

SECTION **DEF**
DEFOGGER

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

CONTENTS

PRECAUTION	3	DTC/CIRCUIT DIAGNOSIS	25
PRECAUTIONS	3	REAR WINDOW DEFOGGER SWITCH	25
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	3	Description	25
Handling for Adhesive and Primer	3	Component Function Check	25
SYSTEM DESCRIPTION	4	Diagnosis Procedure	25
COMPONENT PARTS	4	REAR WINDOW DEFOGGER RELAY	27
Component Parts Location	4	Description	27
Component Description	5	Component Function Check	27
SYSTEM	6	Diagnosis Procedure	27
System Diagram	6	Component Inspection	28
System Description	6	REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT	29
DIAGNOSIS SYSTEM (BCM)	7	Description	29
COMMON ITEM	7	Component Function Check	29
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)	7	Diagnosis Procedure	29
REAR DEFOGGER	8	Component Inspection	30
REAR DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)	8	DOOR MIRROR DEFOGGER LH (WITHOUT AROUND VIEW MONITOR)	31
ECU DIAGNOSIS INFORMATION	9	Description	31
BCM	9	Component Function Check	31
List of ECU Reference	9	Diagnosis Procedure	31
WIRING DIAGRAM	10	Component Inspection	32
REAR WINDOW DEFOGGER SYSTEM	10	DOOR MIRROR DEFOGGER LH (WITH AROUND VIEW MONITOR)	33
Wiring Diagram	10	Description	33
BASIC INSPECTION	22	Component Function Check	33
DIAGNOSIS AND REPAIR WORK FLOW	22	Diagnosis Procedure	33
Work Flow	22	Component Inspection	34
		DOOR MIRROR DEFOGGER RH (WITHOUT AROUND VIEW MONITOR)	35
		Description	35
		Component Function Check	35
		Diagnosis Procedure	35
		Component Inspection	36

DOOR MIRROR DEFOGGER RH (WITH AROUND VIEW MONITOR)	37	Diagnosis Procedure	42
Description	37	DRIVER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.	44
Component Function Check	37	Diagnosis Procedure	44
Diagnosis Procedure	37	PASSENGER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.	45
Component Inspection	38	Diagnosis Procedure	45
SYMPTOM DIAGNOSIS	39	REAR WINDOW DEFOGGER SWITCH DOES NOT LIGHT, BUT REAR WINDOW DEFOGGER OPERATES	46
DEFOGGER SYSTEM SYMPTOMS	39	Diagnosis Procedure	46
Symptom Table	39	REMOVAL AND INSTALLATION	47
REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.	40	FILAMENT	47
Diagnosis Procedure	40	Inspection and Repair	47
REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH OF DOOR MIRROR DEFOGGER OPERATE.	41	CONDENSER	49
Diagnosis Procedure	41	Removal and Installation	49
BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES	42		

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000013930239

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes dual stage front air bag modules. The SRS system may only deploy one front air bag, depending on the severity of a collision and whether the front passenger seat is occupied. Information necessary to service the system safely is included in the SR and SB section 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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery or batteries, and wait at least three minutes before performing any service.

Handling for Adhesive and Primer

INFOID:000000012851815

- Do not use an adhesive which is past its usable date. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Open the seal of the primer and adhesive just before application. Discard the remainder.
- Before application, be sure to shake the primer container to stir the contents. If any floating material is found, do not use it.
- If any primer or adhesive contacts the skin, wipe it off with gasoline or equivalent and wash the skin with soap.
- When using primer and adhesive, always observe the precautions in the instruction manual.

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COMPONENT PARTS

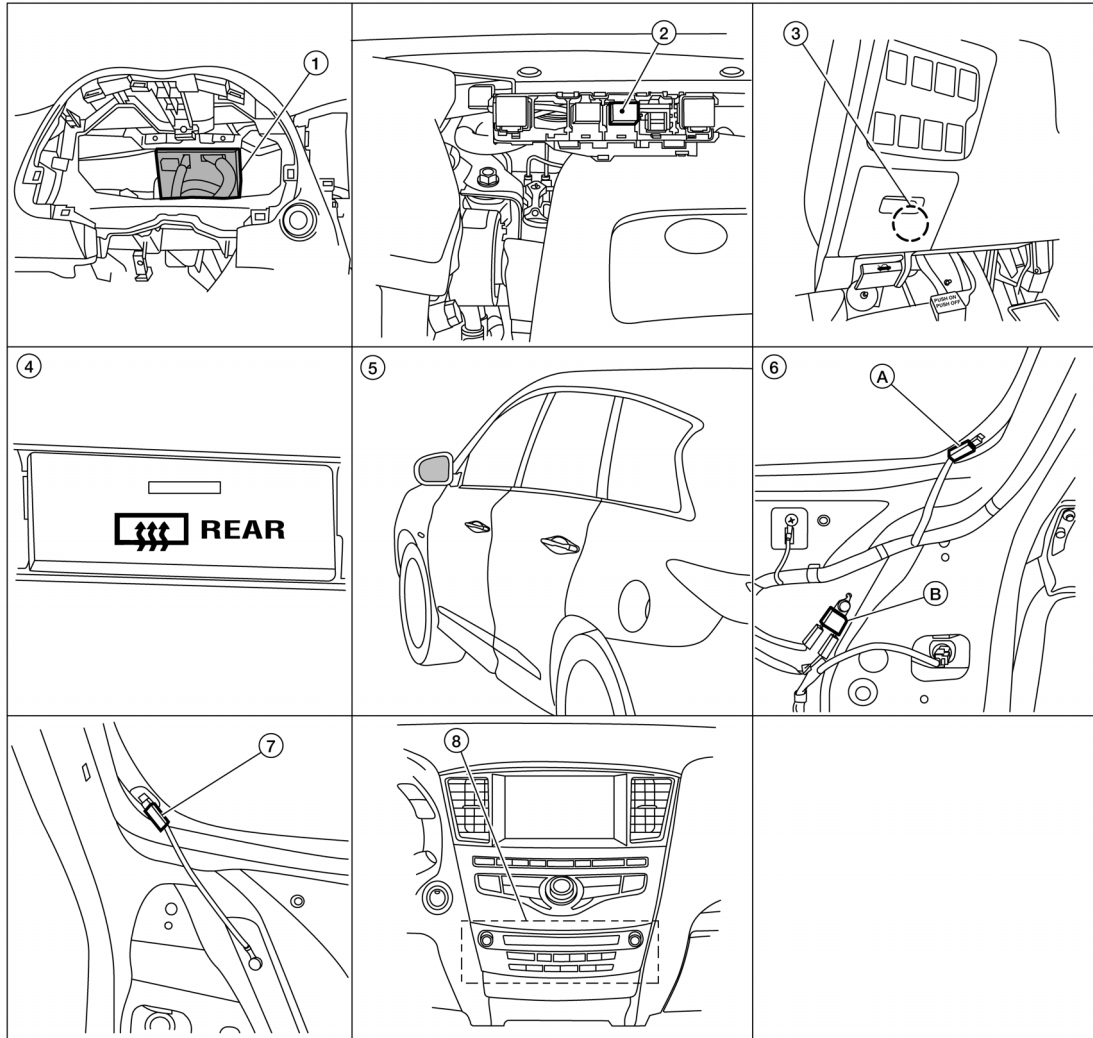
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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- | | | |
|---|---|--|
| 1. BCM (view with combination meter removed) | 2. Accessory relay-2 | 3. Fuse block (J/B) (Rear window defogger relay) |
| 4. Multifunction switch (rear window defogger switch) | 5. Door mirror LH (door mirror defogger) (RH similar) | 6. A. Rear window defogger power connector
B. Rear window defogger condenser (view with back door finisher removed) |
| 7. Rear window defogger ground connector (view with back door finisher removed) | 8. AV control unit | |

COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component Description

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Component	Description
AV control unit	<ul style="list-style-type: none">• AV control unit transmits A/C switch operation signal to the BCM via CAN communication line.
BCM	<ul style="list-style-type: none">• Operates the rear window defogger relay with the operation of rear window defogger switch.• Performs the timer control of rear window defogger.
Rear window defogger relay	<ul style="list-style-type: none">• Operates the rear window defogger and the door mirror defogger with the control signal from BCM.
Multifunction switch (rear window defogger switch)	<ul style="list-style-type: none">• Transmits rear window defogger switch ON signal.• Turns the indicator lamp ON when detecting the operation of rear window defogger.
Rear window defogger	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

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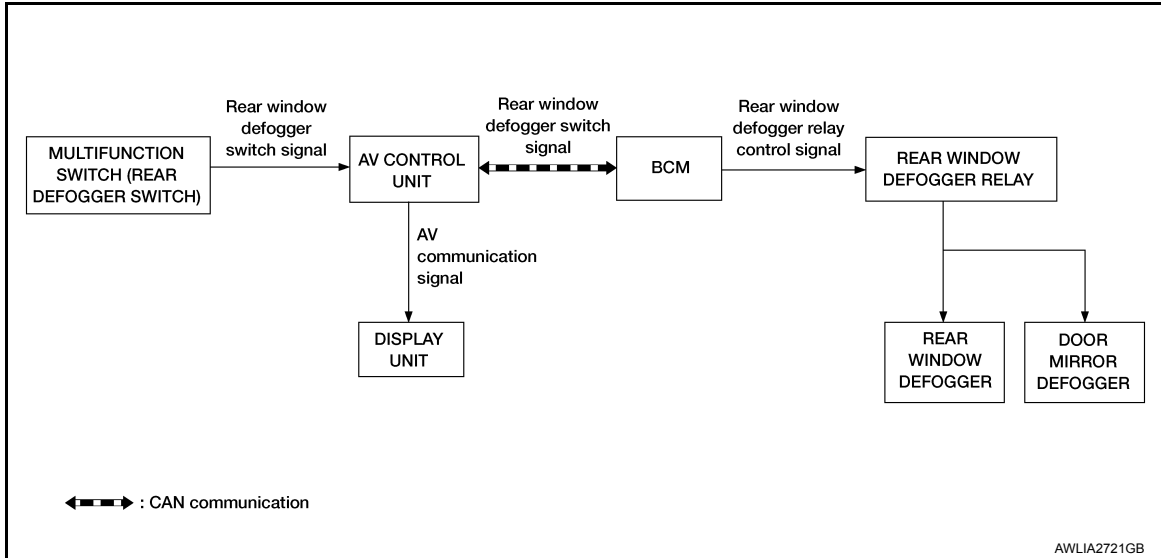
SYSTEM

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SYSTEM

System Diagram

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System Description

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Operation Description

- When rear window defogger switch is turned ON while ignition switch is ON, the multifunction switch transmits rear window defogger switch signal to BCM.
- BCM turns rear window defogger relay ON 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.
- BCM transmits rear window defogger control signal to multifunction switch when rear window defogger operates.
- Rear window defogger ON is displayed when signal is received.
- BCM transmits rear window defogger control signal to AV control unit via CAN communication when rear window defogger operates.

