DEF SECTION DEFOGGER С

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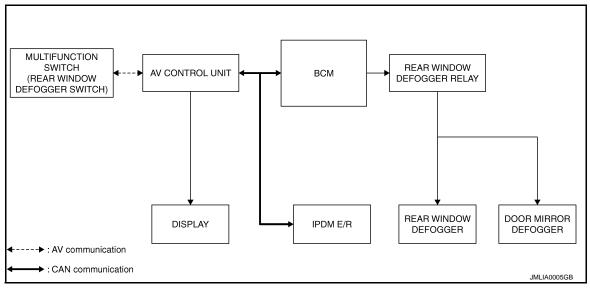
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DIAGNOSIS AND REPAIR WORK FLOW	7.
Work Flow	В
DETAILED FLOW	
1.OBTAIN INFORMATION ABOUT SYMPTOM	С
Interview the customer to obtain the malfunction information (conditions and environment when the malfunc- tion occurred) as much as possible when the customer brings the vehicle in.	D
>> GO TO 2.	
2.CHECK DTC	E
Perform self diagnosis with CONSULT-III	
Is any DTC detected?	F
YES >> Refer to <u>BCS-74, "DTC Index"</u> NO >> GO TO 3.	
3. REPRODUCE THE MALFUNCTION INFORMATION	0
Check the malfunction on the vehicle that the customer describes. Inspect the relation of the symptoms and the condition when the symptoms occur.	G
	Н
>> GO TO 4. 4.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"	
Use "Symptom diagnosis" from the symptom inspection result in step 3. Then identify where to start perform-	
ing the diagnosis based on possible causes and symptoms.	
>> GO TO 5.	J
5. IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"	
Perform the diagnosis with "Component diagnosis" of the applicable system.	Κ
>> GO TO 6.	
6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS	DE
Repair or replace the specified malfunctioning parts.	
>> GO TO 7.	M
7.FINAL CHECK	
Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 3.	Ν
Are all malfunctions corrected?	0
YES >> INSPECTION END NO >> GO TO 4.	
	P
	1

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION REAR WINDOW DEFOGGER SYSTEM

System Diagram

INFOID:000000006457011



System Description

INFOID:000000006457012

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 transmit rear window defogger ON signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger (with mirror defogger) are supplied with power and operate when rear window defogger relay turns ON.
- AV control unit transmit rear window defogger control signal to multifunction switch (rear window defogger switch) via AV communication.
- IPDM E/R transmits rear window defogger control signal to AV control unit via CAN communication.

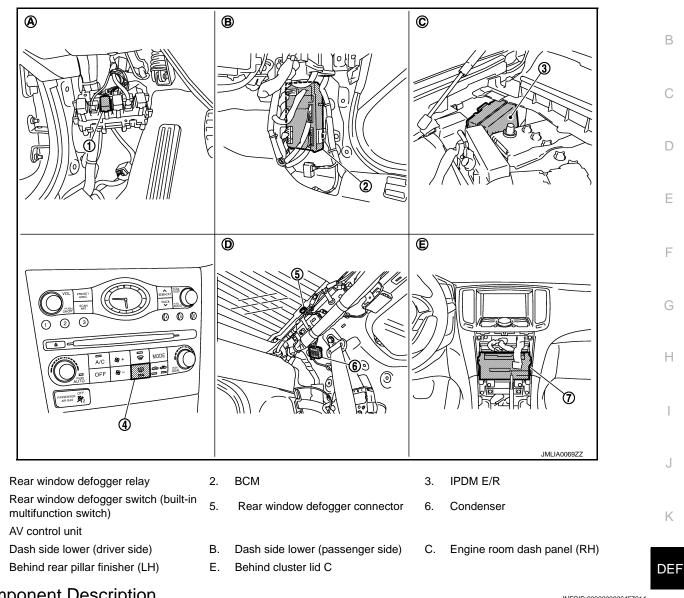
Timer function

- 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 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.

< SYSTEM DESCRIPTION >

Component Parts Location

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Component Description

1.

4.

7.

Α.

D.

INFOID:000000006457014

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 ON 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 win- dow 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

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:000000006933313

APPLICATION ITEM

CONSULT-III 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. Refer to CONSULT-III opera- tion manual.
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	This function is not used even though it is displayed.

