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CONTENTS

PRECAUTION3
PRECAUTIONS
SYSTEM DESCRIPTION5
COMPONENT PARTS5Component Parts Location5Door mirror defogger6Rear window defogger6
SYSTEM 7 System Description 7 Circuit Diagram 8
DIAGNOSIS SYSTEM (BCM)9
COMMON ITEM9 COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)9
REAR WINDOW DEFOGGER10 REAR WINDOW DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)10
ECU DIAGNOSIS INFORMATION12
BCM 12 List of ECU Reference 12
WIRING DIAGRAM13
REAR WINDOW DEFOGGER SYSTEM13 Wiring Diagram13
BASIC INSPECTION23
DIAGNOSIS AND REPAIR WORK FLOW23

Work Flow23	F
DTC/CIRCUIT DIAGNOSIS24	
REAR WINDOW DEFOGGER SWITCH24 Component Function Check24 Diagnosis Procedure24	G
REAR WINDOW DEFOGGER RELAY25 Component Function Check25 Diagnosis Procedure25 Component Inspection26	Н
REAR WINDOW DEFOGGER27Component Function Check27Diagnosis Procedure27Component Inspection29	J
DOOR MIRROR DEFOGGER30Component Function Check30Diagnosis Procedure30	K
DRIVER SIDE DOOR MIRROR DEFOGGER31 Component Function Check	DEF M
PASSENGER SIDE DOOR MIRROR DEFOG-	
GER	Ν
SYMPTOM DIAGNOSIS35	0
REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OPERATE35 Diagnosis Procedure35	Р

DOOR MIRROR DEFOGGER DOES NOT OP-	Diagnosis Procedure38
ERATE BUT REAR WINDOW DEFOGGER OPERATES37	REAR WINDOW DEFOGGER INDICATOR
	DOES NOT ILLUMINATE39
BOTH SIDES 37	Diagnosis Procedure39
BOTH SIDES : Diagnosis Procedure	REMOVAL AND INSTALLATION 40
DRIVER SIDE	
DRIVER SIDE : Diagnosis Procedure	FILAMENT 40
Divivery of De . Diagnosis i roccare	Inspection and Repair40
PASSENGER SIDE37	moposion and respan imminimum.
PASSENGER SIDE : Diagnosis Procedure 37	CONDENSER 42
THOOLINGLY CIPL : Blaghoold Troodaire	Removal and Installation42
ON IS NOT DISPLAYED WHEN PRESSING	Tremoval and installation42
REAR WINDOW DEFOGGER SWITCH BUT	
IT IS OPERATED38	

PRECAUTION

PRECAUTIONS

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

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, 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 "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 or batteries, and wait at least 3 minutes before performing any service.

Precautions for Removing Battery Terminal

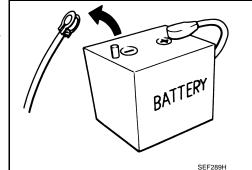
When disconnecting the battery terminal, pay attention to the following.

Always use a 12V battery as power source.

: 4 minutes

- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

BR08DE : 4 minutes V9X engine : 4 minutes YD25DDTi D4D engine : 20 minutes : 2 minutes YS23DDT HR09DET : 12 minutes : 4 minutes HRA2DDT : 12 minutes YS23DDTT : 4 minutes ZD30DDTi : 60 seconds K9K engine : 4 minutes M9R engine : 4 minutes ZD30DDTT : 60 seconds



NOTE:

R9M engine

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

 After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.
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PRECAUTIONS

< PRECAUTION >

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
- Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
- Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

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

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

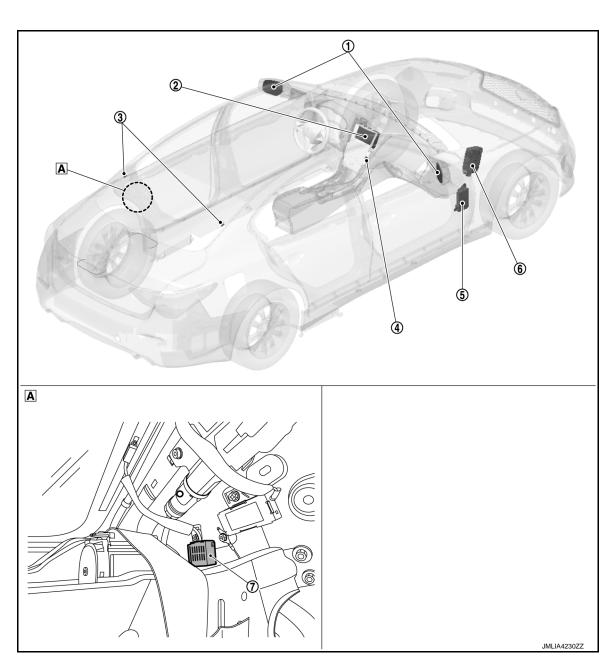
NOTE:

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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location



Behind left rear pillar finisher

No.	Component	Function	
1	Door mirror defogger	Refer to <u>DEF-6</u> , " <u>Door mirror defogger</u> ".	
2	Display control unit	 Display control unit transmits rear window defogger switch signal to BCM via CAN communication. Display control unit transmits rear window defogger feedback signal to integral switch. Refer to AV-14, "Component Parts Location" for detailed installation location. 	
3	Rear window defogger	Refer to DEF-6, "Rear window defogger".	