Timer function

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON while ignition switch is ON. It makes rear window defogger and door mirror defogger (with 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.

INPUT/OUTPUT SIGNAL CHART

Switch	Input signal to BCM	BCM function	Actuator
Rear window defogger switch	Defogger switch signal	Rear window defogger and door mirror defogger control	Rear window defogger Door mirror defogger
Push-button ignition switch	Ignition signal		

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000013530573

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul style="list-style-type: none"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

REAR DEFOGGER

REAR DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)

INFOID:000000013530574

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

DATA MONITOR

Monitor Item [Unit]	Description
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.
REAR DEF SW [On/Off]	Indicates condition of rear window defogger switch.

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	This test is able to check rear window defogger operation [Off/On].

WORK SUPPORT

Support Item	Setting	Description
SET R-DEF TIMER	MODE3	Rear defogger turns OFF after 1 minute.
	MODE2	Rear defogger remains ON until turned OFF.
	MODE1*	Rear defogger turns OFF after 15 minutes.

* : Initial setting

BCM

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000012851822

ECU	Reference
BCM	BCS-30. "Reference Value"
BCM	BCS-49. "Fail Safe"
BCM	BCS-50. "DTC Inspection Priority Chart"
BCM	BCS-51. "DTC Index"

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REAR WINDOW DEFOGGER SYSTEM

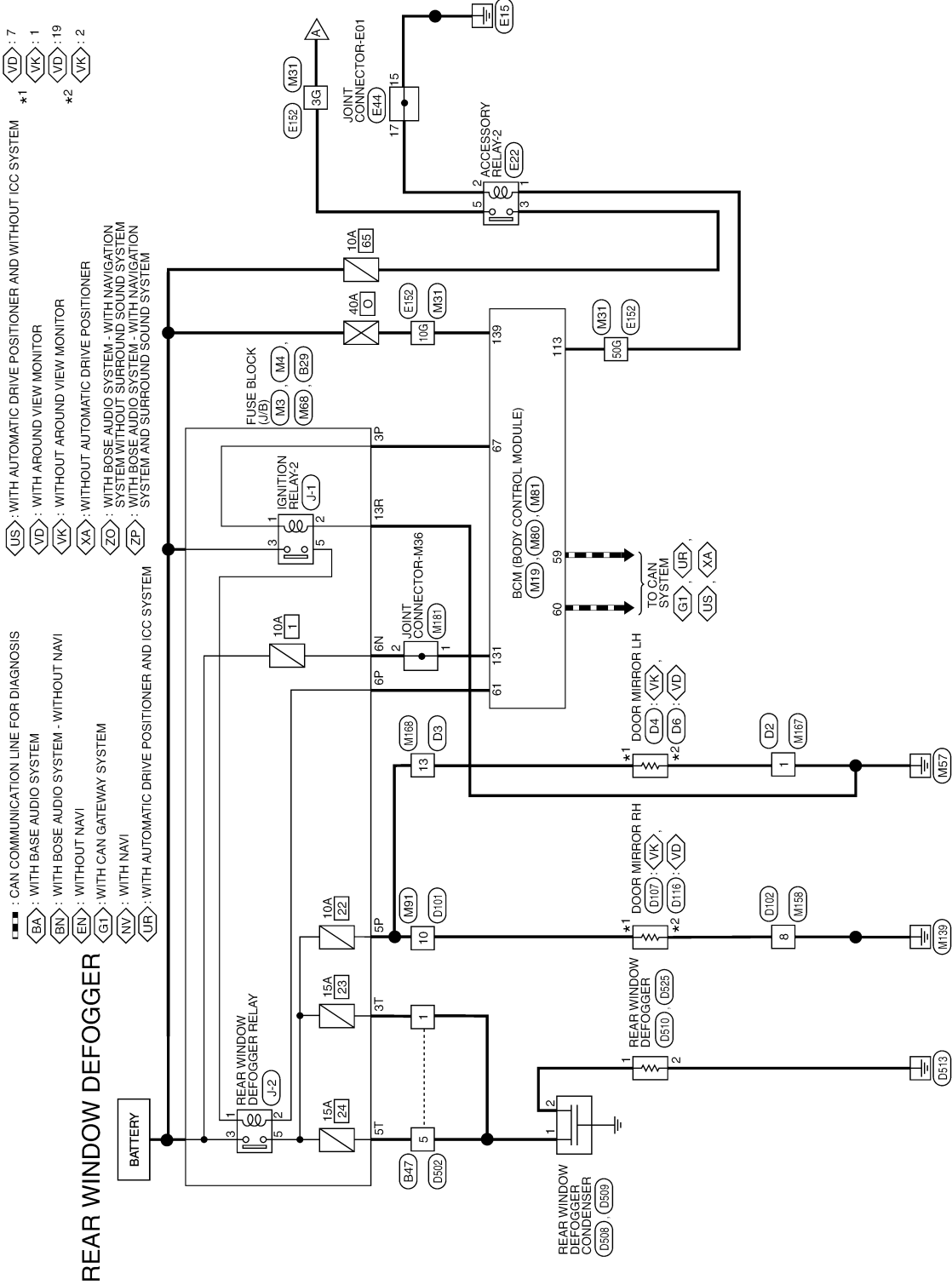
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WIRING DIAGRAM

REAR WINDOW DEFOGGER SYSTEM

Wiring Diagram

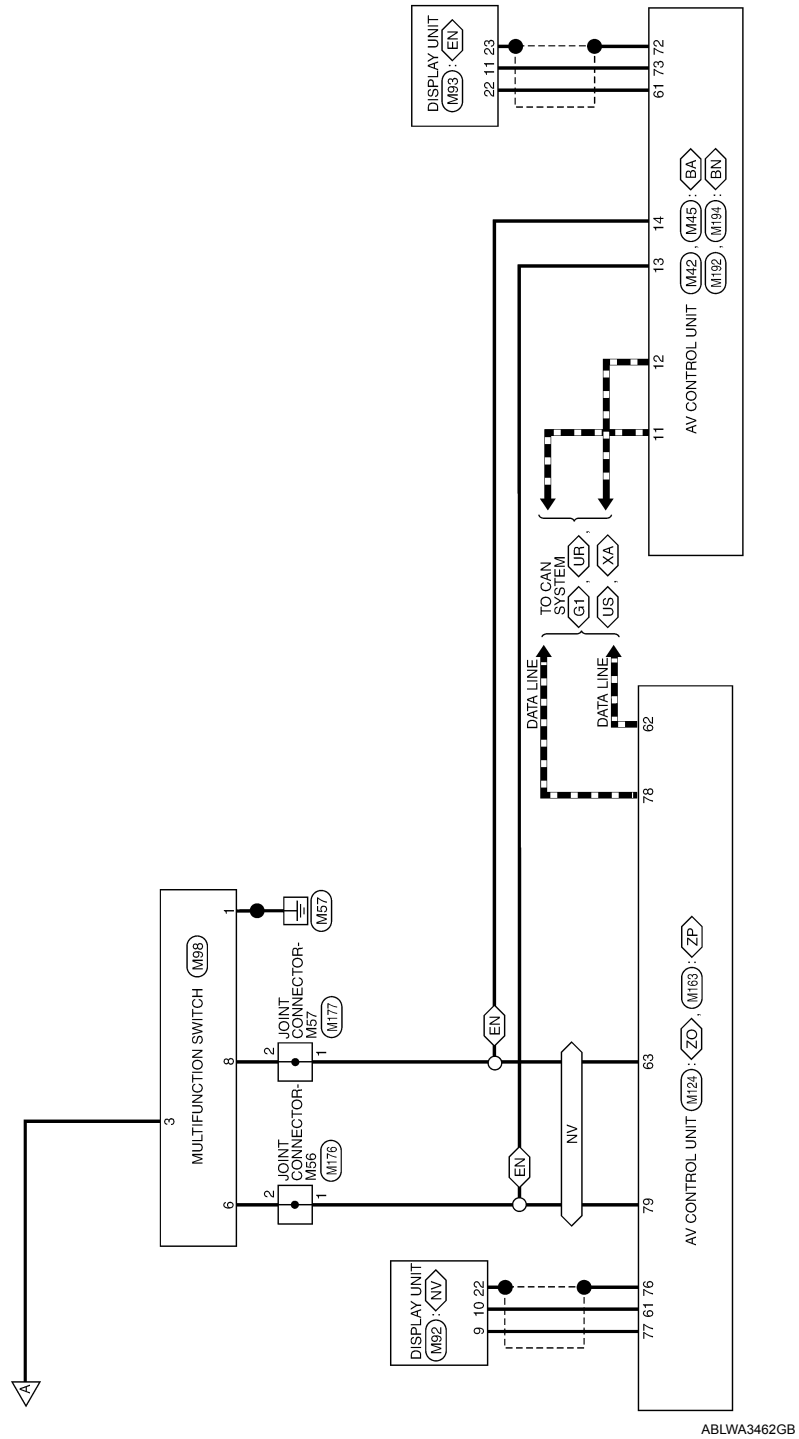
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REAR WINDOW DEFOGGER SYSTEM

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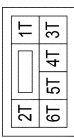
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REAR WINDOW DEFOGGER SYSTEM

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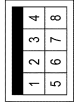
REAR WINDOW DEFOGGER CONNECTORS

Connector No.	B29
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-CS
Connector Color	WHITE


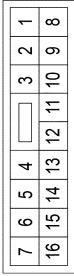
Terminal No.	Color of Wire	Signal Name
1T	W	TAIL LH
2T	-	-
3T	W	IGNITION
4T	LG	BATTERY
5T	G	IGNITION
6T	L	BATTERY

Connector No.	B47
Connector Name	WIRE TO WIRE
Connector Type	M08MW-GY-LC
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	W	TO BACK DOOR LH HARNESS
2	B	TO BACK DOOR LH HARNESS
3	BG	TO BACK DOOR LH HARNESS
4	B	TO BACK DOOR LH HARNESS
5	G	TO BACK DOOR LH HARNESS
6	SHIELD	TO BACK DOOR LH HARNESS
7	W	TO BACK DOOR LH HARNESS
8	B	TO BACK DOOR LH HARNESS

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

Terminal No.	Color of Wire	Signal Name
1	B	TO MAIN HARNESS
2	Y	TO MAIN HARNESS
3	G/B	TO MAIN HARNESS
4	BR	TO MAIN HARNESS
5	SB	TO MAIN HARNESS
6	LG	TO MAIN HARNESS
7	Y	TO MAIN HARNESS
8	W	TO MAIN HARNESS
9	G	TO MAIN HARNESS
10	V	TO MAIN HARNESS
11	BR	TO MAIN HARNESS
12	LG	TO MAIN HARNESS
13	L	TO MAIN HARNESS
14	SHIELD	TO MAIN HARNESS
15	B	TO MAIN HARNESS
16	W	TO MAIN HARNESS

