SECTION DEF
DEFOGGER

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000007158351

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

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.

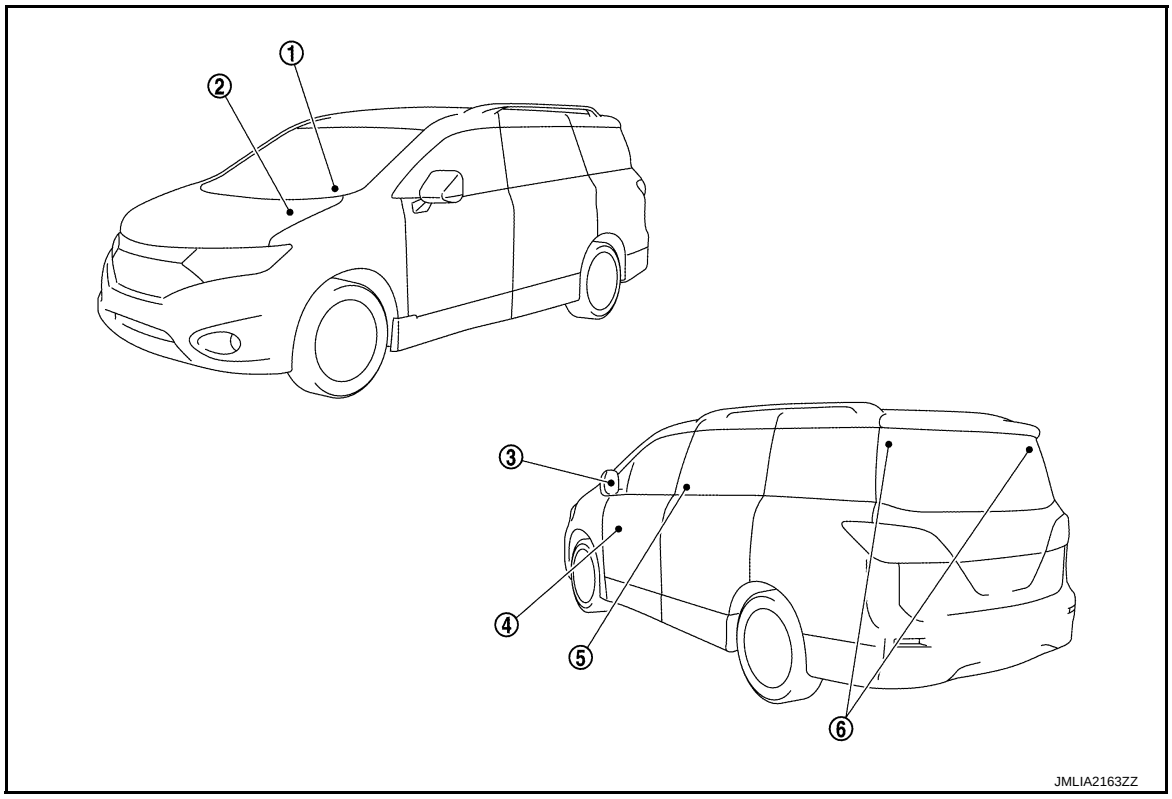
- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious 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.**

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000007157530



No.	Component	Function
1.	BCM	• Rear window defogger switch operation is transmitted to IPDM E/R via CAN communication. • Performs the timer control of rear window defogger and door mirror defogger. Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
2.	IPDM E/R	BCM controls rear window defogger relay via CAN communication, and then operates rear window defogger and door mirror defogger. Refer to PCS-4, "IPDM E/R : Component Parts Location" for detailed installation location.
3.	Door mirror defogger	Heates the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.
4.	Rear window defogger relay (built in fuse block J/B)	Operates the rear window defogger and door mirror defogger with the control signal from BCM.
5.	• A/C auto amp.*1 • A/C amp.*2 (Rear window defogger switch)	• The rear window defogger switch is installed. • Turns the indicator lamp ON when detecting the operation of rear window defogger. • The rear window defogger and door mirror defogger is operated by turning the rear window defogger switch ON. • The indicator lamp in the rear window defogger switch illuminates when the rear window defogger is operating. Refer to HAC-8, "Component Parts Location" for detailed installation location.
6.	Rear window defogger	Heates the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up.

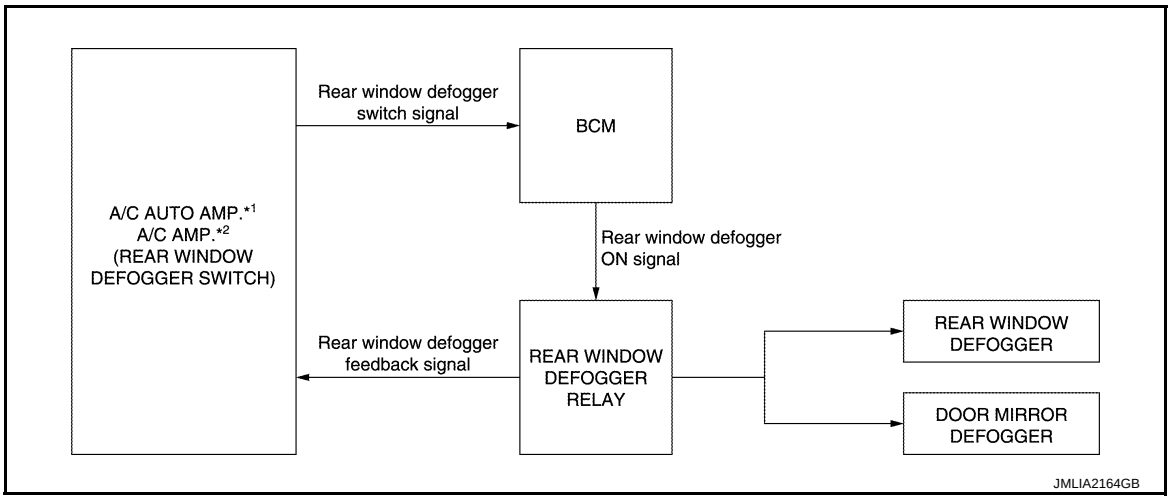
*1: With auto A/C
*2: With manual A/C

SYSTEM

System Description

INFOID:0000000007157569

SYSTEM DIAGRAM



*1: With auto A/C

*2: With manual A/C

OPERATION DESCRIPTION

- When BCM receives rear window defogger switch signal, BCM transmits rear window defogger ON signal to rear window defogger relay (integrated in fuse block J/B) for approximately 15 minutes.
- When rear window defogger relay (integrated in fuse block J/B) turns ON, power supply is supplied to rear window defogger and door mirror defogger.
- When rear window defogger and door mirror defogger are operated, rear window defogger feedback signal is transmitted to A/C auto amp.*1 and A/C amp.*2 (rear window defogger switch), and then indicator lamp of rear window defogger switch ON..