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.

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

NOTE:

*: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit		Description	
Vehicle Speed	km/h	Vehicle speed of the mo	ment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odomete	r value) of the moment a particular DTC is detected	
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)	
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"	
	ACC>ON		While turning power supply position from "ACC" to "IGN"	
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)	
	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" (Emer- gency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK	Power supply position status of the moment a particular DTC is de- tected*	While turning power supply position from "OFF" to "LOCK"*	
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"	
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "OFF".) to low power consumption mode	
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode	
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steer- ing is locked.)*	
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING	CRANKING	Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	0 - 39	 The number is 0 wher The number increases whenever ignition swit 	It ignition switch is turned ON after DTC is detected a malfunction is detected now. Solike $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition inch OFF \rightarrow ON. Do 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:

*: For models without steering lock unit, power supply position changes from "OFF" to "LOCK" when steering lock conditions are satisfied.

REAR WINDOW DEFOGGER

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

INFOID:000000006457016

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Data monitor

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	This test is able to check rear window defogger operation. Rear window defogger operates when "ON" on CONSULT-III screen is touched.

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >	
DTC/CIRCUIT DIAGNOSIS	^
REAR WINDOW DEFOGGER SWITCH	A
Description	OID:000000006457017 B
 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 op 	erating.
Component Function Check	OID:000000006457018
1. CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION	D
Check that the indicator lamp of rear window defogger illuminates when rear window defogger switch a strength a strength a strength as the indicator lamp of rear window defogger illuminates when rear window defogger switch as the indicator lamp of the strength as the indicator lamp of the strength as	tch ON.
<u>Is the inspection result normal?</u> YES >> Rear window defogger switch function is OK. NO >> Refer to <u>DEF-9</u> , " <u>Diagnosis Procedure</u> "	E
Diagnosis Procedure	OID:000000006457019
	01 <i>D</i> :000000006457019
Diagnosis Procedure Image: Comparison of the second se	^{OID:00000006457019} F
Diagnosis Procedure Image: New State 1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) Does multifunction switch operate normally? • Base audio without rear view camera. Refer to AV-20, "Diagnosis Description" • Base audio with rear view camera. Refer to AV-112, "On Board Diagnosis Function"	G
Diagnosis Procedure Image: 1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) Does multifunction switch operate normally? Des multifunction switch operate normally? • Base audio without rear view camera. Refer to AV-20, "Diagnosis Description" Base audio with rear view camera. Refer to AV-20, "Diagnosis Function" • BOSE audio without navigation. Refer to AV-232, "On Board Diagnosis Function" • BOSE audio with navigation. Refer to AV-369, "On Board Diagnosis Function"	
Diagnosis Procedure Image: Comparison of the second state of	F G H
Diagnosis Procedure Image: 1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) Does multifunction switch operate normally? Des multifunction switch operate normally? • Base audio without rear view camera. Refer to AV-20, "Diagnosis Description" • Base audio with rear view camera. Refer to AV-112, "On Board Diagnosis Function" • BOSE audio with navigation. Refer to AV-232, "On Board Diagnosis Function" • BOSE audio with navigation. Refer to AV-369, "On Board Diagnosis Function" • BOSE audio with navigation. Refer to AV-369, "On Board Diagnosis Function" • Bose Section result normal? YES >> INSPECTION END NO NO >> Replace multifunction switch (rear window defogger switch). Refer to AV-98, "Removal	F G H
Diagnosis Procedure Image: 1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH) Does multifunction switch operate normally? Des multifunction switch operate normally? • Base audio without rear view camera. Refer to AV-20, "Diagnosis Description" • Base audio with rear view camera. Refer to AV-112, "On Board Diagnosis Function" • BOSE audio with navigation. Refer to AV-232, "On Board Diagnosis Function" • BOSE audio with navigation. Refer to AV-369, "On Board Diagnosis Function" • BOSE audio with navigation. Refer to AV-369, "On Board Diagnosis Function" • Bose Section result normal? YES >> INSPECTION END NO NO >> Replace multifunction switch (rear window defogger switch). Refer to AV-98, "Removal	F G H <u>I and Instal-</u>

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REAR WINDOW DEFOGGER RELAY

Revision: 2011 December

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

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

Component Function Check

1. CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.

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-10. "Diagnosis Procedure"</u>