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	Y	TO MAIN HARNESS
2	R	TO MAIN HARNESS
3	G/B	TO MAIN HARNESS
4	SB	TO MAIN HARNESS
5	LG	TO MAIN HARNESS
6	L	TO MAIN HARNESS
7	BR	TO MAIN HARNESS

Terminal No.	Color of Wire	Signal Name
8	V	TO MAIN HARNESS
9	Y	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
9	LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
10	BR	TO MAIN HARNESS
11	Y	TO MAIN HARNESS
12	LG	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	LG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
14	Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
15	BR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
15	Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
16	LG	TO MAIN HARNESS
17	L	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
17	BG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	BR	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	L	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	Y	TO MAIN HARNESS
20	LG	TO MAIN HARNESS
21	LG	TO MAIN HARNESS
22	Y	TO MAIN HARNESS
23	LG	TO MAIN HARNESS
24	SB	TO MAIN HARNESS
25	BR	TO MAIN HARNESS
26	B	TO MAIN HARNESS
27	-	TO MAIN HARNESS
28	G	TO MAIN HARNESS
29	SHIELD	TO MAIN HARNESS
30	R	TO MAIN HARNESS
31	B	TO MAIN HARNESS
32	W	TO MAIN HARNESS
33	V	TO MAIN HARNESS
34	Y	TO MAIN HARNESS
35	BG	TO MAIN HARNESS
36	SB	TO MAIN HARNESS
37	V	TO MAIN HARNESS
38	LG	TO MAIN HARNESS
39	Y	TO MAIN HARNESS
40	BR	TO MAIN HARNESS

Connector No.	D4
Connector Name	DOOR MIRROR LH (WITHOUT AROUND VIEW MONITOR)
Connector Type	TH12MW-NH
Connector Color	WHITE





Terminal No.	Color of Wire	Signal Name
1	Y	H+
2	B	H-
3	SB	POWER SUPPLY (SENSOR FOR 5V)
4	BG	MIRROR SENSOR (LH VERTICAL)
5	Y	GND (SENSOR GND)
6	V	MIRROR SENSOR (LH HORIZONTAL)
7	SB	ST+
8	LG	MA
9	L	MB
10	BG	MC
11	V	OP (WITHOUT AUTOMATIC DRIVE POSITIONER)
11	Y	OP (WITH AUTOMATIC DRIVE POSITIONER)
12	BR	CL (WITHOUT AUTOMATIC DRIVE POSITIONER)
12	LG	CL (WITH AUTOMATIC DRIVE POSITIONER)

REAR WINDOW DEFOGGER SYSTEM


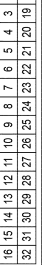
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REAR WINDOW DEFOGGER CONNECTORS

Connector No.	D6
Connector Name	DOOR MIRROR LH (WITH AROUND VIEW MONITOR)
Connector Type	TH24MW-NH
Connector Color	WHITE






Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE



32	-	TO MAIN HARNESS
----	---	-----------------

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS
Connector Color	WHITE



9	G	MB (WITH AUTOMATIC DRIVE POSITIONER)
9	LG	MB (WITHOUT AUTOMATIC DRIVE POSITIONER)
10	SB	MC
11	L	OP (WITHOUT AUTOMATIC DRIVE POSITIONER)
11	LG	OP (WITH AUTOMATIC DRIVE POSITIONER)
12	Y	CL

Connector No.	D116
Connector Name	DOOR MIRROR RH (WITH AROUND VIEW MONITOR)
Connector Type	TH24MW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	G	TO MAIN HARNESS
2	SHIELD	TO MAIN HARNESS
3	R	TO MAIN HARNESS
4	B	TO MAIN HARNESS
5	W	TO MAIN HARNESS
6	Y	TO MAIN HARNESS
7	L	TO MAIN HARNESS
8	BR	TO MAIN HARNESS
9	V	TO MAIN HARNESS
10	BR	TO MAIN HARNESS
11	LG	TO MAIN HARNESS
12	B	TO MAIN HARNESS
13	W	TO MAIN HARNESS
14	-	TO MAIN HARNESS
15	W/B	TO MAIN HARNESS
16	-	TO MAIN HARNESS
17	Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
17	LG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	L	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	Y	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	BR	TO MAIN HARNESS
20	SB	TO MAIN HARNESS
21	LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
21	G	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
22	Y	TO MAIN HARNESS
23	LG	TO MAIN HARNESS
24	BR	TO MAIN HARNESS
25	Y	TO MAIN HARNESS
26	LG	TO MAIN HARNESS
27	-	TO MAIN HARNESS
28	-	TO MAIN HARNESS
29	Y	TO MAIN HARNESS
30	LG	TO MAIN HARNESS
31	BR	TO MAIN HARNESS

Terminal No.	Color of Wire	Signal Name
1	W	TO MAIN HARNESS
2	B	TO MAIN HARNESS
3	SHIELD	TO MAIN HARNESS
4	L	TO MAIN HARNESS
5	BR	TO MAIN HARNESS
6	Y	TO MAIN HARNESS
7	LG	TO MAIN HARNESS
8	B	TO MAIN HARNESS
9	G	TO MAIN HARNESS
10	W	TO MAIN HARNESS

Connector No.	D107
Connector Name	DOOR MIRROR RH (WITHOUT AROUND VIEW MONITOR)
Connector Type	TH12MW-NH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	BR	BATTERY
8	Y	CLOSE
9	LG	OPEN
10	SB	MIRROR MOTOR (RH COMMON [DOWN&RIGHT])
11	G	MIRROR MOTOR (RH HORIZONTAL [LEFT])
12	BR	MIRROR MOTOR (RH VERTICAL [UP])
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	B	TURN -
20	LG	TURN +
21	BR	MIRROR SENSOR (RH VERTICAL)
22	Y	MIRROR SENSOR (RH HORIZONTAL)
23	V	POWER SUPPLY (SENSOR FOR 5V)
24	L	GND (SENSOR GND)

Terminal No.	Color of Wire	Signal Name
1	BR	H+
2	B	H-
3	V	POWER SUPPLY (SENSOR FOR 5V)
4	BR	MIRROR SENSOR (RH VERTICAL)
5	L	GND (SENSOR GND)
6	Y	MIRROR SENSOR (RH HORIZONTAL)
7	LG	ST+
8	BR	MA

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	Y	BATTERY
8	LG	CLOSE
9	Y	OPEN
10	BG	MIRROR MOTOR (LH COMMON [DOWN&RIGHT])
11	L	MIRROR MOTOR (LH HORIZONTAL[LEFT])
12	LG	MIRROR MOTOR (LH VERTICAL [UP])
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	B	TURN -
20	SB	TURN +
21	BG	MIRROR SENSOR (LH VERTICAL)
22	V	MIRROR SENSOR (LH HORIZONTAL)
23	SB	POWER SUPPLY (SENSOR FOR 5V)
24	Y	GND (SENSOR GND)

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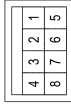
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REAR WINDOW DEFOGGER SYSTEM

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REAR WINDOW DEFOGGER CONNECTORS


Connector No.	D502
Connector Name	WIRE TO WIRE
Connector Type	M08FW-GY-LC
Connector Color	GRAY



H.S.

Terminal No.	Color of Wire	Signal Name
1	R	TO BODY HARNESS
2	B	TO BODY HARNESS
3	LG	TO BODY HARNESS
4	B	TO BODY HARNESS
5	R	TO BODY HARNESS
6	SHIELD	TO BODY HARNESS
7	BR/B	TO BODY HARNESS
8	R/G	TO BODY HARNESS


Connector No.	D508
Connector Name	REAR WINDOW DEFOGGER CONDENSER
Connector Type	P01FB-A
Connector Color	BLACK



H.S.

Terminal No.	1	Color of Wire	R	Signal Name	RR DEFOG COND1+
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
Connector No.	D509
Connector Name	REAR WINDOW DEFOGGER CONDENSER
Connector Type	P01FB-A
Connector Color	BLACK



H.S.

Terminal No.	2	Color of Wire	G	Signal Name	RR DEFOG COMD2-
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
Connector No.	D510
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A
Connector Color	BLACK



H.S.

Terminal No.	1	Color of Wire	G	Signal Name	RR DEFOG+
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
Connector No.	D525
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A
Connector Color	BLACK



H.S.

Terminal No.	2	Color of Wire	B	Signal Name	RR DEFOG-
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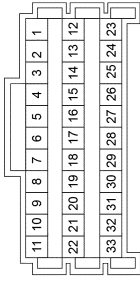
Connector No.	E22
Connector Name	ACCESSORY RELAY-2
Connector Type	M502FL-IM2-LC
Connector Color	BLUE



H.S.

Terminal No.	Color of Wire	Signal Name
1	G	ACC RELAY OUT
2	B	GROUND
3	R	BATT
5	P	ACC

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Type	BJ30FW
Connector Color	WHITE



H.S.

Terminal No.	Color of Wire	Signal Name
1	W	SENSOR POWER SUPPLY
2	W	SENSOR POWER SUPPLY
3	W	SENSOR POWER SUPPLY
4	R	BATTERY
5	R	BATTERY
6	R	BATTERY
7	-	-
8	LG	BATTERY
9	LG	BATTERY
10	LG	BATTERY
11	LG	BATTERY
12	P	BATTERY
13	P	BATTERY
14	P	BATTERY
15	GR	GND
16	B	GND
17	B	GND
18	-	-
19	Y	BATTERY

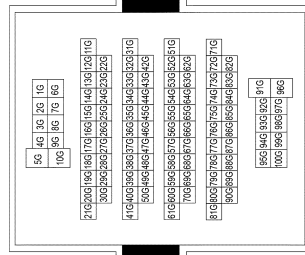
20	Y	BATTERY
21	Y	BATTERY
22	Y	BATTERY
23	BG	EVAP CONTROL SYSTEM PRESSURE SENSOR
24	O	EVAP CONTROL SYSTEM PRESSURE SENSOR
25	-	-
26	G	GND
27	G	GND
28	G	GND
29	-	-
30	V	BATTERY
31	LG	BATTERY
32	V	BATTERY
33	V	BATTERY

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

REAR WINDOW DEFOGGER CONNECTORS

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CST6-TM4
Connector Color	WHITE