*1: With auto A/C

*2: With manual A/C

TIMER FUNCTION

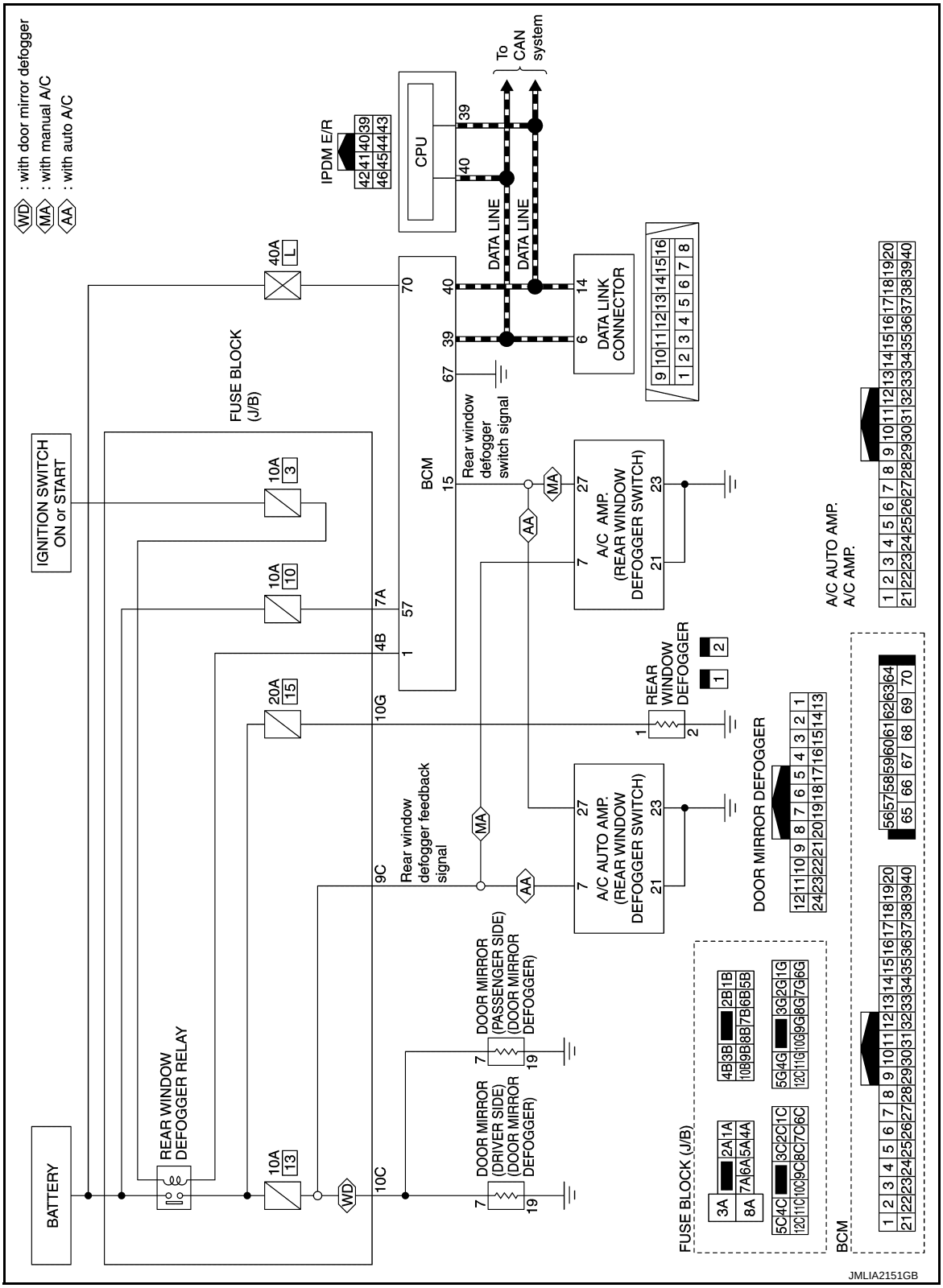
- BCM transmits rear window defogger ON signal to rear window defogger relay (integrated in fuse blocj J/B) for approximately 15 minutes when rear window defogger switch (A/C auto amp.*1 and A/C amp.*2) is turned ON while ignition switch is ON. Rear window defogger and door mirror defogger are oprated.
- Timer is cancelled when rear window defogger switch is pressed again during timer operation. BCM stops output of rear window defogger switch signal. The same reaction also occurs during timer operation when ignition switch is turned OFF.

*1: With auto A/C

*2: With manual A/C

Schematic

INFOID:0000000007157570



DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000007157583

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		×	×
Interior room lamp control system	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioning control system	AIR CONDITONER		×	×*
• Intelligent Key system • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

*: For models with automatic air conditioning control system, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

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

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected*	While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (LOCK)]
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (OFF)]
	LOCK>ACC		While turning power supply position from OFF (LOCK) to ACC
	ACC>ON		While turning power supply position from ACC to ON
	RUN>ACC		While turning power supply position from RUN to ACC (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from CRANK to RUN
	RUN>URGENT		While turning power supply position from RUN to ACC (Emergency stop operation)
	ACC>OFF		While turning power supply position from ACC to OFF (OFF)
	OFF>LOCK		While turning power supply position from OFF (OFF) to OFF (LOCK)
	OFF>ACC		While turning power supply position from OFF (OFF) to ACC
	ON>CRANK		While turning power supply position from ON to CRANK
	OFF>SLEEP		While turning BCM status from normal mode [Power supply position is OFF (OFF)] to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode [Power supply position is OFF (LOCK)] to low power consumption mode
	LOCK		Power supply position is OFF (LOCK)
	OFF		Power supply position is OFF (OFF)
	ACC		Power supply position is ACC
	ON		Power supply position is ON
	ENGINE RUN		Power supply position is RUN
	CRANKING		Power supply position is CRANK
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:

*: Refer to the following for details of the power supply position.

- OFF (OFF, LOCK): Ignition switch OFF
- ACC: Ignition switch ACC
- IGN: Ignition switch ON with engine stopped
- RUN: Ignition switch ON with engine running
- CRANK: At engine cranking

Power supply position shifts to “OFF (LOCK)” from “OFF (OFF)”, when ignition switch is in the OFF position, shift position is in the P position, and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to “ACC” when the push-button ignition switch (push switch) is pushed at “OFF (LOCK)”.

REAR WINDOW DEFOGGER

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

INFOID:0000000007157468

Data monitor

Monitor Item	Description
REAR DEF SW	Displays “Press (ON)/other (OFF)” status determined with the rear window defogger switch.
PUSH SW	Indicates [ON/OFF] condition of push switch.

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	Give a drive signal to the rear window defogger relay to activate it.

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:0000000007208506

AUTO ACTIVE TEST

Description

In auto active test, the IPDM E/R sends a drive signal to the following systems to check their operation.

- Oil pressure warning lamp
- Front wiper (LO, HI)
- Parking lamp
- License plate lamp
- Tail lamp
- Side marker lamp
- Front fog lamp
- Headlamp (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan

Operation Procedure

NOTE:

Never perform auto active test in the following condition.

- Passenger door is open.
- CONSULT is connected.

1. Close the hood and lift the wiper arms from the windshield. (Prevent windshield damage due to wiper operation)
   NOTE:
   When auto active test is performed with hood opened, sprinkle water on windshield beforehand.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON, and within 20 seconds, press the front door switch (driver side) 10 times. Then turn the ignition switch OFF.
4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts.
   NOTE:
   Engine starts when ignition switch is turned ON while brake pedal is depressed.
5. The oil pressure warning lamp starts blinking when the auto active test starts.
6. After a series of the following operations is repeated 3 times, auto active test is completed.

