

D

Е

CONTENTS

BASIC INSPECTION3
DIAGNOSIS AND REPAIR WORK FLOW3 Work Flow3
SYSTEM DESCRIPTION4
REAR WINDOW DEFOGGER SYSTEM4
WITH BOSE SYSTEM4 WITH BOSE SYSTEM: System Diagram4 WITH BOSE SYSTEM: System Description4 WITH BOSE SYSTEM: Component Parts Location5
WITH BOSE SYSTEM : Component Description5
WITHOUT BOSE SYSTEM
DIAGNOSIS SYSTEM (BCM)8
COMMON ITEM
REAR WINDOW DEFOGGER
DTC/CIRCUIT DIAGNOSIS11
POWER SUPPLY AND GROUND CIRCUIT11 Diagnosis Procedure11
PEAR WINDOW DEFOGGER SWITCH12 Description

REAR WINDOW DEFOGGER RELAY14Description14Component Function Check14Diagnosis Procedure14Component Inspection15	F
REAR WINDOW DEFOGGER16Description16Component Function Check16Diagnosis Procedure16	Н
DOOR MIRROR DEFOGGER18Description18Component Function Check18Diagnosis Procedure18	J
DRIVER SIDE DOOR MIRROR DEFOGGER19 Description	K
PASSENGER SIDE DOOR MIRROR DEFOG- GER	M
REAR WINDOW DEFOGGER FEEDBACK SIGNAL	0
tion Check	Р
ECU DIAGNOSIS INFORMATION32	

BCM (BODY CONTROL MODULE)32	Diagnosis Procedure	79
Reference Value 32 Wiring Diagram - BCM - 55 Fail-safe 70 DTC Inspection Priority Chart 71 DTC Index 72	REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE Diagnosis Procedure PRECAUTION	80
SYMPTOM DIAGNOSIS75		
REAR WINDOW DEFOGGER DOES NOT OPERATE	FOR USA AND CANADA	81 81
REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DE- FOGGERS OPERATE	Headlamp Service	82
DOOR MIRROR DEFOGGER DOES NOT OP- ERATE78	FOR MEXICO: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	
BOTH SIDES : Diagnosis Procedure	FOR MEXICO: Precaution for Procedure without Cowl Top Cover	83
DRIVER SIDE	ServiceFOR MEXICO : Precautions for Removing of Bat-	
PASSENGER SIDE	REMOVAL AND INSTALLATION	
ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT IS OPERATED79	FILAMENT Inspection and Repair	

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

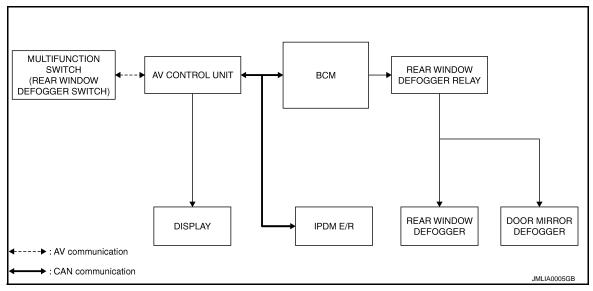
BASIC INSPECTION Α DIAGNOSIS AND REPAIR WORK FLOW Work Flow INFOID:0000000009722485 **DETAILED FLOW** 1. OBTAIN INFORMATION ABOUT SYMPTOM Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred) as much as possible when the customer brings 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-91, "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

SYSTEM DESCRIPTION

REAR WINDOW DEFOGGER SYSTEM WITH BOSE SYSTEM

WITH BOSE SYSTEM: System Diagram

INFOID:0000000009722486



WITH BOSE SYSTEM: System Description

INFOID:0000000009722487

Operation Description

- Turn rear window defogger switch ON when the ignition switch is turned ON. Then multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication. AV 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 (with 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 AV control unit via CAN communication.
- AV control unit transmit rear defogger indicator signal to multifunction switch (rear window defogger switch) via AV 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
 is turned ON. It makes rear window defogger and door mirror defogger (with door mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns
 rear window defogger relay OFF. The same reaction also occurs during timer operation, if the ignition switch
 is turned OFF.

INPUT/OUTPUT SIGNAL CHART

Switch	Input signal to BCM	BCM function	Actuator
Rear window defogger switch	Defogger switch signal	Rear window defogger & Door mir-	Rear window defogger
Push button ignition switch	Ignition signal	ror defogger [*] control	Door mirror defogger *

^{*:} With door mirror defogger

WITH BOSE SYSTEM: Component Parts Location

INFOID:0000000009722488

Α

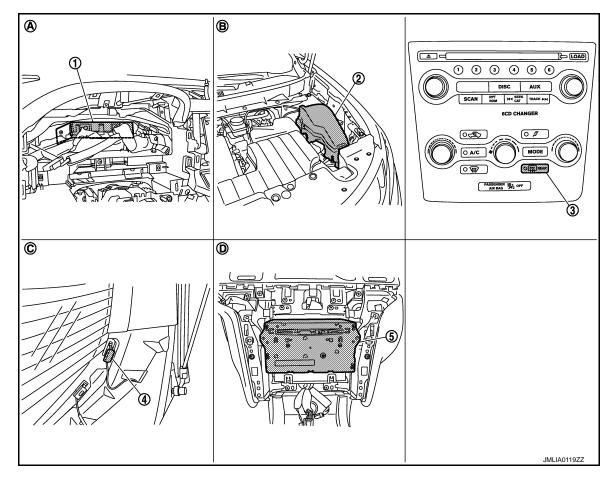
В

D

Е

F

Н



- 1. BCM
- 4. Rear window defogger connector
- A. Dash side lower (passenger side)
- D. Behind cluster lid C

- 2. IPDM E/R
- 5. AV control unit
- B. Engine room dash panel (LH)
- Rear window defogger switch (built-in multifunction switch)
- C. Behind rear pillar finisher (LH)

WITH BOSE SYSTEM: Component Description

INFOID:0000000009722489

BCM	 Operates the rear window defogger with the operation of rear window defogger switch. Performs the timer control of rear window defogger.
Rear window defogger relay	Operates the rear window defogger and the door mirror defogger with the control signal from BCM.
IPDM E/R	Transmit rear window defogger control signal to AV control unit via CAN communication.
Multifunction switch (Rear window defogger switch)	The rear window defogger switch is installed. Turns the indicator lamp ON when detecting the operation of rear window defogger.
AV control unit	Displays the 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.

^{*:} With mirror defogger

WITHOUT BOSE SYSTEM

Revision: 2013 August DEF-5 2014 MURANO

DEF

K

M

Ν

0

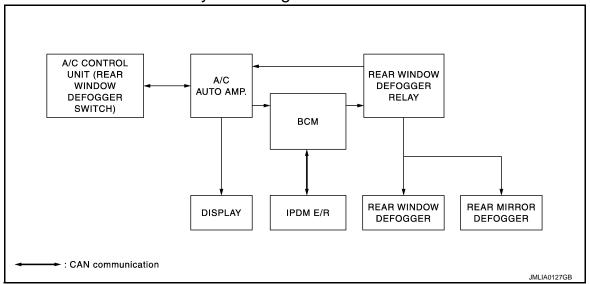
Р

REAR WINDOW DEFOGGER SYSTEM

< SYSTEM DESCRIPTION >

WITHOUT BOSE SYSTEM: System Diagram

INFOID:0000000009722490



WITHOUT BOSE SYSTEM: System Description

INFOID:0000000009722491

Operation Description

- Turn rear window defogger switch ON when the ignition switch is turned ON. Then A/C control unit (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp.. transmits rear window defogger switch signal to BCM.
- 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 (with door mirror defogger) are supplied with power and operate when rear window defogger relay turns ON.
- Rear window defogger relay transmits rear window defogger control signal to A/C auto amp. when rear window defogger operates.
- A/C auto amp. transmit rear window defogger indicator signal to A/C control unit (rear window defogger switch). 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 is turned ON. It makes rear window defogger and door mirror defogger (with door mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same reaction also occurs during timer operation, if the ignition switch is turned OFF.

INPUT/OUTPUT SIGNAL CHART

Switch	Input signal to BCM	BCM function	Actuator
Rear window defogger switch	Defogger switch signal	Rear window defogger & Door mir-	Rear window defogger
Push button ignition switch	Ignition signal	ror defogger* control	Door mirror defogger *

^{*:} With door mirror defogger

WITHOUT BOSE SYSTEM: Component Parts Location

INFOID:0000000009722492

Α

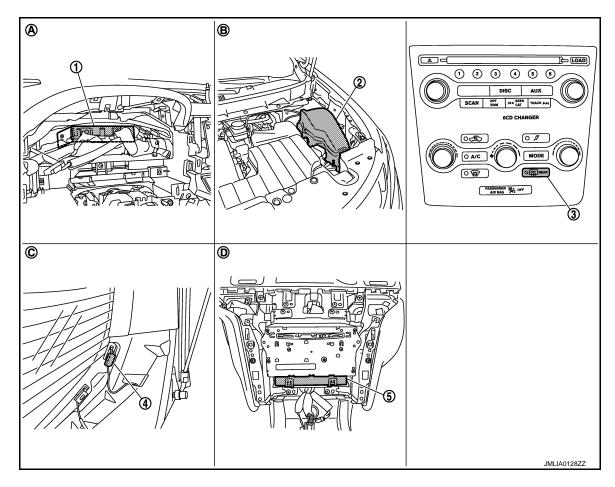
В

D

Е

F

Н



- 1. BCM
- 4. Rear window defogger connector
- A. Dash side lower (passenger side)
- D. Behind cluster lid C

- 2. IPDM E/R
- 5. A/C auto amp
- B. Engine room dash panel (LH)
- Rear window defogger switch (built-in A/C control unit)
- C. Behind rear pillar finisher (LH)

WITHOUT BOSE SYSTEM: Component Description

INFOID:0000000009722493

BCM	 Operates the rear window defogger with the operation of rear window defogger switch. Performs the timer control of rear window defogger.
Rear window defogger relay	Operates the rear window defogger and the door mirror defogger with the control signal from BCM.
IPDM E/R	Transmit rear window defogger control signal to ECM via CAN communication.
A/C control unit (Rear window defogger switch)	The rear window defogger switch is installed. Turns the indicator lamp ON when detecting the operation of rear window defogger.
A/C auto amp.	Displays the 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.

^{*:} With door mirror defogger

Revision: 2013 August DEF-7 2014 MURANO

DEF

K

M

Ν

0

Р

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010100192

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.

x: Applicable item

System	Sub system selection 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	×* ¹	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER*2			
Intelligent Key system Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

- *1: For models with rain sensor this mode is displayed, but is not used.
- *2: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

km/h km SLEEP>LOCK SLEEP>OFF LOCK>ACC ACC>ON RUN>ACC	· · · · · · · · · · · · · · · · · · ·	ment a particular DTC is detected r value) of the moment a particular DTC is detected While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*) While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) While turning power supply position from "LOCK" to "ACC" While turning power supply position from "ACC" to "IGN"
SLEEP>LOCK SLEEP>OFF LOCK>ACC ACC>ON	Total mileage (Odometer	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*) While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) While turning power supply position from "LOCK" to "ACC"
SLEEP>OFF LOCK>ACC ACC>ON		normal mode (Power supply position is "LOCK"*) While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) While turning power supply position from "LOCK" to "ACC"
LOCK>ACC ACC>ON		normal mode (Power supply position is "OFF".) 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	While turning power supply position from "OFF" to "LOCK"*
OFF>ACC	•	While turning power supply position from "OFF" to "ACC"
ON>CRANK	2101040104	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"*
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)
0 - 39	The number is 0 whenThe number increases whenever ignition swit	It ignition switch is turned ON after DTC is detected a malfunction is detected now. It is like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition in the OFF \rightarrow ON. If 39 until the self-diagnosis results are erased if it is over 39.
	RUN>URGENT ACC>OFF DFF>LOCK DFF>ACC DN>CRANK DFF>SLEEP LOCK>SLEEP ACC DN ENGINE RUN CRANKING	RUN>URGENT ACC>OFF DFF>LOCK DFF>ACC DN>CRANK DFF>SLEEP LOCK>SLEEP LOCK DFF ACC DN ENGINE RUN CRANKING The number of times that a the number is 0 when the number increases whenever ignition swite.

