

SECTION

DEF

DEFOGGER

A

B

C

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010774365

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

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- 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

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precautions for Removing Battery Terminal

INFOID:0000000010774366

- With the adoption of Auto ACC function, ACC power is automatically supplied by operating the intelligent key or remote keyless entry or by opening/closing the driver side door. In addition, ACC power is supplied even after the ignition switch is turned to the OFF position, i.e. ACC power is supplied for a certain fixed time.
- When disconnecting the 12V battery terminal, turn off the ACC power before disconnecting the 12V battery terminal, observing "How to disconnect 12V battery terminal" described below.

NOTE:

Some ECUs operate for a certain fixed time even after ignition switch is turned OFF and ignition power supply is stopped. If the battery terminal is disconnected before ECU stops, accidental DTC detection or ECU data damage may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

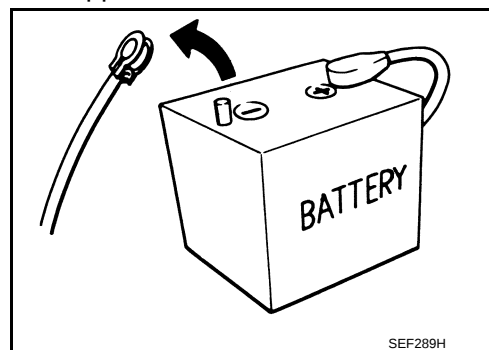
The removal of 12V battery may cause a DTC detection error.

HOW TO DISCONNECT 12V BATTERY TERMINAL

Disconnect 12V battery terminal according to Instruction 1 or Instruction 2 described below.
For vehicles parked by ignition switch OFF, refer to Instruction 2.

INSTRUCTION 1

1. Open the hood.



PRECAUTIONS

< PRECAUTION >

2. Turn key switch to the OFF position with the driver side door opened.
3. Get out of the vehicle and close the driver side door.
4. Wait at least 3 minutes.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the Auto ACC function.

5. Remove 12V battery terminal.

CAUTION:

After installing 12V battery, always check self-diagnosis results of all ECUs and erase DTC.

INSTRUCTION 2 (FOR VEHICLES PARKED BY IGNITION SWITCH OFF)

1. Unlock the door with intelligent key or remote keyless entry.

NOTE:

At this moment, ACC power is supplied.

2. Open the driver side door.
3. Open the hood.
4. Close the driver side door.
5. Wait at least 3 minutes.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the Auto ACC function.

6. Remove 12V battery terminal.

CAUTION:

After installing 12V battery, always check self-diagnosis results of all ECUs and erase DTC.

COMPONENT PARTS

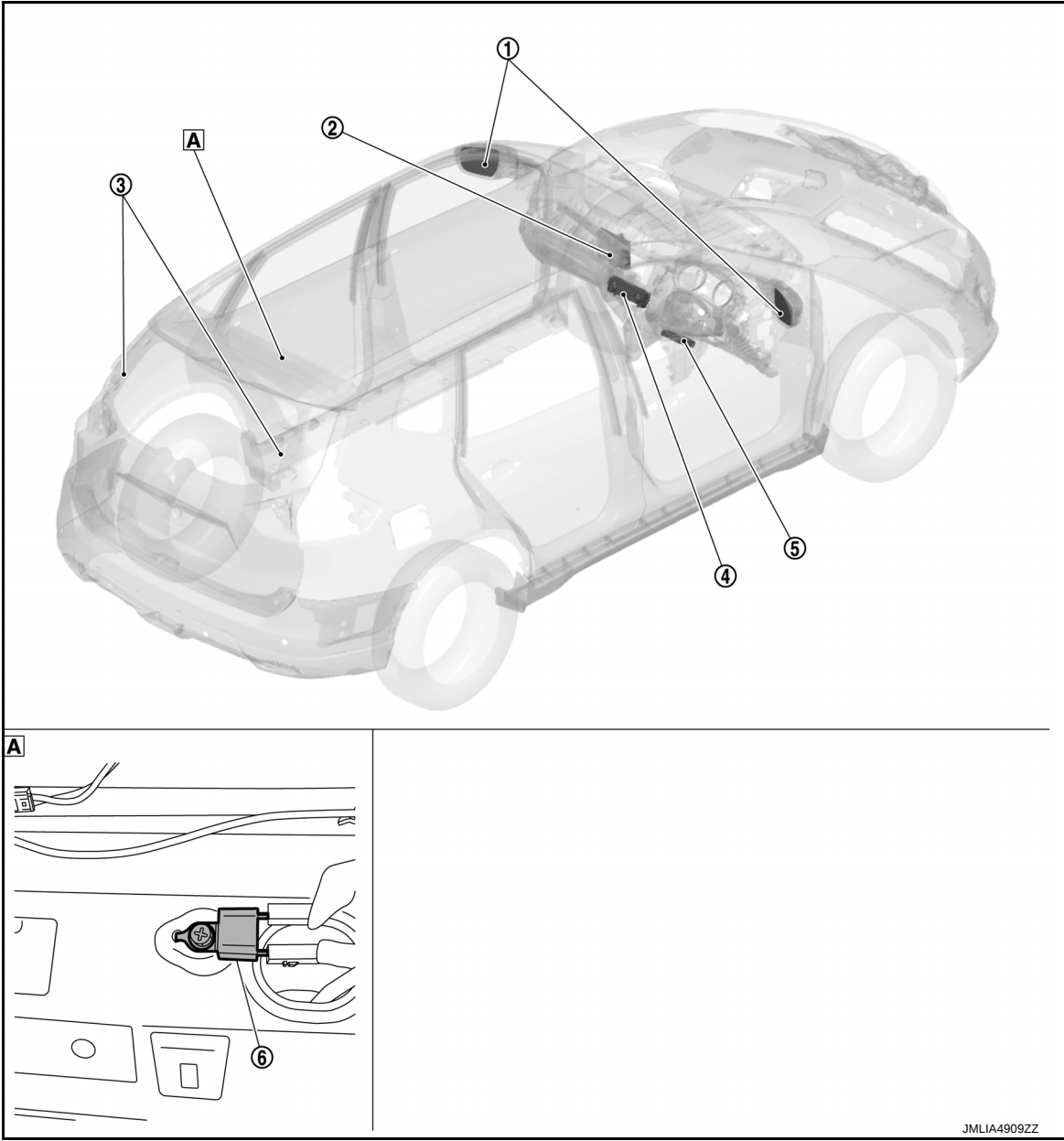
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000010774367



A Back side of headlining assembly
rear side

No.	Component	Function
①	Door mirror defogger	Refer to DEF-6, "Door Mirror Defogger" .
②	BCM	• Receives rear window defogger switch signal. • Performs the timer control of rear window defogger. Refer to BCS-6, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
③	Rear window defogger	Refer to DEF-6, "Rear Window Defogger" .

