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CONTENTS

PRECAUTION3
PRECAUTIONS
SYSTEM DESCRIPTION5
COMPONENT PARTS5Component Parts Location5Component Description5
SYSTEM 6 System Diagram 6 System Description 6
DIAGNOSIS SYSTEM (BCM)7
COMMON ITEM
REAR WINDOW DEFOGGER8 REAR WINDOW DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)8
DIAGNOSIS SYSTEM (IPDM E/R) 10 Diagnosis Description 10 CONSULT Function (IPDM E/R) 12
ECU DIAGNOSIS INFORMATION15
BCM, IPDM E/R15 List of ECU Reference15
WIRING DIAGRAM16
REAR WINDOW DEFOGGER SYSTEM16 Wiring Diagram16

BASIC INSPECTION23
DIAGNOSIS AND REPAIR WORK FLOW23 Work Flow23
DTC/CIRCUIT DIAGNOSIS24
REAR WINDOW DEFOGGER SWITCH24 Component Function Check24 Diagnosis Procedure24
REAR WINDOW DEFOGGER RELAY25 Component Function Check25 Diagnosis Procedure25
REAR WINDOW DEFOGGER
DOOR MIRROR DEFOGGER28Component Function Check
DRIVER SIDE DOOR MIRROR DEFOGGER29 Component Function Check
PASSENGER SIDE DOOR MIRROR DEFOG- GER
SYMPTOM DIAGNOSIS31
ALL DEFOGGER SYSTEMS DO NOT OPER-ATE31 Diagnosis Procedure31
REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DE- FOGGERS OPERATE32 Diagnosis Procedure32

DOOR MIRROR DEFOGGER DOES NOT OP- ERATE	ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT	
ERAIE		٥.
BOTH SIDES 33	IT IS OPERATED	
BOTH SIDES : Description	Diagnosis Procedure	35
BOTH SIDES : Diagnosis Procedure 33	REAR WINDOW DEFOGGER INDICATOR	
DDIVED OIDE	DOES NOT ILLUMINATE	36
DRIVER SIDE 33		
DRIVER SIDE : Description	Diagnosis Procedure	30
DRIVER SIDE : Diagnosis Procedure	REMOVAL AND INSTALLATION	37
PASSENGER SIDE 33	FILAMENT	27
PASSENGER SIDE : Description		
·	Inspection and Repair	37
PASSENGER SIDE : Diagnosis Procedure 33	•	

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-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. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Precautions For Xenon Headlamp Service

WARNING: Comply with the following warnings to prevent any serious accident.

 Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.

- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

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DEF-3 Revision: 2013 September 2014 QX80

Precautions for Removing of Battery Terminal

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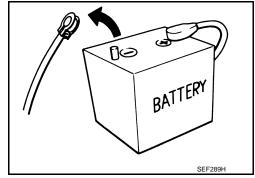
• When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

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.

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.



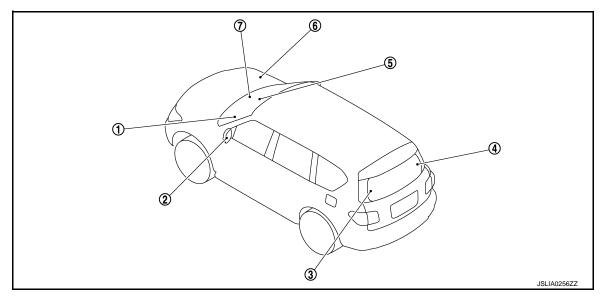
After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
 NOTE:

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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location



- BCM
 Refer to BCS-4, "BODY CONTROL
 SYSTEM: Component Parts Location".
- 4. Rear window defogger connector
- AV control unit
 Refer to <u>AV-12</u>, "<u>Component Parts</u>
 <u>Location</u>" (Bose audio with navigation) or <u>AV-315</u>, "<u>Component Parts</u>
 <u>Location</u>" (Telematics system).
- 2. Door mirror defogger (driver side)
- 5. Multifunction switch (rear window defogger switch)
- 3. Rear window defogger connector
- IPDM E/R
 Refer to PCS-4, "Component Parts
 Location".

