
64	G	I-KEY WARN BUZZER (ENG ROOM)
66	R	BACK DOOR SW
67	GR	BACK DOOR OPENER SW

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



Terminal No.	Color of Wire	Signal Name [Specification]
72	L	ROOM ANT-
73	P	ROOM ANT+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
80	GR	IMMOBI ANTENNA CONTROL
81	W	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/R) CONT
83	GR	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 3

Terminal No.	Color of Wire	Signal Name [Specification]
88	V	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	O	ACC RELAY CONT
96	Y	CONTROL DEVICE POWER SUPPLY
97	L	S/L CONDITION 1
98	P	S/L CONDITION 2
99	BR	ASC CLUTCH SW (With M/T without Switch-Relay Match mode)
99	R	SHIFT P. [With A/T]
100	GR	PASSENGER DOOR REQUEST SW
101	Y	DRIVER DOOR REQUEST SW
102	O	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	W	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	P	HAZARD SW
111	Y	S/L UNIT COMM

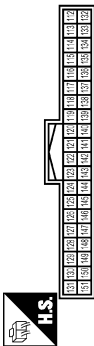
JCMWA3239GE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

134	GR	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	G	POWER WINDOW LOCKDOWN SW (Power Window Lockdown Switch)
140	G	SHIFT N/P (With A/T)
141	Y	SECURITY INDICATOR
142	O	COMET SW OUTPUT 5
143	P	COMET SW OUTPUT 1
144	G	COMET SW OUTPUT 2
145	L	COMET SW OUTPUT 3
146	SB	COMET SW OUTPUT 4
149	W	TIRE PRESSURE WARN CHECK SW
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

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



Terminal No.	Color of Wire	Signal Name [Specification]
113	O	OPTICAL SENSOR
114	R	CLUTCH INTERLOCK SW
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
130	L	REAR DEFOGGER SW
132	Y	POWER WINDOW SW COMM
133	G	PUSH BUTTON IGNITION SW ILL POWER

JCMWA3240GE

Fail-safe

INFOID:000000004749370

FAIL-SAFE CONTROL BY DTC

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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 (battery voltage) • 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 (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
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)

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

HIGH FLASHER OPERATION

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

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

NOTE:

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

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

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

NOTE:

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

BCM (BODY CONTROL MODULE)

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DTC Inspection Priority Chart

INFOID:000000004749371

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 CIRCUIT U1010: CONTROL UNIT (CAN)
3	<ul style="list-style-type: none"> B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING
4	<ul style="list-style-type: none"> B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2606: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B260A: IGNITION RELAY B260B: STEERING LOCK UNIT B260C: STEERING LOCK UNIT B260D: STEERING LOCK UNIT B260F: ENG STATE SIG LOST B2612: S/L STATUS B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2619: BCM B261A: PUSH-BTN IGN SW B261E: VEHICLE TYPE B26E8: CLUTCH SW B26E9: S/L STATUS B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG

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Priority	DTC
5	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT
6	<ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:000000004749372

NOTE:

The details of time display are as follows.

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

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

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	—	BCS-38
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L	×	×	—	—	SEC-50
B2014: CHAIN OF S/L-BCM	×	×	—	—	SEC-51
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-42
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-45
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-46
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-48
B2195: ANTI SCANNING	×	—	—	—	SEC-49
B2553: IGNITION RELAY	—	×	—	—	PCS-48
B2555: STOP LAMP	—	×	—	—	SEC-54

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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
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-56
B2557: VEHICLE SPEED	×	×	×	—	SEC-58
B2560: STARTER CONT RELAY	×	×	×	—	SEC-59
B2562: LOW VOLTAGE	—	×	—	—	BCS-41
B2601: SHIFT POSITION	×	×	×	—	SEC-60
B2602: SHIFT POSITION	×	×	×	—	SEC-63
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-66
B2604: PNP SW	×	×	×	—	SEC-69
B2605: PNP SW	×	×	×	—	SEC-71
B2606: S/L RELAY	×	×	×	—	SEC-73
B2607: S/L RELAY	×	×	×	—	SEC-74
B2608: STARTER RELAY	×	×	×	—	SEC-76
B2609: S/L STATUS	×	×	×	—	SEC-78
B260A: IGNITION RELAY	×	×	×	—	PCS-50
B260B: STEERING LOCK UNIT	—	×	×	—	SEC-82
B260C: STEERING LOCK UNIT	—	×	×	—	SEC-83
B260D: STEERING LOCK UNIT	—	×	×	—	SEC-84
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-85
B2612: S/L STATUS	×	×	×	—	SEC-90
B2614: ACC RELAY CIRC	—	×	×	—	PCS-52
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-55
B2616: IGN RELAY CIRC	—	×	×	—	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-94
B2618: BCM	×	×	×	—	PCS-61
B2619: BCM	×	×	×	—	SEC-96
B261A: PUSH-BTN IGN SW	—	×	×	—	PCS-62
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-97
B2622: INSIDE ANTENNA	—	×	—	—	DLK-55
B2623: INSIDE ANTENNA	—	×	—	—	DLK-57
B26E8: CLUTCH SW	×	×	×	—	SEC-86
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	—	SEC-88
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-89
C1704: LOW PRESSURE FL	—	—	—	×	WT-15
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-17
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	