COMPONENT PARTS

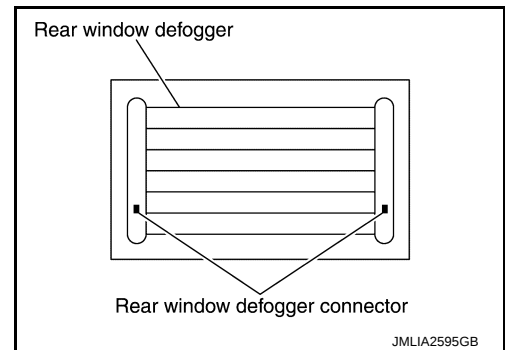
< SYSTEM DESCRIPTION >

No.	Component	Function
	A/C control (Automatic air conditioning models)	- Rear window defogger switch is installed. - Turns the indicator lamp ON when detecting the operation of rear window defogger. Refer to HAC-8, "AUTOMATIC AIR CONDITIONING SYSTEM : Component Parts Location" for detailed installation location.
④	A/C amp. (Manual air conditioning models)	- Rear window defogger switch is installed. - A/C amp. transmits rear window defogger switch signal to BCM via CAN communication. - A/C amp. receives rear window defogger feedback signal from BCM via CAN communication. - Turns the indicator lamp ON when detecting the operation of rear window defogger. Refer to HAC-140, "MANUAL AIR CONDITIONING SYSTEM : Component Parts Location" for detailed installation location.
⑤	A/C auto amp. (Automatic air conditioning models)	- A/C auto amp. receives rear window defogger switch signal from A/C control and transmits it to BCM via CAN communication. - A/C auto amp. receives rear window defogger feedback signal from BCM via CAN communication and transmits it to A/C control. Refer to HAC-8, "AUTOMATIC AIR CONDITIONING SYSTEM : Component Parts Location" for detailed installation location.
⑥	Condenser	Condenser reduce the noise of rear window defogger operation

Rear Window Defogger

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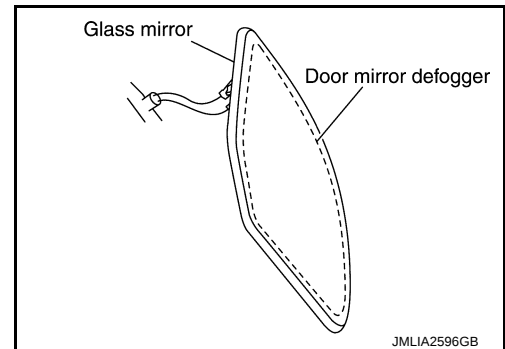
Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up.



Door Mirror Defogger

INFOID:000000010774369

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



SYSTEM

< SYSTEM DESCRIPTION >

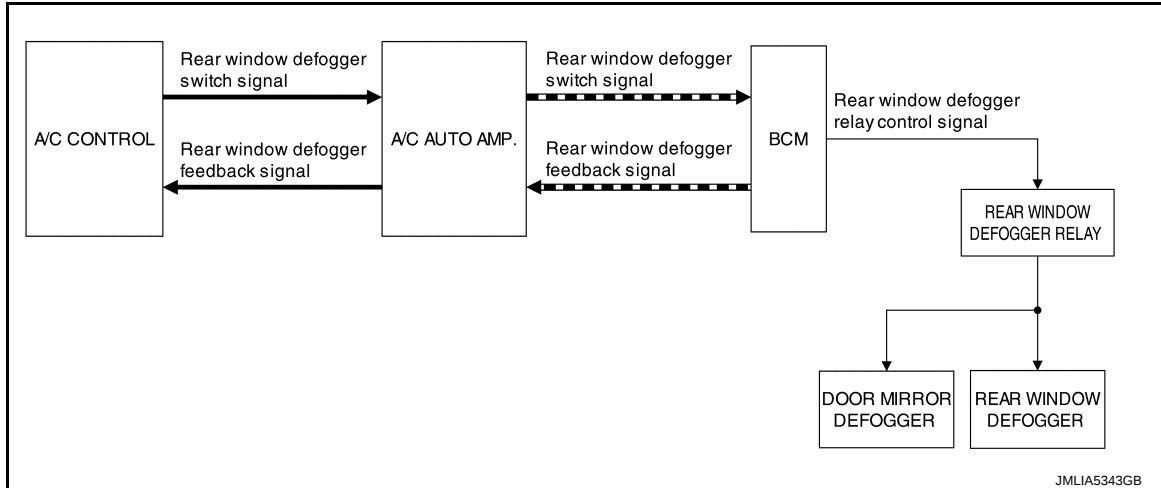
SYSTEM

System Description

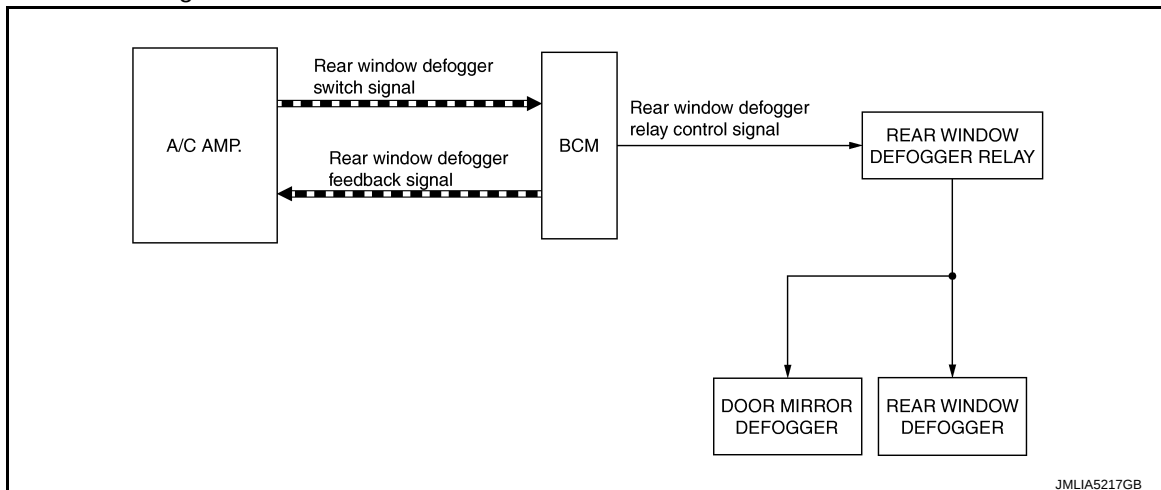
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SYSTEM DIAGRAM

Automatic Air Conditioning Models



Manual Air Conditioning Models



REAR WINDOW DEFOGGER FUNCTION

Automatic Air Conditioning Models

- Turn rear window defogger switch ON when the ignition switch turns ON. Then A/C control transmits rear window defogger switch signal to A/C auto amp. via LIN communication line.
- A/C auto amp. transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmits rear window defogger feedback signal to A/C auto amp. via CAN communication when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger are supplied with power and operate when rear window defogger relay turns ON.
- A/C auto amp. transmit rear window defogger feedback signal to A/C control via LIN communication line when rear window defogger feedback signal is received.
- A/C control turns on the rear window defogger indicator lamp when rear window defogger feedback signal is received.

Manual Air Conditioning Models

- Turn rear window defogger switch ON when the ignition switch turns ON. Then A/C amp. transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmits rear window defogger feedback signal to A/C amp. via CAN communication when rear window defogger switch signal is received.

SYSTEM

< SYSTEM DESCRIPTION >

- Rear window defogger and door mirror defogger are supplied with power and operate when rear window defogger relay turns ON.
- A/C amp. turns on the rear window defogger indicator lamp when rear window defogger feedback signal is received.