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COMPONENT PARTS

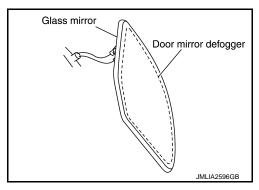
< SYSTEM DESCRIPTION >

No.	Component	Function	
4	Integral switch (Rear window defogger switch)	THE THE TOTAL WINDOW ACTOR AND TOTAL AND THE PROPERTY OF THE P	
5	ВСМ	 Receives rear window defogger switch signal. Performs the timer control of rear window defogger. Refer to BCS-5, "BODY CONTROL SYSTEM: Component Parts Location". 	
6	IPDM E/R	Transmits rear window defogger control signal to display control unit via CAN communication Refer to PCS-5, "Component Parts Location".	
7	Condenser	Reduce the noise of rear window defogger operation.	

Door mirror defogger

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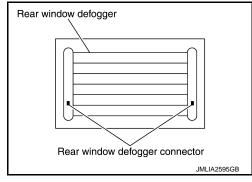
Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.



Rear window defogger

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



SYSTEM

System Description

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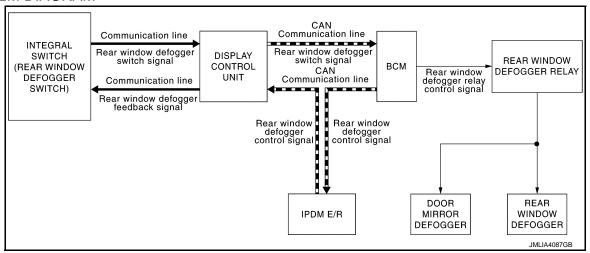
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SYSTEM DIAGRAM



OPERATION DESCRIPTION

- Turn rear window defogger switch ON when the ignition switch turns ON. Then integral switch (rear window defogger switch) transmits rear window defogger switch signal to display control unit. Then display control unit transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmits rear window defogger control signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger are supplied with power and operate when rear window defogger relay turns ON.
- IPDM E/R transmits rear window defogger control signal to display control unit via CAN communication.
- Display control unit transmit rear defogger feedback signal to integral switch (rear window defogger switch) via communication, then rear window defogger indicator is illuminated.

TIMER FUNCTION

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

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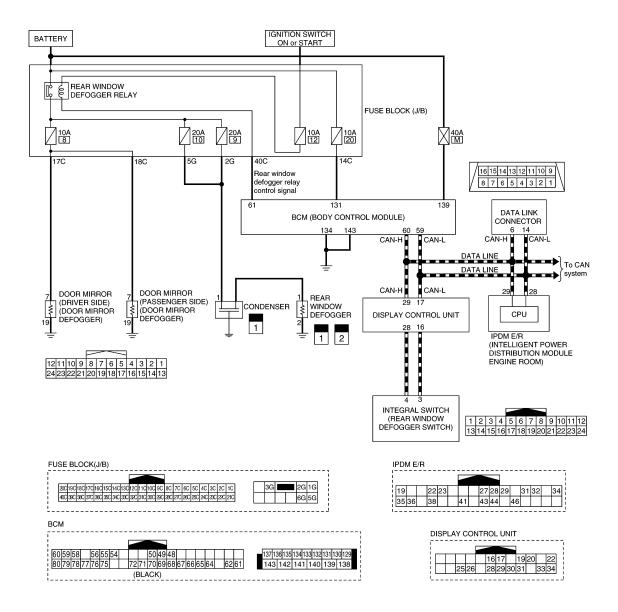
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Circuit Diagram

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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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

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

^{*:} This item 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.

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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		
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)	
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	
	LOCK>ACC		While turning power supply position from "LOCK" *to "ACC"	
	ACC>ON		While turning power supply position from "ACC" to "IGN"	
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)	
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK	Power position status of the moment a particular DTC is detected*	While turning power supply position from "OFF" to "LOCK"*	
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"	
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode	
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode	
	LOCK		Power supply position is "LOCK" (Ignition switch OFF)*	
	OFF		Power supply position is "OFF" (Ignition switch OFF)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	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 → 338 → 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

- *: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever 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 "LOCK".