Component Description

INFOID:00000000009012659

BCM	 Detects rear window defogger switch signal and transmits rear window defogger control signal to IPDM E/R. Performs the timer control of rear window defogger.
IPDM E/R	 Rear window defogger relay is installed. Receives rear window defogger control signal from BCM and transmits rear window defogger control signal to AV control unit via CAM communication. Controls rear window defogger relay to operate rear window defogger and door mirror defogger.
Multifunction switch	The rear window defogger switch is installed. Turns the indicator lamp ON when detecting the operation of rear window defogger.
AV control unit	 Transmits rear window defogger switch signal to BCM via CAN communication. Transmits rear window defogger feedback signal to multifunction switch. Displays rear window defogger ON to the display when detecting the operation of rear window defogger
Rear window defogger	Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up.
Door mirror defogger	Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

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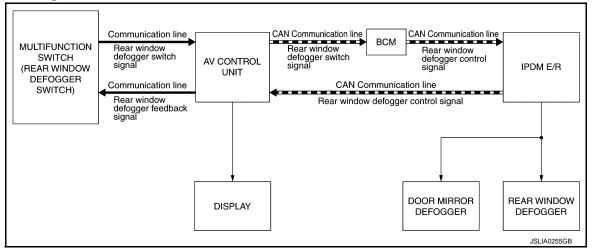
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SYSTEM

System Diagram

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System Description

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System Description

- Multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication when rear window defogger switch is turned ON, while ignition switch is ON.
- AV control unit transmits rear window defogger switch signal to BCM via CAN communication.
- BCM transmits rear window defogger control signal to IPDM E/R for approximately 15 minutes via CAN communication when rear window defogger switch signal is received.
- IPDM E/R turns rear window defogger relay ON when rear window defogger control signal is received.
- Power is supplied to rear window defogger and door mirror defoggers when rear window defogger relay is ON.
- IPDM E/R transmits rear window defogger control signal to AV control unit via CAN communication.
- AV control unit transmits rear window defogger feedback signal to multifunction switch (rear window defogger switch) via AV communication.
- AV control unit displays rear window defogger ON to the display when detecting the operation of rear window defogger.

Timer function

- BCM transmits rear window defogger control signal to IPDM E/R for approximately 15 minutes when rear window defogger switch is turned ON while ignition switch is ON. Then, IPDM E/R activates rear window defogger and door mirror defoggers.
- Timer is canceled when rear window defogger switch is pressed again during timer operation. BCM stops
 the output of rear window defogger control signal. The same operation also occurs when the ignition switch
 is turned OFF during timer operation.

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. Refer to BCS-57, "DTC Index".			
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 quatam adjection item	Diagnosis mode			
System	Sub system selection item	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 systemEngine start system	INTELLIGENT KEY	×	×	×	
Combination switch	COMB SW		×		
Body control system	всм	×			
IVIS	IMMU	×	×	×	
Interior room lamp battery saver	BATTERY SAVER	×	×	×	
Back door	TRUNK		×		
Vehicle security system	THEFT ALM	×	×	×	
RAP system	RETAINED PWR		×		
Signal buffer system	SIGNAL BUFFER		×	×	
_	AIR PRESSURE MONITOR*	×	×	×	

^{*:} This item is indicated, but not used.

FREEZE FRAME DATA (FFD)

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

Revision: 2013 September DEF-7 2014 QX80

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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 "CRANKIN			
	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 with steering is locked.)			
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)			
	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. 				

REAR WINDOW DEFOGGER

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

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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	
REAR DEF SW	This is displayed even when it is not equipped.	
PUSH SW	Indicates [ON/OFF] condition of push switch.	

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

ACTIVE TEST

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

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< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

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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
- Rear window defogger
- 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)

Operation Procedure

CAUTION:

Never perform auto active test in the following conditions.

- Engine is running.
- 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 driver door switch 10 times. Then turn the ignition switch OFF.

CAUTION:

Close passenger door.

4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts.

CAUTION:

Engine starts when ignition switch is turned ON while brake pedal is depressed.

- 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 <u>DLK-119</u>. "Component Function Check".

Inspection in Auto Active Test

When auto active test is actuated, the following operation sequence is repeated 3 times.

Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Rear window defogger	10 seconds
3	Front wiper	LO for 5 seconds → HI for 5 seconds
4	 Parking lamp License plate lamp Tail lamp Side marker lamp Front fog lamp 	10 seconds

< SYSTEM DESCRIPTION >

Operation sequence	Inspection location	Operation	
5	Headlamp	LO for 10 seconds →HI ON ⇔ OFF 5 times	
6	6 A/C compressor (magnet clutch) ON ⇔ OFF 5 times		