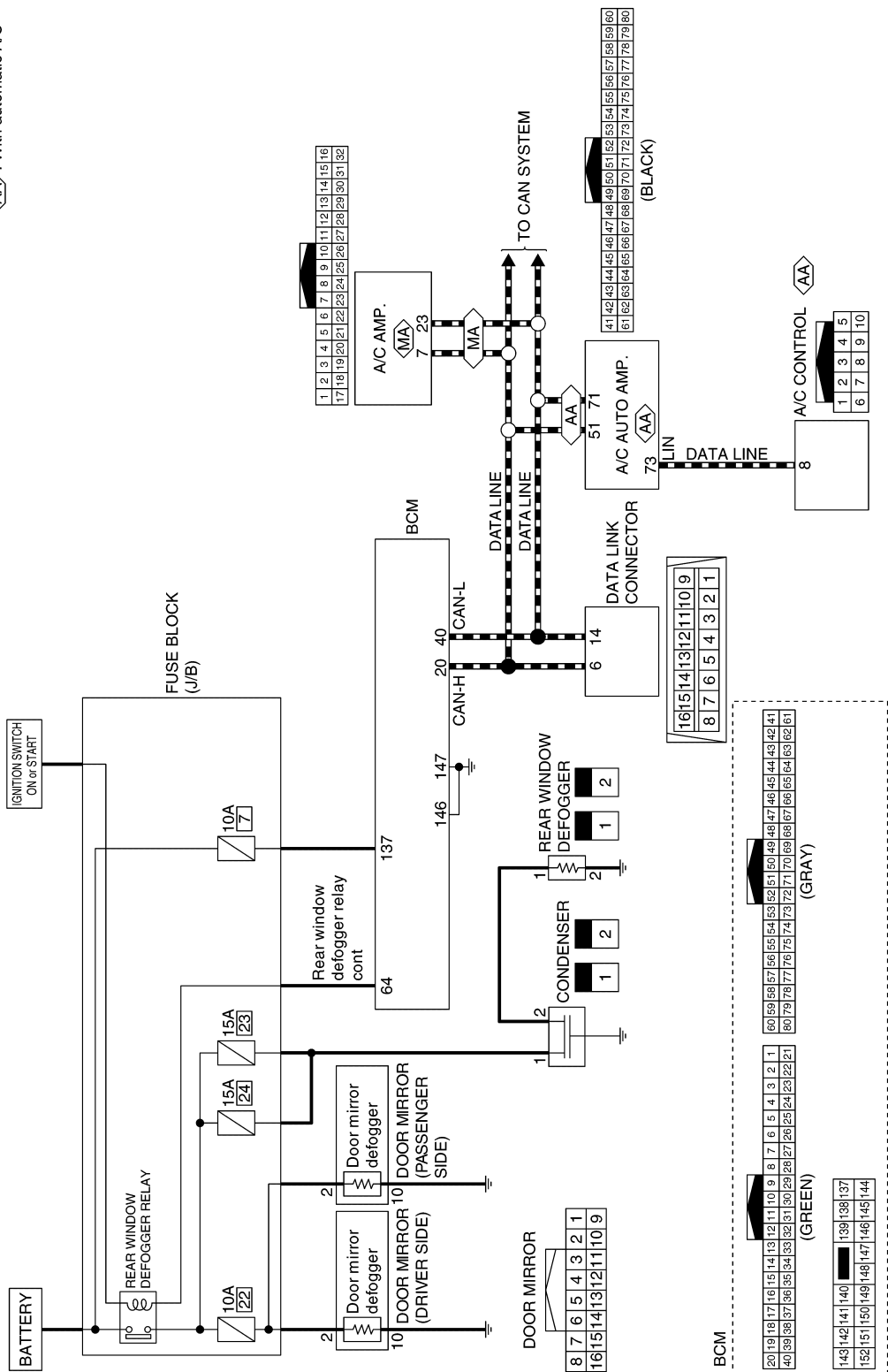
REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER TIMER FUNCTION

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

Circuit Diagram

INFOID:000000010774371

MA : With manual A/C
AA : With automatic A/C



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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000010774372

APPLICATION ITEM

CONSULT 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.
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	- 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		×	×
Exterior lamp	HEAD LAMP	×	×	×
Interior room lamp control	INT LAMP		×	
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	
—	AIR CONDITONER*		×	×
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	
Interior room lamp battery saver	BATTERY SAVER		×	
Back door open	TRUNK		×	
Vehicle security	THEFT ALM	×	×	
RAP	RETAINED PWR		×	
Remote keyless entry system	MULTI REMOTE ENT	×	×	
Signal buffer system	SIGNAL BUFFER		×	×

NOTE:

*: This item is displayed, but 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.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description
BATTERY VOLTAGE	V	Battery voltage of the moment a particular DTC is detected.
VEHICLE SPEED	km/h	Vehicle speed of the moment a particular DTC is detected.
EXTERNAL TEMP	°C	External temperature of the moment a particular DTC is detected
VEHICLE COND	—	NOTE: This item is displayed, but cannot be use this item.
DOOR LOCK STATUS	—	NOTE: This item is displayed, but cannot be use this item.
POWER SUPPLY COUNTER	min	Displays the cumulative time from the time that the battery terminal is connected.

REAR WINDOW DEFOGGER

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

INFOID:0000000010774373

WORK SUPPORT

Service item	Setting item	Description
SET R-DEF TIMER	MODE1*	NOTE: Do not use this function.
	MODE2	
	MODE3	

*: Factory setting

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Description
PUSH SW	Indicates [On/Off] condition of push switch
REAR DEF SW	Displays "Press (On)/other (Off)" status determined with the rear window defogger switch

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	Rear window defogger operates when "On" on CONSULT screen is touched

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000010774374

ECU	Reference
BCM	BCS-53, "Reference Value"
	BCS-76, "Fail-safe"
	BCS-77, "DTC Inspection Priority Chart"
	BCS-78, "DTC Index"

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

DEFOGGER (LHD MODELS)

Connector No.	B19
Connector Name	CONDENSER
Connector Type	P01FBA



Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02MMV-LC



Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-AH



Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

Connector No.	B47
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



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

Connector No.	B106
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LAVB	-
2	LAVB	-
3	W	-
4	V	-
5	SB	-
6	LG	-
7	GR	-
8	G	-
9	Y	-
10	B	-
11	R	-
12	LAW	-
13	LAY	-
14	LALG	-
15	LAV	-
16	LAL	-
17	LAVB	-
18	LAVB	-
19	LAVR	-
22	LAVG	-
23	L	-
24	BG	-

Terminal No.	Color Of Wire	Signal Name [Specification]
6	R	BACK DOOR OPENER REQUEST SW
9	G	HANDS FREE SENSOR
10	W	REAR RH DOOR SW
11	LG	BACK DOOR SW
12	R	REAR LH DOOR SW
13	SB	PASSENGER DOOR SW
15	LAVG	REAR WIPER AUTO STOP
16	Y	BACK DOOR OPENER SW
17	SB	DRIVER DOOR SW
20	L	CANH
21	BR	BUMPER ANTENNA(-)
22	Y	REAR ANTENNA(-)
23	L	REAR ANTENNA(+)
24	G	BUMPER ANTENNA(+)
38	V	SIREN
39	LAW	HIGH-MOUNTED STOP LAMP
40	P	CAN-L