- *: 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)

INFOID:0000000009722495

0

Р

Α

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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.

ACTIVE TEST

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

1. CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	L
11	battery power suppry	10

Is the fuse blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- Disconnect BCM connectors.
- 3. Check voltage between BCM harness connector and ground.

	(+) (-)		
В	BCM		Voltage (Approx.)
Connector	Terminal	0	
M118	1	Ground	Detter veltere
M119	11		Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair or replace harness or connector.

DEF

K

Α

В

D

Е

F

Н

INFOID:0000000009722496

M

Ν

Р

Revision: 2013 August DEF-11 2014 MURANO

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH

Description INFOID:0000000009722497

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

Component Function Check

INFOID:0000000009722498

1. CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

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

YES >> Rear window defogger switch function is OK.

NO >> Refer to DEF-12, "Diagnosis Procedure"

Diagnosis Procedure

INFOID:0000000009722499

WITH BOSE AUDIO SYSTEM

1. CHECK PRESET SWITCH (REAR WINDOW DEFOGGER SWITCH)

Does preset switch operate normally?

- Without navigation system. Refer to AV-178, "Description".
- With navigation system. Refer to AV-315, "Description".

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace preset switch (rear window defogger switch). Refer to <u>AV-285, "Removal and Installation"</u>. (without navigation system) or <u>AV-457, "Removal and Installation"</u> (with navigation system).

WITHOUT BOSE AUDIO SYSTEM

1.CHECK AUTO A/C

Check the operating condition of auto A/C

Does auto A/C operate normally?

YES >> GO TO 2.

NO >> Perform auto A/C diagnosis. Refer to HAC-108, "Diagnosis Chart By Symptom".

2. CHECK BCM OUTPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect A/C auto amp. connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between A/C auto amp. harness connector and ground by oscilloscope.

(+) A/C auto amp.		(-)	voltage (Approx.)	
Connector	Terminal			
M50	27	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB	

Is the inspection result normal?

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

3. CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

- Turn ignition switch OFF.
- 2. Disconnect BCM connector.
- Check continuity between BCM harness connector and A/C auto amp. harness connector.

В	CM	A/C auto amp.		Continuity
Connector	Terminal	Connector Terminal		Continuity
M123	130	M50	27	Existed

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M123	130		Not existed

Is the inspection result normal?

>> Replace BCM. Refer to BCS-98, "Removal and Installation".

NO >> Repair or replace harness.

4. REPLACE A/C CONTROL

- Turn ignition switch OFF.
- Replace A/C control (rear window defogger switch). 2.
- Turn ignition switch ON.
- Operate rear window defogger switch and check the operating condition.

Is the inspection result normal?

YES >> INSPECTION END.

NO >> GO TO 5.

5. REPLACE A/C AUTO AMP.

- Turn ignition switch OFF.
- Replace A/C auto amp. 2.
- Turn ignition switch ON.
- Operate rear window defogger switch and check the operating condition.

Is the inspection result normal?

YES >> INSPECTION END.

NO >> GO TO 6.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END.

DEF

K

Α

В

D

Е

F

Н

Ν

Р

DEF-13 Revision: 2013 August 2014 MURANO

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

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

Component Function Check

INFOID:0000000009722501

1. CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

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

Is the inspection result normal?

YES >> Rear window defogger relay power supply circuit is OK.

NO >> Refer to <u>DEF-14</u>. "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009722502

1.CHECK FUSE

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

-

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT

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

(+) BCM	Л	(-)	Condition of rear window defog- ger switch	Voltage (V) (Approx.)	
Connector	Terminal		ger emien	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M123	151	Ground	ON	0	
IVI 123	151	Ground	OFF	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 3.

3.CHECK FUSE BLOCK (J/B)

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

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

Is the inspection result normal?

YES >> Repair or replace harness or connector between BCM and fuse block (J/B).

NO >> GO TO 4.

4. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to DEF-15, "Component Inspection"

Is the inspection result normal?

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

NO >> Replace rear window defogger relay.

Revision: 2013 August DEF-14 2014 MURANO

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-44, "Intermittent Incident"

>> INSPECTION END

Component Inspection

INFOID:0000000009722503

Α

В

D

Е

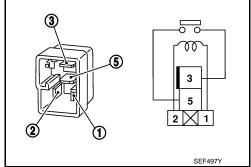
F

Н

1. CHECK REAR WINDOW DEFOGGER RELAY

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

Terr	minal		
	window Jer 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.

DEF

K

M

N

0

Р

Revision: 2013 August DEF-15 2014 MURANO

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER

Description INFOID:000000009722504

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

Component Function Check

INFOID:0000000009722505

1. CHECK REAR WINDOW DEFOGGER

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

Is the inspection result normal?

YES >> Rear window defogger is OK.

NO >> Refer to <u>DEF-16</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009722506

1. CHECK FUSE

- Turn ignition switch OFF.
- 2. Check the following.
- 20A fuse [No.14, located in fuse block (J/B)]
- 20A fuse [No.15, located in fuse block (J/B)]

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK POWER SUPPLY CIRCUIT

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

(+) Rear window defogger			0 11:1	Voltage (V) (Approx.)	
		(-)	Condition of rear window defogger switch		
Connector	Terminal		gg	(
D184	1	Ground	ON	Battery voltage	
D104	'	Giodila	OFF	0	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 4.

3. CHECK GROUND CIRCUIT

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

Rear window defo	gger		Continuity
Connector	Terminal	Ground	Continuity
D185	2		Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector between rear window defogger and ground.

4. CHECK FUSE BLOCK (J/B)

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

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

(+)	(+)			Voltage (V) (Approx.)
Fuse block (J/B)		(-)	Condition of rear window defogger switch	
Connector	Terminal		330	(11 -)
	10G		ON	Battery voltage
B6			OFF	0
ВО	11G	Ground	ON	Battery voltage
	116		OFF	0

Is the inspection result normal?

YES >> GO TO 5.

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

5. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay. Refer to <u>DEF-15</u>. "Component Inspection"

Is the inspection result normal?

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

NO >> Replace rear window defogger relay.

6. CHECK FILAMENT

Check the filament for damage or blown.

Refer to DEF-84, "Inspection and Repair"

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair filament.

7. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-44, "Intermittent Incident"

>> INSPECTION END

DEF

Α

В

D

Е

F

Н

J

K

M

Ν

Р

Revision: 2013 August DEF-17 2014 MURANO

DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Description INFOID:0000000009722507

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

Component Function Check

INFOID:0000000009722508

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-18</u>. "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000009722509

1. CHECK FUSE

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

-

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK FUSE BLOCK (J/B)

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

	+) ock (J/B)	(-)	Condition of rear win- dow defogger switch	Voltage (V) (Approx.)
Connector	Terminal		2011 2011 3901 21111	(+)
	10C	Ground	ON	Battery voltage
IVIS	100	Ground	OFF	0

Is the inspection result normal?

YES >> GO TO 3.

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

${f 3.}$ CHECK DOOR MIRROR DEFOGGER CIRCUIT

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

	or defogger r side)		Condition of rear win- dow defogger switch	Voltage (V) (Approx.)
Connector	Terminal	Ground	dow delogger switch	
D3	7		ON	Battery voltage
DS	7		OFF	0

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the harness or connector.

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-44, "Intermittent Incident"

Is the inspection result normal?

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Description INFOID:0000000009722510

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

Component Function Check

1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

>> Driver side door mirror defogger is OK.

>> Refer to DEF-19, "Diagnosis Procedure". NO

Diagnosis Procedure

1. CHECK POWER SUPPLY CIRCUIT

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

(+) Door mirror (driver s	ide)	(-)	Condition of rear win- dow defogger switch	Voltage (V) (Approx.)
Connector	Terminal			()
D3	7	Ground	ON	Battery voltage
D3	7	Giouna	OFF	0

Is the inspection result normal?

YES >> GO TO 2.

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

2.check ground circuit

- 1. Turn ignition switch OFF.
- 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 >> GO TO 3.

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

3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to DEF-20, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 4.

NO

>> Replace door mirror (driver side). Refer to MIR-72, "DOOR MIRROR ASSEMBLY: Removal and Installation" (with ADP) or Refer to MIR-95, "DOOR MIRROR ASSEMBLY: Removal and Installation" (without ADP).

DEF-19

4.CHECK INTERMITTENT INCIDENT

2014 MURANO

Revision: 2013 August

YES

INFOID:0000000009722511

INFOID:0000000009722512

D

Α

K

DEF

M

N

Р

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Check intermittent incident.

Refer to GI-44, "Intermittent Incident"

Is the inspection result normal?

>> INSPECTION END

Component Inspection

INFOID:0000000009722513

1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

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

Door mirror (driver side)		Continuity
Connector	Terr	minal	Continuity
D3	7	19	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO

>> Replace door mirror glass (driver side). Refer to MIR-72, "DOOR MIRROR ASSEMBLY: Removal and Installation" (with ADP) or Refer to MIR-95, "DOOR MIRROR ASSEMBLY: Removal and Installation" (without ADP).

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description INFOID:0000000009722514

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

Component Function Check

${f 1}$.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

YES >> Passenger side door mirror defogger is OK.

>> Refer to DEF-21, "Diagnosis Procedure". NO

Diagnosis Procedure

1. CHECK POWER SUPPLY CIRCUIT

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

(+)			0 150	V 14 0.0
Door mirror (Passenge	r side)	(-)	Condition of rear win- dow defogger switch	Voltage (V) (Approx.)
Connector	Terminal		30	(11 -)
D43	7	Ground	ON	Battery voltage
D43	,	Giodila	OFF	0

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check passenger side door mirror defogger.

Refer to DEF-22, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 4.

>> Replace door mirror (passenger side).Refer to MIR-72, "DOOR MIRROR ASSEMBLY : Removal NO and Installation" (with ADP) or Refer to MIR-95, "DOOR MIRROR ASSEMBLY: Removal and Installation" (without ADP).

4.CHECK INTERMITTENT INCIDENT

DEF-21 Revision: 2013 August 2014 MURANO

DEF

Α

D

INFOID:0000000009722515

INFOID:0000000009722516

N

Р

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Check intermittent incident.

Refer to GI-44, "Intermittent Incident"

>> INSPECTION END

Component Inspection

INFOID:0000000009722517

1. CHECK PASSENGER DOOR MIRROR DEFOGGER

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

Door mirror (pa	assenger side)		Continuity
Connector	Terr	minal	Continuity
D43	7	19	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO

>> Replace door mirror glass (passenger side). Refer to MIR-72, "DOOR MIRROR ASSEMBLY:

Removal and Installation" (with ADP) or Refer to MIR-95, "DOOR MIRROR ASSEMBLY:

Removal and Installation" (without ADP).

REAR WINDOW DEFOGGER FEEDBACK SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER FEEDBACK SIGNAL WITHOUT BOSE SYSTEM

INFOID:0000000009722518

Α

В

Е

F

Н

WITHOUT BOSE SYSTEM: Component Function Check

1. CHECK REAR WINDOW DEFOGGER FEEDBACK SIGNAL

Check that the indicator lamp of rear window defogger switch is illuminated when turning the rear window defogger switch ON.

Condition

Rear window defogger

switch

ON

OFF

Is the inspection result normal?

YES >> Rear window defogger feedback signal is OK.

>> Refer to DEF-23, "WITHOUT BOSE SYSTEM : Diagnosis Procedure". NO

D

WITHOUT BOSE SYSTEM: Diagnosis Procedure

INFOID:0000000009722519

1.CHECK AUTO A/C

Check the operating condition of auto A/C.

Terminal

26

Does auto A/C operate normally?

YES >> GO TO 2.

NO >> Perform auto A/C diagnosis. Refer to HAC-108, "Diagnosis Chart By Symptom".

2.CHECK REAR WINDOW DEFOGGER FEEDBACK SIGNAL CIRCUIT 1

Turn ignition switch ON.