Diagnosis Procedure

1.CHECK FUSE

- 1. Turn ignition switch off.
- 2. Check the following.
- 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 CIRCUIT 1

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

	+) CM	(-) C		Condition		Condition	
Connector	Terminal				(Approx.)		
M123	151	Ground	Rear window defogger	ON	0		
WI123	151	Ground	Ground switch	OFF	Battery voltage		

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER CIRCUIT 2

1. Turn ignition switch OFF.

2. Disconnect BCM connector and rear window defogger relay.

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

B	СМ	Fuse bl	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M123	151	M2	4B	Existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay. Refer to <u>DEF-11</u>, "Component Inspection" Is the inspection result normal? INFOID:000000006457020

INFOID:000000006457021

INFOID:000000006457022

REAR WINDOW DEFOGGER RELAY

	REAR WINDOW DE	FOGGER	RELAY		
< DTC/CIRCUIT DIAG	NOSIS >				
YES >> GO TO 5.					
	ar window defogger relay.				
5.CHECK FUSE BLO					
 Install the rear wind Turn ignition switch 	dow defogger relay.				
	veen fuse block (J/B) (fuse block	side) and gro	und.		
_					
	(+)	()		Voltage (V)	
	use block (J/B)	(-)		(Approx.)	
Connector	Terminal			Deffection of the second	
M2 s the inspection result	4B	Grou	nd	Battery voltage	
YES >> GO TO 6.	eplace fuse block (J/B).				
Check intermittent incid	lent.				_
Refer to <u>GI-43, "Intermi</u>	ttent Incident"				
>> INSPECTION	ON END				
Component Inspec	ction			INFOID:000000064570)23
CHECK REAR WIN	DOW DEFOGGER RELAY				
. Turn ignition switch					_
 Disconnect rear with 	ndow defogger relay.				
 Check rear window 	v defogger relay.				_
Terminal					
Rear window	Condition	Continuity	3		
defogger relay				5	
	2 V direct current supply between termi-	Existed			
° -	als 1 and 2.			5	
	o current supply	Not existed	R	2 1	
s the inspection result YES >> INSPECTION YES >> INSPECTION					
	ar window defogger relay.			SEF497Y	
,					

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< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER

Description

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

1.CHECK REAR WINDOW DEFOGGER

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.

2. Touch "ON".

3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger is OK.

NO >> Refer to <u>DEF-12</u>, "Diagnosis Procedure"

Diagnosis Procedure

1.CHECK FUSE

1. 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

1. Turn ignition switch ON.

2. Check voltage between rear window defogger connector and ground.

	+) ow defogger	(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(
B401	1	Ground	Rear window defogger	ON	Battery voltage
D401	I	Ground	round switch	OFF	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 4.

3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect rear window defogger connector.

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

Rear windo	ow defogger		Continuity	
Connector	Terminal	Ground	Continuity	
B402	2		Existed	

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

4.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

INFOID:000000006457024

INEOID:000000006457025

INFOID:00000006457026

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2.

Disconnect condenser connector and rear window defogger connector. Check continuity between condenser (condenser side) and rear window defogger harness connector. 3.