NOTE:

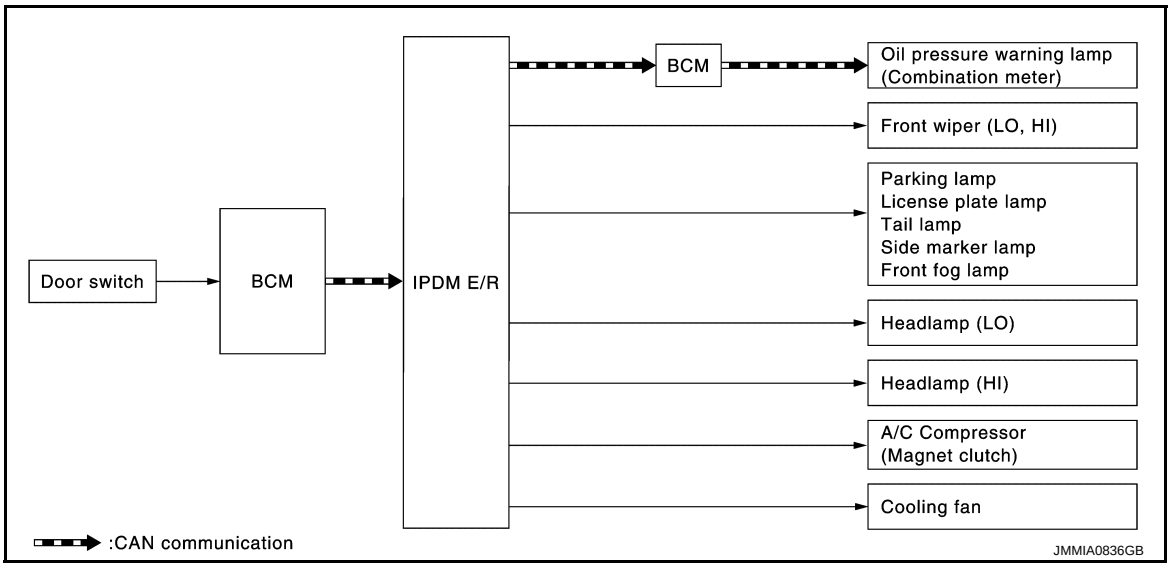
- When auto active test has to be cancelled halfway through test, turn the ignition switch OFF.
- When auto active test is not activated, door switch may be the cause. Check door switch. Refer to DLK-235, "Component Function Check".

Inspection in Auto Active Test

When auto active test is actuated, the following 6 steps are repeated 3 times.

Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Front wiper motor	LO for 5 seconds → HI for 5 seconds
3	• Parking lamp • License plate lamp • Tail lamp • Side marker lamp • Front fog lamp	10 seconds
4	Headlamp	• LO 10 seconds • HI ON ⇔ OFF 5 times
5	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
6	Cooling fan	LO for 5 seconds →MID for 3 seconds → HI for 2 seconds

Concept of auto active test



- IPDM E/R starts the auto active test with the door switch signals transmitted by BCM via CAN communication. Therefore, the CAN communication line between IPDM E/R and BCM is considered normal if the auto active test starts successfully.
- The auto active test facilitates troubleshooting if any systems controlled by IPDM E/R cannot be operated.

Diagnosis chart in auto active test

Symptom	Inspection contents		Possible cause
Any of the following components do not operate • Parking lamp • License plate lamp • Tail lamp • Side marker lamp • Front fog lamp • Headlamp (HI, LO) • Front wiper motor	Perform auto active test. Does the applicable system operate?	YES	BCM signal input circuit
		NO	• Lamp or motor • Lamp or motor ground circuit • Harness or connector between IPDM E/R and applicable system • IPDM E/R
A/C compressor does not operate	Perform auto active test. Does the magnet clutch operate?	YES	• Combination meter signal input circuit • CAN communication signal between Combination meter and ECM • CAN communication signal between ECM and IPDM E/R
		NO	• Magnet clutch • Harness or connector between IPDM E/R and magnet clutch • IPDM E/R
Oil pressure warning lamp does not operate	Perform auto active test. Does the oil pressure warning lamp blink?	YES	• Harness or connector between IPDM E/R and oil pressure switch • Oil pressure switch • IPDM E/R
		NO	• CAN communication signal between IPDM E/R and BCM • CAN communication signal between BCM and Combination meter • Combination meter

Symptom	Inspection contents		Possible cause
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	YES	• ECM signal input circuit • CAN communication signal between ECM and IPDM E/R
		NO	• Cooling fan • Harness or connector between cooling fan and cooling fan relay • Harness or connector between IPDM E/R and cooling fan relay • Cooling fan relay • IPDM E/R

CONSULT Function (IPDM E/R)

INFOID:0000000007208507

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with IPDM E/R.

Diagnosis mode	Description
Ecu Identification	Allows confirmation of IPDM E/R part number.
Self Diagnostic Result	Displays the diagnosis results judged by IPDM E/R.
Data Monitor	Displays the real-time input/output data from IPDM E/R input/output data.
Active Test	IPDM E/R can provide a drive signal to electronic components to check their operations.
CAN Diag Support Monitor	The results of transmit/receive diagnosis of CAN communication can be read.

SELF DIAGNOSTIC RESULT

Refer to PCS-24, "DTC Index".

DATA MONITOR

Monitor item

Monitor Item [Unit]	MAIN SIGNALS	Description
MOTOR FAN REQ [1/2/3/4]	×	Displays the value of the cooling fan speed signal received from ECM via CAN communication.
AC COMP REQ [Off/On]	×	Displays the status of the A/C compressor request signal received from ECM via CAN communication.
TAIL&CLR REQ [Off/On]	×	Displays the status of the position light request signal received from BCM via CAN communication.
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Displays the status of the front wiper request signal received from BCM via CAN communication.
WIP AUTO STOP [STOP P/ACT P]	×	Displays the status of the front wiper stop position signal judged by IPDM E/R.
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.

Monitor Item [Unit]	MAIN SIGNALS	Description
INTER/NP SW [Off/On]		Displays the status of the shift position judged by IPDM E/R.
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.
ST/INHI RLY [Off/ ST /INHI/UNKWN]		Displays the status of the starter relay and starter control relay judged by IPDM E/R.
DETENT SW [Off/On]		Displays the status of the CVT shift selector (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		**NOTE:** The item is indicated, but not monitored.
S/L STATE [LOCK/UNLK/UNKWN]		**NOTE:** The item is indicated, but not monitored.
DTRL REQ [Off/On]		Displays the status of the daytime running light request signal received from BCM via CAN communication. **NOTE:** This item is monitored only on the vehicle with daytime running light system.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		**NOTE:** The item is indicated, but not monitored.
HL WASHER REQ [Off/On]		**NOTE:** The item is indicated, but not monitored.
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN communication.
CRNRNG LMP REQ [Off/On]		**NOTE:** The item is indicated, but not monitored.

ACTIVE TEST

Test item

Test item	Operation	Description
CORNERING LAMP	Off	**NOTE:** The item is indicated, but cannot be tested.
	LH	
	RH	
HORN	On	Operates horn relay for 20 ms.
FRONT WIPER	Off	OFF
	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper high relay.
MOTOR FAN	1	OFF
	2	Operates the cooling fan relay-1.
	3	Operates the cooling fan relay-2.
	4	Operates the cooling fan relay-2 and cooling fan relay-3.
HEAD LAMP WASHER	On	**NOTE:** The item is indicated, but cannot be tested.

Test item	Operation	Description
EXTERNAL LAMPS	Off	OFF
	TAIL	Operates the tail lamp relay and the daytime running light relay.
	Lo	Operates the headlamp low relay.
	Hi	Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals.
	Fog	Operates the front fog lamp relay.