(+)

A/C auto amp.

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

(-)

Ground

Voltage (V) (Approx.)	
Battery voltage	

0

Is the inspection result normal?

YES >> GO TO 3.

Connector

M50

NO >> GO TO 5.

K

3.replace a/c control

- Turn ignition switch OFF.
- 2. Replace A/C control (rear window defogger switch).
- 3. Turn ignition switch ON.
- Operate rear window defogger switch and check the operating condition.

Is the inspection result normal?

YES >> INSPECTION END.

NO >> GO TO 4.

4. REPLACE A/C AUTO AMP.

- 1 Turn ignition switch OFF.
- Replace A/C auto amp. 2.
- Turn ignition switch ON.
- Operate rear window defogger switch and check the operating condition.

Is the inspection result normal?

YES >> INSPECTION END.

NO >> GO TO 7.

5.CHECK FUSE BLOCK (J/B)

- Turn ignition switch OFF.
- Disconnect fuse block (J/B) connector. 2.
- Turn ignition switch ON.

DEF

N

Р

REAR WINDOW DEFOGGER FEEDBACK SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

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

	+) ock (J/B)	(-)	Condit	ion	Voltage (V) (Approx.)
Connector	Terminal				, , ,
M3	9C	Ground	Rear window defogger	ON	Battery voltage
IVIO	90	Giouria	switch	OFF	0

Is the inspection result normal?

YES >> GO TO 6.

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

6. CHECK REAR WINDOW DEFOGGER FEEDBACK SIGNAL CIRCUIT 2

- 1. Turn ignition switch OFF.
- 2. Disconnect A/C auto amp. connector.
- 3. Check continuity between fuse block (J/B) harness connector and A/C auto amp. harness connector

Fuse bl	ock (J/B)	A/C au	ito amp.	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M3	9C	M50	26	Existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END.

REAR WINDOW DEFOGGER SYSTEM Α Wiring Diagram - DEFOGGER SYSTEM -INFOID:0000000009722520 (S) To base audio with color display To BOSE audio without navigation To BOSE audio with navigation MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) (M123): (WD) В AV CONTROL UNIT (M172), (M174): To CAN system C $\operatorname{Res}_{\mathrm{Res}}$ \(\text{MD}\) : With door mirror delogger \(\text{NV}\) : With navigation system \(\text{ON}\) : With navigation system \(\text{ON}\) : With color display \(\text{4.1}\) = 00 : \(\text{NV}\) : \(\text{4.5}\) = 88 : \(\text{NV}\) \(\text{4.1}\) = 00 : \(\text{NV}\) : \(\text{4.6}\) = 80 : \(\text{ON}\) \(\text{5.2}\) : \(\text{CNV}\) \(\text{5.2}\) : \(\text{CNV}\) \(\text{5.2}\) \(\text{CNV}\) \(\text{5.2}\) : \(\text{CNV}\) \(\text{5.2}\) \(\text{5.2}\) \(\text{CNV}\) \(\text{5.2}\) \(\text{5.2}\) \(\text{5.2 D CPU Е DATA LINK CONNECTOR (M4) F 82 M11 M11 40A FUSE BLOCK (J/B) (M1), M2), B6 BCM (BODY CONTROL MODULE) (M118) (M12) (M123) DEFOGGER D184, D185 <u>0</u>183 IGNITION SWITCH ON or START Н 30 20A J SIDE) (DOOR MIRROR DEFOGGER) (D43): (MD) 20A Κ - D41 D41 M18 M18 (DRIVER SIDE) (DOODR MIRROGER) 1 DEFOGGER) 1 DEF REAR WINDOW DEFOGGER RELAY M20 D21 (M20) D21 M - N W BATTERY A/C AUTO AMP. A/C CONTROL (REAR WINDOW DEFOGGER SWITCH) (M95): COD Ν 6: (00) 7: (00) DEFOGGER 0 2012/08/24 To automatic air conditioning system Р

JRLWC2836GB

REAR WINDOW DEFOGGER SYSTEM

DEFOGGER								
Connector No. B6	Connector No.	D3	11	0	-	Connector No.		D41
Connector Name FLISE BLOCK (J/B)	Connector Name	DOOR MIRROR (DRIVER SIDE)	14	В	1	Connector Name		WIRE TO WIRE
			15	ΓG	_			
Connector Type NS12FBR-CS	Connector Type	TH24MW-NH	16	g	-	Connecto	Connector Type	TH40FW-CS15
4	¢		17	Υ	-	ģ		
	B		18	GR	1	B	Į	
	Ě		19	BR	-	P		
	2		20	97	1	2		8 7 8 8 4 2 1
3 -		12 11 10 7	24	۵	1		Н	8 6 10
11(\$ 100		24 25 24	25	>	1			N 8 N 10 N
]	96	*			J	
			2 2	· a	1			
T	T		i			Thomas	30	
No Wire Signal Name [Specification]	No Wire	Signal Name [Specification]	8 8	. 8		N N	Wire	Signal Name [Specification]
+	+		8	3 6		,		
- >	9		5 6	6	i		,	
	+		35			1	1	
4	+	1	33	9	1	4	В	1
2G GR -	12 SB		34	>-		2	Α	
4G L -	19 B		32	٦		9	۵	
	21 BR	-	41	а	1	7	0	1
	22 G	-	42	GR	1	80	В	1
	23 GR	-	43	_	1	16	o	
Connector No. B107	╀		44	>	1	17	>	
l	┨		46	e G		q	. 60	
Connector Name WIRE TO WIRE			? :	9 0		0 9	5 6	
1	-		46	r	3	6	YS	
Connector Type M02MW-LC	Connector No.	D21	20	>	1	50	FG	,
á	Connector Name	WIRE TO WIRE	21	0	1	24	ΓC	1
」			25	٦	- [Without automatic drive positioner]	25	٨	=
Ĭ	Connector Type	TH40FW-CS15	52	۵.	- [With automatic drive positioner]	26	0	-
The state of the s	4		23	٦	- [With automatic drive positioner]	28	9	1
Ļ	B		23	۵.	- [Without automatic drive positioner]	59	>	
2	ŧ	H	54	9	- [Without automatic drive positioner]	30	SB	
	ē.	2	54	ay.	- [With automatic drive positioner]	31	RR	,
		8 2 3 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	14	9	- [Meh automotic dairo positional]	33	0	
Tomino Of		80 S S S S S S S S S S S S S S S S S S S	3 1	3 0	Datal or automatic arise positioner	700		
No Wire Signal Name [Specification]			3		[with root automatic trive positioner]	3 2	, ,	
+						ŧ,	-	
9 :						CC]	10
· (N- MG-	Signal Name [Specification]						
2 B =	No. Wire							
	> 1	1						
	5 2	-						
	e.	1						
	4 B	-						
	9 M							
	es se							
	7 P	1						
	8 BR							
	90							
	5 >							
	2							

JRLWC9483GB

REAR WINDOW DEFOGGER SYSTEM

1. LG Connector Name Connector Type Connector Typ	
Franciscal Color Of Sugral Name (Specification)	
Connector Name REAR WINDOW DEFOOGER Connector Type PDIFB.A Terminal Color Of Signal Name (Specification) Connector Name PDIFB.A CONNECTOR Name PDIFB.	
DEFOGGER Corrector Name DORAMPROR (PASSENGER SIDE)	
	ID

В

Α

С

D

Е

F

G

Н

J

Κ

DEF

 \mathbb{N}

Ν

0

JRLWC9484GB

Ρ

DEFOGGER				
4A GR -	Connector No. M4	20 Y	-[With colour display]	Connector No. M18
H		21 BR		П
╀	Connector Name DATA LINK CONNECTOR	H		Connector Name WIRE TO WIRE
1	Consequent Time	+		Connection Time Wilderson Court
	1	. 47		
	4	72 F		4
Connector No. M2		28 BR		
I		ł		
Connector Name FUSE BLOCK (J/B)		+		20
┪	191 14 18	+	-	
Connector Type NS10FW-CS		38	1	8 2 2 2 2 3 3 4 4 6 6 6
1	3 4 5 6 7 8	H		27 28 38 28 38 38 38 38 38 38 38 38 38 38 38 38 38
Œ		9		
至		+		
		47 P		
	Terminal Color Of	48	•	Terminal Color Of
]] 1	No. Wire Signal Name [Specification]	W W		No. Wire Signal Name [Specification]
10 7 8 5	t	+		t
	- nn c	+	•	9
	4 B -	21 FG	_	2 v –
	- 2	52 Y	-	4 L – [With iPod without BOSE system]
Terminal Color Of	9	> 23		A W = I With BOSE exetem and base audio without i Dod
		ł		t
+	- BK	+	,	4
- w	- 5	22 D		5 BR - [Without iPod and BOSE system]
38	38	2e FG		5 W - [With iPod without BOSE system]
- 0	╀	╀		l
,		+		á
	- Y 91	+	,	- 9 /
- × 89		62 BR	1	n n
78 B		t	,	w 91
ł	Connection No.	t		ł
+	١	64 SHELD	-	+
9B GR -	Occupants Name WIDE TO MIDE	M 99	_	18 W =
		67 R		- H
	Connector Type TH70FW-CS10-M3	W 89		- SB
	1	$^{+}$		$^{+}$
Connector No. M3		+	1	Z4 LG =
Connector Name FLISE BLOCK (1/B)		70 G	-	25 Y =
	J.	71 G		26 P -
Connector Type NS12FW-CS		72 RR		- B
1	11	ł		ł
Q.	1	+		+
全ア	k	74 W	_	30 G
Г	1	75 BR	1	31 V
1 3 6 9		76 R		32 Y -
007	Terminal Color Of	77 G		33
7 7 0 0 1 0 +	No. Wire Signal Name [Specification]	78 ×		34 BR
	3	79		H
		ł		ł
Tarminal Color Of	á	+		
	+	+		
+	2	+		
4	. a	83 BG		
11C R -	- d			
12C 0 -	12 L –			
6C BR -	13 ×			
╀	- × *!			
╀	- a			
200	-			
ac GR	4			

JRLWC9485GB

REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

Terminal Color Of Signal Name [Specification] Wire Wire NTERIOR ROOM LAND POWER SUPPLY 4 NTERIOR ROOM LAND POWER SUPPLY 5 G PASSENGEE BOOR BILLIOCK CUTPUT THE NEW CONTROL BY STATE OF SUPPLY STATE OF S	
11 12 13 14 14 14 14 14 14 14	
Connector Name A/C AUTO AMP.	
Califor Of Signal Name [Specification]	
	Convector Name Character Name Char