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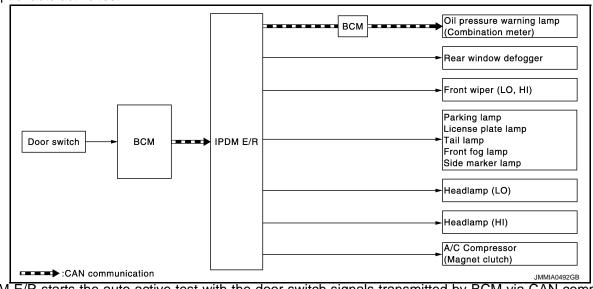
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Concept of auto active test



- 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	
	Perform auto active test. Does the rear window defogger operate?		BCM signal input circuit	
Rear window defogger does not operate			Rear window defogger Rear window defogger ground circuit Harness or connector between IPDM E/R and rear window defogger IPDM E/R	
Any of the following components do not operate		YES	BCM signal input circuit	
 Parking lamp License plate lamp Tail lamp Side marker lamp Front fog lamp Headlamp (HI, LO) Front wiper (HI, LO) 	Perform auto active test. Does the applicable system operate?	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	A/C auto amp. signal input circuit CAN communication signal between A/C auto amp. and ECM CAN communication signal between ECM and IPDM E/R	
			Magnet clutch Harness or connector between IPDM E/R and magnet clutch IPDM E/R	

Revision: 2013 September DEF-11 2014 QX80

< SYSTEM DESCRIPTION >

Symptom	Inspection contents		Possible cause
	Perform auto active test.	YES	Harness or connector between IPDM E/R and oil pressure switch Oil pressure switch IPDM E/R
Oil pressure warning lamp does not operate	Does the oil pressure warning lamp blink?	NO	 CAN communication signal between IPDM E/R and BCM CAN communication signal between BCM and combi- nation meter Combination meter

CONSULT Function (IPDM E/R)

INFOID:0000000009810685

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-22, "DTC Index".

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 [Unit]	MAIN SIG- NALS	Description
RAD FAN REQ [1/2/3/4]	×	Displays the value of the cooling fan speed request 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 auto stop 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.

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	MAIN SIG- NALS	Description
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.
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 ON/INHI ON/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 A/T 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.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		Displays the status of the hood switch 1 judged by IPDM E/R.
HL WASHER REQ [Off/On]		Displays the status of the headlamp washer request signal received from BCM via CAN communication.
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.
HOOD SW 2 [Off/On]		Displays the status of the hood switch 2 judged by IPDM E/R.

ACTIVE TEST

Test item	Operation	Description
CORNERING LAMP	LH	NOTE:
OOMINE MINO LAWI	RH	This item is indicated, but cannot be tested.
HORN	On	Operates horn relay for 20 ms.
REAR DEFOGGER	Off	OFF
NEAR DEI OOGEN	On	Operates the rear window defogger relay.
	Off	OFF
FRONT WIPER	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper high relay.
	1	OFF
	2	Transmits 50% pulse duty signal (PWM signal) to the cooling fan control module.
MOTOR FAN*	3	Transmits 75% pulse duty signal (PWM signal) to the cooling fan control module.
	4	Transmits 100% pulse duty signal (PWM signal) to the cooling fan control module.
HEAD LAMP WASHER	On	Operates the headlamp washer relay for 1 second.

Revision: 2013 September DEF-13 2014 QX80

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< SYSTEM DESCRIPTION >

Test item	Operation	Description
	Off	OFF
	TAIL	Operates the tail lamp relay.
EXTERNAL LAMPS	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.

^{*:} Operates while the engine is running.

ECU DIAGNOSIS INFORMATION

BCM, IPDM E/R

List of ECU Reference

ECU	Reference
	BCS-35, "Reference Value"
BCM	BCS-56, "Fail-safe"
DCIVI	BCS-57, "DTC Inspection Priority Chart"
	BCS-57, "DTC Index"
	PCS-15, "Reference Value"
IPDM E/R	PCS-20, "Fail-safe"
	PCS-22, "DTC Index"