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

INFOID:0000000007157471

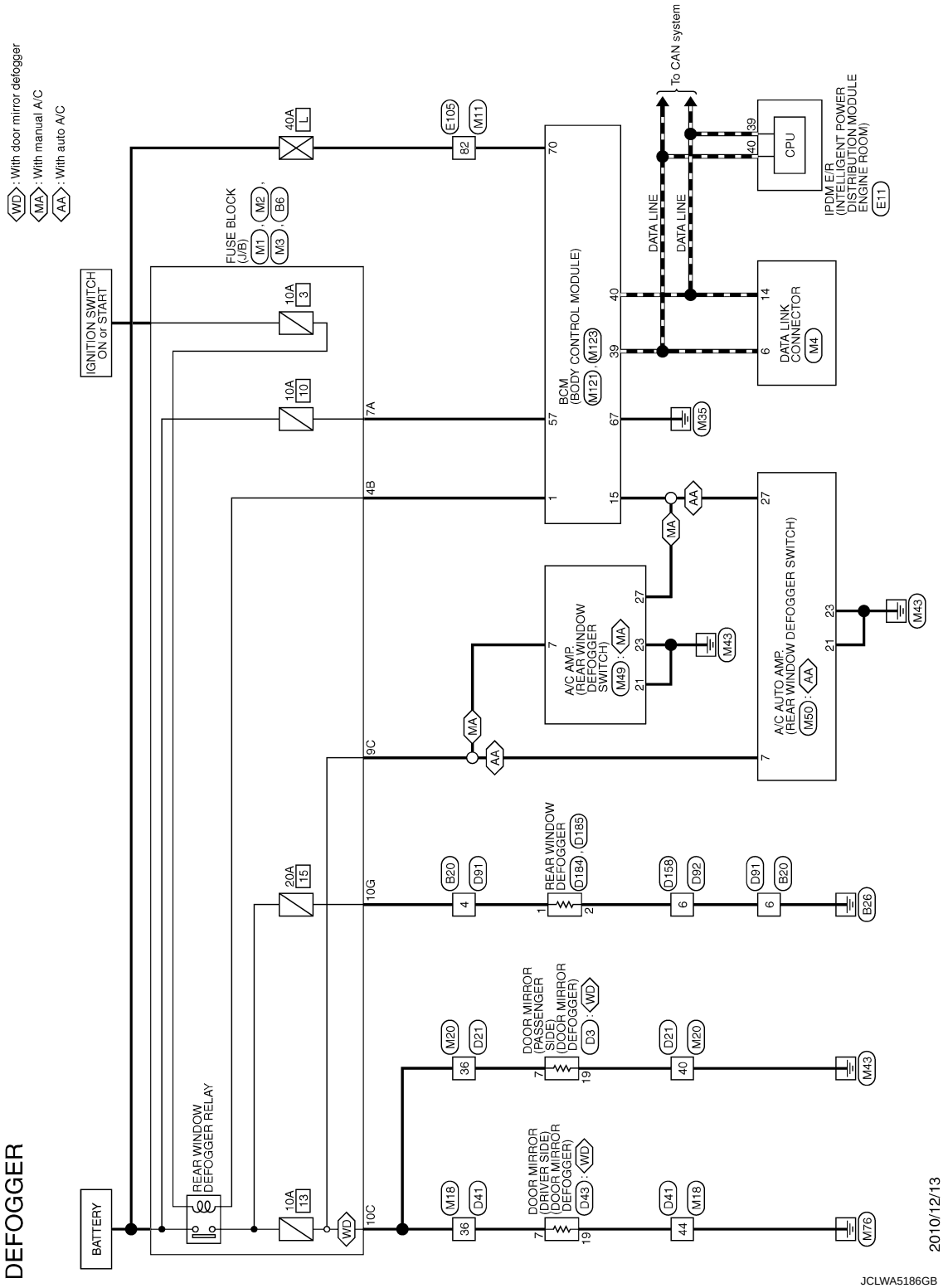
ECU	Reference
BCM	BCS-35, "Reference Value"
	BCS-57, "Fail-safe"
	BCS-57, "DTC Inspection Priority Chart"
	BCS-58, "DTC Index"
IPDM E/R	PCS-16, "Reference Value"
	PCS-23, "Fail-safe"
	PCS-24, "DTC Index"