DEF

Κ

Α

В

С

D

Е

F

G

Н

M

Ν

0

JRLWC9486GB

Ρ

		+	Connector Type TH24FW-NH AV COMM (H)	18 1.6	T19 SB AV COMM (H)	80 P CAN-L		1 2 3 4 5 6 7 8 10 11 12 82 V SWGND	13 14 15 16 17 18 19 20 21 22 23 24 86 SHIELD SHIELD		88 L TEL VOICE SIGNAL (-)	Terminal Color Of Secretary Control (8-PULSE)	Signal Name (Specification) 93 G PARKING BRAN	94 SB	37 SB SIGNAL GND 95 G IGNITION	W 96 HP	COMM (DISP-CONT)	RGB AREA (15) SIGNAL 103 B	B RGB SYNC	G RGB	44 L RGB (G:GREEN) SIGNAL Connector No. M180	45 Y RGB (B:BLUE) SIGNAL Connector Name AV CONTROL UNIT	40 W – Conventor Line Tringfal Mil	Y INVERTER VCC	- HB	S0	- 51	21 22 12 13	B		Terminal Color Of Signal Name [Specification]	99			SHIELD	8	COMM	74 P CAN-L	2	3 8	9	SB	The state of the s
-	O TIRE PRESS RECEIVER COMM	SECURIT	L COMBI SW OUTPUT 5	W COMBI SW OUTPUT 1	P COMBI SW OUTPUT 2	v COMBI SW OUTPUT 3	Y COMBI SW OUTPUT 4	SB DRIVER DOOR SW	G REAR WINDOW DEFOGGER RELAY CONT			M125	HOLLON CONTENT		e TH16FW-NH			<u> </u>	8	7			Signal Name [Specification]	B		R ILL		SB AV COMM (H)		W EJECT SIGNAL													
ŀ	139	╀	142	143 W	Ц	145	146 Y	150 SI	151			Connector No.	Connector Name		Connector Type	ą.	至	i.S					No Mira	+	е	4	2	9 0	+	14 N													
	IGN BELAY (E/B) CONT	KEYLESS ENTRY RECEIVER COMM	COMBI SW INPUT 5	COMBI SW INPUT 3	CAN-L	CAN-H	KEY SLOT ILL CONT	ONI NO	ACC RELAY CONT	CVT SHIFT SELECTOR POWER SUPPLY	SHIFT P	PASSENGER DOOR REQUEST SW	DRIVER DOOR REQUEST SW	BLOWER RELAY CONT	KEYLESS ENTRY RECEIVER POWER SUPPLY	COMBI SW INPUT 1	COMBI SW INPUT 4	COMBI SW INPO 2			M123	BCM (BODY CONTROL MODULE)	THE CHORD					21 00 22 NO 00 00 00 00 00 00 00 00 00 00 00 00 00			Signal Name [Specification]	RAIN SENSOR SERIAL LINK	OPTICAL SENSOR	STOP LAMP SW 1	STOP LAMP SW 2	DR DOOR UNLOCK SENSOR	KEY SLOT SW	IGN F/B	PASSENGEN DOOR SW	POWER WINDOW SW COMM	PUSH-BUTTON IGNITION SW ILL POWER	LOCK IND	
DEFOGGER	81 87 88	╁	87 R	88 GR	90 P	91 L	92 R	93 P	35 T	A 96	۸ 66	100 P	101 W	102 Y	103 L	+	+	110	1		Connector No.	Connector Name	Connection Time	account whe	7	v	1				Ferminal Color Of No Wire	╁	Ä	116 GR	+	W	+	123 G	+	╀	133 W	134 R	

JRLWC9487GB

REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

Α

В

С

D

Е

F

G

Н

ı

J

Κ

DEF

M

Ν

0

JRLWC9488GB

Ρ

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status					
FR WIPER HI	Other than front wiper switch HI	Off					
TIX WIF LIX III	Front wiper switch HI	On					
FR WIPER LOW	Other than front wiper switch LO	Off					
FR WIPER LOW	Front wiper switch LO	On					
FR WASHER SW	Front washer switch OFF	Off					
FR WASHER SW	Front washer switch ON	On					
ED WIDED INT	Other than front wiper switch INT/AUTO	Off					
FR WIPER INT	Front wiper switch INT/AUTO	On					
FR WIPER STOP	Front wiper is not in STOP position	Off					
FR WIPER STOP	Front wiper is in STOP position	On					
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position					
DD WIDED ON	Other than rear wiper switch ON	Off					
RR WIPER ON	Rear wiper switch ON	On					
DD WIDED INT	Other than rear wiper switch INT	Off					
RR WIPER INT	Rear wiper switch INT	On					
DD WACHED CW	Rear washer switch OFF	Off					
RR WASHER SW	Rear washer switch ON	On					
DD WIDED OTOD	Rear wiper is in STOP position	Off					
RR WIPER STOP	Rear wiper is not in STOP position	On					
TUDNI CIONAL D	Other than turn signal switch RH	Off					
TURN SIGNAL R	Turn signal switch RH	On					
TUDNI CICNIAL I	Other than turn signal switch LH	Off					
TURN SIGNAL L	Turn signal switch LH	On					
TAIL LAND OW	Other than lighting switch 1ST and 2ND	Off					
TAIL LAMP SW	Lighting switch 1ST or 2ND	On					
LILDE AM CVA	Other than lighting switch HI	Off					
HI BEAM SW	Lighting switch HI	On					
LIEAD LAMB OW 4	Other than lighting switch 2ND	Off					
HEAD LAMP SW 1	Lighting switch 2ND	On					
LIEAD LAMB OW O	Other than lighting switch 2ND	Off					
HEAD LAMP SW 2	Lighting switch 2ND	On					
DA CCINIC CIVI	Other than lighting switch PASS	Off					
PASSING SW	Lighting switch PASS	On					
ALITO LICHT CM	Other than lighting switch AUTO	Off					
AUTO LIGHT SW	Lighting switch AUTO	On					

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
R FOG SW	Front fog lamp switch OFF	Off
K FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
OOR SW-DR	Driver door opened	On
OOR SW-AS	Passenger door closed	Off
OOR SW-AS	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
OOK SW-KK	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
OOK SW-KL	Rear LH door opened	On
OOOR SW-BK	Back door closed	Off
OOK SW-DK	Back door opened	On
DL LOCK SW	Other than power door lock switch LOCK	Off
DE LOOK SW	Power door lock switch LOCK	On
DL UNLOCK SW	Other than power door lock switch UNLOCK	Off
DE OINTOOK 200	Power door lock switch UNLOCK	On
EY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
LI OIL LN-OW	Driver door key cylinder LOCK position	On
EV CVI LINLSW	Other than driver door key cylinder UNLOCK position	Off
EY CYL UN-SW	Driver door key cylinder UNLOCK position	On
EY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
AZADD CW	Hazard switch is OFF	Off
AZARD SW	Hazard switch is ON	On
EAR DEF SW	Rear window defogger switch OFF	Off
OTE: or models with BOSE audio system is item is not monitored.	Rear window defogger switch ON	On
	NOTE:	
R CANCEL SW	The item is indicated, but not monitored.	Off
D/DD ODEN CW	Back door opener switch OFF	Off
R/BD OPEN SW	While the back door opener switch is turned ON	On
RNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
N/E LOOK	LOCK button of Intelligent Key is not pressed	Off
KE-LOCK	LOCK button of Intelligent Key is pressed	On
	UNLOCK button of Intelligent Key is not pressed	Off
KE-UNLOCK	UNLOCK button of Intelligent Key is pressed	On
	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
KE-TR/BD	BACK DOOR OPEN button of Intelligent Key is pressed	On
	PANIC button of Intelligent Key is not pressed	Off
KE-PANIC	PANIC button of Intelligent Key is pressed	On
	UNLOCK button of Intelligent Key is not pressed	Off
KE-P/W OPEN	UNLOCK button of Intelligent Key is pressed and held	On

DEF-33 Revision: 2013 August 2014 MURANO

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
OVE MODE OUG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On
ODTICAL SENSOD	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V
DEO CW. DD	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
DEO CW. AC	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
NLW SW -DU/ I K	Back door request switch is pressed	On
DIICH C/W	Push-button ignition switch (push switch) is not pressed	Off
PUSH SW	Push-button ignition switch (push switch) is pressed	On
ION DI VO. E/D	Ignition switch in OFF or ACC position	Off
IGN RLY2 -F/B	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
DDAKE OW O	The brake pedal is not depressed	Off
BRAKE SW 2	Stop lamp switch 1 signal circuit is normal	On
DETE/CANOL CW	Selector lever in P position	Off
DETE/CANCL SW	Selector lever in any position other than P	On
CET DNI/NI CW/	Selector lever in any position other than P and N	Off
SFT PN/N SW	Selector lever in P or N position	On
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
UINLN SEIN -UK	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
ION DIVA E'D	Ignition switch in OFF or ACC position	Off
IGN RLY1 -F/B	Ignition switch in ON position	On
DETE OW IDDA:	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
SFT PN -IPDM	Selector lever in any position other than P and N	Off
OI I FIN TIFUIVI	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
SFI F -WEI	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
SELIN-MET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Power supply position in LOCK position	Reset
ID ON I LAG	Power supply position in any position other than LOCK	Set
PRMT ENG STRT	The engine start is prohibited	Reset
I INVIT LING STILL	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEN SM SLOT	Intelligent Key is not inserted into key slot	Off
KEY SW -SLOT	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet
CONFRINTID ALL	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet
CONFINIVI ID4	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done

Revision: 2013 August DEF-35 2014 MURANO

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet
CONFIRM IDS	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet
GOW IKW ID2	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done
CONFIDM ID4	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet
CONFIRM ID1	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done
TD 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
TP 4	The ID of fourth Intelligent Key is registered to BCM	Done
TD 0	The ID of third Intelligent Key is not registered to BCM	Yet
TP 3	The ID of third Intelligent Key is registered to BCM	Done
TD 0	The ID of second Intelligent Key is not registered to BCM	Yet
TP 2	The ID of second Intelligent Key is registered to BCM	Done
TD 4	The ID of first Intelligent Key is not registered to BCM	Yet
TP 1	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGOT FLT	ID of front LH tire transmitter is not registered	Yet
ID DECCT ED4	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECCE DD4	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECCE DI 4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
WADNING LAMP	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DI 177ED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

Α

В

C

D

Е

F

G

Н

Κ

DEF

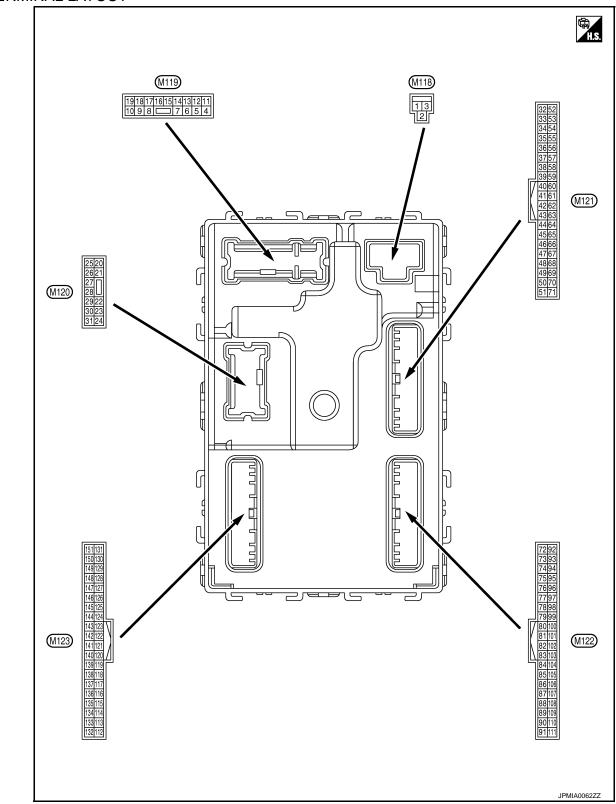
M

Ν

0

Р

TERMINAL LAYOUT



PHYSICAL VALUES

Revision: 2013 August DEF-37 2014 MURANO

	inal No. e color)	Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage
3 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		Battery voltage
		Interior room lamp			battery saver is activated. oom lamp power supply)	0 V
4 (P/W)	Ground	power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage
5	0	Passenger door UN-	0	December	UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Ground	Step lamp control	Output	Step lamp	ON	0 V
(W)	Giodila	Step lamp control	Output	Step lamp	OFF	Battery voltage
8	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
(V)	Oround	All doors Look	Output	All doors	Other than LOCK (Actuator is not activated)	0 V
9	Cravinad	Driver deer LINI OOK	Outnut	Output Driver door	UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground	Driver door UNLOCK	Output		Other than UNLOCK (Actuator is not activated)	0 V
10	Cravind	Rear RH door and	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(P)	Ground	rear LH door UN- LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V
11 (LG)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON		0 V
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0 2 ms
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage
					ACC	0 V

	ninal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 PKID0926E 6.5 V
					Turn signal switch OFF	0 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
19	Ground	Interior room lamp	Output Interior room lamp	Interior room	OFF	Battery voltage
(Y)	Giodila	control		lamp	ON	0 V
00					OPEN (Back door opener actuator is activated)	Battery voltage
23 (BR)	Ground	Back door open	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
(G)	Giodila	I (Gai Mibel	Output	iteai wipei	ON (Operated)	Battery voltage
34	Constant	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(-round	na (-)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
35		Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(W)	Glound	na (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
38	Ground	Ground Rear bumper anten-Output door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB		
(L)	Clound	na (-)	Cuipui	door request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
39	Ground	Rear bumper anten-	Qutout	When the back door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)	Ground	na (+)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage 0 V

	inal No.	Description				Value	
(Wire	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	Α
				Ignition switch	When selector lever is in P or N position	Battery voltage	В
52 (R)	Ground	Starter relay control	Output	ON	When selector lever is not in P or N position	0.3 V	
				Ignition switch OF	F	0 V	С
60		Push-button ignition	_	Push-button igni-	Pressed	0 V	
(BR)	Ground	switch (push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage	D
					ON (Pressed)	0 V	
61 (R)	Ground	Back door request switch	Input	Back door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V	E F G
64		Intelligent key warn-			Sounding	0 V	
(GR)	Ground	ing buzzer control	Output	Warning buzzer	Not sounding	Battery voltage	Н
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 10 10 ms JPMIA0016GB 1.0 V	J
					Not in stop position	0 V	K
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	DE M
					ON (When back door opens)	0 V	Ν
					Pressed	0 V	
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB	O
						11.8 V	

	ninal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When rear LH door opens)	0 V
72	72 (B) Room antenna (-) (Center console)			Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
			Output		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

	ninal No.	Description				Value	/
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	F
73		Doom ontonno (1)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(W)	Ground	Room antenna (+) (Center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	E
74		Passenger door an-		When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	F
(Y)	Ground	tenna (-)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	þ.
				When the pas-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	N
75 (LG)	Ground	Passenger door antenna (+)	Output	senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0063GB	F