REAR WINDOW DEFOGGER

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

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WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

^{*:} Factory setting

DATA MONITOR

NOTE:

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

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

ACTIVE TEST

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

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ECU DIAGNOSIS INFORMATION

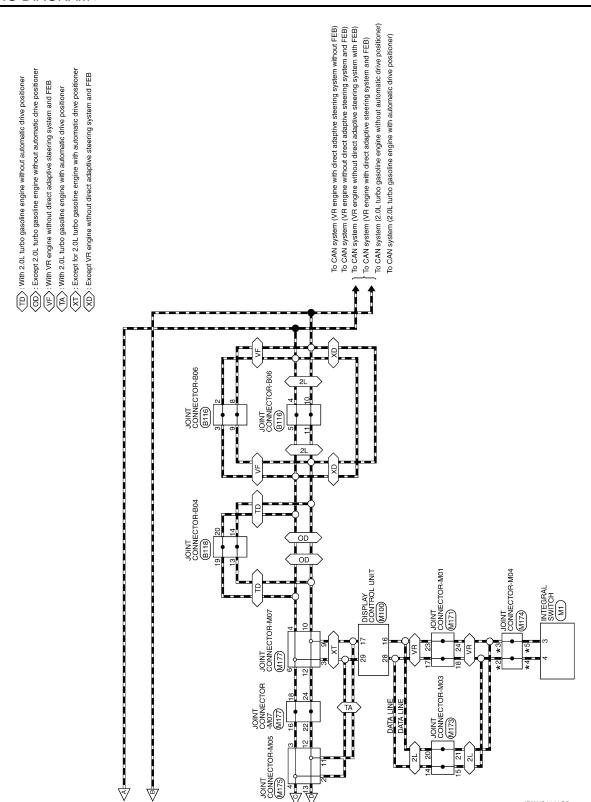
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List of ECU Reference

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ECU	Reference
	BCS-36, "Reference Value"
BCM	BCS-61, "Fail-safe"
BCIVI	BCS-62, "DTC Inspection Priority Chart"
	BCS-63, "DTC Index"

WIRING DIAGRAM Α REAR WINDOW DEFOGGER SYSTEM Wiring Diagram INFOID:0000000012793646 В JOINT CONNECTOR-E05 (E220) : Without automatic drive positioner : With automatic drive positioner C D NO KING TO THE TOTAL THE T DATA LINE Е DATA LINK CONNECTOR (M25) F * 96 : VH 18 : VH 19 : VH 22 : CH 24 : VH 25 : CH 26 : CH 27 : CH 27 : CH 28 : CH 29 : CH 20 CPU ზ BCM (BODY CONTROL MODULE) (M14), (M17) Н This connector is not shown in "Harness Layout". 404 ■ FUSE BLOCK (J/B) (M133), (B38) J BEFOGGER * * * IGNITION SWITCH ON or START K DEF 10A CONDENSER (B43) M 20A 9 DOOR MIRROR (DRIVER SIDE) (D3): (OM) (D56): (PM) DOOR MIRROR DEFOGGER 20A Ν 29 KM33 40 (M33 4 0 DEFOGGER RELAY DOOR MIRROR (PASSENGER SIDE) (D17): <OM) (D57): <PM) DEFOGGER 2016/02/15 M34 <u>P18</u> 018 M34 Р 40A -w BATTERY JRLWG0868GB



JRLWG0869GB

< WIRING DIAGRAM >

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	R - [With VR30 engine]	36	S SB	- [With VR30 engine]			7.1	9	DR DOOR REQ SW
84 LG	. 91	36	M 9	- [With 2.0L turbo gasoline engine]			72	SB	PASS DOOR REQ SW
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-	BG - [With VR30 engine]	Conne	Connector Type	NH24FB-J	14 V	ACC [For VR30 engine]			
95 P	t				15 B	ILLUMINATION CONTROL SIGNAL	Connector Name		BCM (BODY CONTROL MODULE)
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\vdash	P - [With VR30 engine]								143 142 141 140 139 138
100 SHIELD	· · OTI	 -							
		Terminal No.	inal Color Of	Signal Name [Specification]	Connector No.	M14			
Connector No.	E121	E .	╁		Connector Name	BCM (BODY CONTROL MODULE)	Terminal	Color Of	3
Ometer Manage	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE	4	٦		Connector Type	TH40FB-NH	No.	Wire	Signal Name [Specification]
		7	*		4		129	LG	INT ROOM LAMP PWR SPLY
Connector Type	TH32FW-NH	8			彦		130	۵	PASS DOOR UNLK OUTPUT
ģ		11	1 W		Ě		131	>	BAT (FUSE)
唐		12	+		19	60 59 54 52 48	132	>	RR, RL DOOR LK OUTPUT
ě		15	۵	- [Without Gateway]		80 73 73 73 73 73 73 73 68 67 66 65 64 62 61	133	æ	RR, RL DOOR UNLK OUTPUT
121	19 22 23 27 28 29 31 32 33 34	15	<u>س</u>	- [With Gateway]			134	В	GND
		16	+				135	>	FRONT DOOR, FL LID LK OUTPUT
		1 1	д 6	- [Without Gateway]			136	>	INT ROOM LAMP CONT
		19	ж Ж	- [With Gateway]	lar C	Signal Name [Specification]	137	97	FRONT DOOR, FL LID UNLK OUTPUT
	-	°]	\dashv		No. Wire		138	۵	REAR DOORS ACT PWR SPLY [With VR30 engine]
e e	or Of Signal Name (Specification)	23	+	- [Without Gateway]	+	PUSH-BTN IGN SW ILL PWR	138	æ	REAR DOORS ACT PWR SPLY [With 2.0L turbo gasoline engine]
No. Wire	_	23	<u>س</u>	- [With Gateway]	52 G	DONGLE LINK	139	≥	BAT (F/L)
+	- [With	24	7		+	COMM LINE	140	BR	IGN ON
+	- [With VK3U engine]	T			+	KAIN SENSOR	141	×,	PWR SPLY (BAT)
22 BC		_			29 b	CAN-L	142	~ 0	FRONT DOORS, FL LID ACT PWR SPLY
23 GR	R - [With VR30 engine]	7			7 09	CAN-H	143	8	GND