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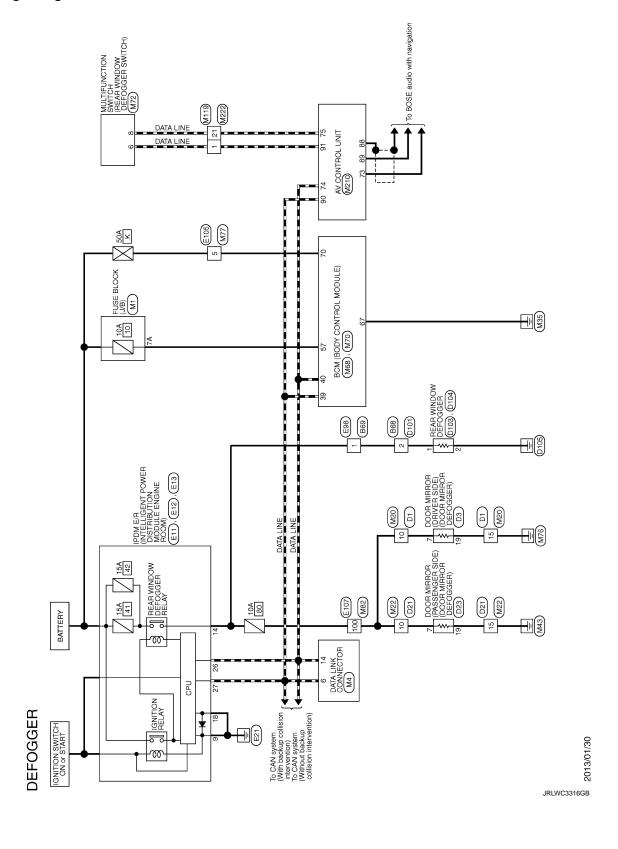
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WIRING DIAGRAM

REAR WINDOW DEFOGGER SYSTEM

Wiring Diagram



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37 BR/Y 38 SB 39 W/L		20 19 18	B B B		SIDE CAMERA LH GND	44 GR/L 45 G 46 W 47 LG	
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Connector No. F13	Connector Name	Connector Type TH12FW-NH		H.S. 27 26 26 24 23 34 33 32 30		Terminal Color Of Signal Name [Specification]	H	24 W/G	56		30 KW	+	34 6 .		Addute Connector No Eq.	Π	Connector Name WIKE TO WIKE	Connector Type M01FBR-S-LC	•		<u> </u>			- In	al Color Of	No. Wire oignal warne [opecinication]	1 1 .		
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Connector No. D101	e	Connector Type M02FW-LC		H.S.		Terminal Color Of Signal Name (Specification)	— с В	2 L .		Connector No. D103	Connector Name REAR WINDOW DEFOGGER	Connector Type P01FB-A				3 V E	E.S.			Lerminal Color Of Signal Name [Specification]	1 L -		Connector No.		Connector Name REAR WINDOW DEFOGGER	Connector Type P01FB-A			
DEFOGGER	50 R/B	\top	2	Φ.	Connector Type TH24MW-NH		12 11 10 9 8 7 6 5 3 2	24 23 22 21 20 19 18 17 16 15 14		Toursing	No. Wire Signal Name [Specification]	R/W	3 W SIDE CAMERA LH COMM	+	2 L	8 LG	H	Н	+	12 L/O = -	Н	П	하	19 B SIDE CAMERA LTI GNU	Ľ	21 R/B -	22 L/R -	23 W/L -	24 Y -

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Connector No. M1 Connector Name FUSE BLOCK (J/B)	7		3A 🔲 2A 1A	20 74 64 54					No. Wire Signal Name [Specification]	۱۵ ×	- BS	W	╀		ΓW	<u> </u>	**	ł		Connector No. M4	Γ	Connector Name DATA LINK CONNECTOR	Consector Type BP46EM	7			4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	11111111	3 4 5 6 7 8				Signal Name [Specification]		2 0		0 -	7 8	go	¥3 (5		r.		14 P	_		
RW		9			:										0					B/G	d/X							Q.	-		B/W	SIR.	98				-										
24 F	+	Н	Н	+	+	+	41	42	43	AA SH	46	47	48	Т	г	П	┰	۰	┿	┿	+	+	+	+	+	+	┰	\neg	+	+	67 B	+	+	+	+	+	+	3									
51 L/O 52 BRW	+	: B	ъ	9	- 1	70.0	X/B	G/R	œ	╀	100 W/R	1		Connector No. E107	Γ	Connector Name WIRE TO WIRE	Connector Type TH80MW-CS16-TM4	1	T T T T T T T T T T T T T T T T T T T			-					Signal Name [Specification]		$^{+}$	M/N	5 G/R	a :	GRAL	X/X	200	200	DIV.T	14 LG	DE/W	B/Y	17 W/B	+	+	┥	-	23 G/R -	
Comector No. E105 Connector Name WIRE Connector Transmitted Connec	٦.		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3						No. Wire Signal Name [Specification]	-	- WI C	3 B/B	t	+	ľ	t	8//M	t	╀	╀	H	╁	+	+	- 98 01	+	+	20 BR/Y	+	+	23 Y	+	+	29 KW	+	ľ	+	- 40	+	+	+	+	40 SB -	┥	4	43 V -	