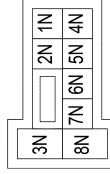


Terminal No.	Color of Wire	Signal Name
1G	G	TO MAIN HARNESS
2G	W	TO MAIN HARNESS
3G	P	TO MAIN HARNESS
4G	R	TO MAIN HARNESS
5G	P	TO MAIN HARNESS
6G	W	TO MAIN HARNESS
7G	SHIELD	TO MAIN HARNESS
8G	G	TO MAIN HARNESS
9G	LG	TO MAIN HARNESS
10G	P	TO MAIN HARNESS
11G	G	TO MAIN HARNESS
12G	P	TO MAIN HARNESS
13G	W	TO MAIN HARNESS
14G	BG	TO MAIN HARNESS
15G	W	TO MAIN HARNESS
16G	R	TO MAIN HARNESS
17G	B	TO MAIN HARNESS
18G	SHIELD	TO MAIN HARNESS
19G	W	TO MAIN HARNESS
20G	G	TO MAIN HARNESS
21G	P	TO MAIN HARNESS
22G	B	TO MAIN HARNESS
23G	SHIELD	TO MAIN HARNESS
24G	R	TO MAIN HARNESS
25G	W	TO MAIN HARNESS
26G	SHIELD	TO MAIN HARNESS

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80G	G	TO MAIN HARNESS
81G	R	TO MAIN HARNESS
82G	-	TO MAIN HARNESS
83G	-	TO MAIN HARNESS
84G	-	TO MAIN HARNESS
85G	-	TO MAIN HARNESS
86G	-	TO MAIN HARNESS
87G	-	TO MAIN HARNESS
88G	-	TO MAIN HARNESS
89G	R	TO MAIN HARNESS
90G	L	TO MAIN HARNESS
91G	L	TO MAIN HARNESS
92G	-	TO MAIN HARNESS
93G	-	TO MAIN HARNESS
94G	Y	TO MAIN HARNESS
95G	W	TO MAIN HARNESS
96G	-	TO MAIN HARNESS
97G	-	TO MAIN HARNESS
98G	-	TO MAIN HARNESS
99G	-	TO MAIN HARNESS
100G	SHIELD	TO MAIN HARNESS

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1N	LG	IGNITION
2N	BG	BATTERY
3N	L	IGNITION
4N	V	BATTERY
5N	Y	BATTERY
6N	W	BATTERY
7N	L	BATTERY
8N	L	IGNITION

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1P	R	IGNITION
2P	LG	IGNITION
3P	G	IGN ELEC RELAY OUT 2
4P	-	-
5P	P	IGNITION
6P	BG	REAR DEFOGGER RELAY OUT
7P	LG	IGNITION
8P	BG	IGNITION
9P	L	BATTERY
10P	BR	IGNITION
11P	-	-
12P	-	-
13P	W	BATTERY
14P	Y	BATTERY
15P	L	BATT
16P	W	BLOWER FAN RELAY OUT

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

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

REAR WINDOW DEFOGGER CONNECTORS

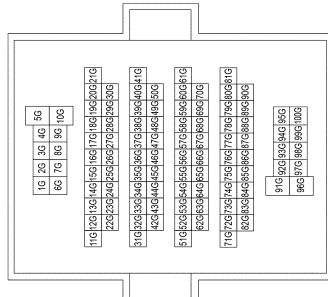
Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK



H.S.

79	W	COMBI SW OUT 1
80	R	BACK DOOR OPEN SW
Connector No.	M31	
Connector Name	WIRE TO WIRE	
Connector Type	TH80FW-CS16-TM4	
Connector Color	WHITE	

H.S.



17G	B	TO ENGINE ROOM HARNESS
18G	SHIELD	TO ENGINE ROOM HARNESS
19G	SB	TO ENGINE ROOM HARNESS
20G	LG	TO ENGINE ROOM HARNESS
21G	R	TO ENGINE ROOM HARNESS
22G	B	TO ENGINE ROOM HARNESS
23G	SHIELD	TO ENGINE ROOM HARNESS
24G	W	TO ENGINE ROOM HARNESS
25G	R	TO ENGINE ROOM HARNESS
26G	SHIELD	TO ENGINE ROOM HARNESS
27G	B	TO ENGINE ROOM HARNESS
28G	W	TO ENGINE ROOM HARNESS
29G	G	TO ENGINE ROOM HARNESS
30G	R	TO ENGINE ROOM HARNESS
31G	L	TO ENGINE ROOM HARNESS
32G	G	TO ENGINE ROOM HARNESS
33G	G	TO ENGINE ROOM HARNESS
34G	G	TO ENGINE ROOM HARNESS
35G	P	TO ENGINE ROOM HARNESS
36G	L	TO ENGINE ROOM HARNESS
37G	L	TO ENGINE ROOM HARNESS
38G	W	TO ENGINE ROOM HARNESS
39G	R	TO ENGINE ROOM HARNESS
40G	Y	TO ENGINE ROOM HARNESS
41G	L	TO ENGINE ROOM HARNESS
42G	P	TO ENGINE ROOM HARNESS
43G	W	TO ENGINE ROOM HARNESS
44G	G	TO ENGINE ROOM HARNESS
45G	R	TO ENGINE ROOM HARNESS
46G	Y	TO ENGINE ROOM HARNESS
47G	Y	TO ENGINE ROOM HARNESS
48G	LG	TO ENGINE ROOM HARNESS
49G	P	TO ENGINE ROOM HARNESS
50G	L	TO ENGINE ROOM HARNESS
51G	B/W	TO ENGINE ROOM HARNESS
52G	BR	TO ENGINE ROOM HARNESS
53G	L	TO ENGINE ROOM HARNESS
54G	BG	TO ENGINE ROOM HARNESS
55G	G	TO ENGINE ROOM HARNESS
56G	P	TO ENGINE ROOM HARNESS
57G	P	TO ENGINE ROOM HARNESS
58G	L	TO ENGINE ROOM HARNESS
59G	B	TO ENGINE ROOM HARNESS
60G	W	TO ENGINE ROOM HARNESS
61G	SHIELD	TO ENGINE ROOM HARNESS
62G	G	TO ENGINE ROOM HARNESS
63G	P	TO ENGINE ROOM HARNESS
64G	W	TO ENGINE ROOM HARNESS
65G	G/R	TO ENGINE ROOM HARNESS
66G	R	TO ENGINE ROOM HARNESS
67G	W	TO ENGINE ROOM HARNESS
68G	LG/R	TO ENGINE ROOM HARNESS
69G	P	TO ENGINE ROOM HARNESS

70G	BG	TO ENGINE ROOM HARNESS
71G	GR	TO ENGINE ROOM HARNESS
72G	-	TO ENGINE ROOM HARNESS
73G	-	TO ENGINE ROOM HARNESS
74G	-	TO ENGINE ROOM HARNESS
75G	G	TO ENGINE ROOM HARNESS
76G	Y	TO ENGINE ROOM HARNESS
77G	BR	TO ENGINE ROOM HARNESS
78G	-	TO ENGINE ROOM HARNESS
79G	R	TO ENGINE ROOM HARNESS
80G	W	TO ENGINE ROOM HARNESS
81G	G	TO ENGINE ROOM HARNESS
82G	P	TO ENGINE ROOM HARNESS
83G	P	TO ENGINE ROOM HARNESS
84G	P	TO ENGINE ROOM HARNESS
85G	P	TO ENGINE ROOM HARNESS
86G	P	TO ENGINE ROOM HARNESS
87G	P	TO ENGINE ROOM HARNESS
88G	P	TO ENGINE ROOM HARNESS
89G	R	TO ENGINE ROOM HARNESS
90G	P	TO ENGINE ROOM HARNESS
91G	L	TO ENGINE ROOM HARNESS
92G	P	TO ENGINE ROOM HARNESS
93G	P	TO ENGINE ROOM HARNESS
94G	O	TO ENGINE ROOM HARNESS
95G	B	TO ENGINE ROOM HARNESS
96G	P	TO ENGINE ROOM HARNESS
97G	P	TO ENGINE ROOM HARNESS
98G	P	TO ENGINE ROOM HARNESS
99G	P	TO ENGINE ROOM HARNESS
100G	SHIELD	TO ENGINE ROOM HARNESS

Terminal No.	Color of Wire	Signal Name
1G	SB	TO ENGINE ROOM HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
1G	P	TO ENGINE ROOM HARNESS - (WITH CLIMATE CONTROLLED SEAT)
2G	W	TO ENGINE ROOM HARNESS
3G	P	TO ENGINE ROOM HARNESS
4G	G	TO ENGINE ROOM HARNESS
5G	P	TO ENGINE ROOM HARNESS
6G	SB	TO ENGINE ROOM HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
6G	R	TO ENGINE ROOM HARNESS - (WITH CLIMATE CONTROLLED SEAT)
7G	SHIELD	TO ENGINE ROOM HARNESS
8G	G	TO ENGINE ROOM HARNESS
9G	BG	TO ENGINE ROOM HARNESS
10G	W	TO ENGINE ROOM HARNESS
11G	R	TO ENGINE ROOM HARNESS
12G	G	TO ENGINE ROOM HARNESS
13G	G	TO ENGINE ROOM HARNESS
14G	V	TO ENGINE ROOM HARNESS
15G	W	TO ENGINE ROOM HARNESS
16G	R	TO ENGINE ROOM HARNESS

Terminal No.	Color of Wire	Signal Name
41	-	-
42	-	-
43	-	-
44	-	-
45	-	-
46	-	-
47	-	-
48	R	HIGH SIDE START SW LED
49	-	-
50	-	-
51	-	-
52	W	AUDIO DONGLE
53	-	-
54	W	PW LIN/COM
55	BR	R SENSOR K-LINE
56	-	-
57	-	-
58	-	-
59	P	CAN-L
60	L	CAN-H
61	BG	REAR DEFOGGER RELAY OUT
62	W	STARTER RELAY OUT
63	BG	I-KEY LINK SIGNAL
64	P	BUIZZER OUT
65	P	DOOR HANDLE LAMP
66	W	BLOWER PAN RELAY OUT
67	G	IGNELEC RELAY OUT 2
68	P	MR OUTPUT
69	G	AT DEVICE OUT
70	P	IGN USM OUT 1
71	R	DR REQUEST SW
72	G	AS REQUEST SW
73	-	-
74	-	-
75	BG	COMBI SW OUT 5
76	P	COMBI SW OUT 4
77	P	COMBI SW OUT 3
78	W	COMBI SW OUT 2

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REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

REAR WINDOW DEFOGGER CONNECTORS

Connector No.	M42
Connector Name	AV CONTROL UNIT (WITH BASE AUDIO SYSTEM)
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17

Connector No.	M45
Connector Name	AV CONTROL UNIT (WITH BASE AUDIO SYSTEM)
Connector Type	TH24FW-NH
Connector Color	WHITE

H.S.