Terminal No.	Color Of Wire	Signal Name [Specification]
1G	LAVR	-
2G	P	-
3G	G	-
4G	P	-
5G	G	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LAV	-
2	R	-
3	LAVG	-
4	B	-
5	B	-
6	LAL	-
7	LAVR	-
8	SB	-
9	LAVR	-
10	LASB	-
11	P	-
12	LG	-
13	LAY	-
14	LAW	-
15	LAVR	-
16	B	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH16MW-AH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-
3	LAP	-
4	LAVR	-

JRLWDS750GB

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

DEFOGGER (LHD MODELS)

Connector No.	D42	WIRE TO WIRE
Connector Name	NS16FW-CS	
Connector Type		
Terminal No.	Wire	Signal Name [Specification]
1	GR	-
2	G	-
3	B	-
4	LA/SE	-
5	LA/GR	-
6	LA/B	-
7	Y	-



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

Connector No.	D41	WIRE TO WIRE
Connector Name	TH24FW-NH	
Connector Type		
Terminal No.	Wire	Signal Name [Specification]
1	LA/B	-
2	B	-
3	LA/GR	-
4	LA/Y	-
5	LA/R	-
6	LA/V	-
7	LA/W	-
8	LA/G	-



12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Connector No.	D43	DOOR MIRROR (PASSENGER SIDE)
Connector Name	TH6MMV-NH	
Connector Type		
Terminal No.	Wire	Signal Name [Specification]
1	B	-
2	B	-
3	P	-
4	R	-
5	SB	-
6	L	-
7	V	-
8	Y	-
9	B	-
10	G	-
11	LA/Y	-
12	LA/R	-
13	LA/V	-
14	LA/W	-
15	LA/G	-
16	LA/L	-
17	LA/BG	-
18	GR	-
19	LA/G	-



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

Terminal No.	Wire	Signal Name [Specification]
2	GR	-
3	LA/L	-
4	LA/R	-
5	LA/Y	-
6	L	-
7	V	-
8	B	-
9	LA/BG	-
10	LA/V	-
11	LA/W	-
12	LA/G	-
13	B	-

Connector No.	D166	REAR WINDOW DEFOGGER
Connector Name	P01FB-A	
Connector Type		
Terminal No.	Wire	Signal Name [Specification]
1	W	-



2

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

Connector No.	D167	CONDENSER
Connector Name	P01FB-A	
Connector Type		
Terminal No.	Wire	Signal Name [Specification]
1	W	-



2

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

Connector No.	M2	FUSE BLOCK (J/B)
Connector Name	NS16FBC-CS	
Connector Type		
Terminal No.	Wire	Signal Name [Specification]
1	W	-



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

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

DEFOGGER (LHD MODELS)

Terminal No.	Color Of Wire	Signal Name [Specification]
10B	GR	- [With MR20 engine or R3M engine]
10B	LA/GR	- [With GR25 Engine]
12B	BR	-
14B	W	-
15B	W	-
16B	GR	-
1B	G	-
2B	R	-
3B	V	-
6B	LAV	-
7B	LAV	-

Connector No.	M3
Connector Name	FUSE BLOCK (JIB)
Connector Type	NS16FW-CS



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

Terminal No.	Color Of Wire	Signal Name [Specification]
10C	LG	-
13C	LA/G	-
14C	R	-
15C	L	-
16C	LA/W	-
1C	R	-
2C	G	-
3C	Y	-
4C	LG	-
5C	GR	-
6C	LA/R	-
7C	Y	-
8C	BR	- [With ISS]
8C	LA/BR	- [Without ISS]
9C	L	-

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



11	14	15	16	8	3	4	5	6	7
----	----	----	----	---	---	---	---	---	---

Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
8	Y	-
11	SB	-
14	P	-
15	BR	-
16	W	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH24MMV-NH



11	12	13	14	15	16	17	18	19	20	21	22	23	24
----	----	----	----	----	----	----	----	----	----	----	----	----	----

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

13	GR	-
14	LA/SE	-
15	LA/GR	-
16	LAV	-
17	LAV	-
18	LA/BG	-
19	LA/R	-
22	LA/G	-
23	BG	-
24	SB	-

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



11	12	13	14	15	16	8	9	10	11	12	13	14	15	16
----	----	----	----	----	----	---	---	----	----	----	----	----	----	----

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

Connector No.	M56
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color Of Wire	Signal Name [Specification]
1	SB	-
3	B	-
5	LG	-
7	L	-
8	W	-
9	BG	-
10	Y	-
11	V	-
12	GR	-
13	LG	-
14	SB	-
16	BR	-
18	BR	-
19	G	-
20	Y	-
21	BG	-
23	R	-
24	SB	-
25	GR	-
26	BR	-
27	LG	-
28	W	-
29	BG	-
30	G	-

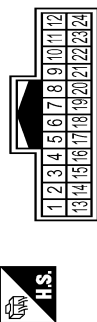
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REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

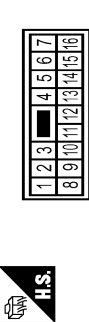
DEFOGGER (LHD MODELS)

Connector No.	M81
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-AH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
3	GR	- [With SDW]
4	Y	- [Without SDW]
5	BR	-
6	SB	-
7	B	-
8	L	-
9	Y	-
10	SHIELD	-
11	G	-
13	LA/SB	-
14	LA/GR	-
15	LA/Y	-
16	LA/L	-
17	LA/BG	-
18	GR	-
21	LA/Y	-

Connector No.	M82
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



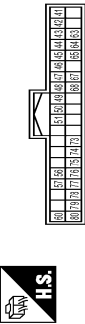
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	GR	-
8	SB	-
9	BR	-
10	GR	-
11	L	-
12	Y	-
13	GR	-
14	W	-

Connector No.	M85
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16BR-CS



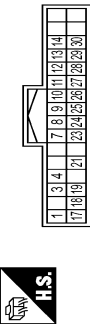
Terminal No.	Color Of Wire	Signal Name [Specification]
137	W	BAT POWER SUPPLY (FUSE)
138	SB	INT ROOM LAMP CONT
139	L	PASSENGER DOOR UNLOCK OUTPUT
141	V	FRONT DOOR LOCK OUTPUT
143	LA/V	POWER SUPPLY (FR DOOR LK ACT)
144	BG	POWER SUPPLY (TURN SIGNAL)
145	GR	POWER SUPPLY (STOP LAMP)
146	B	GROUND
147	B	GROUND
148	G	DRIVER DOOR UNLOCK OUTPUT
149	W	FRONT DOOR SUPER LOCK OUTPUT
151	R	POWER SUPPLY (REAR DOOR LK ACT)
152	LG	POWER SUPPLY (REAR WIPER)

Connector No.	M87
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-AH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	STEERING LOCK UNIT POWER SUPPLY
42	LA/G	TURN SIG LH (SIDE)
43	LA/Y	TURN SIG RH (SIDE)
44	P	INTERIOR ROOM LAMP RELAY CONT
45	R	CAN-L
46	L	CAN-H
47	G	LIGHT & RAIN SENSOR
48	L	CAN-L
49	R	CAN-H
50	BG	DOOR LOCK SW
51	Y	HAZARD SW
56	P	DONGLE
57	L	CYT SHIFT SELECT (DETENT SW) PWR
60	R	HEADLAMP WASHER SW
63	G	POWER WINDOW RELAY CONT
64	LA/R	REAR WINDOW DEFOGGER RELAY CONT
65	BR	ACC RELAY CONT
67	Y	IGN RELAY (F/B) CONT OUTPUT
68	LA/W	BLOWER RELAY CONT
73	LG	COMBI SW INPUT 5
74	Y	COMBI SW OUTPUT 5
75	BG	SECURITY IND LAMP CONT
76	G	COMBI SW INPUT 3
77	GR	COMBI SW INPUT 4
78	V	COMBI SW INPUT 1
79	W	COMBI SW INPUT 2
80	SB	DOOR UNLOCK SW