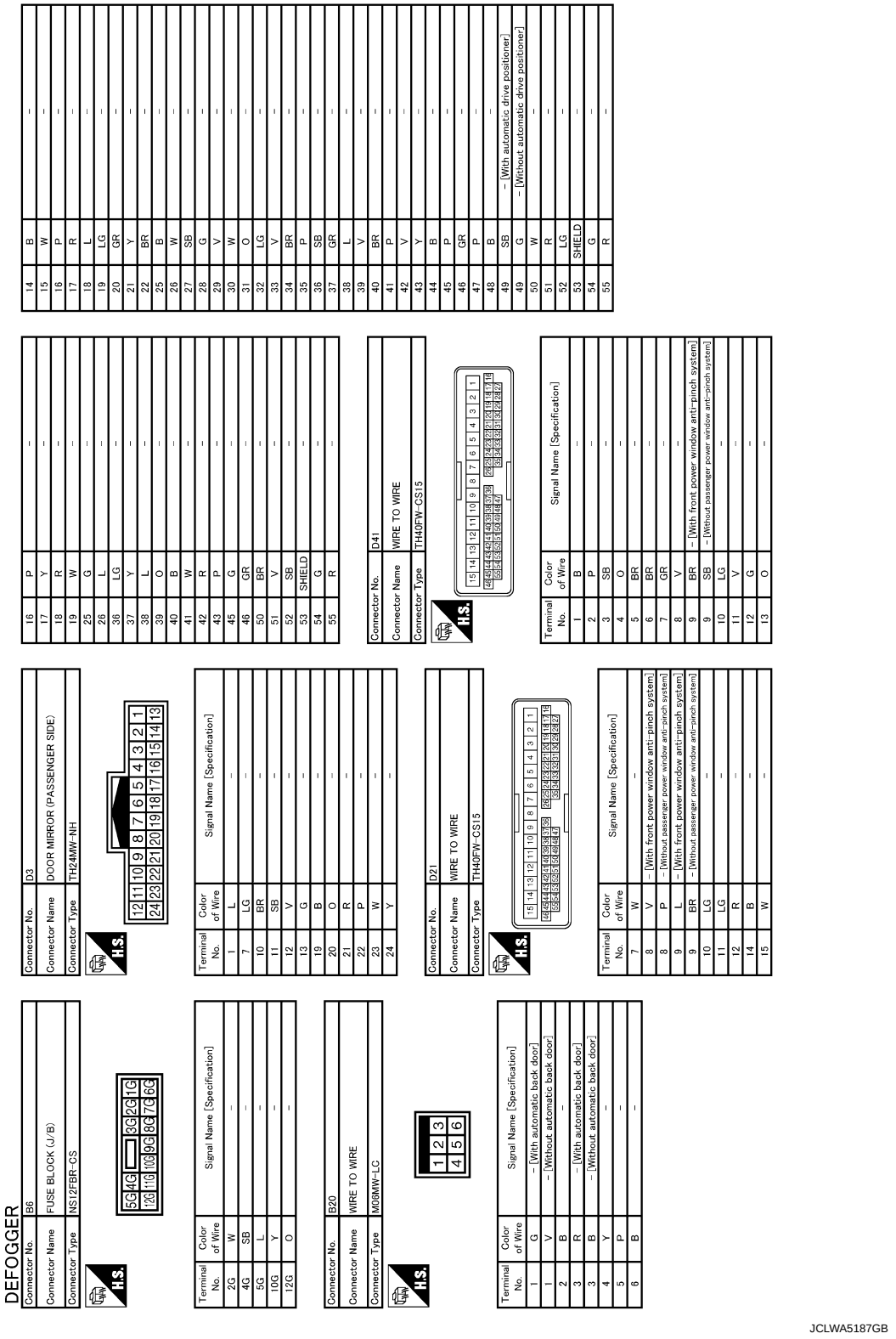
WIRING DIAGRAM

REAR WINDOW DEFOGGER SYSTEM

Wiring Diagram

INFOID:0000000007157472





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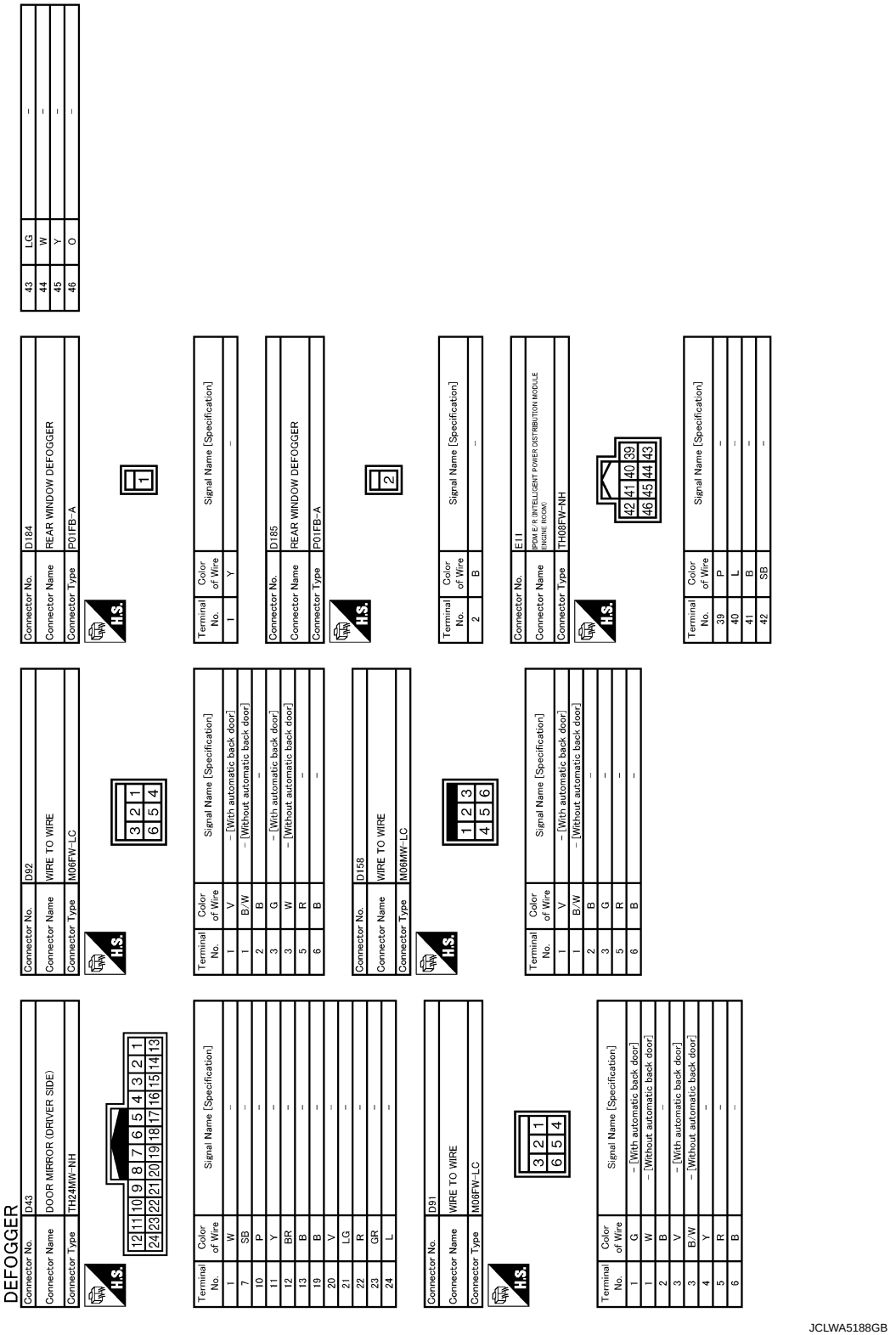

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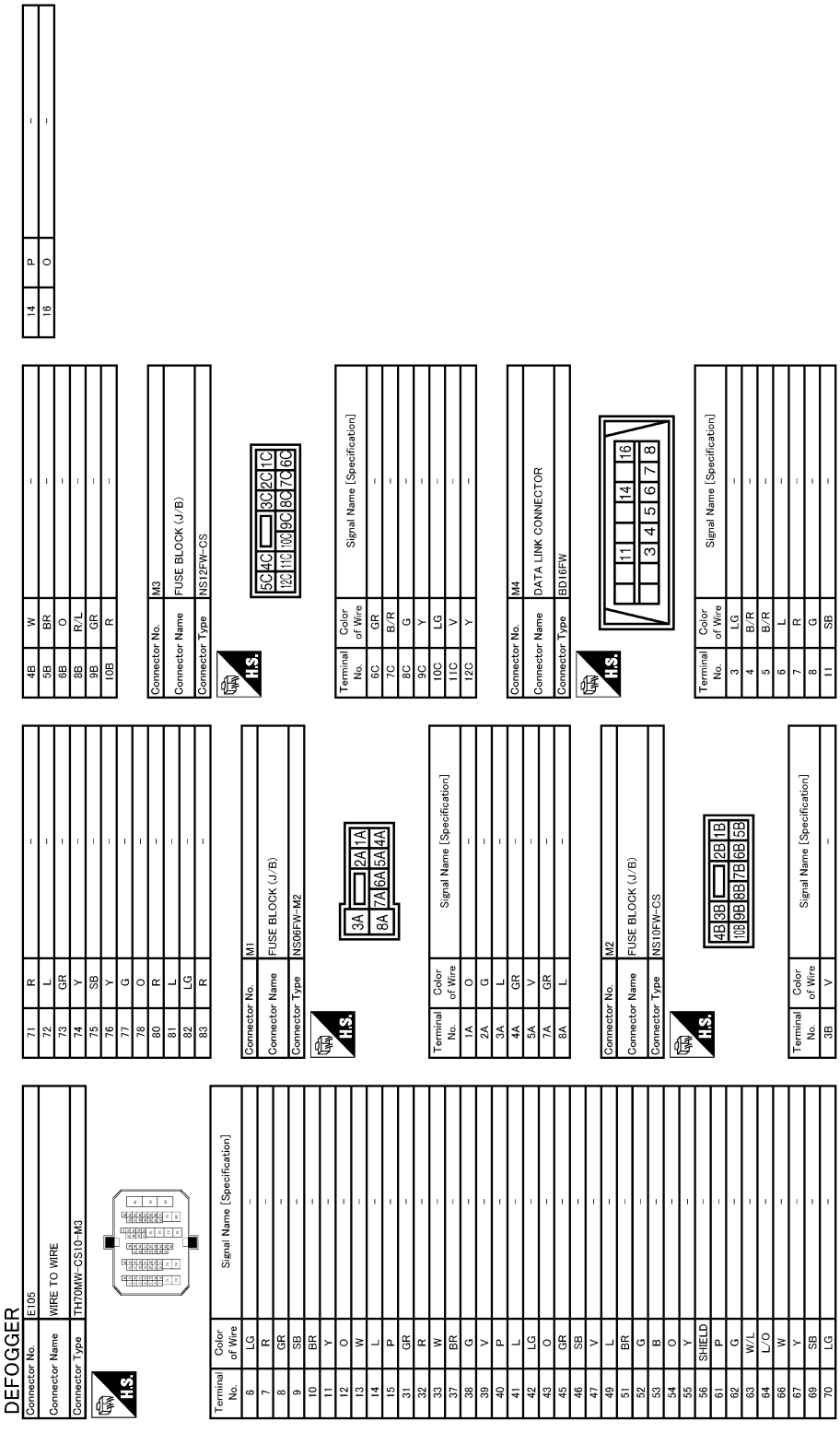