64	63	62	61	60	59	58	57	56	55	54	53
76	75	74	73	72	71	70	69	68	67	66	65

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	B	TEL VOICE-
5	W	TEL VOICE+
6	SHIELD	SHIELD
7	-	-
8	-	-
9	-	-
10	V	GND
11	L	CAN-H
12	P	CAN-L
13	SB	M-CAN1 H
14	LG	M-CAN1 L
15	SB	M-CAN2 H TRM
16	LG	M-CAN2 L TRM
17	-	-
18	-	-
19	-	-
20	R	AUX AUDIO RH+
21	W	AUX AUDIO LH+
22	B	AUX GND
23	-	-
24	-	-
25	SHIELD	SHIELD
26	-	-
27	-	-
28	Y	CD (DVD) EJECT (IGN)
29	LG	REVERSE SIG
30	R	PKB SIG
31	G	SPEED 8P
32	BG	SPEED 8P

Terminal No.	Color of Wire	Signal Name
53	B	COMP OUT-
54	W	COMP OUT+
55	W	B
56	B	G
57	R	R
58	B	RGB SYN
59	SHIELD	RGB SYN GND
60	W	YS
61	B	DISP IT
62	G	HP
63	B	SIG GND
64	V	SIG VC
65	-	-
66	SHIELD	SHIELD
67	SHIELD	SHIELD
68	-	-
69	-	-
70	-	-
71	-	-
72	SHIELD	SHIELD
73	W	IT DISP
74	R	VP
75	LG	INV GND
76	L	INV VC

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
111	P	ACC LED
112	-	-
113	L	ACC RELAY OUT
114	W	AS DOOR ANT A
115	BG	AS DOOR ANT B
116	W	ROOM ANT 2 A
117	SB	FL FLASHER
118	-	-
119	R	RF MINICO
120	-	-
121	G	DR DOOR ANT B
122	P	DR DOOR ANT A
123	-	-
124	-	-
125	-	-
126	P	IMMO START BUTTON ANT B
127	BG	IMMO START BUTTON ANT A
128	R	ROOM ANT 2 B

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA
Connector Color	WHITE

H.S.

137	136	135	134	133	132	131	130	129
143	142	141	140	139	138	137	136	135

Connector No.	M80
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FB-NH
Connector Color	BLACK

H.S.

116	115	114	113	112	111	110	109	108	107	106	105
128	127	126	125	124	123	122	121	120	119	118	117

Terminal No.	Color of Wire	Signal Name
129	SB	BATTERY SWER OUT
130	LG	DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	BR	DOOR LOCK RR/RL
133	Y	DOOR UNLOCK RR/RL
134	B	GND 2
135	L	DOOR LOCK DR/AS/FL
136	LG	ROOM LAMP CONT
137	V	DOOR UNLOCK DR/FL
138	V	BAT REAR DOOR
139	W	BAT POWER F/L
140	BR	P/W POWER SUPPLY IGN
141	Y	P/W POWER SUPPLY BAT
142	Y	BAT FRONT DOOR
143	B	GND 1

Terminal No.	Color of Wire	Signal Name
105	LG	FR FLASHER
106	-	-
107	W	LOW SIDE START SW LED
108	G	SHIFT LOCK SOLENOID OUT
109	R	REVERSE SIGNAL
110	-	-



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

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

REAR WINDOW DEFOGGER CONNECTORS

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	W	TO FRONT DOOR RH HARNESS
2	SHIELD	TO FRONT DOOR RH HARNESS
3	G	TO FRONT DOOR RH HARNESS
4	R	TO FRONT DOOR RH HARNESS
5	B	TO FRONT DOOR RH HARNESS
6	G	TO FRONT DOOR RH HARNESS
7	Y	TO FRONT DOOR RH HARNESS
8	W	TO FRONT DOOR RH HARNESS
9	BG	TO FRONT DOOR RH HARNESS
10	P	TO FRONT DOOR RH HARNESS
11	LG	TO FRONT DOOR RH HARNESS
12	B	TO FRONT DOOR RH HARNESS
13	W	TO FRONT DOOR RH HARNESS
14	Y/R	TO FRONT DOOR RH HARNESS
15	GR	TO FRONT DOOR RH HARNESS
16	BW	TO FRONT DOOR RH HARNESS
17	BG	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
17	G	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	W	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	BG	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	G	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	P	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	G	TO FRONT DOOR RH HARNESS
21	W	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
21	R	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
22	SB	TO FRONT DOOR RH HARNESS
23	P	TO FRONT DOOR RH HARNESS
24	G	TO FRONT DOOR RH HARNESS


25	BG	TO FRONT DOOR RH HARNESS
26	W	TO FRONT DOOR RH HARNESS
27	-	TO FRONT DOOR RH HARNESS
28	-	TO FRONT DOOR RH HARNESS
29	W	TO FRONT DOOR RH HARNESS
30	SB	TO FRONT DOOR RH HARNESS
31	W	TO FRONT DOOR RH HARNESS
32	-	TO FRONT DOOR RH HARNESS

Connector No.	M92
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH
Connector Color	WHITE



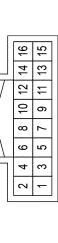

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	SHIELD	FRONT COMP SHIELD
7	SHIELD	SHIELD
8	B	R CAMERA COMP
9	B	FRONT DISP IT
10	W	IT FRONT DISP
11	Y	BATT
12	B	GND
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	B	FRONT COMP +
19	W	FRONT COMP -
20	R	FRONT COMP SYNC
21	-	-
22	SHIELD	SHIELD
23	P	ACC
24	-	-

Connector No.	M93
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH
Connector Color	WHITE




Terminal No.	Color of Wire	Signal Name
1	B	GND
2	L	INV VCC
3	V	SIG VCC
4	W	COMP GND
5	SHIELD	COMP SHIELD
6	B	G
7	SHIELD	RGB GND
8	G	HP
9	W	YS
10	-	-
11	W	UART IN
12	-	-
13	LG	INV GND
14	B	SIG GND
15	B	COMP
16	-	-
17	R	R
18	W	B
19	B	RGB SYNC
20	R	VP
21	SHIELD	SYNC GND
22	B	UART OUT
23	SHIELD	UART GND
24	-	-

Connector No.	M98
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	GR	GND
2	-	-
3	P	ACC
4	R	ILL
5	B	ILL CONT
6	SB	MCAH-H
7	-	-
8	LG	MCAH-L
9	V	EJECT GND
10	-	-
11	-	-
12	-	-
13	-	-
14	Y	CD (DVD) EJECT
15	R	AIRBAG CUTOFF
16	LG	HAZARD

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

REAR WINDOW DEFOGGER CONNECTORS

Connector No.	M124
Connector Name	AV CONTROL UNIT (WITH BOSE AUDIO SYSTEM - WITH NAVI WITHOUT SURROUND SOUND SYSTEM)
Connector Type	TH32FW-NH
Connector Color	WHITE



48	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

Terminal No.	Color of Wire	Signal Name
48	-	-
49	-	-
50	-	-
51	-	-
52	-	-
53	G	PKB SIG
54	-	-
55	W	NAVI COMP 1+
56	B	NAVI COMP 1+
57	BG	I-KEY MEMORY
58	G	AV-ACC (DCM)
59	SHIELD	PKB SIGMIC GND
60	W	MIC VCC
61	W	IT DISP
62	P	CAN-L
63	LG	M CAN-L
64	LG	M CAN-L TRM
65	-	-
66	-	-
67	P	MR OUTPUT
68	LG	IGN
69	R	REVERSE SIG
70	BG	SPEED
71	SHIELD	NAVI COMP 1 SHIELD
72	R	NAVI COMP 1 SYNC
73	-	-
74	-	-
75	B	MIC SIG
76	SHIELD	DISP SHIELD
77	B	DISP IT
78	L	CAN-H
79	SB	M CAN-H
80	SB	M CAN-H TRM

ABLIA8718GB

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS
Connector Color	WHITE



1	2	3	4
5	6	7	8
9	10		

Terminal No.	Color of Wire	Signal Name
1	W	TO FRONT DOOR RH HARNESS
2	B	TO FRONT DOOR RH HARNESS
3	SHIELD	TO FRONT DOOR RH HARNESS
4	BR	TO FRONT DOOR RH HARNESS
5	Y	TO FRONT DOOR RH HARNESS
6	L	TO FRONT DOOR RH HARNESS
7	LG	TO FRONT DOOR RH HARNESS
8	GR	TO FRONT DOOR RH HARNESS
9	BR	TO FRONT DOOR RH HARNESS - (WITH BASE AUDIO SYSTEM)
9	G	TO FRONT DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)
10	Y	TO FRONT DOOR RH HARNESS - (WITH BASE AUDIO SYSTEM)
10	W	TO FRONT DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)

Connector No.	M163
Connector Name	AV CONTROL UNIT (WITH BOSE AUDIO SYSTEM - WITH NAVI AND SURROUND SOUND SYSTEM)
Connector Type	TH32FW-NH
Connector Color	WHITE



49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

Terminal No.	Color of Wire	Signal Name
49	-	-
50	-	-
51	-	-
52	-	-
53	G	PKB SIG

54	-	-	-
55	W	NAVI COMP1-	-
56	B	NAVI COMP1+	-
57	BG	RESERVE I1	-
58	G	RESERVE I2	-
59	SHIELD	MIC GND	-
60	W	MIC VCC	-
61	W	IT-DISP	-
62	P	CAN-L	-
63	LG	M-CAN L	-
64	LG	M-CAN L TRM	-
65	-	-	-
66	-	-	-
67	P	MR OUTPUT	-
68	LG	IGN	-
69	R	REVERSE SIG	-
70	BG	SPEED	-
71	SHIELD	NAVI COMP1 SHIELD	-
72	R	GND	-
73	-	-	-
74	-	-	-
75	B	MIC SIG	-
76	SHIELD	DISP SHIELD	-
77	B	DISP-IT	-
78	L	CAN-H	-
79	SB	M-CAN H	-
80	SB	M-CAN H TRM	-

Connector No.	M167
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT DOOR LH HARNESS
2	V	TO FRONT DOOR LH HARNESS
3	G/B	TO FRONT DOOR LH HARNESS
4	V	TO FRONT DOOR LH HARNESS
5	SB	TO FRONT DOOR LH HARNESS
6	BR	TO FRONT DOOR LH HARNESS
7	Y	TO FRONT DOOR LH HARNESS
8	W	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
8	V	TO FRONT DOOR LH HARNESS - (WITH BASE AUDIO SYSTEM)

9	P	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM WITHOUT SURROUND SOUND SYSTEM)
9	G	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM AND SURROUND SOUND SYSTEM)
9	SB	TO FRONT DOOR LH HARNESS - (WITH BASE AUDIO SYSTEM)
10	L	TO FRONT DOOR LH HARNESS
11	BR	TO FRONT DOOR LH HARNESS
12	Y	TO FRONT DOOR LH HARNESS
13	LG	TO FRONT DOOR LH HARNESS
14	SHIELD	TO FRONT DOOR LH HARNESS
15	B	TO FRONT DOOR LH HARNESS
16	W	TO FRONT DOOR LH HARNESS

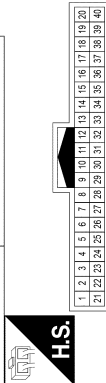
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REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