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< WIRING DIAGRAM >

- [With DRPO]			- [Without DRPO]	- [With DRPO]										-	4	,		. ,						BOLLY OT BOLLY	O WINE	TH80MW-CS16-TM4	Į	20 E E E E						Signal Name [Specification]					- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		- [With VR30 engine]	- DWith 2 Of turbo gasolina anginal
BR	æ	: 88	BG	W/B	_	Ь	^	В	SB	9	9	91	Ж	В	œ	æ :	> 8	¥ >	SB	>			lo. M40		,,									Color Of	Wire	BG	W/B	^	BG	BR	91	Ь	W	W	٨
56	27	28	53	59	30	49	52	55	95	57	28	59	09	63	64	9	99	8 2	7.1	72			Connector No.	Connector Name	COILLECTO	Connector Type	Q]	季	H.S.					let	No.	1	9	7	80	8	6	6	10	11	11
										M34	JOHN OF JOHN	WIRE IO WIRE	NH60MW-TS12			61 R2 R3 R4 R5 R6 S1 R5 R4 R4 R5	2 2 2 2	3 6 6 6 7 7 7 7 7 7 7			Lacitate State of a second lace of	olgilal Marrie [opecification]			- [With DRPO]	- [Without DRPO]									-				- [With DRPO]	- [Without DRPO]			- [Without DRPO]	- [With DRPO]	
8	æ	. BB	Ь	^	W	ΓG	^			r No.	Money	r Name									Color Of	Wire	۸	В	9	SB	، د	χ α	: >	GR	>	>	91	>	g	В	Μ	В	SB	٨	SHIELD	В	BG	Ь	ŋ
64	9	99	89	69	70	7.1	72			Connector No.	A section of	Connecto	Connector Type	1	B						Terminal	No.	1	2	4	4	20	٥	. 00	6	10	11	22	14	16	17	18	19	20	20	21	22	23	23	24
								- [With DRPO]	- [Without DRPO]			- [Without DRPO]	- [With DRPO]			- [Without DRPO]	- [With DRPO]	,												- [Except with VR30 engine and without ISS]	- [With VR30 engine and without ISS]							-							
SHIELD	۵	8	91	>	>	Ь	W/B	PT	٨	>	8	BG	9	1	>	. BG	_ ;	- 8	>	8	>	m	SB	٦	BR	97	≥ 4	۵ ۵	- 8s	*	>	+	\dashv	9	>	8	BR	8	BG	PT	۸	ч	9	٦	9
11	12	1 2	14	15	16	17	18	19	19	70	21	22	22	23	24	25	25	27	28	53	30	31	32	33	34	32	36	, Q	41	43	43	44	46	47	49	20	25	23	55	26	57	28	59	9	61
Connector No. M25		Connector Name DATA LINK CONNECTOR	Connector Type BD16FW			/	1.5.	3 4 5 6 7 8				Terminal Color Of	Wire Signal Name [Specification]	LG M_CAN_L	B EARTH	B EARTH	CAN-H	W KINE (With 2.0t turbo gasoline engine)				L CAN-H	P CAN-L	W POWER			Connector No. M33	Connector Name WIRE TO WIRE	Connector Type NH60MW-TS12			1	31 35 30 21 44 47 50 21 51 51 51 52 52 51 51 51 51 51 51 51 51 51 51 51 51 51	7 8 88 W				Terminal Color Of Signal Name (Specification)	Wire Spran vanic [Sprandarion]		. 9			R -	8 GR .