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
76	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(V)		(-)		switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
77	Ground	Driver door antenna	Output When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(P)	Glouine	(+)		ed with ignition	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0063GB
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82	Ground	Ignition relay [fuse	Output	Ignition switch	OFF or ACC	0 V
(BR)		block (J/B)] control		5	ON	Battery voltage

	inal No. e color)	Description	T		One distant	Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
83		Remote keyless entry	Input/	During waiting Input/ Output		(V) 15 10 5 0 1 ms JMKIA0064GB	
(P) Ground	receiver communication	Output	When operating e	ither button on Intelligent Key	(V) 15 10 5 1 ms JMKIA0065GB		
		Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	
87	Ground				Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	
87 (R)					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	
					Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 6 Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB	

	inal No. e color)	Description	ı		O Bri	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 2 ms 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
90 (P)	Ground	CAN-L	Input/ Output		_	_
91 (L)	Ground	CAN-H	Input/ Output		_	_

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					OFF	0 V
92 (R)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB 6.5 V
					ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(L)	Cidana	-	Carput	.g.m.o.r. ownorr	ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output		_	Battery voltage
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V
(V)	Ground	tion switch	IIIput	Gelector level	Any position other than P	Battery voltage
					ON (Pressed)	0 V
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(Y)	Giodila	lay control	Output	igililori switcii	ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage

	inal No. e color)	Description	I			Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 10 0 2 ms JPMIA0037GB
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 2 ms JPMIA0036GB 1.3 V
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

Terminal No.	Description	escription C			Value	
(Wire color)	Signal name	Input/ Output		Condition	(Approx.)	
				All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	
				Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	•
108 (P) Ground	Ground Combination switch INPUT 4	Input	Input Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	
				Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB	D
				Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms	

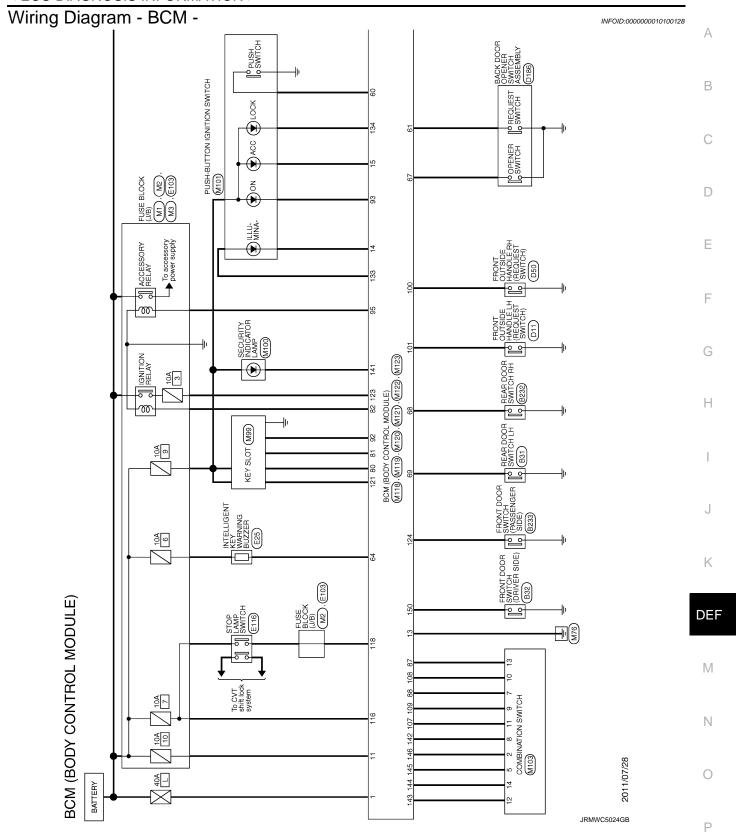
	inal No. e color)	Description			Condition	Value						
+	-	Signal name	Input/ Output		Condition	(Approx.)						
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB						
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB						
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 2 ms JPMIA0036GB						
					Front wiper switch INT/ AUTO	(V) 15 10 5 0 2 ms JPMIA0038GB						
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB						
					ON	0 V						
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V						

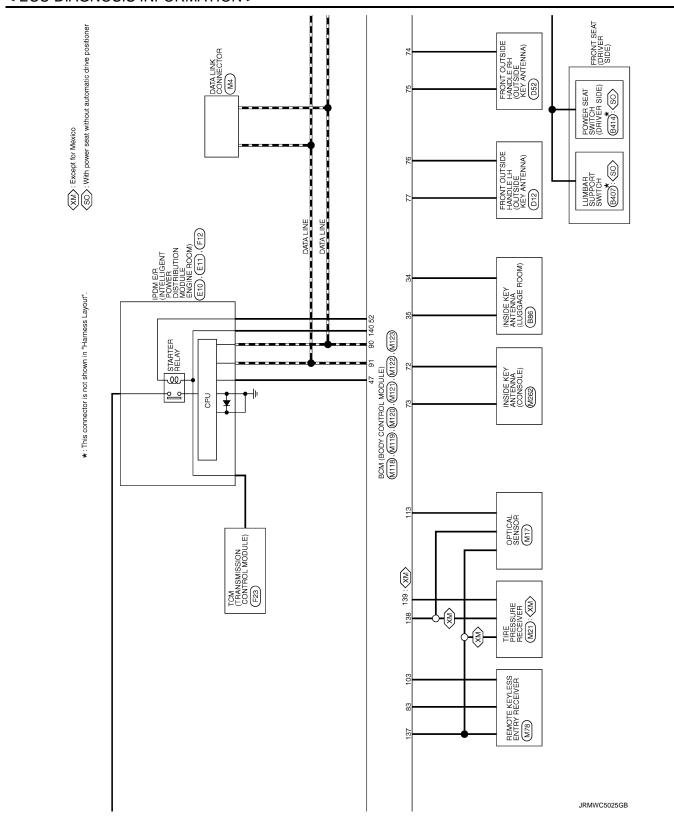
	inal No.	Description				Value	Λ
+	e color) –	Signal name	Input/ Output		Condition	(Approx.)	Α
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 JPMIA0156GB 8.7 V	C
113	Crownd	Ontical concer	lanut	Ignition switch	When bright outside of the vehicle	Close to 5 V	
(P/B)	Ground	Optical sensor	Input	ŎN	When dark outside of the vehicle	Close to 0 V	E
116 (GR)	Ground	Stop lamp switch 1	Input		_	Battery voltage	F
118	Cround	Stop Jamp switch 2	loout	Stop Jamp quiteb	OFF (Brake pedal is not depressed)	0 V	
(L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	ON (Brake pedal is depressed)	Battery voltage	(
119 (W)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB	ŀ
					UNLOCK status (unlock sensor switch ON)	1.1 V 0 V	
101				When Intelligent K	(ey is inserted into key slot	Battery voltage	k
121 (Y)	Ground	Key slot switch	Input		ey is not inserted into key slot	0 V	
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V	DE
(G)	Giound	ION IEEUDAUK	Input	igililion switch	ON	Battery voltage	
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	N
					ON (When passenger door opens)	0 V	

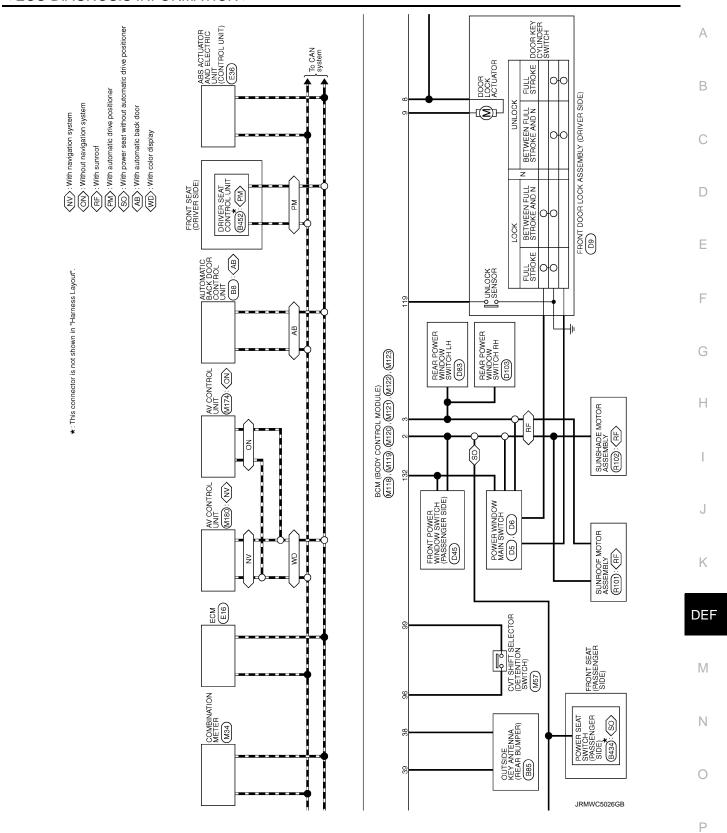
	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
130 (BR)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB
					Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms 10 ms 10.2 V
				Ignition switch OF	F or ACC	Battery voltage
					ON (When tail lamps OFF)	9.5 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5 0 JPMIA0159GB
					Rear window defogger switch OFF Rear window defogger switch ON vitch OFF or ACC ON (When tail lamps OFF) OFF OFF OFF (ACC and ON indicator lamps are not illuminated.) ON vitch ON OFF	0 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	tor lamps are not illuminated.)	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor	Output	Ignition switch		0 V
(V)	Ciodila	power supply	Caiput	-gindon ownon	ACC or ON	5.0 V