REAR WINDOW DEFOGGER CONNECTORS

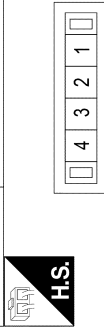
Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	SB	TO FRONT DOOR LH HARNESS
2	R	TO FRONT DOOR LH HARNESS
3	G/B	TO FRONT DOOR LH HARNESS
4	P	TO FRONT DOOR LH HARNESS
5	V	TO FRONT DOOR LH HARNESS
6	R	TO FRONT DOOR LH HARNESS
7	G	TO FRONT DOOR LH HARNESS
8	P	TO FRONT DOOR LH HARNESS
9	W	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
9	R	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
10	R	TO FRONT DOOR LH HARNESS
11	G	TO FRONT DOOR LH HARNESS
12	P	TO FRONT DOOR LH HARNESS
13	P	TO FRONT DOOR LH HARNESS
14	B/G	TO FRONT DOOR LH HARNESS
15	W	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
15	G	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
16	G	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
16	W	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
17	G	TO FRONT DOOR LH HARNESS
18	W	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	B/G	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	W	TO FRONT DOOR LH HARNESS
20	SB	TO FRONT DOOR LH HARNESS
21	P	TO FRONT DOOR LH HARNESS
22	W	TO FRONT DOOR LH HARNESS
23	G	TO FRONT DOOR LH HARNESS
24	SB	TO FRONT DOOR LH HARNESS

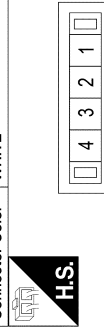
25	R	TO FRONT DOOR LH HARNESS
26	B	TO FRONT DOOR LH HARNESS
27	-	TO FRONT DOOR LH HARNESS
28	B	TO FRONT DOOR LH HARNESS
29	SHIELD	TO FRONT DOOR LH HARNESS
30	R	TO FRONT DOOR LH HARNESS
31	G	TO FRONT DOOR LH HARNESS
32	W	TO FRONT DOOR LH HARNESS
33	B/G	TO FRONT DOOR LH HARNESS
34	Y	TO FRONT DOOR LH HARNESS
35	R	TO FRONT DOOR LH HARNESS
36	B/G	TO FRONT DOOR LH HARNESS
37	W	TO FRONT DOOR LH HARNESS
38	P	TO FRONT DOOR LH HARNESS
39	W	TO FRONT DOOR LH HARNESS
40	P	TO FRONT DOOR LH HARNESS

Connector No.	M176
Connector Name	JOINT CONNECTOR-M56
Connector Type	TK04FW-J
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	SB	M CAN-H
2	SB	M CAN-H
3	SB	M CAN-H
4	SB	M CAN-H

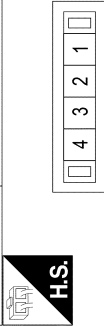
Connector No.	M177
Connector Name	JOINT CONNECTOR-M57
Connector Type	TK04FW-J
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	LG	M CAN-L
2	LG	M CAN-L

3	LG	M CAN-L
4	LG	M CAN-L

Connector No.	M181
Connector Name	JOINT CONNECTOR-M36
Connector Type	TK04FW-J
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	W	BATTERY
2	W	BATTERY
3	W	BATTERY
4	W	BATTERY

Connector No.	M192
Connector Name	AV CONTROL UNIT (WITH BOSE AUDIO SYSTEM WITHOUT NAVI)
Connector Type	TH32FW-NH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	B	TEL VOICE-
5	W	TEL VOICE+
6	SHIELD	SHIELD
7	-	-
8	-	-
9	-	-
10	V	GND
11	L	CAN-H
12	P	CAN-L
13	SB	M-CAN-H
14	LG	M-CAN-L

15	SB	M-CAN2 H TRM
16	LG	M-CAN2 L TRM
17	-	-
18	-	-
19	-	-
20	R	AUX AUDIO RH+
21	W	AUX AUDIO LH+
22	B	AUX GND
23	-	-
24	-	-
25	SHIELD	SHIELD
26	-	-
27	-	-
28	Y	CD (DVD) EJECT
29	LG	IGN
30	R	REVERSE SIG
31	G	PKB SIG
32	B/G	SPEED 8P

REAR WINDOW DEFOGGER SYSTEM

< WIRING DIAGRAM >

REAR WINDOW DEFOGGER CONNECTORS

Connector No.	M194
Connector Name	AV CONTROL UNIT (WITH BOSE AUDIO SYSTEM WITHOUT NAVI)
Connector Type	TH24FW-NH
Connector Color	WHITE



64	63	62	61	60	59	58	57	56	55	54	53
76	75	74	73	72	71	70	69	68	67	66	65

Terminal No.	Color of Wire	Signal Name
53	B	COMP OUT-
54	W	COMP OUT+
55	W	B
56	B	G
57	R	R
58	B	RGB SYN
59	SHIELD	RGB SYN GND
60	W	YS
61	B	DISP IT
62	G	HP
63	B	SIG GND
64	V	SIG VC
65	-	-
66	SHIELD	SHIELD
67	SHIELD	SHIELD
68	-	-
69	-	-
70	-	-
71	-	-
72	SHIELD	SHIELD
73	W	IT DISP
74	R	VP
75	LG	INV GND
76	L	INV VC

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

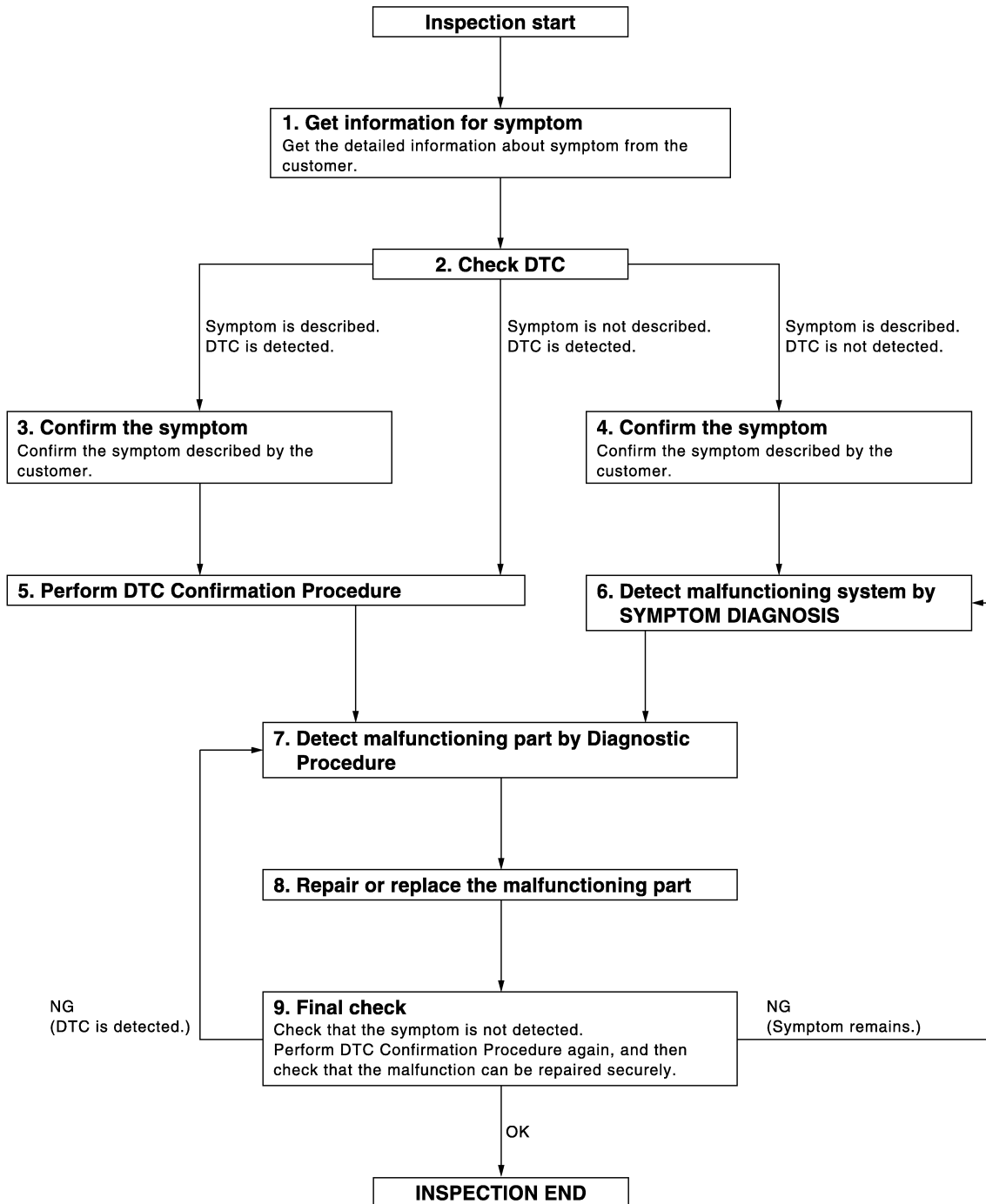
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000012851824

OVERALL SEQUENCE



DETAILED FLOW

JMKIA2270GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1. GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

2. CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is displayed.
 - Record DTC and freeze frame data (Print them out with CONSULT.)
 - Erase DTC.
 - Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related service bulletins for information.

Is any symptom described and any DTC detected?

- Symptom is described, DTC is displayed>>GO TO 3.
- Symptom is described, DTC is not displayed>>GO TO 4.
- Symptom is not described, DTC is displayed>>GO TO 5.

3. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again.
At this time, always connect CONSULT to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to [BCS-50. "DTC Inspection Priority Chart"](#) and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

- YES >> GO TO 7.
- NO >> Refer to [GI-50. "Intermittent Incident"](#).

6. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to [DEF-6. "System Description"](#) based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 7.

7. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

The Diagnostic Procedure described is based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check voltage of related BCM terminals using CONSULT.

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.
3. Check DTC. If DTC is displayed, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction has been repaired securely.

When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 7.

YES (Symptom remains)>>GO TO 6.

NO >> Inspection End.

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

REAR WINDOW DEFOGGER SWITCH

Description

INFOID:0000000012851825

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

Component Function Check

INFOID:0000000012851826

1. CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

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

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
NO >> Refer to [DEF-25, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012851827

Regarding Wiring Diagram information, refer to [DEF-10, "Wiring Diagram"](#).

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) CIRCUIT

Operate the rear window defogger switch.

Is the inspection result normal?

- YES >> Inspection End.
NO >> GO TO 2.

2. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) CIRCUIT VOLTAGE

1. Turn ignition switch ACC.
2. Check voltage between multifunction switch harness connector M98 terminal 3 and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
M98	3	Ground	Ignition switch	ACC Battery voltage
			OFF 0	

Is the inspection result normal?

- YES >> Replace multifunction switch. Refer to [HAC-158, "Removal and Installation"](#).
NO >> GO TO 3.

3. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) CIRCUIT FOR OPEN

1. Turn ignition switch OFF.
2. Disconnect accessory relay-2 connector E22.
3. Disconnect multifunction switch connector M98.
4. Check continuity between multifunction switch connector M98 terminal 3 and accessory relay-2 connector E22 terminal 5.