Connector B26 Check continuity be	Terminal		Rear window defogger		Continuity	
	Terrinia	C	onnector Te	rminal	Continuity	
heck continuity be	1		B401	1	Existed	
	etween conden	ser (condense	r side) connector and	ground.		
	Condenser		_		Continuity	
Connector		Terminal	Ground		·	
B26		1			Not existed	
inspection result >> GO TO 5. >> Replace co IECK REAR WIN	ondenser. Refer DOW DEFOGO	GER CIRCUIT	Removal and Installatio	<u>n"</u>		
-		ock (J/B) harne	ess connector and cond	denser harr	ness connector.	
	ock (J/B)		Condenser		Continuity	
Connector	Terminal	C	onnector Te	minal		
B6	10G		B26	1	Existed	
-		ock (J/B) harne	ess connector and grou	ınd.		
	Fuse block (J/B)				Continuity	
Connector		Terminal 10G	Ground	Ground		
B6		10G 11G			Not existed	
_						
inspection result >> GO TO 6. >> Repair or re IECK FUSE BLOO urn ignition switch heck voltage bety	eplace harness CK (J/B) n ON.		ock side) and ground.			
inspection result >> GO TO 6. >> Repair or re HECK FUSE BLOO urn ignition switch theck voltage betw (+)	eplace harness CK (J/B) n ON. ween fuse block	κ (J/B) (fuse blo			Voltage (V)	
inspection result >> GO TO 6. >> Repair or re IECK FUSE BLOO urn ignition switch heck voltage betw (+) Fuse block	eplace harness CK (J/B) n ON. ween fuse block		ock side) and ground. Conditio	Dn	Voltage (V) (Approx.)	
inspection result >> GO TO 6. >> Repair or re HECK FUSE BLOO urn ignition switch theck voltage betw (+)	eplace harness CK (J/B) n ON. ween fuse block (J/B) Terminal	κ (J/B) (fuse blo		on ON		
inspection result >> GO TO 6. >> Repair or re HECK FUSE BLOO urn ignition switch check voltage betw (+) Fuse block Connector	eplace harness CK (J/B) n ON. ween fuse block	< (J/B) (fuse blo (−)	Conditio	1	(Approx.)	
inspection result >> GO TO 6. >> Repair or re IECK FUSE BLOO urn ignition switch heck voltage betw (+) Fuse block	eplace harness CK (J/B) n ON. ween fuse block (J/B) Terminal	κ (J/B) (fuse blo		ON	(Approx.) Battery voltage	

Check filament. Refer to DEF-14, "Component Inspection" А

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair filament.

 $8. {\sf CHECK} {\sf INTERMITTENT} {\sf INCIDENT}$

Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>

>> INSPECTION END

Component Inspection

INFOID:000000006457027

1.CHECK FILAMENT

Check the filament for damage or blown. Refer to <u>DEF-70</u>, "Inspection and Repair"

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair filament.

DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIA		MIRRO	R DEFO	GGER		
	R DEFOGGER					
Description						INF0ID:00000006457028
Power is supplied to	the door mirror defogge	er with BCN	VI control.			В
Component Fund	ction Check					INFOID:00000006457029
1.CHECK DOOR M	IRROR DEFOGGER					C
 Touch "ON". Check that both solutions 	est ("REAR DEFOGGE side door mirror glass is <u>Ilt normal?</u> ror defogger is OK.			Ι.		D
NO >> Refer to	DEF-15, "Diagnosis Pro	ocedure"				E
Diagnosis Proce	dure					INFOID:000000006457030
1. CHECK FUSE 1. Turn ignition swit						F
Is the inspection resultYES>> GO TO 2NO>> Replace2.CHECK POWER 31.Disconnect door2.Turn ignition switt	the blown fuse after rep SUPPLY CIRCUIT mirror (driver side) con	pairing the	affected ci			н н
					ground.	
(+) Door mirror (-	(—)		Conditior	ו	Voltage (V)
Connector	Terminal	. ,				(Approx.)
D3	4	Ground	Rear windo	w defogger	ON	Battery voltage
Is the inspection resu	lt pormal?		SWIICH		OFF	0
YES >> GO TO 5 NO >> GO TO 3 3. CHECK DRIVER 5	SIDE DOOR MIRROR	DEFOGGE	ER CIRCUI	т		N
	block (J/B) connector.	/B) harnes	s connecto	or and door	⁻ mirror (dr	iver side) harness con-
	block (J/B)	_		(driver side)		Continuity
Connector M3	Terminal 10C		nector D3	-	ninal 4	Existed
1013	100	L		2	т	

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

Fuse bl	ock (J/B)		Continuity
Connector	Terminal	Ground	Continuity
M3	10C		Not existed

Is the inspection result normal?

Ρ

DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

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

4.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.

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

(+) Fuse block (J/B)		()	(–) Condition		Condition	
Connector	Terminal				(Approx.)	
M3	10C	Ground	Rear window defogger	ON	Battery voltage	
IVIS	100	Ground	switch	OFF	0	

Is the inspection result normal?

YES >> GO TO 5.

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

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-43</u>, "Intermittent Incident".