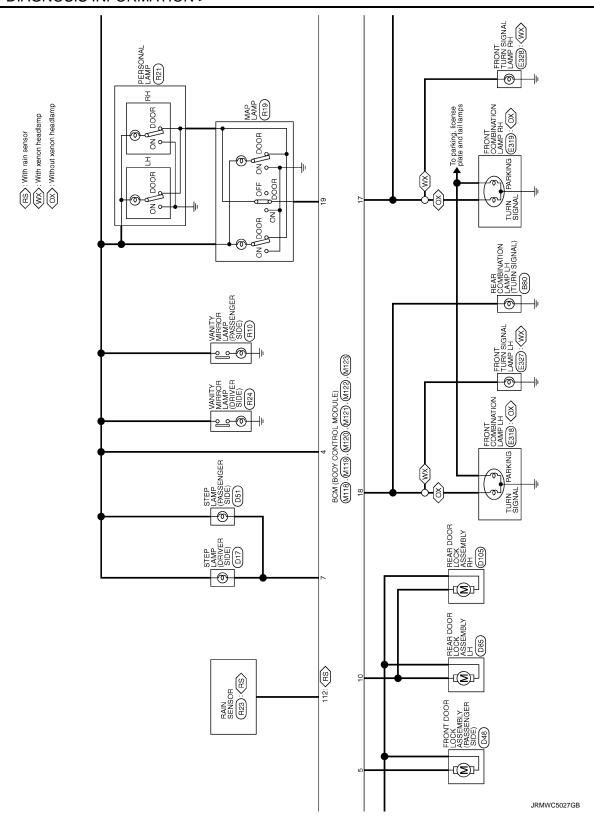
	inal No.	Description				Value	Λ
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)	Α
139		Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 *** 0.2s OCC3881D	С
(O)	Ground	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 	E
140		Selector lever P/N			P or N position	Battery voltage	G
(GR)	Ground	position	Input	Selector lever	Except P and N positions	0 V	
					ON	0 V	-
141 (O)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 10 5 0 11.3 V	J
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	OFF All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	Battery voltage 0 V (V) 15 10 2 ms JPMIA0031GB 10.7 V	DE N
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	0 V 15 10 2 ms JPMIA0032GB 10.7 V	C

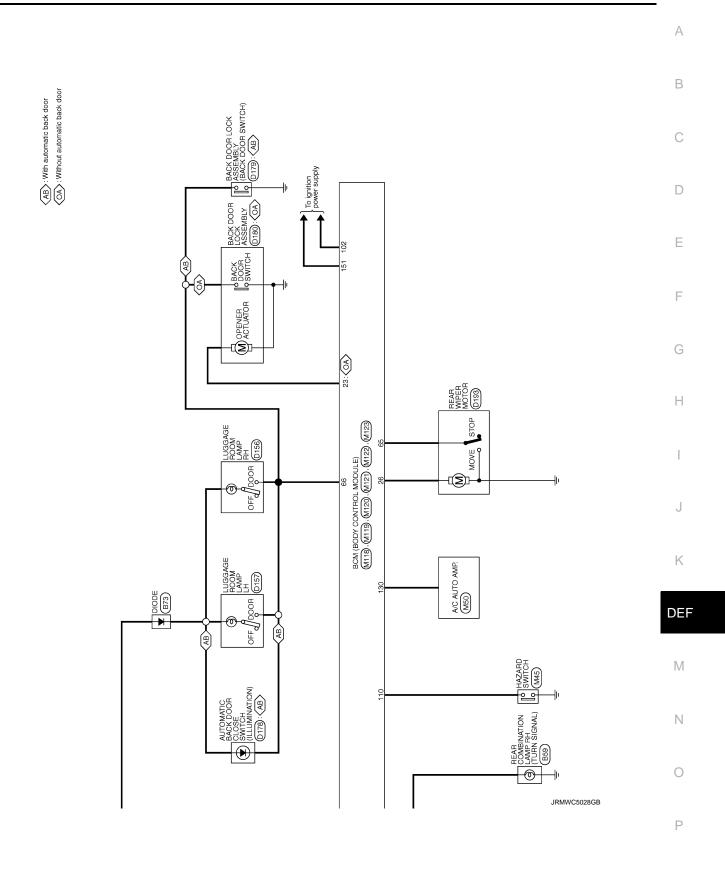
	ninal No. e color)	Description			0 110	Value				
+	-	Signal name	Input/ Output		Condition	(Approx.)				
					All switches OFF (Wiper intermittent dial 4)	0 V				
					Front washer switch ON (Wiper intermittent dial 4)					
144		Combination switch		Combination	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10				
(P)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	5 0				
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB				
					All switches OFF	0 V				
					Front wiper switch INT/ AUTO	(V)				
145		Combination switch			Front wiper switch LO	15 10 5				
(V)	Ground	OUTPUT 3	Output	(Wiper intermit- tent dial 4)	Lighting switch AUTO	2 ms JPMIA0034GB				
					All switches OFF	0 V				
			Combination switch		Front fog lamp switch ON					
				O and the office	Lighting switch 2ND	(V)				
146	0	Combination switch	0		Lighting switch PASS	15 10 5				
(Y)	Ground	OUTPUT 4	Output	(Wiper intermit- tent dial 4)	Turn signal switch LH	2 ms JPMIA0035GB				
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB				
					ON (When driver door opens)	0 V				
151	Ground	Rear window defog-	Output	Rear window de-	Active	0 V				
(G)	Giouria	ger relay control	Output	fogger	Not activated	Battery voltage				



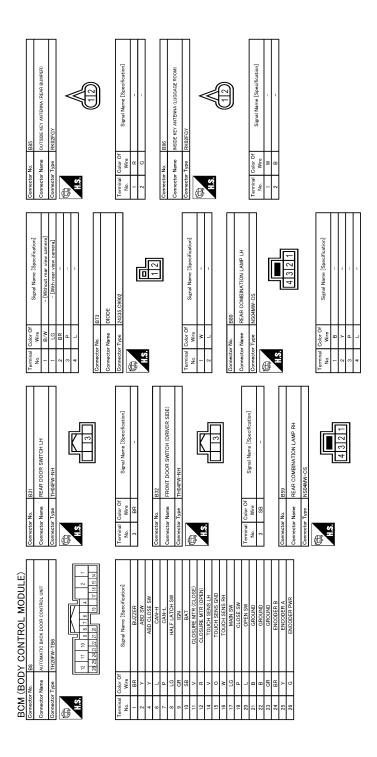








Revision: 2013 August DEF-59 2014 MURANO



JRMWE5830GB

< ECU DIAGNOSIS INFORMATION >

Connector Nume	
Terminal Color Of Notes Signal Name [Specification] 1	
Terminal Code: Of Name Specification No. Wire Name Specification No. 12 L.G	
BEACH MODDY CONTROL MODULE) Connector Name REAR DOOR SWITCH RH Connector Type IntideW-8H Connector Name Report Door Switch (PASSENGER SIDE) Connector Name LUMBAR SUPPORT SWITCH Connector Name LUMBAR SUPPORT SWITCH Connector Name LUMBAR SUPPORT SWITCH Connector Type RISSPER-CS Connector Type NISSPER-CS	
	JRMWE5831GB

DEF

Κ

Α

В

С

D

Е

F

G

Н

M

Ν

0

Р

Connector No. D50 Connector Name FRONT OUTSIDE HANDLE RH (REQUEST SWITCH) Connector Type RHIGEB	Terminal Color Of Signal Name [Specification]	H	Connector No. DS1 Connector Name STEP LAMP (PASSENGER SIDE) Connector Type QOZEW	#.S.	Terminal Color Of Signal Name [Specification] No. Wire	
Connector No. D45 Connector Name Priori Propes wactor pAssence etc. Connector Type NS16FW-CS H\$ 1 2 3 4 1 5 6 7	8 9 10 11 12 13 14 15 16 16 17 17 10 14 15 16 18 18 18 18 18 18 18	+++	10 P	16 0 Connector No. D48 Connector No. D48 Connector Name Priori took LOR ASSEMBLY PASSEMBLY BASSEMBLY CONNECTOR TO BE EDGE OF PR.	H.S.	Terminal Color Of Signal Name [Specification] No. Wire S V
Connector No. D12 Connector Name Richt Guffer (14 (GUTSSE FCF AFTENN) Connector Type RKIZMGY HS.	Terminal Color Of Signal Name (Specification)	HH	Connector No. D17 Connector Name STEP LAMP (DRIVER SIDE) Connector Type 002FW	#S.	Terminal Color Of Signal Name (Specification) No. Wire 1 0 -	
BCM (BODY CONTROL MODULE) Connector No. D9 Connector None FRONT DOOR LOCK ASSENBLY (DRIVER SIDE) Connector Type EUGF GY- HS	Terminal Color Of Signal Name (Specification)	+++	_	Connector Name Proof of Original Connector Name Proof Original Connector Name Proof Original Connector Name Prefer	. 8-	B B M

JRMWE5832GB

Α

< ECU DIAGNOSIS INFORMATION >

В
С
D E
F
G
Н
I
J
K
DEF
N
0
RMWE5833GB

Revision: 2013 August DEF-63 2014 MURANO

BCM (BODY CONTROL MODULE)	Connector No. D186	Connector No. E10	Connector No. E11	
Connector Name BACK DOOR LOCK ASSEMBLY	ě.	e e	Connector Name	POM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type NS08FW-CS	Connector Type TH04MW-NH	Connector Type TH20FW-CS12-M4-1V	Connector Type	N-NH
	B		E	
1	1234			42 41 40 39
Terminal Color Of Signal Name [Specification] No. Wine	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification]	Terminal Color Of No.	Signal Name [Specification]
Н	Н	Н	Н	1
- ^	2 B –		Н	1
0	3 B	+	+	-
1 3		10 BR	42 SB	
× 9		13 SB	- A 45	
	Connector No. D193	15 W -	45 0	-
	Connector Name REAR WIPER MOTOR	+	46 BR	-
Connector No. 10400	Connector Type C 104594-13	÷ -	T	
	1	10	Connector No.	
Connector Name BACK DOOR LOCK ASSEMBLY				
Connector Type NS04FW-CS		Н	Connector Name ECM	
	1	\dashv	Connector Type RH24FB	RH24FB-RZ8-L-LH
	3.4	25 GR	Œ	
H.S.		26 Y =	Arth	81 85 50 50 10 105 109
137		ł	ž	82 86 94 86 102 106 110
2	lar O	Н		25 19 55 111
	No. Wire	+		St 88 92 98 100 104 106 112
	0	a. (Τ	
I erminal Color Of Signal Name [Specification]	+	+		
Wire BR	0	38 GH	No. Wire	Signal Name [Specification]
B			81 W ACCEL	ACCELERATOR PEDAL POSITION SENSOR 1
- P0			0	ACCELERATOR PEDAL POSITION SENSOR 2
- 8			+	SENSOR POWER SUPPLY
			84 B	SENSOR GROUND
			Y 88	ASCD STEERING SWITCH
			8 8	SENSOR POWER SUPPLY
			0 88	DATA LINK CONNECTOR
			Н	SENSOR POWER SUPPLY
			+	SENSOR GROUND
			ä	IGNITION SWITCH
			94 GR E	ENGINE SPEED OUTPUT SIGNAL

JRMWE5834GB

< ECU DIAGNOSIS INFORMATION >

Connector Name FRONT COMBINATION LAMP RH	
Connector No. E116 Connector Name STOP LAMP SWITCH	
Terminal Color Of Signal Name Specification No. Wire No	
BCM (BODY CONTROL MODULE)	
	IRMWE5835GR