Multifunction switch		Accessory relay-2		Continuity
Connector	Terminal	Connector	Terminal	
M98	3	E22	5	Yes

Is the inspection result normal?

- YES >> GO TO 4.

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REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair and replace harness.

4. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) CIRCUIT FOR SHORT

1. Turn ignition switch OFF.
2. Disconnect accessory relay-2 connector E22.
3. Disconnect multifunction switch connector M98.
4. Check continuity between multifunction switch connector M98 terminal 3 and ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M98	3		No

Is the inspection result normal?

- YES >> Check the following:
- Accessory relay-2.
 - Battery power supply circuit.
- NO >> Repair or replace harness.

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

INFOID:0000000012851828

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

Component Function Check

INFOID:0000000012851829

1. CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

Check that an operation noise of rear window defogger relay [located in fuse block (J/B)] can be heard when turning the rear window defogger switch ON.

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:0000000012851830

Regarding Wiring Diagram information, refer to [DEF-10, "Wiring Diagram"](#).

1. CHECK REAR WINDOW DEFOGGER RELAY GROUND CIRCUIT

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

(+)		(-)	Condition	Voltage (V) (Approx.)	
BCM					
Connector	Terminal				
M19	61	Ground	Rear window defogger switch	ON	0
				OFF	Battery voltage

Is the inspection result normal?

- YES >> Rear window defogger power supply circuit is OK.
- NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

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

BCM		Fuse block (J/B)		Continuity
Connector	Terminal	Connector	Terminal	
M19	61	M4	6P	Yes

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 >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#)
- NO >> Replace rear window defogger relay.

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REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

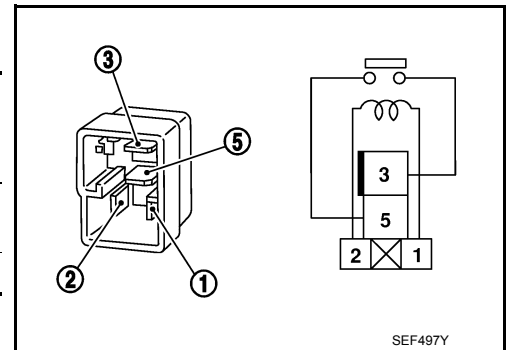
Component Inspection

INFOID:000000012851831

1. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Terminal		Condition	Continuity
Rear window defogger relay			
3	5	12V direct current supply between terminals 1 and 2.	Yes
		No current supply	No



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Is the inspection result normal?

YES >> Inspection End.

NO >> Replace rear window defogger relay.

REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

Description

INFOID:000000012851832

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:000000012851833

1. CHECK REAR WINDOW DEFOGGER

Check that the heating wire of rear window defogger is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Rear window defogger is OK.
- NO >> Refer to [DEF-29, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012851834

Regarding Wiring Diagram information, refer to [DEF-10, "Wiring Diagram"](#).

1. CHECK FUSES

Check if any of the following fuses in fuse block (J/B) are blown.

COMPONENT PARTS	AMPERE	FUSE NO.
Fuse block (J/B)	15A	23
	15A	24

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

2. CHECK POWER SUPPLY CIRCUIT

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

(+) Rear window defogger		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
D510	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.
3. Check continuity between rear window defogger connector and ground.

Rear window defogger		Ground	Continuity
Connector	Terminal		
D525	2		Yes

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REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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

4. CHECK HARNESS CONTINUITY 1

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

Rear window defogger condenser		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
D509	2	D510	1	Yes

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace or repair harness.

5. CHECK HARNESS CONTINUITY 2

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

Fuse block (J/B)		Rear window defogger condenser		Continuity
Connector	Terminal	Connector	Terminal	
B29	3T	D508	1	Yes
	5T			

Is the inspection result normal?

- YES >> Replace rear window defogger condenser.
NO >> Replace or repair harness.

6. CHECK FILAMENT

Check filament. Refer to [DEF-30, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Refer to [GI-50, "Intermittent Incident"](#).
NO >> Repair filament. Refer to [DEF-47, "Inspection and Repair"](#).

Component Inspection

INFOID:0000000012851835

1. CHECK FILAMENT

Check the filament for damage or open circuits.
Refer to [DEF-47, "Inspection and Repair"](#).

Is the inspection result normal?

- YES >> Inspection End.
NO >> Repair filament. Refer to [DEF-47, "Inspection and Repair"](#).

DOOR MIRROR DEFOGGER LH (WITHOUT AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER LH (WITHOUT AROUND VIEW MONITOR)

Description

INFOID:000000012851836

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

Component Function Check

INFOID:000000012851837

1. CHECK DOOR MIRROR DEFOGGER LH

Check that heating wire of door mirror defogger LH is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Door mirror defogger is OK.
- NO >> Refer to [DEF-31. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012851838

Regarding Wiring Diagram information, refer to [DEF-10. "Wiring Diagram"](#).

1. CHECK POWER SUPPLY

Check if the following fuse in the fuse block (J/B) is blown.

COMPONENT PARTS	AMPERE	FUSE NO.
Fuse block (J/B)	10A	22

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

2. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Turn ignition switch ON.
4. Check voltage between door mirror LH connector D4 terminal 1 and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
D4	1	Ground	Rear window defogger switch	Battery voltage
			ON	
			OFF	0

Is the inspection result normal?

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

3. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror LH connector and ground.

Door mirror LH		Ground	Continuity
Connector	Terminal		
D4	2		Yes

Is the inspection result normal?

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DEF

DOOR MIRROR DEFOGGER LH (WITHOUT AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

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

4. CHECK DOOR MIRROR DEFOGGER LH

Check door mirror defogger LH.
Refer to [DEF-32. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace door mirror LH. Refer to [MIR-35. "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-50. "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following:
- Battery power supply circuit
 - Fuse block (J/B)
- NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:000000012851839

1. CHECK DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Check continuity between door mirror terminals.

Terminal		Continuity
1	2	Yes

Is the inspection result normal?

- YES >> Check the condition of the harness and the connector.
NO >> Replace malfunctioning door mirror LH. Refer to [MIR-35. "Removal and Installation"](#).

DOOR MIRROR DEFOGGER LH (WITH AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER LH (WITH AROUND VIEW MONITOR)

Description

INFOID:000000012851840

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

Component Function Check

INFOID:000000012851841

1. CHECK DOOR MIRROR DEFOGGER LH

Check that heating wire of door mirror defogger LH is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

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

Diagnosis Procedure

INFOID:000000012851842

Regarding Wiring Diagram information, refer to [DEF-10. "Wiring Diagram"](#).

1. CHECK POWER SUPPLY

Check if the following fuse in the fuse block (J/B) is blown.

COMPONENT PARTS	AMPERE	FUSE NO.
Fuse block (J/B)	10A	22

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

2. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Turn ignition switch ON.
4. Check voltage between door mirror LH connector D6 terminal 7 and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
D6	7	Ground	Rear window defogger switch	Battery voltage
			ON	
			OFF	0

Is the inspection result normal?

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

3. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror LH connector and ground.

Door mirror LH		Ground	Continuity
Connector	Terminal		
D6	19		Yes

Is the inspection result normal?

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DEF

DOOR MIRROR DEFOGGER LH (WITH AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

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

4. CHECK DOOR MIRROR DEFOGGER LH

Check door mirror defogger LH.
Refer to [DEF-34. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace door mirror LH. Refer to [MIR-35. "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-50. "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following:
- Battery power supply circuit
 - Fuse block (J/B)
- NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:0000000012851843

1. CHECK DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Check continuity between door mirror terminals.

Terminal		Continuity
7	19	Yes

Is the inspection result normal?

- YES >> Check the condition of the harness and the connector.
NO >> Replace malfunctioning door mirror LH. Refer to [MIR-35. "Removal and Installation"](#).

DOOR MIRROR DEFOGGER RH (WITHOUT AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER RH (WITHOUT AROUND VIEW MONITOR)

Description

INFOID:000000012851844

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

Component Function Check

INFOID:000000012851845

1. CHECK DOOR MIRROR DEFOGGER RH

Check that the heating wire of door mirror defogger RH is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

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

Diagnosis Procedure

INFOID:000000012851846

Regarding Wiring Diagram information, refer to [DEF-10. "Wiring Diagram"](#).

1. CHECK POWER SUPPLY

Check if the following fuse in the fuse block (J/B) is blown.

COMPONENT PARTS	AMPERE	FUSE NO.
Fuse block (J/B)	10A	22

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

2. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Turn ignition switch ON.
4. Check voltage between door mirror RH connector D107 terminal 1 and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)	
Connector	Terminal				
D107	1	Ground	Rear window defogger switch	ON OFF	Battery voltage 0

Is the inspection result normal?

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

3. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror RH connector and ground.

Door mirror RH		Ground	Continuity
Connector	Terminal		
D107	2		Yes

Is the inspection result normal?

DEF

DOOR MIRROR DEFOGGER RH (WITHOUT AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

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

4. CHECK DOOR MIRROR DEFOGGER RH

Check door mirror defogger RH.
Refer to [DEF-36. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace door mirror RH. Refer to [MIR-35. "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-50. "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following:
- Battery power supply circuit
 - Fuse block (J/B)
- NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:000000012851847

1. CHECK DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Check continuity between door mirror terminals.

Terminal		Continuity
1	2	Yes

Is the inspection result normal?

- YES >> Check the condition of the harness and the connector.
NO >> Replace malfunctioning door mirror RH. Refer to [MIR-35. "Removal and Installation"](#).

DOOR MIRROR DEFOGGER RH (WITH AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER RH (WITH AROUND VIEW MONITOR)

Description

INFOID:000000012851848

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

Component Function Check

INFOID:000000012851849

1. CHECK DOOR MIRROR DEFOGGER RH

Check that the heating wire of door mirror defogger RH is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Door mirror defogger RH is OK.
- NO >> Refer to [DEF-37. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012851850

Regarding Wiring Diagram information, refer to [DEF-10. "Wiring Diagram"](#).

1. CHECK POWER SUPPLY

Check if the following fuse in the fuse block (J/B) is blown.

COMPONENT PARTS	AMPERE	FUSE NO.
Fuse block (J/B)	10A	22

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.

2. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Turn ignition switch ON.
4. Check voltage between door mirror RH connector D116 terminal 7 and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
D116	7	Ground	Rear window defogger switch	Battery voltage
			ON	
			OFF	0

Is the inspection result normal?

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

3. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror RH connector and ground.

Door mirror RH		Ground	Continuity
Connector	Terminal		
D116	19		Yes

Is the inspection result normal?