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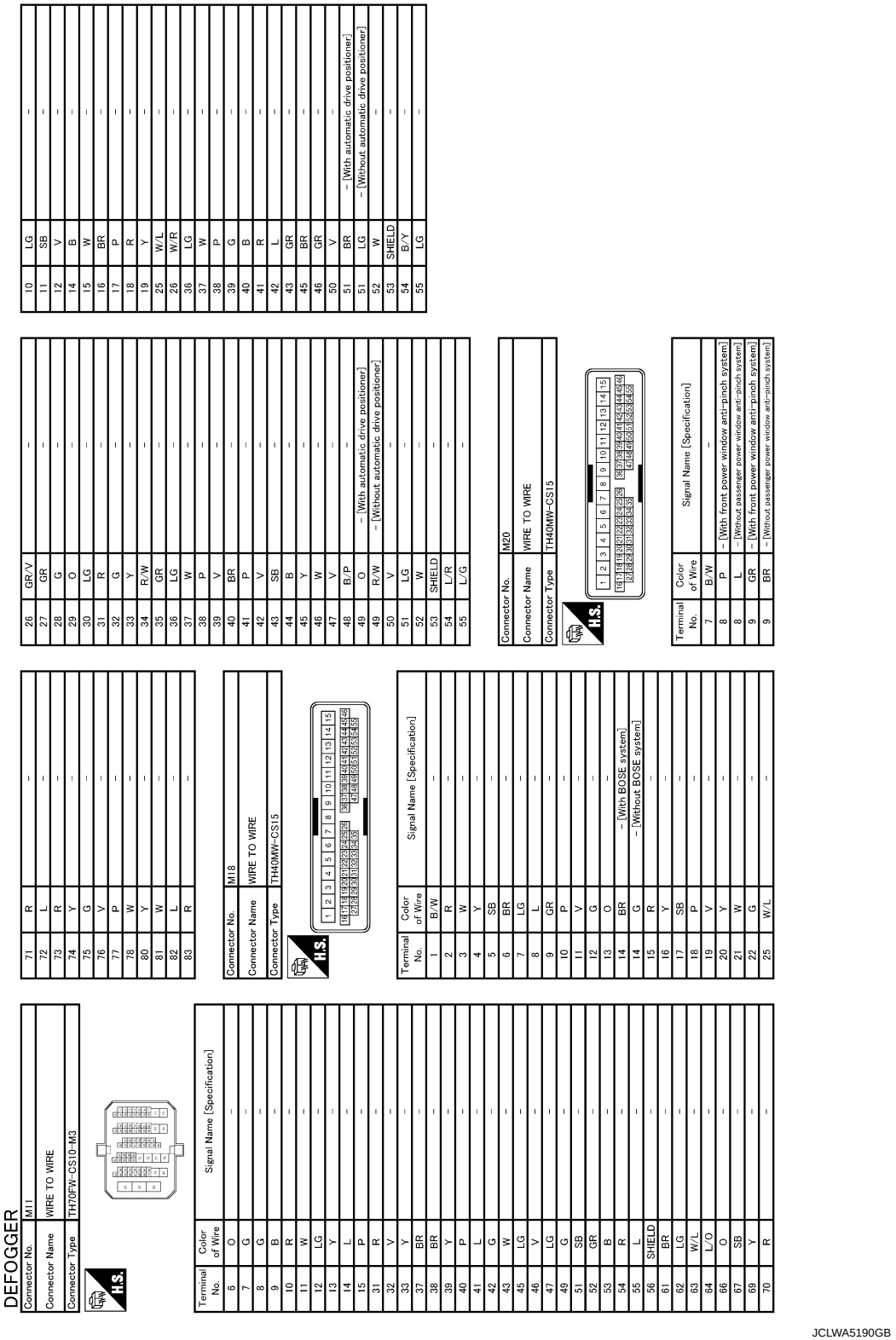

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DEFOGGER

Connector No.	M49
Connector Name	A/C AMP.
Connector Type	TH40FW-NH

H.S.

1	2	4	5	7	8	10	12	13			17		
21	23			27	28	30	32	33			37		40

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	BATTERY POWER SUPPLY
2	G	IGNITION POWER SUPPLY
4	SB	DOOR MOTOR POWER SUPPLY
5	BR	LIN SIGNAL
7	Y	REAR WINDOW DEFOGGER F/B SIGNAL
8	R/L	ILLUMINATION POWER SUPPLY
9	V	ACC POWER SUPPLY
10	W	FRONT BLOWER MOTOR CONTROL SIGNAL
12	BR	BLOWER FAN ON SIGNAL
13	O	A/C ON SIGNAL
15	GR	IONIZER ON/OFF CONTROL SIGNAL
17	L	ENGINE COOLANT TEMPERATURE SIGNAL
18	L	SUNLOAD SENSOR SIGNAL
19	O	FRONT IN-VEHICLE SENSOR SIGNAL
20	R	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
21	B/W	GROUND
23	B/W	GROUND
24	SB	VEHICLE SPEED SIGNAL
27	W	REAR WINDOW DEFOGGER ON SIGNAL
28	B/R	ILLUMINATION GROUND
30	R	REAR BLOWER MOTOR CONTROL SIGNAL
32	BR	COMM (A/C AUTO AMP.-->RR A/C CONT)
33	SB	COMM (RR A/C CONT-->A/C AUTO AMP.)
36	G	EXH GAS/OUTSIDE ODOR DETECTING SENSOR SIGNAL
37	GR	INTAKE SENSOR SIGNAL
38	P	REAR IN-VEHICLE SENSOR SIGNAL
39	LG	AMBIENT SENSOR SIGNAL
40	Y	SENSOR GROUND

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	REAR WINDOW DEF RELAY CONT
2	LG	COMBI SW INPUT 5
3	Y	COMBI SW INPUT 4
4	O	COMBI SW INPUT 3
5	G	COMBI SW INPUT 2
6	L	COMBI SW INPUT 1
7	W	KEY CYL UNLOCK SW
8	Y	KEY CYL LOCK SW [Without automatic sliding door]
8	GR	PW SW COMM [With automatic sliding door]
9	V	STOP LAMP SW 1
12	GR	DOOR LK & UNLK SW LOCK
13	BR	DOOR LK & UNLK SW UNLOCK
14	L	OPTICAL SENS
15	W	REAR WINDOW DEF SW
16	Y	DIMMER
17	O	SENS PWR SPLY
18	R	RECEIV/SENS GND
21	R	NATS ANT AMP.
23	V	SECURITY IND CONT
24	B	DONGLE LINK
25	W	NATS ANT AMP.
27	O	A/C ON
28	BR	BLOWER FAN ON
29	P	HAZARD SW
30	L	BK DOOR OPNR SW
31	O	DR DOOR UNLK SENS
32	Y	COMBI SW OUTPUT 5
33	W	COMBI SW OUTPUT 4
34	GR	COMBI SW OUTPUT 3
35	SB	COMBI SW OUTPUT 2
36	R	COMBI SW OUTPUT 1
37	G	DETENT SW
38	SB	RECEIVER COMM
39	L	CAN-H
40	P	CAN-L

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA

H.S.

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name [Specification]
56	P	INT ROOM LAMP PWR SPLY
57	GR	BAT
58	O	AIR BAG
59	SB	PASS DOOR UNLK OUTPUT
60	V	TURN SIG LH OUTPUT
61	G	TURN SIG RH OUTPUT
62	W	STEP LAMP CONT
63	R	INT ROOM LAMP CONT
64	LG	CRANK REQ
65	V	ALL DOOR LOCK OUTPUT
66	G	DR DOOR UNLK OUTPUT
67	B	GND
68	L	PW PWR SPLY (IGN)
69	P	PW PWR SPLY (BAT)
70	L	BAT

Connector No.	M50
Connector Name	A/C AUTO AMP.
Connector Type	TH40FW-NH

H.S.