Connector No.	M132
Connector Name	A/C AMP.
Connector Type	TH32FW-AH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	FAN LAMP CONT
3	SB	ACC PWR SPY
4	V	IGN ON
7	L	CAN-L
8	W	MTR PWR SPY (INT. MODE)
9	BG	AMIX 1
10	Y	AMIX 2
11	V	INT 1
12	GR	INT 2
13	LG	MODE 1
14	SB	MODE 2
17	W	BLOWER MTR F/B
18	BR	SENS GND (INTAKE)
19	B	GND
21	BG	INTAKE SENS
23	R	CAN-L
24	SB	MTR PWR SPY (AMIX)
25	GR	AMIX 3
26	BR	AMIX 4
27	LG	INT 3
28	W	INT 4
29	BG	MODE 3
30	G	MODE 4

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

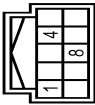
DEFOGGER (LHD MODELS)

Connector No.	M133
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	-
3	-	-
5	-	-
7	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
16	-	-
18	-	-
19	-	-
20	-	-
21	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-

Connector No.	M135
Connector Name	A/C CONTROL
Connector Type	TH10FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
4	GR	ACC PWR SPLY
8	LG	LIN

Connector No.	M174
Connector Name	A/C AUTO AMP.
Connector Type	TH40FB-NH

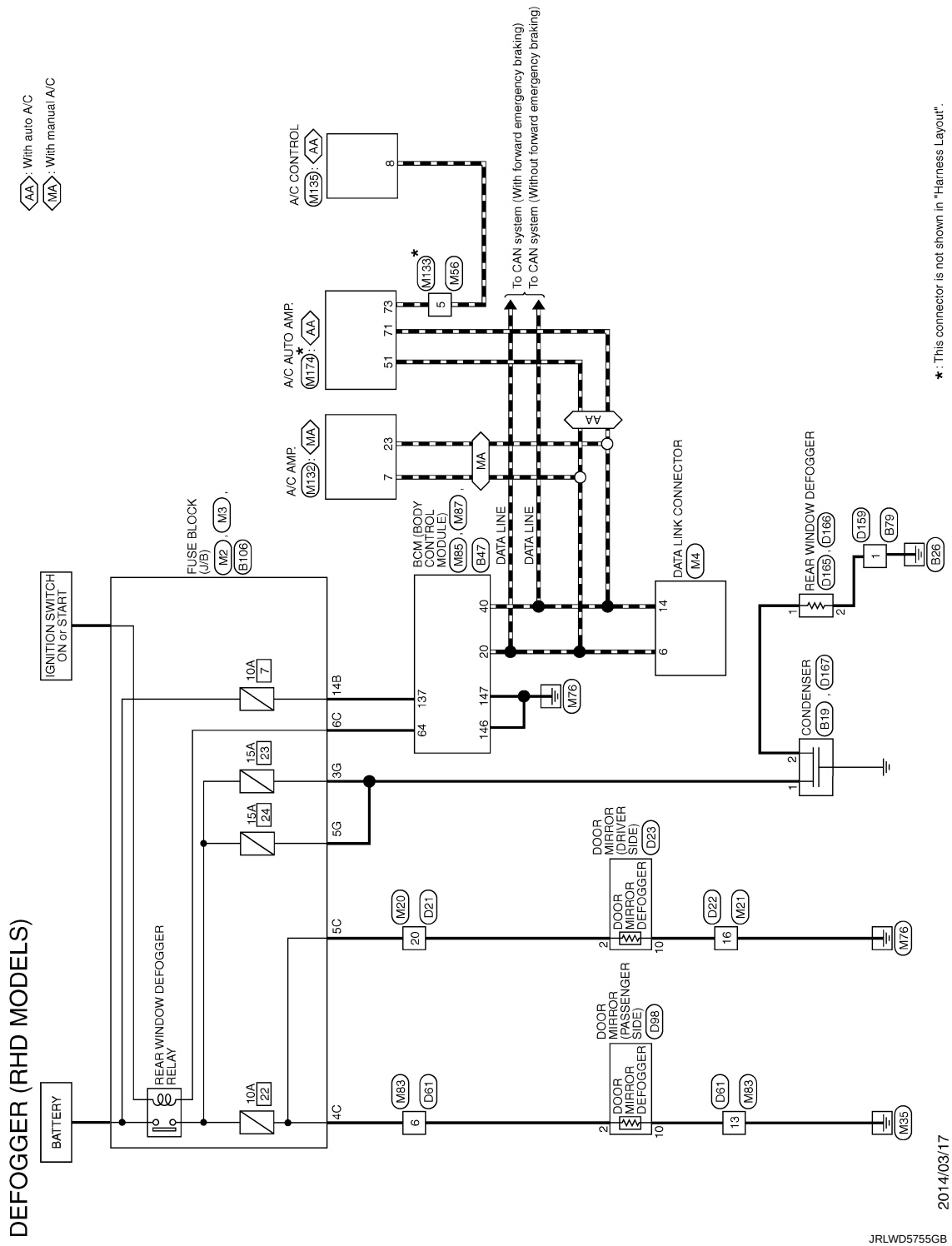


Terminal No.	Color Of Wire	Signal Name [Specification]
41	BG	ACC PWR SPLY
43	R	GND
51	L	CAN-H
53	P	IN-VHCL SENS
54	V	SUNLOAD SENS
63	G	SENS GND (IN-VHCL - SUNLOAD)
71	W	CAN-L
73	Y	LIN

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REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >
RHD MODELS



2014/03/17

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REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

DEFOGGER (RHD MODELS)

Connector No.	B19
Connector Name	CONDENSER
Connector Type	P01FBA



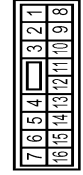
Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	M02MMV-LC



Connector No.	D21
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

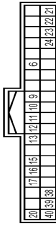


Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Type	NS16FM-CS



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

Connector No.	B47
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



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

Connector No.	B106
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FM-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
6	R	BACK DOOR OPENER REQUEST SW
9	G	HANDS FREE SENSOR
10	W	REAR RH DOOR SW
11	LG	BACK DOOR SW
12	R	REAR LH DOOR SW
13	SB	PASSENGER DOOR SW
15	LAG	REAR WIPER AUTO STOP
16	Y	BACK DOOR OPENER SW
17	SB	DRIVER DOOR SW
20	L	CANH
21	BR	BUMPER ANTENNA(-)
22	Y	REAR ANTENNA(-)
23	L	REAR ANTENNA(+)
24	G	BUMPER ANTENNA(+)
38	V	SIREN
39	LAW	HIGH-MOUNTED STOP LAMP
40	P	CAN-L

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
3	B	-
4	W	-
5	V	-
6	SB	-
7	L	-
8	G	-
9	Y	-
10	B	-
11	G	-
13	LAW	-
14	LAG	-
15	LAGR	-
16	LAP	-
17	LA5E	-
18	LA/R	-
19	LA5E	-
20	GR	-
21	LA/G	-
22	R	-
23	BG	-
24	L	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1G	LA/R	-
2G	P	-
3G	G	-
4G	P	-
5G	G	-