DEF

DOOR MIRROR DEFOGGER RH (WITH AROUND VIEW MONITOR)

< DTC/CIRCUIT DIAGNOSIS >

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

4. CHECK DOOR MIRROR DEFOGGER RH

Check door mirror defogger RH. Refer to [DEF-38. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace door mirror RH. Refer to [MIR-35. "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-50. "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following:
- Battery power supply circuit
 - Fuse block (J/B)
- NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:0000000012851851

1. CHECK DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Check continuity between door mirror terminals.

Terminal		Continuity
7	19	Yes

Is the inspection result normal?

- YES >> Check the condition of the harness and the connector.
NO >> Replace malfunctioning door mirror RH. Refer to [MIR-35. "Removal and Installation"](#).

DEFOGGER SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

DEFOGGER SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000012851852

Symptom	Reference page
Rear window defogger and door mirror defoggers do not operate.	Refer to DEF-40, "Diagnosis Procedure" .
Rear window defogger does not operate but both of the door mirror defoggers operate.	Refer to DEF-41, "Diagnosis Procedure" .
Both door mirror defoggers don't operate but rear window defogger operates.	Refer to DEF-42, "Diagnosis Procedure" .
Driver side door mirror defogger does not operate.	Refer to DEF-44, "Diagnosis Procedure" .
Passenger side door mirror defogger does not operate.	Refer to DEF-45, "Diagnosis Procedure" .
Rear window defogger switch does not light, but rear window defogger operates.	Refer to DEF-46, "Diagnosis Procedure" .

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REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

Diagnosis Procedure

INFOID:000000012851853

1. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.

Refer to [DEF-25, "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 REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

Check rear window defogger power supply and ground circuit.

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.

Refer to [DEF-31, "Diagnosis Procedure"](#) (LH without around view monitor), [DEF-33, "Diagnosis Procedure"](#) (LH with around view monitor), [DEF-35, "Diagnosis Procedure"](#) (RH without around view monitor), [DEF-37, "Diagnosis Procedure"](#) (RH with around view monitor).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:000000012851854

1. CHECK REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

Check rear window defogger power supply and ground circuit.

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

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES

Diagnosis Procedure

INFOID:000000012851855

Regarding Wiring Diagram information, refer to [DEF-10. "Wiring Diagram"](#).

1. CHECK DOOR MIRROR DEFOGGER FUSE

Check if the following fuse in fuse block (J/B) is blown.

COMPONENT PARTS	AMPERE	FUSE NO.
Fuse block (J/B)	10A	22

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit.

2. CHECK DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following harness connectors.
 - Fuse block (J/B) connector M4
 - Door mirror LH D4 (without around view monitor), D6 (with around view monitor)
 - Door mirror RH D107 (without around view monitor), D116 (with around view monitor)
3. Check continuity between fuse block (J/B) harness connector and door mirror defogger harness connectors.

Fuse block (J/B) Connector	Terminal	Door mirror Connectors	Terminal	Continuity
M4	5P	D4 (LH without around view monitor)	1	Yes
		D107 (RH without around view monitor)		
		D6 (LH with around view monitor)	7	
		D116 (RH with around view monitor)		

4. Check continuity between fuse block (J/B) harness connector M4 terminal 5P and ground.

Fuse block (J/B) connector	Terminal	Ground	Continuity
M4	5P		No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DOOR MIRROR DEFOGGER

Check door mirror LH.

Refer to [DEF-31. "Component Function Check"](#) (without around view monitor) or [DEF-33. "Component Function Check"](#) (with around view monitor).

Check door mirror RH.

Refer to [DEF-35. "Component Function Check"](#) (without around view monitor) or [DEF-37. "Component Function Check"](#) (with around view monitor).

Is the inspection result normal?

BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

- YES >> Check intermittent incident. Refer to [GI-50. "Intermittent Incident"](#).
- NO >> Repair or replace the malfunctioning parts.

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DRIVER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

< SYMPTOM DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

Diagnosis Procedure

INFOID:000000012851856

1. CHECK DOOR MIRROR DEFOGGER LH

Check door mirror defogger LH.

Refer to [DEF-31, "Component Function Check"](#) (without around view monitor) or [DEF-33, "Component Function Check"](#) (with around view monitor).

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).
- NO >> Repair or replace the malfunctioning parts.

PASSENGER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

< SYMPTOM DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

Diagnosis Procedure

INFOID:000000012851857

1. CHECK DOOR MIRROR DEFOGGER RH

Check door mirror defogger RH.

Refer to [DEF-35. "Component Function Check"](#) (without around view monitor) or [DEF-37. "Component Function Check"](#) (with around view monitor).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-50. "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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REAR WINDOW DEFOGGER SWITCH DOES NOT LIGHT, BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH DOES NOT LIGHT, BUT REAR WINDOW DEFOGGER OPERATES

Diagnosis Procedure

INFOID:000000012851858

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check that multifunction switch (rear window defogger switch) is operating normally.

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).
- NO >> Check rear window defogger switch. Refer to [DEF-25, "Diagnosis Procedure"](#).

FILAMENT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

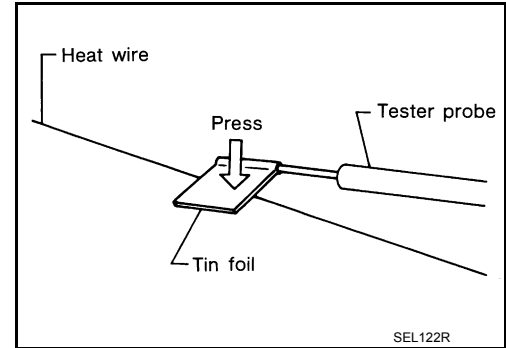
FILAMENT

Inspection and Repair

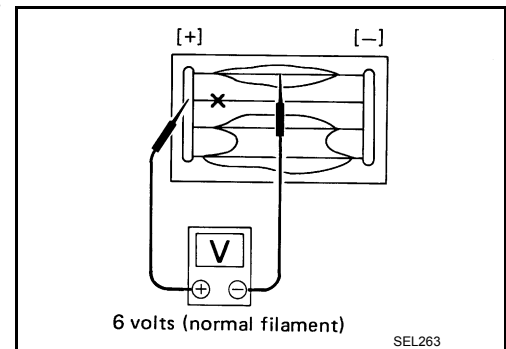
INFOID:000000012851859

INSPECTION

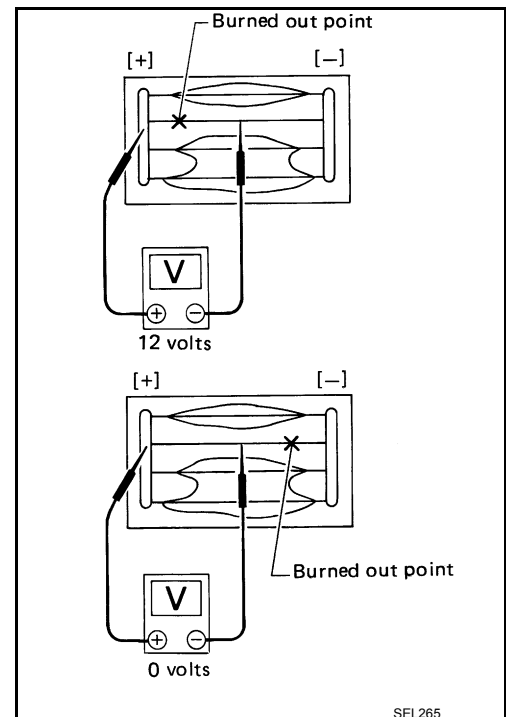
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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



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



REPAIR

REPAIR EQUIPMENT

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

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FILAMENT

< REMOVAL AND INSTALLATION >

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

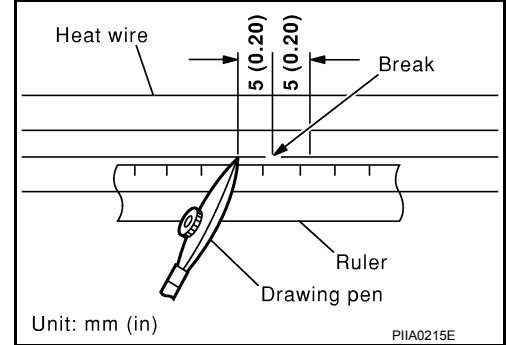
REPAIRING PROCEDURE

1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen.

NOTE:

Shake silver composition container before use.

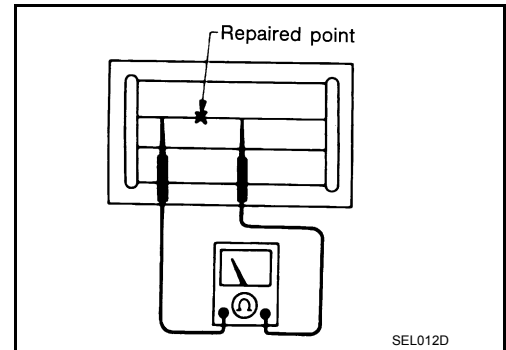
3. Place ruler on glass along broken line. Deposit conductive silver composition on break with drawing pen. Slightly overlap existing heat wire on both sides [preferably 5 mm (0.20 in)] of the break.



4. After repair has been completed, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited.

CAUTION:

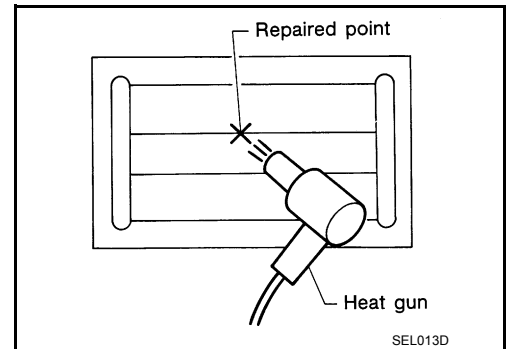
Do not touch repaired area while test is being conducted.



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.

NOTE:

If a heat gun is not available, let the repaired area dry for 24 hours.



CONDENSER

< REMOVAL AND INSTALLATION >

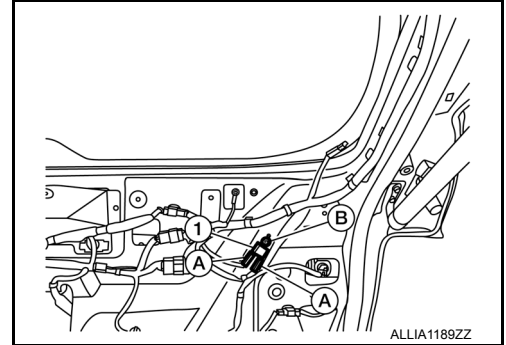
CONDENSER

Removal and Installation

INFOID:000000012851860

REMOVAL

1. Remove the back door lower finisher. Refer to [INT-35. "BACK DOOR LOWER FINISHER : Removal and Installation"](#).
2. Disconnect the harness connectors (A) from the condenser (1).
3. Remove the bolt (B) and the condenser (1).



INSTALLATION

Installation is in the reverse order of removal.

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