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Conne	Connector No.	M20	45	P/L	-	36	G/O		26	0	INTELLIGENT KEY IDENTIFICATION
0	Connector Name	SOME TO WIRE	43	re		37	Y/B		59	W	HAZARD SW
5	all Maille		44	GR		38	۸		30	T/M	BK DOOR OPNR SW
Conne	Connector Type	TH40MW-CS15	45	SHIELD	-	39	M/L		31	M/G	DR DOOR UNLOCK SENSOR
			46	*		40	0/1		32	97	COMBI SW OUTPUT 5
	1		47	97		44	GR		33	Y	COMBI SW OUTPUT 4
	1	2 C C C C C C C C C C C C C C C C C C C	48	G/W		45	9		35	Μ	COMBI SW OUTPUT 3
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1	ý E	20.00	20	L/Υ		47	LG		36	SB	COMBI SW OUTPUT 1
•	į		51	GR/R		48	L/R		37	6/∀	SHIFT P
			25	LG/B		49	٨		33	_	CAN-H
			53	Ø		20	R/B		40	۵	CAN-L
Termir	Terminal Color Of		75	m		53	SHIELD				
Š	Wire	Signal Name [Specification]	55	œ		24	В				
-	>	•				22	В		Conne	Connector No.	M70
2	*								ducc	Connector Name	BCM (BODY CONTROL MODILIE)
က	>		Conne	Connector No.	M22				5		com (cool control moders)
4	>		Connection	Connector Namo	WIDE TO WIDE	Connector No.		M68	Conne	tor Type	Connector Type FEA09FW-FHA6-SA
2	LG/R		5	all saling		Jano	Connector Name	(3 II IOOM IOBEROO AGOS) MOS			
9	BR/W	- ^	Conne	Connector Type	TH40MW-CS15	Sellino	or Name	BOM (BODT CONTROL MODULE)	_	٦	
8	>					Connec	Connector Type	TH40FB-NH		•	T 56 57 58 50 87 87 82 84
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٩	+	,							į	ME	
1	+		Termina	0	Signal Name [Specification]				29	W/R	INT ROOM LAMP PWR SPLY
18	+		ģ	Wire		Terming	Ferminal Color Of	Signal Name [Specification]	24	9	BAT (FUSE)
19	ď		-	O		g Z	Wire		28	S/W	SHOCK DETECT_SENS
20	Δ.		2	≥		2	BR/Y	COMBI SW INPUT 5	29	O	PASSENGER DOOR UNLK OUTPUT
22	>		က	>		3	GR	COMBI SW INPUT 4	9	9	TURN SIGNAL LH OUTPUT
23	B/B		2	P/L		4	7	COMBI SW INPUT 3	61	6/∀	TURN SIGNAL RHOUTPUT
24	0/1		9	L/R		2	9	COMBI SW INPUT 2	62	œ	STEP LAMP CONT
25	BR/W	- · · · · · · · · · · · · · · · · · · ·	œ	Μſ		9	۸	COMBI SW INPUT 1	63	BR	ROOM LAMP TIMER CONT
26	Н		6	7/9		∞	۸	POWER WINDOW SW COMM	64	GR/R	CRANKING REQUEST
27	>		10	_		o	ď	STOP LAMP SW 1	92	~	ALL DOOR LOCK OUTPUT
28	M/G		12	₽Ą		÷	ď	RAIN SENSOR SERIAL LINK	99	>	DR DOOR. FUEL LID UNLK OUTPUT
59	Y/G		13	-		14	P/B	OPTICAL SENSOR	67	æ	QNS
30	č		14	œ		16	0/	DIMMER SIGNAL	89	>	PW PWR SPI Y (IGN)
8	GR/B		5			1	۷//	Y Ids BWR SPINS	69	. 3	PW PWR SPI Y (BAT)
8	+		2 4	B/W		ξ. Ε) A	RECEIVER/SENSOR GND	8	: >	BAT (E/I)
3 8	╀		2 2	۵		9	ä	VIGS GWG GENESE	2		(21)
8 %	+		2 8	<u>-</u>		2 8	9/R	KYI S ENT RECEIVER COMM			
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40	3		52	+		54	8	DONGLE LINK			
4	\dashv		26	W/R		52	LG/R	NATS ANT AMP.			