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Signal Name [Specification]	orginal value [openingation]		-				,	•	- [Without DRPO]	- [With DRPO]				-									t			- [With VR30 engine]	- [With 2.0L turbo gasoline engine]			-									•										
\vdash	Wire	^	7	7	Υ	В	œ	7	BG	Ь	8	ď	M	7	7	7	97	SB	Ь	*	8	œ	ď	*	×	В	Я	W/B	SB	ď	W	SB	>	Ь	9	Ь	Ь	9	9	9	>								
Terminal	No.	10C	12C	13C	14C	15C	16C	17C	18C	18C	19C	1C	20C	21C	22C	23C	25C	26C	27C	28C	29C	2C	30C	31C	32C	330	33C	34C	35C	360	37C	38C	39C	3C	40C	4C	2C	99	7C	3C	96								
- [With VR30 engine]	- [With 2.0L turbo gasoline engine]				M100	The Court of the C	DISPLAY CONTROL UNIT	TH24FW-NH				1617 1920 22	26 29 30 31 33 34	00 000000000000000000000000000000000000			(10)71 (9) 100 N (100)	olgna i Name (opecification)	AV COMM (L)	CAN-L	DIMMER SIGNAL	REVERSE SIGNAL	GND	CAMERA SWITCH SIGNAL	AV COMM (H)	CAN-H	IGN [For VR30 engine]	IGN [For 2.0L turbo gasoline engine]	VEHICLE SPEED SIGNAL (8-PULSE)	ACC [Except for VR30 engine and with ISS]	ACC [For VR30 engine and with ISS]	BAT			M133	FLISE BLOCK (1/B)	(5) (5) (5) (6)	TH40FW-NH					200 190 190 190 190 190 190 180 180 180 190 80/70 60/50/40/30/20/10	400 (80) 800 800 (80) 800 (80) 800 (80) 800 (80) 800 (80) 800 (80) 800 (80) 800 (80) 800 (80) 800 (80) 800 (80)					
BR	97	SHIELD															Color Of	Wire	91	d	ď	BR	В	BR	SB	_	Я	۸	~	SB	۸	>				Connector Name	,					_							
66	66	100			Connector No.		Connect	Connector Type				2					Terminal	No.	16	17	19	20	22	56	28	53	30	30	31	33	33	34			Connector No.	Connect		Connector Type		E	•	?							
- [With 2.0L turbo gasoline engine]			-			- [Color of wire differs depending on production]	- [Color of wire differs depending on production]					- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine and without gateway]	- [With 2.0L turbo gasoline engine and with gateway]			- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		•			- [With 2.0L turbo gasoline engine]	- [With VR30 engine]					- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	•			- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine and without gateway]	- [With 2.0L turbo gasoline engine and with gateway]			
۵	В	SB	W/B	^	R	۵	>	91	BG	7	~	^	Μ	1	91	œ	٨	BR	_	89	۵	æ	W/B	SB	9	9	æ	9	~	91	BR	~	>	>	g	>	9	^	Μ	9	BB	GR	1	BR	Ь	æ	≥	97	<u>,</u>
57	28	29	61	64	9	99	99	29	89	69	70	7.1	71	72	72	73	73	74	74	75	75	75	9/	77	78	78	79	80	81	82	83	83	84	98	87	89	90	90	91	95	93	94	94	92	95	92	96	97	ŏ
- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		- [With VR30 engine]	- [With 2.0L turbo gasoline engine]			- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2:0L turbo gasoline engine]				- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine and without gateway]	- [With 2.0L turbo gasoline engine and with gateway]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]				- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	,	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]				- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With W830 engine]
GR	SHIELD	8	BG	SB	8	BR	97	8	W/B	٨	W	9	۸	1	٨	Ь	BG	9	80	_	_	а.	œ	œ	>	GR	_	BR	_	W	9	>	BG	œ	SHIELD	89	6	В	BR	٦	>	9	SB	٨	В	Ь	BG	GR	G.R.
13 GR	13	14	15	15	16	16	17	18	18	19	31	32	32	33	33	34	32	36	37	37	38	38	38	39	39	40	41	44	45	45	46	46	47	47	48	49	49	20	20	51	25	53	54	54	55	55	26	95	57

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201-0C 2	В
NH275 NH20FL DC NH20FL DC Signal Name [S 17 16 15 16 17 16 15 17 16 15 17 16 17 17	С
Connector No. No. Connector No. No. Wire No. Wire 10 P L L S L L L S L L L S L L L S L L L S L L L S L L L L S L L L L S L L L L S L L L L S L L L L L S L	D
	Е
Signal Name (Specifical	F
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Connector No. Connector Name Connector Name Connector Name No. No. No. No. No. No. No. No.	Н
28342_4GAZA	J
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M171 M171 M171 M171 M171 M171 M172	M
╙ │	N
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Revision: November 2016 **DEF-21** 2016 Q50

Connector No. M178	e	Connector Type NH20FW-DC	H.S.	Terminal Color Of Signal Name [Specification] No. Wire	1 R .	2 R	7 8	8 8	. 8 6	10 B - [With VR30 engine]	10 W - [With 2.0L turbo gasoline engine]	11 B - [With VR30 engine]	11 W - [With 2.0L turbo gasoline engine]		12 W - [With 2.0L turbo gasoline engine]	13 B - [With VR30 engine]	13 W - [With 2.0L turbo gasoline engine]	14 B .	15 B - [With VR30 engine]	15 W - [With 2.0L turbo gasoline engine]	17 BR -	18 BR -	20 BR .					
M177	CONNECTOR-M07	24342_4GA2A	1 1 1 1 1 1 1 1 1 1	Signal Name [Specification]																								_
DEFUGGER onnector No.	Name	Type		Color Of Wire	٦	7	1	٦	7	٦	а	۵	Ь	۵	۵	Ь	٦	٦	1	٦	7	7	8	Μ	Μ	Ь	0	_
Connector No.	Connector Name	Connector Type	H.S.	Terminal No.	1	2	3	4	2	9	7	∞	6	10	11	12	13	14	15	16	17	18	19	20	21	22		57