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LA/B	-
2	Y	-
3	G	-
4	V	-
6	LG	-
6	G	-
7	SB	-
8	LA/B	-
9	LAGR	-
10	LAV	-
11	LAL	-
12	LAG	-
13	LA/R	-
14	LAG	-
15	LA/R	-
16	B	-

Connector No.	D23
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH16MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	LAL	-
4	LAV	-

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< WIRING DIAGRAM >

Terminal No.	Color Of Wire	Signal Name [Specification]
10C	LG	-
13C	LV/G	-
14C	R	-
15C	L	

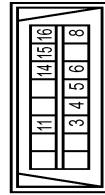
REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

DEFOGGER (RHD MODELS)

16C	LAW	-
1C	R	-
2C	G	-
3C	Y	-
4C	LG	-
5C	GR	-
6C	LAR	-
7C	Y	-
8C	BR	- [With ISS]
8C	LABR	- [Without ISS]
9C	L	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16EW



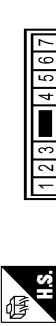
Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
8	Y	-
11	SB	-
14	P	-
15	BR	-
16	W	-

Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-AH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
3	GR	-
4	Y	-
5	V	-
6	BR	-
7	L	-
8	Y	-
9	G	-
10	SHIELD	-
11	G	-
13	LAW	-
14	LAG	-
15	LAGR	-
16	LAP	-
17	LASE	-
18	LAR	-
19	GR	-
20	GR	-
21	LAY	-
22	R	-
23	SB	-
24	BG	-

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

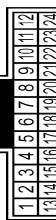
Connector No.	M56
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-AH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	SB	-
3	B	-
6	LG	-
7	L	-

8	W	-
9	BG	-
10	Y	-
11	V	-
12	GR	-
13	LG	-
14	SB	-
16	BR	-
18	BR	-
19	G	-
20	Y	-
21	BG	-
23	R	-
24	SB	-
25	GR	-
26	BR	-
27	LG	-
28	W	-
29	BG	-
30	G	-

Connector No.	M83
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-AH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	W	-
4	P	-
5	SB	-
6	LG	-
7	B	-
8	L	-
9	Y	-
10	SHIELD	-
11	R	-
13	B	-
14	LAW	-
15	LG	-
16	LAGR	-

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REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

DEFOGGER (RHD MODELS)

17	LAP	-
18	LASE	-
19	B	-
20	LG	-
21	BR	-
22	LAVG	-

Connector No.	M85
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FBR-GS



143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158

Terminal No.	Wire	Signal Name [Specification]
137	W	BAT POWER SUPPLY (FUSE)
138	SB	INT ROOM LAMP CONT
139	L	PASSENGER DOOR UNLOCK OUTPUT
141	V	FRONT DOOR LOCK OUTPUT
143	LAV	POWER SUPPLY (FR DOOR LK ACT)
144	BG	POWER SUPPLY (TURN SIGNAL)
145	GR	POWER SUPPLY (STOP LAMP)
146	B	GROUND
147	B	GROUND
148	G	DRIVER DOOR UNLOCK OUTPUT
149	W	FRONT DOOR SUPERLOCK OUTPUT
151	R	POWER SUPPLY (REAR DOOR LK ACT)
152	LG	POWER SUPPLY (REAR WIPER)

Connector No.	M87
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH



8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23

Terminal No.	Wire	Signal Name [Specification]
41	V	STEERING LOCK UNIT POWER SUPPLY
42	LAVG	TURN SIG LH (SIDE)
43	LAV	TURN SIG RH (SIDE)
44	P	INTERIOR ROOM LAMP RELAY CONT
45	R	CAN-L
46	L	CAN-H
47	G	LIGHT & RAIN SENSOR
48	L	CAN-H
49	R	CAN-L
50	BG	DOOR LOCK SW
51	Y	HAZARD SW
56	P	DONGLE
57	L	CVT SHIFT SELECT (DETENT SW) PWR
60	R	HEADLAMP WASHER SW
63	G	POWER WINDOW RELAY CONT
64	LAV	REAR WINDOW DEFOGGER RELAY CONT
65	BR	ACC RELAY CONT
67	Y	IGN RELAY (FIB) CONT OUTPUT
68	LAV	BLOWER RELAY CONT
73	LG	COMBI SW INPUT 5
74	Y	COMBI SW OUTPUT 5
75	BG	SECURITY IND LAMP CONT
76	G	COMBI SW INPUT 3
77	GR	COMBI SW INPUT 4
78	V	COMBI SW INPUT 1
79	W	COMBI SW INPUT 2
80	SB	DOOR UNLOCK SW

Connector No.	M132
Connector Name	A/C AMP
Connector Type	TH32FM-NH



1	3	4	7	8	9	10	11	12	13	14
17	18	19	21	23	24	25	26	27	28	29

Terminal No.	Wire	Signal Name [Specification]
1	G	FAN AMP CONT
3	SB	ACC PWR SPLY
4	V	IGN ON
7	L	CAN-H
8	W	MTR PWR SPLY (INT. MODE)
9	BG	AMIX 1
10	Y	AMIX 2
11	V	INT 1
12	GR	INT 2
13	LG	MODE 1
14	SB	MODE 2
17	W	BLOWER MTR F/B
18	BR	SENS GND (INTAKE)
19	B	GND
21	BG	INTAKE SENS
23	R	CAN-L
24	SB	MTR PWR SPLY (AMIX)
25	GR	AMIX 3
26	BR	AMIX 4
27	LG	INT 3
28	W	INT 4
29	BG	MODE 3
30	G	MODE 4

Connector No.	M133
Connector Name	WIPE TO WIRE
Connector Type	TH32MW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	-
3	-	-
9	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
16	-	-
18	-	-
19	-	-
20	-	-
21	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-

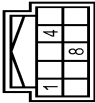
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REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

DEFOGGER (RHD MODELS)

Connector No.	M135
Connector Name	A/C CONTROL
Connector Type	TH10FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
4	GR	ACC PWR SPLY
8	LG	LIN

Connector No.	M174
Connector Name	A/C AUTO AMP.
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	BG	ACC PWR SPLY
43	R	GND
51	L	CAN-H
53	P	IN-VHCL SENS
54	V	SUNLOAD SENS
63	G	SENS GND (IN-VHCL, SUNLOAD)
71	W	CAN-L
73	Y	LIN

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000010774376

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

Perform self diagnosis with CONSULT.

Is any DTC detected?

YES >> Refer to [BCS-78, "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.

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

REAR WINDOW DEFOGGER SWITCH

Component Function Check

INFOID:0000000010774377

1.CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

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

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
- NO >> Refer to [DEF-26. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:0000000010774378

1.CHECK A/C TYPE

Check A/C type.

Automatic A/C>>GO TO 2.

Manual A/C>>GO TO 3.

2.REPLACE A/C CONTROL

1. Turn ignition switch OFF.
2. Replace A/C control. Refer to [HAC-125. "Removal and Installation"](#).
3. Turn ignition switch ON.
4. Operate rear window defogger switch and check the operating condition.

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace A/C auto amp. Refer to [HAC-126. "Removal and Installation"](#)

3.REPLACE A/C AMP.