DEF

Κ

Α

В

С

D

Е

F

G

Н

M

Ν

0

JRMWE5835GB

Ρ

Signal Name (Specification) Terminal Coles Of Signal Name (Specification)	BCM (BODY CONTROL MODULE) Connector No. E328 Connector Name FRONT THIR SIGNAL I AMP RH		Connec	Connector No.	F23 TOM TTRANSMISSION CONTROL MOBILE)	Connector No.	5. M1 Small FIRE BLOCK (L/R)	Conne	Connector No.	M3 FILSE RI OCK (J/R)	
Terminal Code Of Signal Name (Specification) Terminal Code Of Signal			Connec	tor Type	RH40FB-RZ8-L-RH	Connector Ty		Conne	- 1 1	NS12FW-CS	
Training Color of Figure Name Specification Name Name Specification Name Name Specification Name			€ ±	16	37 38 39 40 5 27 28 39 30 5 7 7 8 9 10	H.S.	3A 24 14 8A 74 64 54 44	E C	vi.	10 8	
1		[noi	Termin No.					Termi			
F12 F12 F12 F12 F13 F13 F13 F13 F13 F14 F13 F14			- 6	8/d	TRANSMISSION RANGE SWITCH 2 TRANSMISSION RANGE SWITCH 3	1A	× 0	100	H		
FT FT FT FT FT FT FT FT			3 6	0/5	TRANSMISSION RANGE SWITCH 4	3A) >	120	\vdash	_	
Fig. 2 B C C C C C C C C C			4	GR	TRANSMISSION RANGE SWITCH 3 (MONITOR)	Н	GR -	9	Н	-	
THE SERVICE CAN AND			ın n	ω :	GROUND	Α.	- 97	2 2	+	1	
Trigoty-USIR-MA 0 U.M CHILDING SELLY CHILDING S		MODULE ENGINE	,	* 8	SENSOR GROUND	8A	-		+		
10 BR-R DATA LINE SERIOR PANEE SERIOR Connector No. DATA LINE DATA LINE Connector No. DATA LINE	Т		00 O	- N	CHIP SELECT (SEL 1)				+		
1 BR-W TRAMSBESSURE SENSOR 13 V CVT FLUD TEMPERATURE SENSOR 14 R.W SECONDANT PRESSURE SENSOR 15 V/W SECONDANT PRESSURE SENSOR 15 V/W SECONDANT PRESSURE SENSOR 16 R.W SECONDANT PRESSURE SENSOR 16 R.W SECONDANT PRESSURE SENSOR 17 R.W SECONDANT PRESSURE SENSOR 18 R.W SECONDANT PRESSURE SENSOR 19 V/W SECONDANT PRESSURE SENSOR GROUND 19 V/W SECONDANT PRESSURE SENSOR 19 V/W SECONDANT PRESSURE SENSOR GROUND 19 V/W SECONDANT PRESSURE SENSOR 19 V/W	1		2	BR/R	L	Connector No	Г				
13 V V V FLUID TEMBER OR Commettor Type MS10FW-CS Commettor Type MS10FW-CS 14 R/W PRIMAMP PRESSURE SENSOR Commettor Type MS10FW-CS 15 V/W SECONDARY PRESSURE SENSOR Commettor Type MS10FW-CS 16 V/W SECONDARY PRESSURE SENSOR Commettor Type MS10FW-CS 17 R/W SENSOR GROUND Commettor Type MS10FW-CS 18 R/W SENSOR GROUND Commettor Type MS10FW-CS 19 V/W SENSOR GROUND Commettor Type MS10FW-CS 10 R/W SENSOR GROUND Commettor Type MS10FW-CS 11 R/W Commettor Type MS10FW-CS Commettor Type MS10FW-CS 12 R/W SENSOR GROUND Commettor Type MS10FW-CS 13 R/W SENSOR GROUND Commettor Type MS10FW-CS 14 R/W Commettor Type MS10FW-CS 15 R/W SENSOR GROUND Commettor Type MS10FW-CS 16 R/W SENSOR GROUND Commettor Type Commettor Type MS10FW-CS 17 R/W SENSOR GROUND Commettor Type MS10FW-CS 18 R/W SENSOR GROUND Commettor Type Commettor Type MS10FW-CS 19 R/W SENSOR GROUND Commettor Type Commettor Type MS10FW-CS 10 R/W SENSOR GROUND Commettor Type Commettor Type Commettor Type Commettor Type Commettor Type 14 P			1	BR/W	Ц	Connector Na	١	Conne	ctor No.	M4	
14 R.W. SECONDARY PRESSURE SENDOR			13	>	CVT FLUID TEMPERATURE SENSOR			Conne	ctor Name	DATA LINK CONNECTOR	
15 V/W SECONMANT MESSAGE SENSORY Miles	68 70 72		4	+	1	Connector Ty	┑		- 1		
Signal Name [Specification] 27 R. 18 SECRET RELAY R. 18	22 12 23	8	0 0	+	1	Œ		- Court	1	BUIDEW	
Signal Name Specification 25 W/R SERSOR BOOMEN 14			2 8	╁				Ø	•		
Signal Name (Specification) 22			25	Н	SENSOR GROUND	2		F	v	/ / / / / / / / / / / / / / / / / / / /	
Terminal Color Of Signal Name [Specification]		[ao.	56	Н	SENSOR POWER		1 0		5		
28			27	R/G	STEP MOTOR D		14 / 6 3				
23			07 8	2 5	STEP MOTOR C						
31 P CAN-L No. Wire Signal Manne [Specification] Terminal Goldor Of Preminal Color Of Premin	200	T	30	+			L				
1 1 1 1 1 1 1 1 1 1	- 5/A		E	╁				Termi		L	
1	R/W -		32	-	CAN-H	18		°N	_	olgnar ivame [opecinication]	
10	G/W		33	PT		38	- 1	3	97	-	
33	W/L		34	\dashv	_	48	- 5	4	В	-	
1	R/Y		37	V/R	LOCK-UP SELECT SOLENOID VALVE	5B	-	S	<u>а</u>	-	
1	- 0		8	8	TORQUE CONVERTER CLUTCH SOLENOID VALVE	99	- \	° 	4	-	
A	Α.		38	+	SECONDARY PRESSURE SOLENOID VALVE	18		<u> </u>	+	-	
42 B GR 11	W/B -		40	+	LINE PRESSURE SOLENOID VALVE	+	ı.	<u></u>	+	1	
- 46 Y POWER SUPPLY 47 L/R POWER SUPPLY (MEMORY BACK-UP) - 48 Y POWER SUPPLY 48 Y POWER SUPPLY	- 0		45	В	GROUND	\dashv	GR -	=	\dashv	-	
- 47 L/R POWER SUPPLY (MEMORY BACK-LIP) - 48 Y POWER SUPPLY (DEMORY BACK-LIP)	R/B -		46	>	4			14	\dashv	-	
- 48 Y			47	+	4			16	>	=	
The state of the s	- as	T	84	>	POWER SUPPLY						
	GR	T									

JRMWE5836GB

< ECU DIAGNOSIS INFORMATION >

34 V AMR POWFR [Without colour display]		35 L AMB SENS [With colour display.] 36 LG INCAR SENS	9 > 0 >	Connector No. M57	-	ı	CATALLY .		- 00 - 00 - 00			Terminal Color Of			8 0 0	- B	- × 8	- ^ 6		Connector No. M78	CTANACAC VOTERA COLUMNIA		Connector Type JAB04FB	Œ	deter		100			TT	No Wire Signal Name [Specification]	+			
Connector No. M45	l e	Connector Type TK04FW	HS 4321		Signal Name [Specification] Wire Sylverification No. Wire Signal Name [Specification]	- 8	2 G			-	-	Connector Name A/C AUTO AMP.	Connector Type SAB40FW				S			Ferminal Color Of	No. Wire Signal Name [Specification]	1 L CAN-H	2 P CAN-L	ĭ	TAN SIG DATE AND SIGNATURE AND	p _	1 02		16 G INTAKE SENS [With colour display]	+	19 B GROUND	5 5	# ##	P AMB POWE	
Connector No. M34 Con	COMBINATION METER	Connector Type TH40FW-NH Conn	R		Terminal Color Of Signal Name [Specification] Term No. Wire No.	1 Y BATTERY POWER SUPPLY	2 LG IGN SIGNAL	GROUND	SB ILLUM	SB TRIP RESET SIGNAL	9 W SWILL POWER CONT 10 IG METER CONTROL SWITCH GROUND	L ENTER SWITCH SIGNAL	R SELECT SWITCH SIGNAL	V ILLUMINATION CONTROL SWITCH SYGNAL (+) [With automatic drive positioned]	14 GR ILLUMINATION CONTROL SWITCH SIGNAL (-) LAW AIR BAG SIGNAL	L AMBIENT SENSOR SIGNAL	а	Y AMBIENT	21 L CAN-H	B GROUND	W FUEL LEVEL SENSOR GROUND	BR	5	V BRAKE FLUID LEVEL SWITCH SIGNAL	29 R WASHEY LEVEL SWITCH SIGNAL	V VEHICLE SPEED SIGNAL (2-DLISE)	LG OVERDRIVE CONTROL SWITCH SIGNAL	G FUEL LEVEL SENSOR SIGNAL	Ц	36 R SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE) 1		16			
BCM (BODY CONTROL MODULE)	Connector Name OPTICAL SENSOR	Connector Type TK03FW	#S.		Terminal Color Of Signal Name [Specification] No. Wire	>	× 4			Connector No. M21	Connector Name TIRE PRESSURE RECEIVER	Connector Type TK04FW	Ó	inth	HS.	īL	1 2 4			No. Wire Signal Name [Specification]	1 P GROUND	2 O SIGNAL	4 V POWER												

Α

В

С

D

Е

F

G

Н

J

Κ

DEF

M

Ν

0

JRMWE5837GB

Р

BCM (BODY CONTROL MODULE)								
Connector No. M99	Connector No.	Vo. M101		13	Я	INPUT 5	Connector No.	M120
Connector Name KEY SLOT	Connector Name		PUSH-BUTTON IGNITION SWITCH	_	۵	OUTPUT 2	Connector Name	BCM (BODY CONTROL MODULE)
Connector Type TH12FW-NH	Connector Type	TK08FBR	FBR				Connector Type	NS12FW-CS
₫.	Ą			Connec	Connector No.	M118	ą.	
The state of the s	THE PERSON NAMED IN COLUMN TO PERSON NAMED I			Connec	Connector Name	BCM (BODY CONTROL MODULE)	Marky	
1 2 2 4 1 5 6	2] ·	Connec	Connector Type	M03FB-LC	5	5 4 3 2 1
2			4 5 6 / 8	₫.				12 11 10 9 8 7
7				O E				
				¥	9	1 3		
Terminal Color Of Signal Name [Specification]	Terminal	Color Of	Signal Name [Specification]				Terminal Color Of	Of Signal Name [Specification]
+	-]	+	THE I O NOOD OBEN OF THE IT
	- ^	٥					+	\downarrow
		3		Terminal	ol Color Of		ł	
+	. 4	HE HE	1	Š		Signal Name [Specification]		
2	2	œ	1	-	*	BAT (F/L)	Connector No.	M121
9	9	_	1	2	GR	POWER WINDOW POWER SUPPLY (BAT)		П
KEY S	7	۵	1	٣	_	POWER WINDOW POWER SUPPLY (IGN)	Connector Name	
	8	GR	_				Connector Type	TH40FGY-NH
							ģ	
Connector No. M100				Connec	Connector No.	M119	彦	
Connector Name SECURITY INDICATOR LAMP	Connector No.	No. M103		Connec	Connector Name	BCM (BODY CONTROL MODULE)	H.S.	
Connector Type TK02FBR	Connector Name		COMBINATION SWITCH	Connec	Connector Type	SO-Magisn		3 3 3 3 3
1	Connector Type	Т	TH16FW-NH					89 69 67 66 64 61 89 82
修	þ	1		Œ				
	厚			Ę				
	S ::				9	3 2 1	la C	Of Simal Name [Specification]
2 1			1 2 7 8			15 14 13 12 11 10 9 8	>	
			L				+	LUGGAGE ROOM ANT-
			9 10 11				35 W	LUGGAGE ROOM ANT+
							+	
-				Terminal		Signal Name [Specification]	39 BR	4
No. Wire	la	Color Of	Signal Name [Specification]	No	Wire		+	IGN RELAY (IPDM E/R) CONT
	No.	Wire		4	M/d	INTERIOR ROOM LAMP POWER SUPPLY	+	
2 0 -	-	5		S	5	PASSENGER DOOR UNLOCK OUTPUT	+	4
	2	>-	OUTPUT 4	7	٨	STEP LAMP CONT	+	BACK
	8	BG	FR	∞	>	ALL DOOR, FUEL LID LOCK OUTPUT	64 GR	_
	4	w	IGN	6	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT	65 0	REAR WIPER STOP POSITION
	2	>	OUTPUT 3	10	а	REAR DOOR UNLOCK OUTPUT	7 99	BACK DOOR SW
	9	В	GROUND	Ξ	LG	BAT (FUSE)	67 LG	BA
	7	GR	INPUT 3	13	В	GROUND	W 89	REAR RH DOOR SW
	00	٦	OUTPUT 5	14	0	PUSH-BUTTON IGNITION SW ILL GND	69 R	REAR LH DOOR SW
	6	SS	INPUT 2	15	_	ACC IND		
	0	۵	INPUT 4	-	9	TURN SIGNAL RH		
	Ξ	0	INPUT 1	8	BR	TURN SIGNAL LH		
	12	W	OUTPUT 1	19	\	INT ROOM LAMP CONT		

JRMWE5838GB

< ECU DIAGNOSIS INFORMATION >

Terminal Color Of Name (Specification] No. Wire Parking Brake No. Wire Specification] No. Wire Specification] Specification Specificat	
Connector No. M174	
Connector No. M123 Connector Name BOM (BODY CONTROL MODULE) Connector Type TH40FG-NH TH40FG-N	
Connector No. MI22	
	JRMWE5839GB

0

Α

В

С

D

Е

F

G

Н

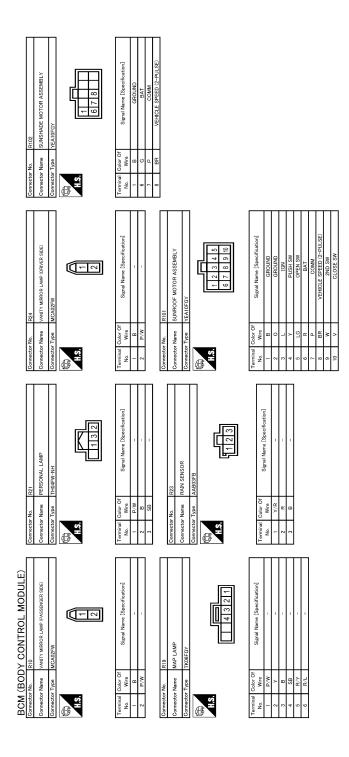
Κ

DEF

M

Ν

Ρ



JRMWE5840GB

Fail-safe

INFOID:0000000010100129

FAIL-SAFE CONTROL BY DTC

 $\ensuremath{\mathsf{BCM}}$ performs fail-safe control when any DTC are detected.