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION Α DIAGNOSIS AND REPAIR WORK FLOW Work Flow INFOID:0000000012793647 **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. D >> GO TO 2. 2. CHECK DTC Е Perform self diagnosis with CONSULT Is any DTC detected? F YES >> Refer to BCS-63, "DTC Index". NO >> GO TO 3. $3.\mathsf{REPRODUCE}$ 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. Н >> GO TO 4. f 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. ${f 5}.$ IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS" Perform the diagnosis with "Component diagnosis" of the applicable system. >> GO TO 6. DEF 6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS Repair or replace the specified malfunctioning parts. M >> GO TO 7. 7. FINAL CHECK Ν 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. Р

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

REAR WINDOW DEFOGGER SWITCH

Component Function Check

INFOID:0000000012793648

1. CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

Check that the indicator lamp of rear window defogger illuminates when rear window defogger switch ON. Is the inspection result normal?

YES >> Rear window defogger switch function is OK.

NO >> Refer to DEF-24, "Diagnosis Procedure"

Diagnosis Procedure

INFOID:0000000012793649

1. CHECK INTEGRAL SWITCH (REAR WINDOW DEFOGGER SWITCH)

Does integral switch operate normally?

Refer to AV-397, "Symptom Table".

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace integral switch (rear window defogger switch).

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Component Function Check

INFOID:0000000012793650

1. CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

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- 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 <u>DEF-25</u>, "<u>Diagnosis Procedure</u>"

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INFOID:0000000012793651

Diagnosis Procedure

1. CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check 10A fuse [No.12, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

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

(+)				
В	СМ	(–)	Conditio	n	Voltage (V)
Connector	Terminal				
M14	61	Ground	Rear window defogger	ON	0 – 1
10114	01	Ground	switch	OFF	9 – 16

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.check rear window defogger circuit ${\scriptstyle 2}$

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

В	CM	Fuse bl	ock (J/B)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M14	61	M133	40C	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to DEF-26. "Component Inspection"

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear window defogger relay.

5.CHECK FUSE BLOCK (J/B)

1. Install the rear window defogger relay.

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Revision: November 2016 DEF-25 2016 Q50

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

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

(+)			V 16 0.0
Fuse bloo	sk (J/B)	(–)	Voltage (V) (Approx.)
Connector	Terminal		, , ,
M133	40C	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

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

6. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

Component Inspection

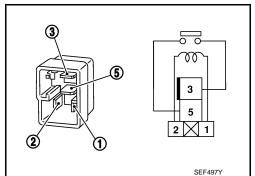
INFOID:0000000012793652

2016 Q50

1. CHECK REAR WINDOW DEFOGGER RELAY

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

Terr	minal		
	window er relay	Condition	Continuity
3	5	12 V direct current supply between terminals 1 and 2.	Existed
		No current supply	Not existed



Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace rear window defogger relay.

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER

Component Function Check

INFOID:0000000012793653

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1. CHECK REAR WINDOW DEFOGGER

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

Is the inspection result normal?

YES >> Rear window defogger is OK.

>> Refer to DEF-27, "Diagnosis Procedure"

Diagnosis Procedure

INFOID:0000000012793654

1. CHECK FUSE

- Turn ignition switch OFF.
- Check that the following fuses are not blown (open).

Fuse No.	Capacity
9	20 A
10	20 //

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

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

	+) ow defogger	(–)	Conditi	on	Voltage (V) (Approx.)
Connector	Terminal				(11 -)
B471	1	Ground	Rear window defogger	ON	Battery voltage
D471	'	switch		OFF	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 4.

3. CHECK GROUND CIRCUIT

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

Rear windo	ow defogger		Continuity
Connector	Terminal	Ground	Continuity
B472	2		Existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness.

4.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

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

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REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

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

Condenser	Rear windo	Continuity	
Terminal	Connector	Continuity	
1	B471	1	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or condenser.

${f 5.}$ CHECK REAR WINDOW DEFOGGER CIRCUIT 2

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

Fuse blo	ock (J/B)	Conc	lenser	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B38	2G	B43	1	Existed
D30	5G		'	Existed

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

Fuse bl	ock (J/B)		Continuity	
Connector	Terminal	Ground	Continuity	
B38	2G	Ground	Existed	
B 30	5G		LAISIEU	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK FUSE BLOCK (J/B)

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

(+) Fuse block (J/B) Terminal	(-)	Condition		Voltage (V) (Approx.)
200		Rear window defogger switch	ON	Battery voltage
2G	Ground		OFF	0
5G	Giouna		ON	Battery voltage
			OFF	0

Is the inspection result normal?

YES >> GO TO 7.

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

7. CHECK CONDENSER

Check condenser. Refer to DEF-29, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 9.

NO >> Replace condenser.

8. CHECK FILAMENT

Check the filament for damage or blown.