1	2	4	5	7	8	10	12	13	15		17	18	19	20
21	23	24		27	28	30			35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	BATTERY POWER SUPPLY
2	G	IGNITION POWER SUPPLY

JCLWA5191GB

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000007157473

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 FOR DTC

Perform self diagnosis with CONSULT

Is any DTC detected?

YES-1 >> BCM: Refer to BCS-58, "DTC Index".
YES-2 >> IPDM E/R: Refer to PCS-24, "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.

DTC/CIRCUIT DIAGNOSIS

REAR WINDOW DEFOGGER SWITCH WITH AUTO A/C

WITH AUTO A/C : Description

INFOID:0000000007216193

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

WITH AUTO A/C : Component Function Check

INFOID:0000000007216194

1.CHECK FUNCTION

Check (REAR DEF SW) in BCM “DATA MONITOR”mode using CONSULT when rear window defogger switch is ON.

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-23, "WITH AUTO A/C : Diagnosis Procedure"

WITH AUTO A/C : Diagnosis Procedure

INFOID:0000000007216195

1.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
A/C auto amp.			
Connector	Terminal		
M50	27	Ground	12

Is the inspection result normal?

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

2.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and A/C auto amp. harness connector.

BCM		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M121	15	M50	27	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	15		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between A/C auto amp. harness connector and ground.

A/C auto amp.		Ground	Continuity
Connector	Terminal		
M50	21		Existed
	23		

Is the inspection result normal?

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

4.CHECK REAR WINDOW DEFOGGER SWITCH

Refer to DEF-24, "WITH AUTO A/C : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace A/C auto amp.. Refer to HAC-142, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

WITH AUTO A/C : Component Inspection

INFOID:0000000007216196

1.CHECK REAR WINDOW DEFOGGER SWITCH

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

A/C auto amp.		Condition		Continuity
Terminal				
27	21	Rear window defogger switch	Pressed	Existed
	23		Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace A/C auto amp.. Refer to HAC-142, "Removal and Installation".

WITH MANUAL A/C

WITH MANUAL A/C : Description

INFOID:0000000007216075

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

WITH MANUAL A/C : Component Function Check

INFOID:0000000007216076

1.CHECK FUNCTION

Check (REAR DEF SW) in BCM “DATA MONITOR”mode using CONSULT when rear window defogger switch is ON.

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-24, "WITH MANUAL A/C : Diagnosis Procedure"

WITH MANUAL A/C : Diagnosis Procedure

INFOID:0000000007216077

1.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect A/C amp. connector.
3. Check voltage between A/C amp. harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
A/C amp.			
Connector	Terminal		
M49	27	Ground	12

Is the inspection result normal?

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

2.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and A/C amp. harness connector.

BCM		A/C amp.		Continuity
Connector	Terminal	Connector	Terminal	
M121	15	M49	27	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	15		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between A/C amp. harness connector and ground.

A/C amp.		Ground	Continuity
Connector	Terminal		
M53	21		Existed
	23		

Is the inspection result normal?

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

4.CHECK REAR WINDOW DEFOGGER SWITCH

Refer to DEF-25, "WITH MANUAL A/C : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace A/C amp.. Refer to HAC-142, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

WITH MANUAL A/C : Component Inspection

INFOID:0000000007216078

1.CHECK REAR WINDOW DEFOGGER SWITCH

1. Turn ignition switch OFF.

2. Disconnect A/C amp. connector.
3. Check continuity between A/C amp. terminals.

A/C amp. Terminal		Condition		Continuity
27	21	Rear window defogger switch	Pressed	Existed
	23		Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace A/C amp.. Refer to HAC-142, "Removal and Installation".

REAR WINDOW DEFOGGER RELAY

Description

INFOID:0000000007158138

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

Component Function Check

INFOID:0000000007158139

1.CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

1. Perform 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:0000000007158140

1.CHECK FUSE

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

-

Is the inspection result normal?

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

2.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT

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

(+)		(-)	Condition of rear window defogger switch	Voltage (V) (Approx.)
BCM				
Connector	Terminal			
M121	1	Ground	ON	0
			OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 3.

3.CHECK FUSE BLOCK (J/B)

Check voltage between fuse block (J/B) connector and ground.

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

Is the inspection result normal?

YES >> Repair or replace harness or connector between BCM and fuse block (J/B).
NO >> GO TO 4.

4.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to DEF-28, "Component Inspection"

Is the inspection result normal?

YES >> Replace fuse block (J/B).
NO >> Replace rear window defogger relay.

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-42, "Intermittent Incident"

>> INSPECTION END

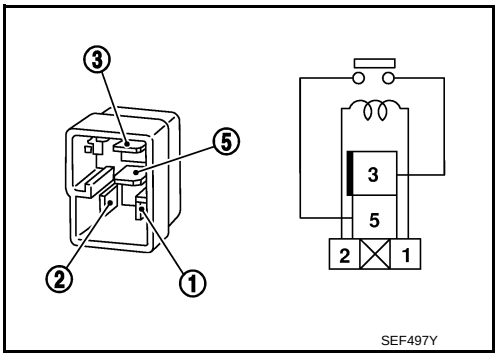
Component Inspection

INFOID:0000000007158141

1.CHECK REAR WINDOW DEFOGGER RELAY

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

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



Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear window defogger relay.

REAR WINDOW DEFOGGER

Description

INFOID:0000000007216198

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:0000000007216199

1.CHECK REAR WINDOW DEFOGGER

1. Perform 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:0000000007216200

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following.

- 20A fuse (No.15, located in fuse block (J/B)

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Condition of rear window defogger switch	Voltage (V) (Approx.)
Rear window defogger				
Connector	Terminal			
D184	1	Ground	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. Check continuity between rear window defogger harness connector and ground.

Rear window defogger		Ground	Continuity
Connector	Terminal		
D185	2		Existed

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace harness or connector between rear window defogger and ground.

4.CHECK REAR WINDOW DEFOGGER CIRCUIT

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

Fuse block (J/B)		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
B6	10G	D184	1	Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness or connector between fuse block (J/B) and condenser.

5.CHECK FUSE BLOCK (J/B)

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 7.

6.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay. Refer to DEF-28, "Component Inspection"

Is the inspection result normal?

YES >> Replace fuse block (J/B).
NO >> Replace rear window defogger relay.

7.CHECK FILAMENT

Check the filament for damage or blown.
Refer to DEF-42, "Inspection and Repair"

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair filament.

8.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-42, "Intermittent Incident"

>> INSPECTION END

DOOR MIRROR DEFOGGER

Description

INFOID:0000000007158146

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

Component Function Check

INFOID:0000000007158147

1.CHECK DOOR MIRROR DEFOGGER

1. Perform 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-31, "Diagnosis Procedure"

Diagnosis Procedure

INFOID:0000000007158148

1.CHECK FUSE

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

-

Is the inspection result normal?

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

2.CHECK FUSE BLOCK (J/B)

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

(+)		(-)	Condition of rear window defogger switch	Voltage (V) (Approx.)
Fuse block (J/B)				
Connector	Terminal			
M3	10C	Ground	ON	Battery voltage
			OFF	0

Is the inspection result normal?

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

3.CHECK DOOR MIRROR DEFOGGER CIRCUIT

Check voltage between door mirror defogger (driver side) connector and ground.

Door mirror defogger (driver side)		Ground	Condition of rear window defogger switch	Voltage (V) (Approx.)
Connector	Terminal			
D43	7	Ground	ON	Battery voltage
			OFF	0

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the harness or connector.

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-42, "Intermittent Incident"

Is the inspection result normal?