1. Turn ignition switch OFF.
2. Replace A/C amp. Refer to [HAC-222. "Removal and Installation"](#).
3. Turn ignition switch ON.
4. Operate rear window defogger switch and check the operating condition.

>> INSPECTION END

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Component Function Check

INFOID:0000000010774379

1.CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

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

Is the inspection result normal?

- YES >> Rear window defogger relay power supply circuit is OK.
NO >> Refer to [DEF-27, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:0000000010774380

1.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

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

(+)		(-)	Condition		Voltage
BCM					
Connector	Terminal				
M87	64	Ground	Rear window defogger switch	ON	0 – 1.5 V
				OFF	9 – 16 V

Is the inspection result normal?

- YES >> GO TO 5.
NO-1 >> Fixed at 0 V and remains unchanged: GO TO 2.
NO-2 >> Fixed at 9 – 16 V and remains unchanged: Replace BCM. Refer to [BCS-121, "Removal and Installation"](#).

2.CHECK REAR WINDOW DEFOGGER CIRCUIT 2

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

BCM		Fuse block (J/B)		Continuity
Connector	Terminal	Connector	Terminal	
M87	64	M3	6C	Existed

Is the inspection result normal?

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

3.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay. Refer to [DEF-28, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace rear window defogger relay.

4.CHECK FUSE BLOCK (J/B)

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

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Voltage
Fuse block (J/B)			
Connector	Terminal		
M3	6C	Ground	9 – 16 V

Is the inspection result normal?

YES >> GO TO 6.

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

5.CHECK REAR WINDOW DEFOGGER RELAY

1. Turn ignition switch OFF.
2. Check rear window defogger relay. Refer to [DEF-28, "Component Inspection"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear window defogger relay.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:0000000010774381

1.CHECK REAR WINDOW DEFOGGER RELAY

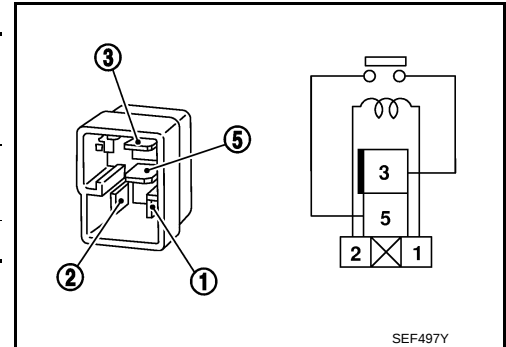
1. Turn ignition switch OFF.
2. Disconnect rear window defogger relay.
3. Check continuity between rear window defogger relay terminals.

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.



REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER

Component Function Check

INFOID:0000000010774382

1.CHECK REAR WINDOW DEFOGGER

1. Perform BCM Active Test ("REAR DEFOGGER") with CONSULT.
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-29, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:0000000010774383

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check that the following fuses are not fusing.

Fuse No.	Capacity
23	15 A
24	

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

(+)		(-)	Condition		Voltage (Approx.)
Rear window defogger					
Connector	Terminal				
B165	1	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

Rear window defogger		Ground	Continuity
Connector	Terminal		
D166	2		Existed

Is the inspection result normal?

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

4.CHECK REAR WINDOW DEFOGGER CIRCUIT-I

1. Turn ignition switch OFF.
2. Disconnect condenser connector.

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REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between condenser harness connector and rear window defogger harness connector.

Condenser		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
D167	2	D165	1	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK REAR WINDOW DEFOGGER CIRCUIT-II

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

Fuse block (J/B)		Condenser		Continuity
Connector	Terminal	Connector	Terminal	
B106	3G	B19	1	Existed
	5G			

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK FUSE BLOCK (J/B)

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

(+)Fuse block (J/B)		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
B106	3G	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V
	5G			ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace or repair fuse block (J/B).

7.CHECK FILAMENT

Check the filament for damage or blown. Refer to [DEF-41, "Inspection and Repair"](#).

Is the inspection result normal?

YES >> GO TO 9.

NO >> Replace condenser. Refer to [DEF-43, "Removal and Installation"](#).

8.CHECK CONDENSER

Check condenser. Refer to [DEF-31, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair filament.

9.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Component Inspection

INFOID:000000010774384

1.CHECK CONDENSER

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

Terminal		Continuity
1	2	Existed

4. Check continuity between condenser and ground part of condenser.

Condenser	Ground part of condenser	Continuity
Terminal		
1		Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace condenser. Refer to [DEF-43, "Removal and Installation"](#).

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DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Component Function Check

INFOID:0000000010774385

1.CHECK DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

- YES >> Door mirror defogger is OK.
NO >> Refer to [DEF-32, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:0000000010774386

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check that the following fuse is not fusing.

Fuse No.	Capacity
22	10 A

Is the inspection result normal?

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

2.CHECK FUSE BLOCK (J/B)

1. Disconnect door mirror (driver side) connector and door mirror (passenger side) connector.
2. Turn ignition switch ON.
3. Check voltage between fuse block (J/B) harness connector and ground.

(+)		(-)	Condition		Voltage (Approx.)
Fuse block (J/B)					
Connector	Terminal				
M3	4C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V
	5C			ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Component Function Check

INFOID:000000010774387

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

- YES >> Driver side door mirror defogger is OK.
NO >> Refer to [DEF-33. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000010774388

1.CHECK POWER SUPPLY CIRCUIT

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

LHD models

(+)		(-)	Condition		Voltage (Approx.)
Door mirror (driver side)					
Connector	Terminal				
D3	2	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

RHD models

(+)		(-)	Condition		Voltage (Approx.)
Door mirror (driver side)					
Connector	Terminal				
D23	2	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

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

2.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

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

LHD models

Fuse block (J/B)		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	4C	D3	2	Existed

RHD models

Fuse block (J/B)		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	5C	D23	2	Existed

Is the inspection result normal?

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

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

3.CHECK FUSE BLOCK (J/B)

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

LHD models

(+) Fuse block (J/B)		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M3	4C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

RHD models

(+) Fuse block (J/B)		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M3	5C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace or repair fuse block (J/B).

4.CHECK GROUND CIRCUIT

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

LHD models

Door mirror (driver side)		Ground	Continuity
Connector	Terminal		
D3	10		Existed

RHD models

Door mirror (driver side)		Ground	Continuity
Connector	Terminal		
D23	10		Existed

Is the inspection result normal?

YES >> Replace glass mirror (driver side). Refer to [MIR-30, "GLASS MIRROR : Removal and Installation"](#).

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Component Function Check

INFOID:000000010774389

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

- YES >> Passenger side door mirror defogger is OK.
NO >> Refer to [DEF-35. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000010774390

1.CHECK POWER SUPPLY CIRCUIT

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

LHD models

(+)		(-)	Condition		Voltage (Approx.)
Door mirror (passenger side)					
Connector	Terminal				
D43	2	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

RHD models

(+)		(-)	Condition		Voltage (Approx.)
Door mirror (passenger side)					
Connector	Terminal				
D98	2	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

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

2.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER CIRCUIT

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

LHD models

Fuse block (J/B)		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	5C	D43	2	Existed

RHD models

Fuse block (J/B)		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	4C	D98	2	Existed

Is the inspection result normal?

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

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

3.CHECK FUSE BLOCK (J/B)

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

LHD models

(+) Fuse block (J/B)		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M3	5C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

RHD models

(+) Fuse block (J/B)		(-)	Condition		Voltage (Approx.)
Connector	Terminal				
M3	4C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace or repair fuse block (J/B).