>> INSPECTION END

	DRIVER S	SIDE DOOR	MIRROR DEFO	GGER					
< DTC/CIRCUIT DIA									
DRIVER SIDE	DOOR MIR	ROR DEFC	OGGER						
Description					INFOID:000000006457031				
Heats the heating wire from fogging up.	e with the power	supply from the	rear window defogge	er relay to pr	event the door mirror				
Component Fund	tion Check				INFOID:00000006457032				
1.CHECK DRIVER S	DOOR MIR	ROR DEFOGGE	ĒR						
	iver side door mi	rror glass is gett ogger is OK.							
Diagnosis Proced	dure				INFOID:00000006457033				
 Turn ignition swite Disconnect door r Turn ignition swite Check voltage be 	mirror (driver side ch ON.		arness connector and	ground.					
(+)									
Door mirror (driver side)	()	Condition	ı	Voltage (V) (Approx.)				
Connector	Terminal			1	, , , , , , , , , , , , , , , , , , , ,				
D3	4	Ground	Rear window defogger switch	ON	Battery voltage				
Is the inspection result YES >> GO TO 3. NO >> GO TO 2. 2.CHECK DRIVER S				OFF	0				
1. Turn ignition swite	ch OFF.		s connector and door	r mirror (drive	er side) harness con-				
2. Check continuity nector.									
nector.	block (J/B)		Door mirror (driver side)		Continuity				
nector.		Con	· · · ·	ninal	Continuity				

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

Fuse block (J/B)			Continuity	0
Connector	Terminal	Ground	Continuity	
М3	10C		Not existed	

Is the inspection result normal?

>> GO TO 4. YES

>> Repair or replace harness. NO

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

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

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

	Door mirror	(driver side)		Continuity	
	Connector	Terminal	Ground	Continuity	
	D3	8		Existed	
Is the	e inspection result norma	al?			

YES >> Replace door mirror glass (driver side). Refer to <u>MIR-20, "GLASS MIRROR : Disassembly and</u> <u>Assembly"</u>

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>

Is the inspection result normal?

>> INSPECTION END

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS > PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

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

Component Function Check

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Perform Active Test ("REAR DEFOGGER") with CONSULT-III. 1.

2. Touch "ON".

Check that the passenger side door mirror glass is getting warmer. 3.

Is the inspection result normal?

- YES >> Passenger side door mirror defogger is OK.
- NO >> Refer to DEF-19, "Diagnosis Procedure"

Diagnosis Procedure

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

 ,	+) assenger side)	()	Condition		Voltage (V) (Approx.)	
 Connector	Terminal				()	I
 D33	4	Ground	Rear window defogger	ON	Battery voltage	
033	4	Ground	switch	OFF	0	J

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.

DEF Check continuity between fuse block (J/B) harness connector and door mirror (passenger side) harness 2. connector.

M	Continuity	assenger side)	Door mirror (p	ock (J/B)	Fuse bl
	Continuity	Terminal	Connector	Terminal	Connector
N	Existed	4	D33	9C	M3

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

Fuse bl	ock (J/B)		Continuity	0
Connector	Terminal	Ground	Continuity	
M3	9C		Not existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

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

DEF-19

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INFOID:00000006457034

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PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Door mirror (p	assenger side)		Continuity		
Connector	Terminal	Ground	Continuity		
D33	8		Existed		
	10				

Is the inspection result normal?