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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
C1712: [CHECKSUM ERR] FL	—	—	—	×	WT-20
C1713: [CHECKSUM ERR] FR	—	—	—	×	
C1714: [CHECKSUM ERR] RR	—	—	—	×	
C1715: [CHECKSUM ERR] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-23
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1720: [CODE ERR] FL	—	—	—	×	WT-25
C1721: [CODE ERR] FR	—	—	—	×	
C1722: [CODE ERR] RR	—	—	—	×	
C1723: [CODE ERR] RL	—	—	—	×	
C1724: [BATT VOLT LOW] FL	—	—	—	×	WT-28
C1725: [BATT VOLT LOW] FR	—	—	—	×	
C1726: [BATT VOLT LOW] RR	—	—	—	×	
C1727: [BATT VOLT LOW] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-31
C1734: CONTROL UNIT	—	—	—	×	WT-33

REAR WINDOW DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000004586158

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.

Refer to [DEF-11, "BCM : 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.

• With Navigation: Refer to [DEF-12, "WITH NAVIGATION : Component Function Check"](#)

• Without Navigation: Refer to [DEF-12, "WITHOUT NAVIGATION : 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-14, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK REAR WINDOW DEFOGGER

Check rear window defogger.

Refer to [DEF-16, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

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

NO >> GO TO 1.

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

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

Diagnosis Procedure

INFOID:000000004586163

1.CHECK AV CONTROL FUNCTION

Check that the AV control unit is operating normally.

- With Navigation: Refer to [AV-152. "Work Flow"](#).
- Without Navigation: Refer to [AV-35. "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-39. "Intermittent Incident"](#).
NO >> GO TO 1.

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE WITH NAVIGATION

WITH NAVIGATION : Diagnosis Procedure

INFOID:000000004586165

1.CHECK REAR WINDOW DEFOGGER OPERATION

Check rear window defogger operation.

Is the inspection result normal?

YES-1 >> With Navigation: Check AV control system. Refer to [AV-152, "Work Flow"](#)

YES-2 >> Without Navigation: Check AV control system. Refer to [AV-35, "Work Flow"](#)

NO >> Check rear window defogger system. Refer to [DEF-3, "Work Flow"](#)

WITHOUT NAVIGATION

WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:000000004586166

1.CHECK A/C CONTROLLER FUNCTION

Check that the A/C controller is operating normally.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check A/C control system. Refer to [HAC-5, "Work Flow"](#).

2.CHECK REAR WINDOW DEFOGGER ON SIGNAL

Check rear window defogger ON signal.

Refer to [DEF-19, "Component Function Check"](#).

Is the inspection result normal?

YES >> Replace A/C controller (rear window defogger switch). Refer to [HAC-83, "BOSE AUDIO WITH-OUT NAVIGATION : Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

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PRECAUTIONS

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PRECAUTION

PRECAUTIONS

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

INFOID:000000004586167

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIRBAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury.

When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

FILAMENT

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

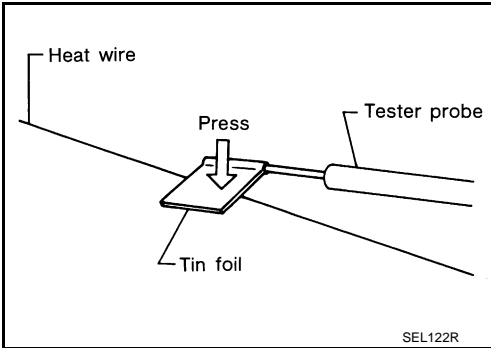
FILAMENT

Inspection and Repair

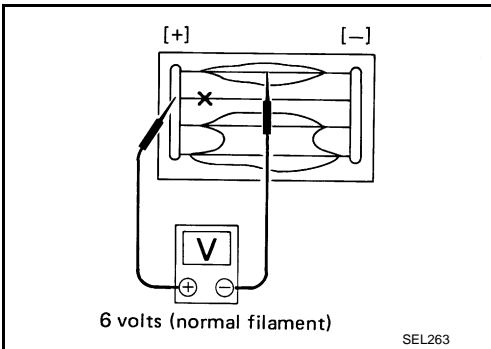
INFOID:000000004586168

INSPECTION

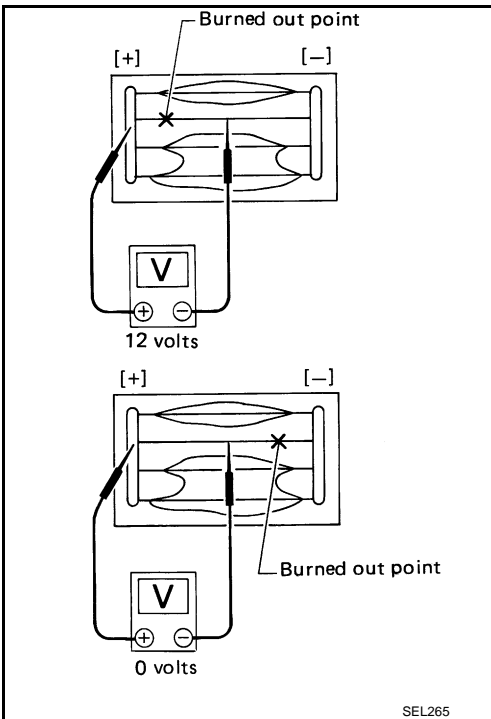
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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 swings abruptly when probe passes the point.