Refer to DEF-40, "Inspection and Repair".

Is the inspection result normal?

REAR WINDOW DEFOGGER < DTC/CIRCUIT DIAGNOSIS > YES >> GO TO 9. NO >> Repair filament. Α 9. CHECK INTERMITTENT INCIDENT Check intermittent incident. В Refer to GI-45, "Intermittent Incident". >> INSPECTION END Component Inspection INFOID:0000000012793655 1. CHECK CONDENSER D Check continuity between condenser and ground part of condenser. Е Condenser Continuity Terminal Ground part of condenser 1 Not existed F Is the inspection result normal? >> INSPECTION END YES NO >> Replace condenser. Н K DEF M Ν

Revision: November 2016 DEF-29 2016 Q50

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DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Component Function Check

INFOID:0000000012793656

1. CHECK DOOR MIRROR DEFOGGER

- 1. Perform Active Test ("REAR DEFOGGER") with CONSULT.
- 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 <u>DEF-30</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000012793657

1. CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check that the following fuse is not blown (open).

Fuse No.	Capacity	
8	10 A	

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK FUSE BLOCK (J/B)

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

	(+) Fuse block (J/B)		Con	dition	Voltage (V) (Approx.)	
Connector	Terminal				() ,	
	470	Ground		ON	Battery voltage	
M133	17C		Rear window	Rear window	OFF	0
IVI 133			defogger switch	ON	Battery voltage	
	18C			OFF	0	

Is the inspection result normal?

YES >> GO TO 3.

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

3. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Component Function Check

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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 <u>DEF-31</u>, "<u>Diagnosis Procedure</u>"

INFOID:0000000012793659

Diagnosis Procedure

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.

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(+) Door mirror (driver side)					Voltage (V)
		(-)	Con	Condition	
Connector	Terminal				(Approx.)
D3	7	Ground Rear window	ON	Battery voltage	
D3	,	Giodila	defogger switch	OFF	0
With automatic drive	positioner				
(-	+)				

Door mirror (driver side)		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(, 44, 2,)
D56	7	Ground	Rear window	ON	Battery voltage
	,	Ground	defogger switch	OFF	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

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

Without automatic drive positioner

Fuse b	lock (J/B)	Door mirror	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M133	17C	D3 7		Existed
With automatic drive po	sitioner			
Fuse b	lock (J/B)	Door mirror	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M133	17C	D56	7	Existed

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

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DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Fuse block (J/B)		Ground	Continuity	
Connector	Terminal	Giodila	Continuity	
M133	17C	Ground	Not existed	

Is the inspection result normal?

YES >> Replace fuse block (J/B).

NO >> Repair or replace harness.

3. 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	Giouna	Continuity		
D3	19	Ground	Existed		
With automatic drive positione	With automatic drive positioner				
Door mirror (driver side)		Ground	Continuity		
Connector	Terminal	Ground	Continuity		
D56 19		Ground	Existed		

Is the inspection result normal?

- YES >> Replace glass mirror (driver side). Refer to <u>MIR-50</u>, "<u>DOOR MIRROR</u>: <u>Removal and Installation</u>" (with automatic drive positioner) or <u>MIR-76</u>, "<u>DOOR MIRROR</u>: <u>Removal and Installation</u>" (without automatic drive positioner).
- NO >> Repair or replace harness.

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Component Function Check

INFOID:0000000012793660

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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 <u>DEF-33</u>, "<u>Diagnosis Procedure</u>"

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INFOID:0000000012793661

Diagnosis Procedure

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.

Without automatic drive positioner

without automatic	urive positioner				
(+) Door mirror (Passenger side) Connector Terminal		(-)	Condition		Voltage (V) (Approx.)
		7 Ground Rear window defogger switch	ON	Battery voltage	
D17	/		defogger switch	OFF	0
With automatic driv	e positioner				
(+)			Condition		Voltage (V) (Approx.)
Door mirror (Passenger side)		(-)			
Connector	Terminal				(/ (pp. 6%.)
D57	7	Ground	Rear window	ON	Battery voltage
			defogger switch	OFF	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

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

Without automatic drive positioner

Fuse block (J/B)		Door mirror (passenger side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M133	18C	D17	7	Existed	
With automatic drive po	sitioner				
Fuse block (J/B)		Door mirror (passenger side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M133	18C	D57	7	Existed	

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

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PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Fuse block (J/B)		Ground	Continuity	
Connector	Terminal	Giodila	Continuity	
M133	18C	Ground	Not existed	

Is the inspection result normal?

YES >> Replace fuse block (J/B).

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between door mirror (passenger side) harness connector and ground.

Without automatic drive positioner

Door mirror (passenger side)		- Ground	Continuity	
Connector	Terminal	Giodila	Continuity	
D17	19	Ground	Existed	
With automatic drive positione	r			
Door mirror (passenger side)		Ground	Continuity	
Connector	Terminal	Giodila	Continuity	
D57	19	Ground	Existed	

Is the inspection result normal?