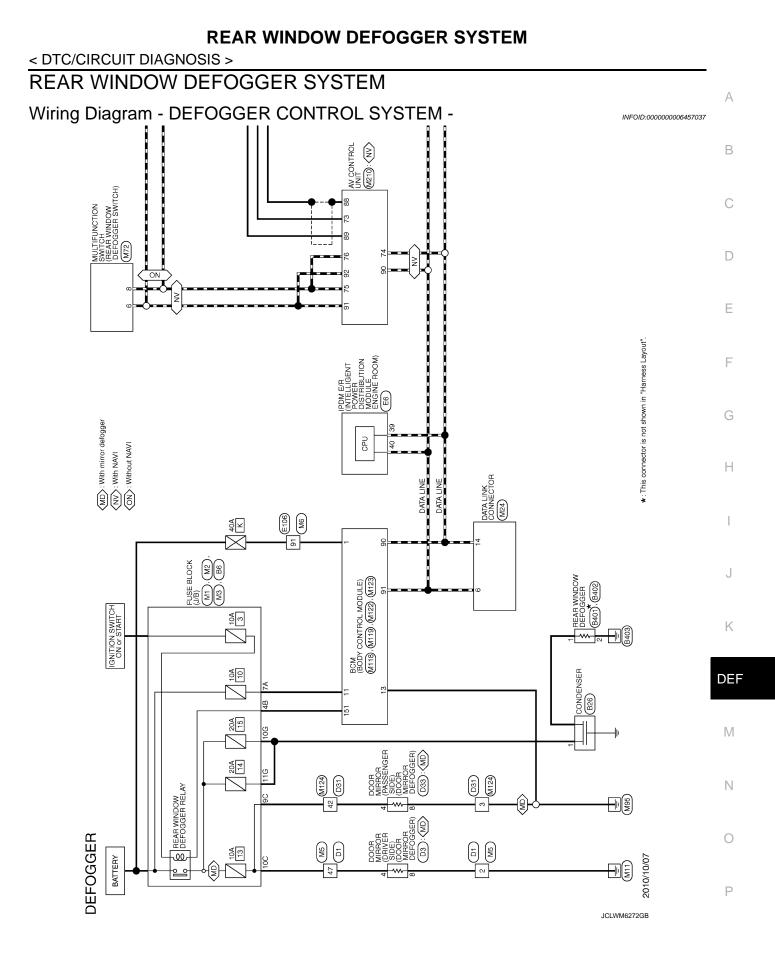
YES >> Replace door mirror glass (passenger side). Refer to <u>MIR-20, "GLASS MIRROR : Disassembly</u> and <u>Assembly"</u>

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>

>> INSPECTION END

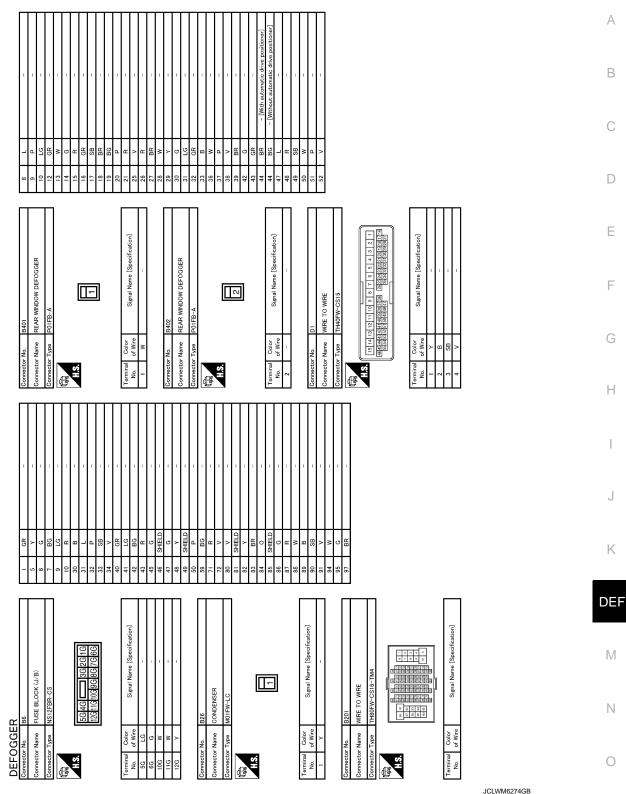


< DTC/CIRCUIT DIAGNOSIS >

*1 B6: (00) *6 B8: (00) *1 (11) (11) 73: (10) *2 B7: (00) *7 B9: (10) *3 44: (00) *8 90: (10) *4 56: (00) *9 91: (10) *5 55: (00) 76: (10) *52:< (10) 76: (10) (10)	
 Swithout NAVI Am > With rear view monitor Om > Without rear view monitor 	AV CONTROL UNIT (MB3) - (MB5) - (OM) (M203) - (M204) - (HW)
	- ·
DATA LINE DATA LINE To base audio without rear view camera To Bose audio without navigation To BOSE audio with navigation	*5 To CAN system