4.CHECK GROUND CIRCUIT

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

LHD models

Door mirror (passenger side)		Ground	Continuity
Connector	Terminal		
D43	10		Existed

RHD models

Door mirror (passenger side)		Ground	Continuity
Connector	Terminal		
D98	10		Existed

Is the inspection result normal?

YES >> Replace glass mirror (passenger side). Refer to [MIR-30, "GLASS MIRROR : Removal and Installation"](#).

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

Diagnosis Procedure

INFOID:0000000010774391

1.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.

Refer to [DEF-26, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-27, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.

Refer to [DEF-32, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:0000000010774392

1.CHECK REAR WINDOW DEFOGGER

Check rear window defogger.

Refer to [DEF-29, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE BUT REAR WINDOW DEFOGGER OPERATE

< SYMPTOM DIAGNOSIS >

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

BOTH SIDES : Diagnosis Procedure

INFOID:0000000010774393

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.

Refer to [DEF-32, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000010774394

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to [DEF-33, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000010774395

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.

Refer to [DEF-35, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

NO >> GO TO 1.

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REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:0000000010774396

1. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch. Refer to [DEF-26, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

NO >> GO TO 1.

FILAMENT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

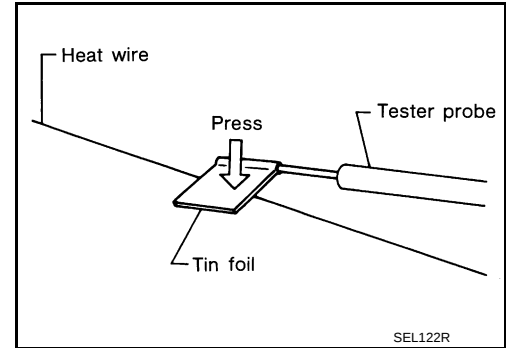
FILAMENT

Inspection and Repair

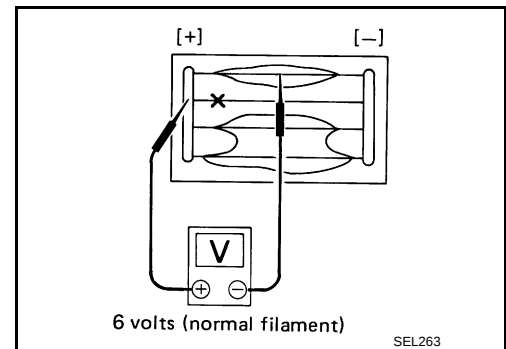
INFOID:0000000010774397

INSPECTION

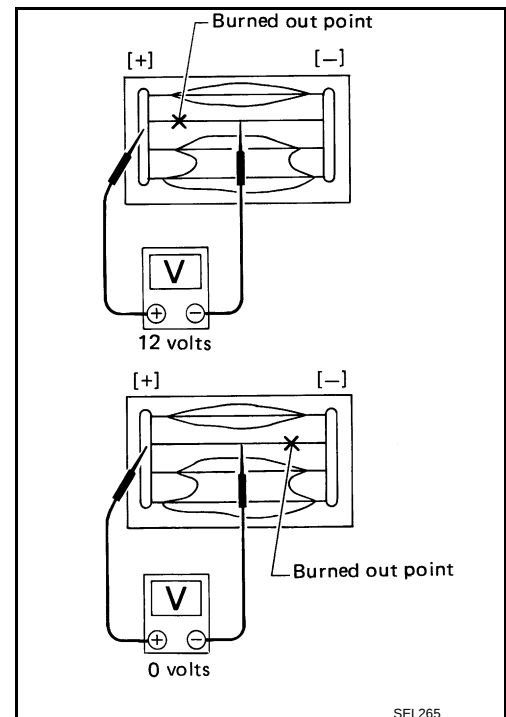
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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



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



REPAIR

REPAIR EQUIPMENT

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

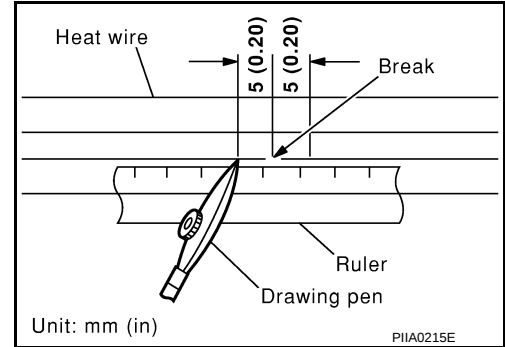
FILAMENT

< REMOVAL AND INSTALLATION >

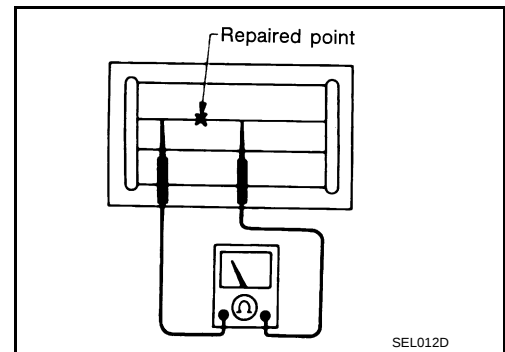
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

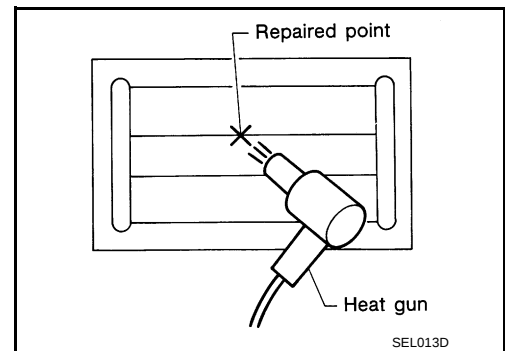
1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen. Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on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



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



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



CONDENSER

< REMOVAL AND INSTALLATION >

CONDENSER

Removal and Installation

INFOID:000000010774398

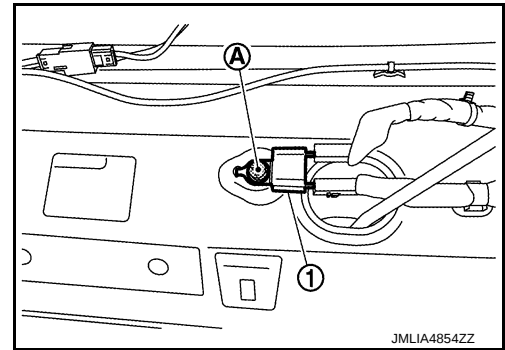
REMOVAL

1. Remove the back door weather-strip. Refer to [DLK-295, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#) (RHD models with Intelligent Key), [DLK-603, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#) (LHD models with intelligent Key), [DLK-766, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#) (RHD models without Intelligent Key) or [DLK-908, "BACK DOOR WEATHER-STRIP : Removal and Installation"](#) (LHD models without Intelligent Key)
2. Remove clips of headlining assembly rear side, and remove headlining assembly rear side. Refer to [INT-37, "Removal and Installation"](#).

CAUTION:

Does not bend hard the headlining assembly, because headlining assembly is damaged.

3. Remove the condenser mounting bolt (A), and then remove the condenser (1).



INSTALLATION

Install in the reverse order of removal.