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	W	Connector Name WIRE TO WIRE 50 SHIELD .	80	11780FW-C310-11MH 3Z	32 [6/6	5 5 5	K/G	999				0	62		Wire Signal Name [Specification]	70.1	1/1 00	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	G/R - 67 B/W	. 91	95 SB	Y/R - 96	_		H		BR/W	B/Y	W/B	GR/R	W/R	a.	ii a	0.00	G/R	KW	W/L	R CILEBINADIA CIA		28 B/SB .	9	\dashv		+	0 - 2	40 W 3 L	R WB			97 9	SHIELD - 7	. 8	0	CHE OF	SMELU - 10
		BR -		90			BK/Y	^			,		. 0	R/W			- 0				B/O -	G/Y		SB	W/R	~				BB/Y	GR/L				. פ		0		L/W	Y/B -			O/L -	W/B											
	+	41 4	$^{+}$	+	+	+	+	21	22	23	╀	+	-	H	t	+	+	+	34	+	\dashv	-	-		H	H	43	H	t	t	25	t	61	5 6	70	Т	Т	+	+	96	\dashv	\dashv	86	\dashv											
DEFOGGER	Connector No. M72	Connector Name MULTIFUNCTION SWITCH	Connector Type Tuterill Nill	CONTROL STATE OF THE CONTROL OF THE	•			4 6 8 14	,	13 5 9					No Wire Signal Name [Specification]		ONIO - C	>	L/W	B/O	6 SB AV COMM (H)	re		14 W/B DISK EJECT SIGNAL			Connector No. M77	() L	Connector Name WIRE O WIRE	Connector Type TH80FW-CS16-TM4		Г	Lot	ol at		1.1				Terminal Color Of Signal Name [Specification]		\dashv	\dashv	3 R/B -	Н	2 ×	88 9	- 2 M/G	+	+	9 W/B	H		╀	4

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1	W/L	-	69	0	INTELLIGENT KEY IDENTIFICATION SIGNAL	13	Ь	-
12	٦		20	BR	REVERSE 12	14	SHIELD	
13	۵	-	71	SHIELD	MICROPHONE SHIELD	15	g	-
14	SHIELD	-	72	>	MICROPHONE VCC [With DCM]	16	>	
15	Ø		72	A//G	MICROPHONE VCC [Without DCM]	17	Μ	
16	>		73	A/G	COMM (CONT-DISP)	18	G/R	
17	Α		74	а	CAN-L	19	>	
18	G/R	•	75	97	AV COMM (L)	20	BR	
19	>		9/	97	AV COMM (L)	21	97	
20	æ	,	79	0/1	DIMMER SIGNAL	22	97	
21	97		98	GR/L	IGNITION SIGNAL	23	۵	
22	91		81	RV	REVERSE SIGNAL	24	R/W	
23	۵		82	BR/W	VEHICLE SPEED SIGNAL (8-PULSE)	52	0/1	
24	W/W		83	SHIELD	SHIELD	56	GR/L	
52	2		8	W/B	COMPOSITE IMAGE SYNC SIGNAL	27	×	
56	GR/L		87	BR	MICROPHONE SIGNAL [With DCM]	28	۸	
27	۸	-	87	Y/L	MICROPHONE SIGNAL [Without DCM]	59	BRW	
28	BR	- [Without DCM]	88	SHIELD	SHIELD	30	9/A	
28	>	- [With DCM]	88	Y/L	COMM (DISP-CONT)	31	T/A	
58	BR/W		06	_	CAN-H	32	<u>а</u>	
30	J/K		91	SB	AV COMM (H)	33	œ	
31	Y/L	-	85	SB	AV COMM (H)	34	M	=
32	В					35	SHIELD	
33	æ	,				36	SHIELD	
34	8		Connector No.	l	M222	37	SHIELD	
32	SHIELD	,	,	l	L	38	GR/R	
38	SHELD	,	Connect	Connector Name	WIRE TO WIRE	39	BR	
37	SHIELD	,	Connect	Connector Type	TH40FW-NH	40	SHIELD	
88	GR/R							
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Connect	Connector Name	AV CONTROL UNIT						
Connect	Connector Type	TH32FW-NH	Termina	Ferminal Color Of				
			Š	Wire	Signal Name [Specification]			
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	•		2	SB				
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9	<u>@</u>	57 88 89 91	4	W/B				
	2		2	SHIELD				
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Terminal	_	Signal Nama [Specification]	80	W				
o N	Wire	ognal rame [opecification]	თ	0	-			
65	W	PARKING BRAKE SIGNAL	10	SHIELD				
29	Μ	COMPOSITE IMAGE SIGNAL GND	11	W/L				
89	ч	COMPOSITE IMAGE SIGNAL	12	7				

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION Α DIAGNOSIS AND REPAIR WORK FLOW Work Flow INFOID:0000000009012668 **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 FOR DTC Е Perform self diagnosis with CONSULT Is any DTC detected? YES-1 >> BCM: Refer to BCS-57, "DTC Index". YES-2 >> IPDM E/R: Refer to PCS-22, "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. 5.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS" Perform the diagnosis with "Component diagnosis" of the applicable system. >> GO TO 6. DEF $oldsymbol{6}$. REPAIR OR REPLACE THE MALFUNCTIONING PARTS Repair or replace the specified malfunctioning parts. >> GO TO 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:00000000009012669

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:0000000009012670

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Does multifunction switch operate normally?