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:0000000007158149

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:0000000007158150

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

1. Perform 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-32, "Diagnosis Procedure"

Diagnosis Procedure

INFOID:0000000007158151

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Condition of rear window defogger switch	Voltage (V) (Approx.)
Door mirror (driver side)				
Connector	Terminal			
D43	7	Ground	ON	Battery voltage
			OFF	0

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector between fuse block (J/B) and door mirror (driver side).

2.CHECK GROUND CIRCUIT

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

Door mirror (driver side)		Ground	Continuity
Connector	Terminal		
D43	19		Existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness or connector between door mirror (driver side) and ground.

3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-33, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace door mirror (driver side). Refer to MIR-31, "DOOR MIRROR ASSEMBLY : Removal and Installation"

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-42, "Intermittent Incident"

Is the inspection result normal?

>> INSPECTION END

Component Inspection

INFOID:0000000007158152

1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

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

Door mirror (driver side)			Continuity
Connector	Terminal		
D43	7	19	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror glass (driver side). Refer to MIR-34, "GLASS MIRROR : Removal and Installation"

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:0000000007158153

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:0000000007158154

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Perform 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-34, "Diagnosis Procedure"

Diagnosis Procedure

INFOID:0000000007158155

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Condition of rear window defogger switch	Voltage (V) (Approx.)
Door mirror (Passenger side)				
Connector	Terminal			
D3	7	Ground	ON	Battery voltage
			OFF	0

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector between fuse block (J/B) and door mirror (passenger side).

2.CHECK GROUND CIRCUIT

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

Door mirror (passenger side)		Ground	Continuity
Connector	Terminal		
D3	19		Existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness or connector between door mirror (passenger side) and ground.

3.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check passenger side door mirror defogger.
Refer to DEF-35, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace door mirror (passenger side).Refer to MIR-31, "DOOR MIRROR ASSEMBLY : Removal and Installation"

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-42, "Intermittent Incident"

>> INSPECTION END

Component Inspection

INFOID:0000000007158156

1. CHECK PASSENGER DOOR MIRROR DEFOGGER

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

Door mirror (passenger side)			Continuity
Connector	Terminal		
D3	7	19	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror glass (passenger side). Refer to MIR-34, "GLASS MIRROR : Removal and Installation"

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007157496

1. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
Refer to DEF-23, "WITH AUTO A/C : Component Function Check"(with auto A/C) or DEF-24, "WITH MANUAL A/C : Component Function Check"(without auto A/C).

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

Check rear window defogger.
Refer to DEF-29, "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-42, "Intermittent Incident".
NO >> GO TO 1.

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

Diagnosis Procedure

INFOID:0000000007157497

1.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
Refer to DEF-23, "WITH AUTO A/C : Component Function Check"(with auto A/C) or DEF-24, "WITH MANUAL A/C : Component Function Check"(without auto A/C).

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

Check rear window defogger.
Refer to DEF-29, "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-42, "Intermittent Incident".
NO >> GO TO 1.

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

Diagnosis Procedure

INFOID:0000000007157498

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-42, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE

BOTH SIDES

BOTH SIDES : Description

INFOID:0000000007157499

Driver side and passenger side door mirror defoggers do not operate.

BOTH SIDES : Diagnosis Procedure

INFOID:0000000007157500

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.
Refer to DEF-31, "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-42, "Intermittent Incident".
NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000007157501

Driver side door mirror defogger does not operate.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007157502

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-31, "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-42, "Intermittent Incident".
NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000007157503

Passenger side door mirror defogger does not operate.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007157504

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.
Refer to DEF-31, "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-42, "Intermittent Incident".
NO >> GO TO 1.

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:0000000007227123

1. CHECK A/C AUTO AMP. AND A/C AMP. SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check that rear window defogger operates.

Is the inspection result normal?

YES >> Replace A/C auto amp.(with auto A/C) and A/C amp.(with manual A/C) switch (rear window defogger switch).

NO >> Check rear window defogger system. Refer to DEF-22, "Work Flow"

REMOVAL AND INSTALLATION

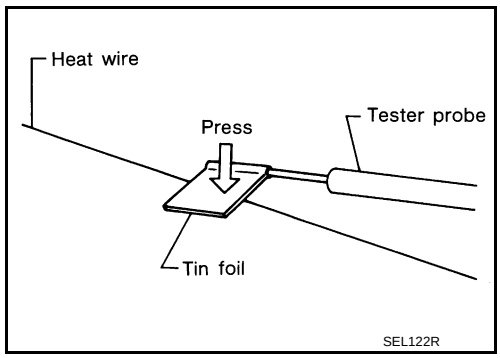
FILAMENT

Inspection and Repair

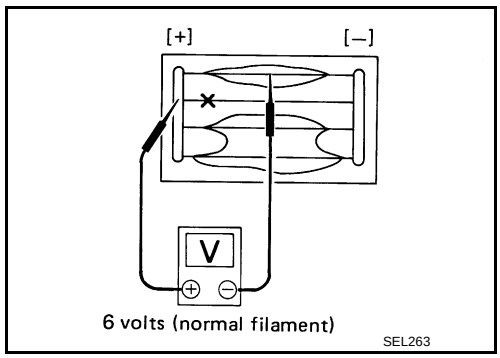
INFOID:0000000007157507

INSPECTION

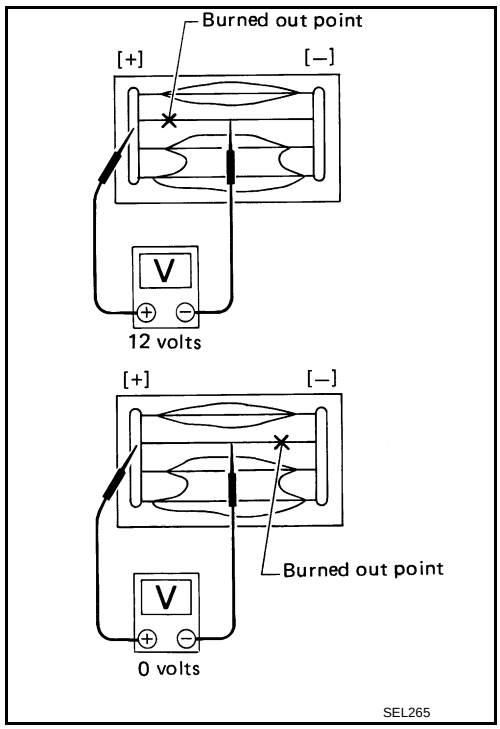
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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

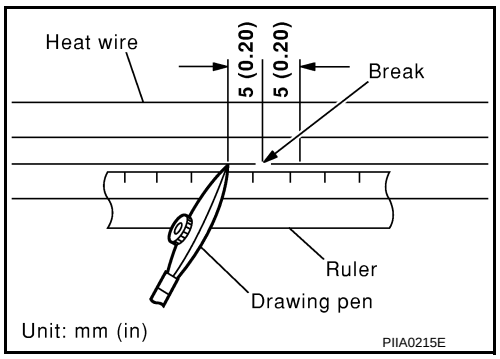
REPAIR EQUIPMENT

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

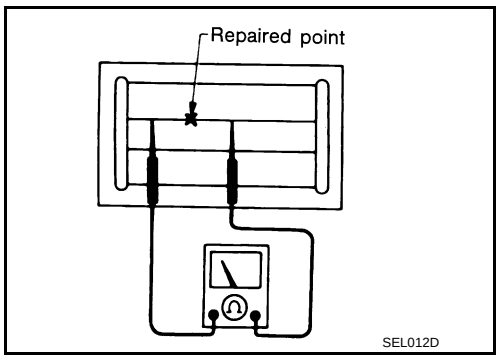
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

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.