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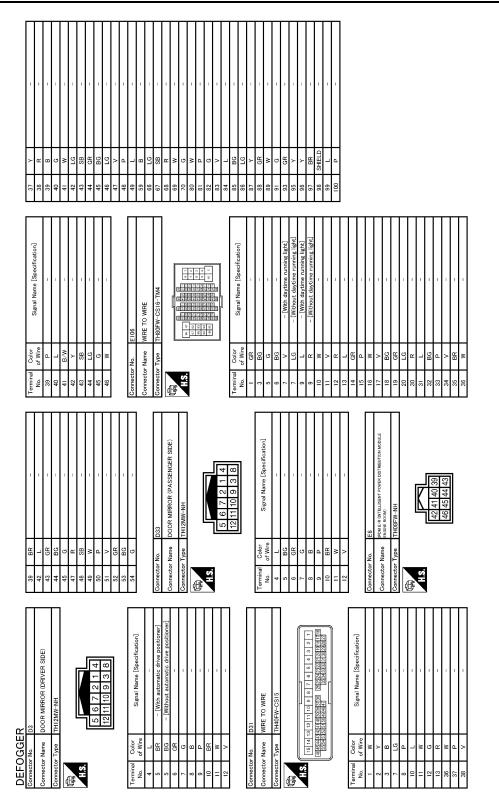
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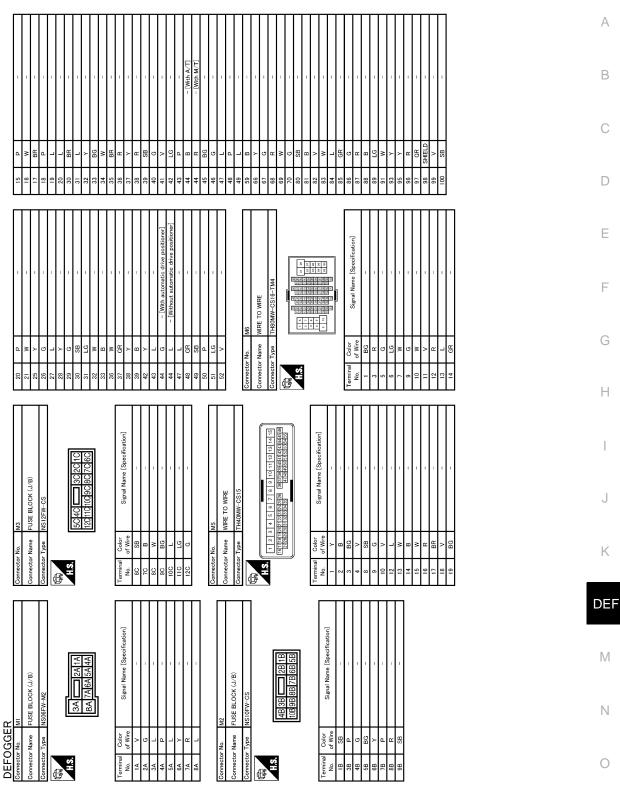
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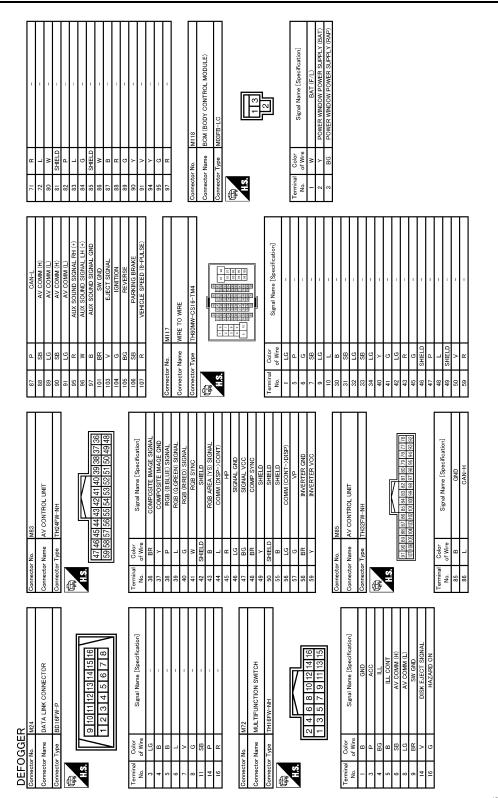
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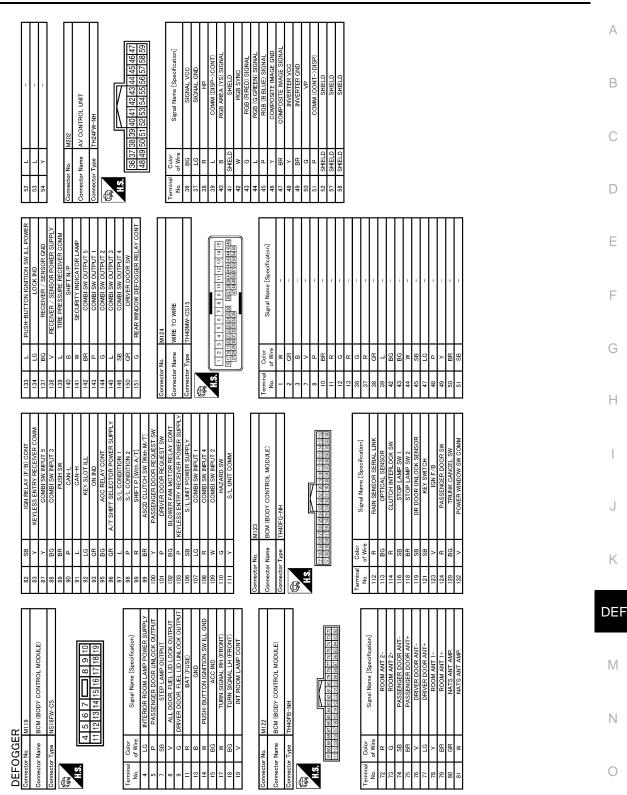
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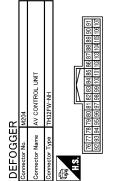