Refer to AV-37, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> INSPECTION END

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

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Component Function Check

1. CHECK FUNCTION

- 1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using 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 function is OK.
- NO >> Refer to <u>DEF-25</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check the 15A fuse (No. 41, 42 located in IPDM E/R).

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 IPDM E/R OUTPUT SIGNAL

- Turn ignition switch ON.
- 2. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.
- 3. Touch "ON".
- 4. Check voltage between IPDM E/R harness connector and ground.

(+) IPDM E/R		(-) CONSULT Active T		Test condition	Voltage (V) (Approx.)
Connector	Terminal				(11 -)
E11	14	14 Cround REAR DEFO	REAR DEFOGGER	ON	Battery voltage
EII	14 Ground		ILAN DLI OGGER	OFF	0

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace IPDM E/R.

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Revision: 2013 September DEF-25 2014 QX80

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER

Component Function Check

1. CHECK FUNCTION

- 1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.
- Touch "ON".
- 3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger function is OK.

NO >> Refer to <u>DEF-26</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009012674

INFOID:0000000009012673

1. CHECK REAR WINDOW DEFOGGER POWER SUPPLY CIRCUIT

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

(+) Rear window defogger		(-)	Condition		Voltage (V) (Approx.)	
Connector	Terminal				(Αρρίολ.)	
D103	1	Ground	Rear window defogger switch	ON	Battery voltage	
D103	1	Giodila	ixear willdow delogger switch	OFF	0	

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 4.

2.check rear window defogger ground circuit

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

Rear windo	ow defogger		Continuity	
Connector	Terminal	Ground	Continuity	
D104	2		Existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK FILAMENT

Refer to DEF-37, "Inspection and Repair".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair filament.

4. CHECK REAR WINDOW DEFOGGER POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect IPDM E/R connector.
- 3. Check continuity between IPDM E/R harness connector and rear window defogger harness connector.

IPDM E/R		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E11	14	D103	1	Existed

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS > Is the inspection result normal? Α YES >> GO TO 5. NO >> Repair or replace harness. 5. CHECK INTERMITTENT INCIDENT В Check intermittent incident. Refer to GI-43, "Intermittent Incident". С >> INSPECTION END D Е F G Н Κ DEF M Ν 0

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DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Component Function Check

INFOID:0000000009012675

1. CHECK DOOR MIRROR DEFOGGER

- 1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.
- Touch "ON".
- 3. Check that both side door mirror glasses are getting warmer.

Is the inspection result normal?

YES >> Door mirror defogger function is OK.

NO >> Refer to <u>DEF-28</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009012676

2014 QX80

1. CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check 10A fuse (No.80).

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 DOOR MIRROR DEFOGGER CIRCUIT

- 1. Disconnect IPDM E/R connector and door mirror (driver sides) connector.
- 2. Check continuity between IPDM E/R harness connector and door mirror (driver side) harness connector.

IPDM E/R		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E11	14	D3	7	Existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.check intermittent incident

Check intermittent incident.

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Component Function Check

INFOID:0000000009012677

1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

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- 1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using 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-29</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009012678

1. CHECK POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect IPDM E/R connector and door mirror (driver side) connector.
- 3. Check continuity between IPDM E/R harness connector and door mirror (driver side) harness connector.

IPDM E/R		Door mirror defo	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
E11	14	D3	7	Existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> Replace door mirror glass (driver side).

NO >> Repair or replace harness.

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Revision: 2013 September DEF-29 2014 QX80

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Component Function Check

INFOID:0000000009012679

1. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

- 1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.
- 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-30</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009012680

1. CHECK POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect IPDM E/R connector and door mirror (passenger side) connector.
- Check continuity between IPDM E/R harness connector and door mirror (passenger side) harness connector.

IPDM E/R		Door mirror defogger (passenger side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
E11	14	D23	7	Existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK GROUND CIRCUIT

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

Door mirror (p	assenger side)		Continuity
Connector	Terminal	Ground	Continuity
D23	19		Existed

Is the inspection result normal?