- YES >> Replace glass mirror (passenger side).Refer to MIR-50, "DOOR MIRROR: Removal and Installation" (with automatic drive positioner) or MIR-76, "DOOR MIRROR: Removal and Installation" (without automatic drive positioner).
- NO >> Repair or replace harness.

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OP-ERATE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS Α REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT **OPERATE** В Diagnosis Procedure INFOID:0000000012793662 ${f 1}$.CHECK REAR WINDOW DEFOGGER SWITCH Check rear window defogger switch. Refer to DEF-24, "Component Function Check". D Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. Е 2.CHECK REAR WINDOW DEFOGGER RELAY Check rear window defogger relay. Refer to DEF-25, "Component Function Check". F Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CHECK DOOR MIRROR DEFOGGER Check door mirror defogger. Н Refer to DEF-30, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. f 4.CONFIRM THE OPERATION Confirm the operation again. Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". >> GO TO 1. NO K

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:0000000012793663

1. CHECK REAR WINDOW DEFOGGER

Check rear window defogger.

Refer to DEF-27, "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-45. "Intermittent Incident".

NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

DOOR MIRROR DEFOGGER DOES NOT OPERATE BUT REAR WIN DEFOGGER OPERATES BOTH SIDES	DOW A
BOTH SIDES : Diagnosis Procedure	D00000012793664
1. CHECK DOOR MIRROR DEFOGGER	С
Check door mirror defogger. Refer to DEF-30, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	D
Confirm the operation again. Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". NO >> GO TO 1. DRIVER SIDE	F
DRIVER SIDE : Diagnosis Procedure	00000012793665
1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER	Н
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	J
Confirm the operation again. Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". NO >> GO TO 1. PASSENGER SIDE	K
PASSENGER SIDE : Diagnosis Procedure	00000012793666
1. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.	M
Check passenger side door mirror defogger. Refer to DEF-33, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	N O
Confirm the operation again. Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident". NO >> GO TO 1.	Р

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:0000000012793667

1. CHECK DISPLAY CONTROL UNIT FUNCTION

Check that the display control unit is operating normally.

Refer to AV-273, "Work Flow".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

NO >> GO TO 1.

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS > REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE Α Diagnosis Procedure INFOID:0000000012793668 1. CHECK INTEGRAL SWITCH (REAR WINDOW DEFOGGER SWITCH) В Check rear window defogger switch. Refer to DEF-24, "Component Function Check". Is the inspection result normal? C >> INSPECTION END YES >> Replace integral switch (rear window defogger switch). NO D Е F Н J Κ DEF M Ν 0

Revision: November 2016 DEF-39 2016 Q50

REMOVAL AND INSTALLATION

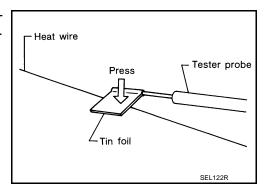
FILAMENT

Inspection and Repair

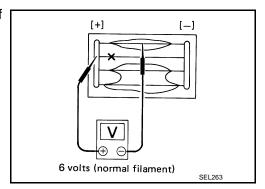
INFOID:0000000012793669

INSPECTION

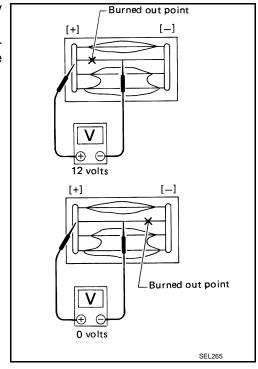
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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.
- To locate burned out point, move probe to left and right along filament. Test needle will swing abruptly when probe passes the point.



REPAIR

REPAIR EQUIPMENT

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

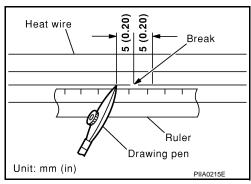
FILAMENT

< REMOVAL AND INSTALLATION >

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

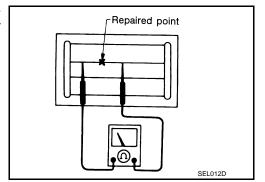
REPAIRING PROCEDURE

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



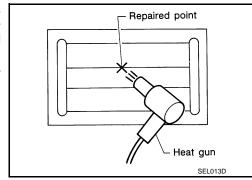
4. After repair has been completed, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited.

Do not touch repaired area while test is being conducted.



 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.



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CONDENSER

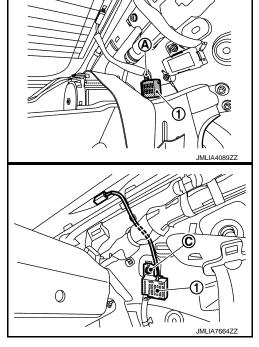
Removal and Installation

INFOID:0000000012793670

REMOVAL

- 1. Remove the rear pillar finisher. Refer to INT-35, "REAR PILLAR FINISHER: Removal and Installation".
- 2. Disconnect rear window defogger connector (A) and condenser connector (B).

3. Remove the condenser mounting bolt ©, and then remove the condenser 1.



INSTALLATION

Install in the reverse order of removal.