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF \Rightarrow ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

- 1. More than 1 minute is passed after the rear wiper stop.
- Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

DEF

K

Α

В

D

Е

M

Ν

0

Р

INFOID:0000000010100130

2014 MURANO

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM U1010: CONTROL UNIT(CAN)
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING
4	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2605: PNP SW B2606: IGNITION RELAY B2607: ENG STATE RELAY B2607: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2618: DSM B2614: PUSH-BTN IGN SW B2615: VEHICLE TYPE B266A: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT
6	B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to DEF-8, "COM-MON ITEM: CONSULT Function (BCM - COMMON ITEM)".

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference	
No DTC is detected. further testing may be required.	_	_	_	_	_	-
U1000: CAN COMM	_	_	_	_	BCS-42	-
U1010: CONTROL UNIT(CAN)	_	_	_	_	BCS-43	-
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-44	-
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-42	-
32191: DIFFERENCE OF KEY	×	_	_	_	SEC-45	-
32192: ID DISCORD BCM-ECM	×	_	_	_	SEC-46	-
32193: CHAIN OF BCM-ECM	×	_	_	_	SEC-48	-
32195: ANTI SCANNING	×	_	_	_	SEC-49	_
32553: IGNITION RELAY	_	×	_	_	PCS-50	-
32555: STOP LAMP	_	×	_	_	SEC-50	-
32556: PUSH-BTN IGN SW	_	×	×	_	SEC-52	-
32557: VEHICLE SPEED	×	×	×	_	SEC-54	-
32560: STARTER CONT RELAY	×	×	×	_	SEC-55	-
32562: LOW VOLTAGE	_	×	_	_	BCS-45	-
32601: SHIFT POSITION	×	×	×	_	SEC-56	-
32602: SHIFT POSITION	×	×	×	_	SEC-59	-
32603: SHIFT POSI STATUS	×	×	×	_	SEC-61	-
32604: PNP SW	×	×	×	_	SEC-64	-
32605: PNP SW	×	×	×	_	SEC-66	-
32608: STARTER RELAY	×	×	×	_	SEC-68	=
3260A: IGNITION RELAY	×	×	×		PCS-52	-
3260F: ENG STATE SIG LOST	×	×	×		SEC-70	-
32614: ACC RELAY CIRC		×	×		PCS-54	-
32615: BLOWER RELAY CIRC		×	×		PCS-57	-
32616: IGN RELAY CIRC		×	×		PCS-60	-
32617: STARTER RELAY CIRC	×	×	×		SEC-72	-
32618: BCM	×	×	×		PCS-63	-
3261A: PUSH-BTN IGN SW		×	×		SEC-75	-
3261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-78	-
32622: INSIDE ANTENNA		×		_	DLK-91	-
32623: INSIDE ANTENNA		×	_		DLK-93	-
326EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-71	-
C1704: LOW PRESSURE FL	_	_	_	×		-
C1705: LOW PRESSURE FR	_	_	_	×		
C1706: LOW PRESSURE RR		_	_	×	<u>WT-23</u>	
C1707: LOW PRESSURE RL				×		

Revision: 2013 August DEF-73 2014 MURANO

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference	
C1708: [NO DATA] FL	_	_	_	×		
C1709: [NO DATA] FR	_	_	_	×	<u>WT-25</u>	
C1710: [NO DATA] RR	_	_	_	×		
C1711: [NO DATA] RL	_	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	_	×		
C1717: [PRESSDATA ERR] FR	_	_	_	×	\\/T 20	
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>WT-28</u>	
C1719: [PRESSDATA ERR] RL	_	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-29</u>	
C1734: CONTROL UNIT	_	_	_	×	<u>WT-30</u>	

REAR WINDOW DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS SYMPTOM DIAGNOSIS				
	Α			
REAR WINDOW DEFOGGER DOES NOT OPERATE				
Diagnosis Procedure				
1. CHECK POWER SUPPLY AND GROUND CIRCUIT				
Check power supply and ground circuit. Refer to DEF-11, "Diagnosis Procedure".				
Is the inspection result normal?				
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D			
2. CHECK REAR WINDOW DEFOGGER SWITCH				
Check rear window defogger switch.	Е			
Refer to DEF-12, "Component Function Check". Is the inspection result normal?				
YES >> GO TO 3.	F			
NO >> Repair or replace the malfunctioning parts.				
3. CHECK REAR WINDOW DEFOGGER RELAY	G			
Check rear window defogger relay. Refer to DEF-14, "Component Function Check".				
Is the inspection result normal?	Н			
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.				
4.CHECK REAR WINDOW DEFOGGER	I			
Check rear window defogger.				
Refer to DEF-16, "Component Function Check".	J			
Is the inspection result normal? YES >> GO TO 5.				
NO >> Repair or replace the malfunctioning parts.	K			
5.CONFIRM THE OPERATION	T\			
Confirm the operation again.	DEE			
Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".	DEF			
NO >> GO TO 1.				
	M			
	Ν			
	0			
	Р			

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OPERATE

Diagnosis Procedure

INFOID:0000000009722527

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.

Refer to DEF-11, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.

Refer to DEF-12, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to DEF-14, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

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:0000000009722528

Α

В

C

D

Е

F

1. CHECK REAR WINDOW DEFOGGER

Check rear window defogger.

Refer to DEF-16, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

Н

J

K

DEF

M

Ν

0

Р

DOOR MIRROR DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DOOR MIRROR DEFOGGER DOES NOT OPERATE BOTH SIDES

BOTH SIDES: Diagnosis Procedure

INFOID:0000000009722529

1. CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.

Refer to <u>DEF-18</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000009722530

1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to DEF-19, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000009722531

1. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.

Refer to DEF-21, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

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	А
Diagnosis Procedure	В
WITH BOSE AUDIO SYSTEM 1. CHECK AV CONTROL UNIT FUNCTION	D
	С
 Check that the AV control unit is operating normally. Without navigation refer to <u>AV-228, "Work Flow"</u>. With navigation refer to <u>AV-373, "Work Flow"</u>. Is the inspection result normal? 	D
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	Е
Confirm the operation again. Is the inspection result normal?	F
YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". NO >> GO TO 1.	G
WITHOUT BOSE AUDIO SYSTEM	G
1. CHECK A/C CONTROL UNIT FUNCTION	ш
Check that A/C the control unit is operating normally. Refer to <u>HAC-5</u> , "Work Flow". Is the inspection result normal?	П
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.CONFIRM THE OPERATION	
Confirm the operation again.	J
Is the inspection result normal?	
YES >> Check intermittent incident. Refer to <u>GI-44, "Intermittent Incident"</u> . NO >> GO TO 1.	K

DEF

 \mathbb{N}

Ν

0

Ρ

Revision: 2013 August DEF-79 2014 MURANO

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:0000000009722533

WITHOUT BOSE AUDIO SYSTEM

1. CHECK REAR WINDOW DEFOGGER FEEDBACK SIGNAL

Check rear window defogger feedback signal.

Refer to DEF-23, "WITHOUT BOSE SYSTEM: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

WITH BOSE AUDIO SYSTEM

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check that the multifunction switch is operating normally.

- Without navigation: Refer to AV-178, "On Board Diagnosis Function".
- With navigation: Refer to AV-315, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: 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, 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

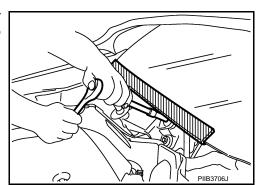
WARNING:

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.

FOR USA AND CANADA: Precaution for Procedure without Cowl Top Cover

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



FOR USA AND CANADA: 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.

DEF

Α

В

D

Е

DEF

M

Ν

0

INFOID:0000000010107990

INFOID:0000000010107913

PRECAUTIONS

< PRECAUTION >

- 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.).

FOR USA AND CANADA: Precautions for Removing of Battery Terminal

INFOID:0000000010107991

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

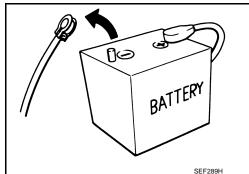
NOTE:

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.

FOR MEXICO

FOR MEXICO: 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. 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.

FOR MEXICO: Precaution for Procedure without Cowl Top Cover

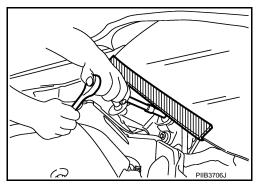
INFOID:0000000010108076

Α

D

Н

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



FOR MEXICO: Precautions For Xenon Headlamp Service

INFOID:0000000010108099

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.).

FOR MEXICO: Precautions for Removing of Battery Terminal

INFOID:0000000010108075

 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.

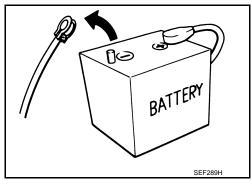
• For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

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.



DEF

K

M

Ν

С

Р

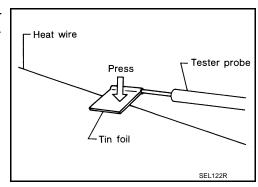
REMOVAL AND INSTALLATION

FILAMENT

Inspection and Repair

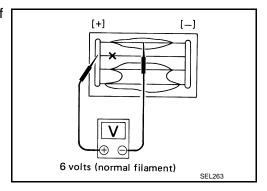
INSPECTION

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

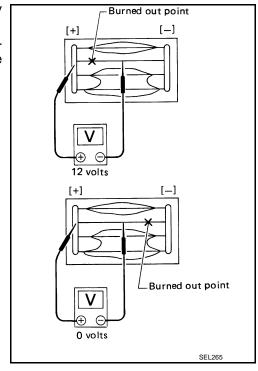


INFOID:0000000009722536

2. 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)

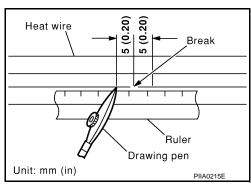
FILAMENT

< REMOVAL AND INSTALLATION >

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

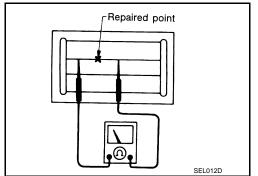
REPAIRING PROCEDURE

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



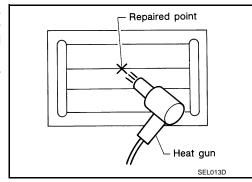
4. After repair has been completed, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited.

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.



DEF

K

Α

В

D

Е

F

Н

M

Ν

0

Р