YES >> Replace door mirror glass (passenger side).

NO >> Repair or replace harness.

ALL DEFOGGER SYSTEMS DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS Α ALL DEFOGGER SYSTEMS DO NOT OPERATE Diagnosis Procedure INFOID:0000000009012681 В 1. CHECK REAR WINDOW DEFOGGER SWITCH Check rear window defogger switch. Refer to DEF-24, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. D NO >> Repair or replace the malfunctioning parts. 2.check rear window defogger relay Е Check rear window defogger relay. Refer to DEF-25, "Component Function Check". Is the inspection result normal? F YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CHECK DOOR MIRROR DEFOGGER Check door mirror defogger. Refer to DEF-28, "Component Function Check". Is the inspection result normal? Н 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-43, "Intermittent Incident". NO >> GO TO 1. 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:0000000009012682

1. CHECK REAR WINDOW DEFOGGER

Check rear window defogger.

Refer to DEF-26, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > DOOR MIRROR DEFOGGER DOES NOT OPERATE Α **BOTH SIDES BOTH SIDES: Description** INFOID:00000000009012683 В Driver side and passenger side door mirror defoggers do not operate. **BOTH SIDES**: Diagnosis Procedure INFOID:0000000009012684 1. CHECK DOOR MIRROR DEFOGGER Check door mirror defogger. D Refer to DEF-28, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. Е 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-43, "Intermittent Incident". NO >> GO TO 1. DRIVER SIDE DRIVER SIDE: Description INFOID:00000000009012685 Driver side door mirror defogger does not operate but passenger side door mirror defogger operates. DRIVER SIDE: Diagnosis Procedure INFOID:0000000009012686 1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER Check driver side door mirror defogger. Refer to DEF-29, "Component Function Check". Is the inspection result normal? K YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION DEF Confirm the operation again. Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". NO >> GO TO 1. PASSENGER SIDE Ν PASSENGER SIDE: Description INFOID:0000000009012687 Passenger side door mirror defogger does not operate but driver side door mirror defogger operates. PASSENGER SIDE : Diagnosis Procedure INFOID:0000000009012688 CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER. P Check passenger side 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. $2.\mathsf{confirm}$ the operation

DOOR MIRROR DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 1.

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

INFOID:0000000009012689

Diagnosis Procedure

1. CHECK AV CONTROL UNIT FUNCTION

Check that the AV control unit is operating normally.

Refer to AV-131, "Work Flow (Multi AV)" (BOSE audio with navigation) or AV-361, "Work Flow" (Telematics system).

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-43, "Intermittent Incident".

NO >> GO TO 1.

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REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:00000000009012690

1. CHECK AV CONTROL UNIT FUNCTION

Check that the AV control unit is operating normally.

Refer to AV-131, "Work Flow (Multi AV)" (BOSE audio with navigation) or AV-361, "Work Flow" (Telematics system).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK MULTIFUNCTION SWITCH

Check that the multifunction switch is operating normally.

Refer to AV-37, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 1.

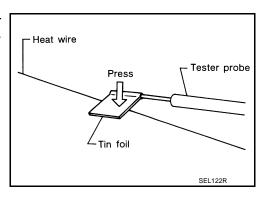
REMOVAL AND INSTALLATION

FILAMENT

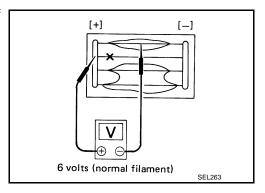
Inspection and Repair

INSPECTION

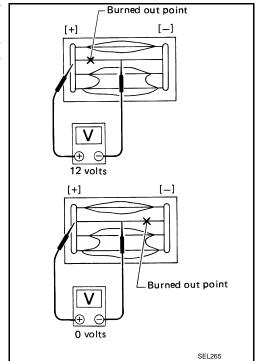
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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



- 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)

Revision: 2013 September DEF-37 2014 QX80

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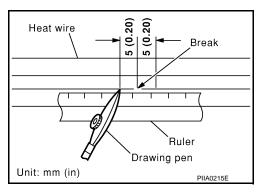
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< REMOVAL AND INSTALLATION >

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

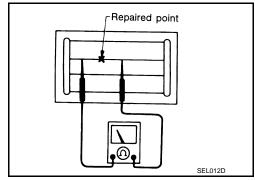
REPAIRING PROCEDURE

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



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

Do not touch repaired area while test is being conducted.



 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.