REPAIR

REPAIR EQUIPMENT

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

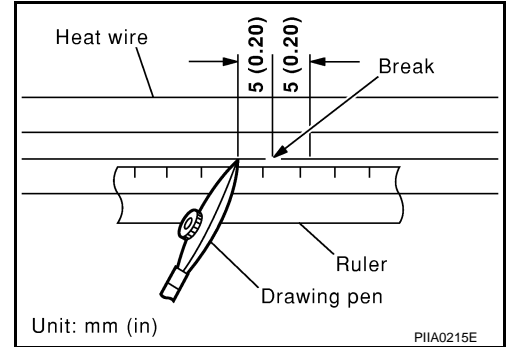
FILAMENT

< ON-VEHICLE REPAIR >

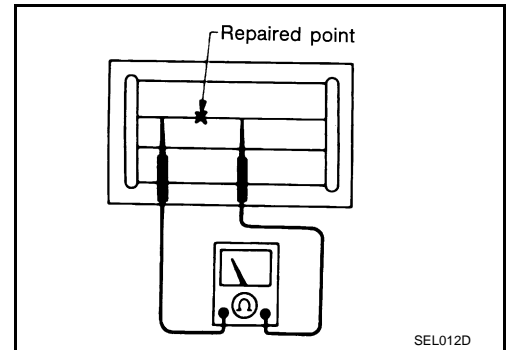
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

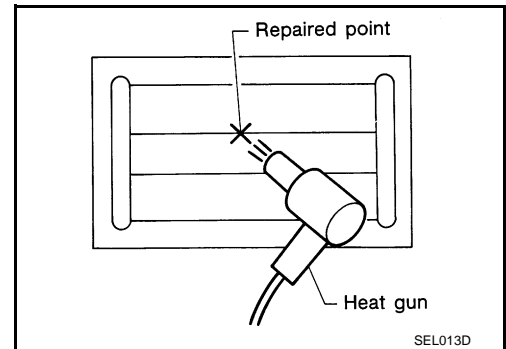
1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen. Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on 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 complete, 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.



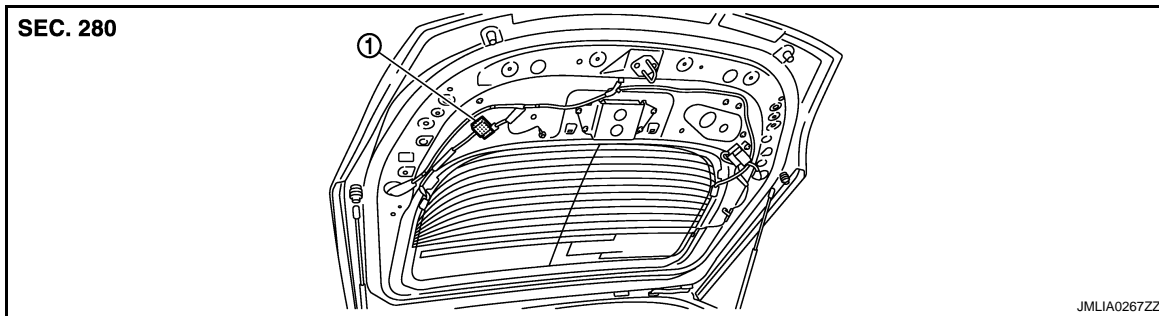
CONDENSER

< ON-VEHICLE REPAIR >

CONDENSER

Exploded View

INFOID:000000004586169



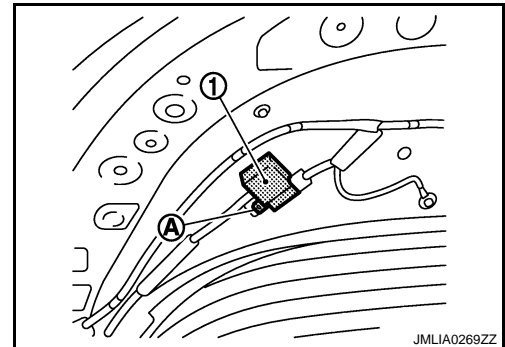
1. Condenser

Removal and Installation

INFOID:000000004586170

REMOVAL

1. Remove the back door finisher lower.
Refer to [INT-27, "Removal and Installation"](#).
2. Remove bolt (A), and then remove condenser (1) from the vehicle body.



INSTALLATION

Install in the reverse order of removal.

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