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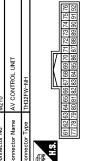
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< DTC/CIRCUIT DIAGNOSIS >

AV COMM (L)	AV COMM (L)	ILLUMINATION	IGNITION	REVERSE	VEHICLE SPEED (8-PULSE)	SHIELD	MICROPHONE SIGNAL	SHIELD	COMM (DISP->CONT)	CAN-H	AV COMM (H)	AV COMM (H)
LG	ГG	٦	5	BG	ч	SHIELD	æ	SHIELD	٦	٦	SB	SB
75	76	64	80	18	82	83	87	88	68	06	91	92



Signal Name [Specification]	AV COMM (L)	AV COMM (H)	AV COMM (L)	AV COMM (H)	CAN-L	CAN-H	SW GND	SHIELD	TEL VOICE SIGNAL (+)	TEL VOICE SIGNAL (-)	VEHICLE SPEED (8-PULSE)	PARKING BRAKE	REVERSE	IGNITION	DISK EJECT SIGNAL	
Color of Wire	ГG	SB	LG	SB	٩	٦	BR	SHIELD	-	٩	ж	SB	BG	5	^	
Terminal No.	76	<i>LL</i>	78	6/	80	81	82	86	28	88	26	93	94	95	96	



Signal Name [Specification]	PARKING BRAKE	COMPOSITE IMAGE GND	COMPOSITE IMAGE SIGNAL	MICROPHONE GND	MICROPHONE VCC	COMM (CONT->DISP)	CAN-L
Color of Wire	SB	٩	L	SHIELD	g	٩	٩
Terminal No.	65	67	68	71	72	73	74

JCLWM6279GB

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
FR WIFER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
IN WASHEN SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
I K WIFEK STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi- tion
TURN SIGNAL R	Other than turn signal switch RH	Off
I OTTIN OIGINAL R	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
I UNIN SIGINAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAWIF SW	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
HEAD LAWP SW T	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
HEAD LAIVIP SVV 2	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off
	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
JDL UNLOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
LET GTL LK-SW	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
LET CTL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off
	Trunk lid opener cancel switch OFF	Off
FR CANCEL SW	Trunk lid opener cancel switch ON	On
	Trunk lid opener switch OFF	Off
FR/BD OPEN SW	While the trunk lid opener switch is turned ON	On
	Trunk lid closed	Off
FRNK/HAT MNTR	Trunk lid opened	On
	LOCK button of the Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On
	TRUNK OPEN button of the Intelligent Key is not pressed	Off
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is pressed	On
	PANIC button of the Intelligent Key is not pressed	Off
RKE-PANIC	PANIC button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simulta- neously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On
	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V
	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
	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

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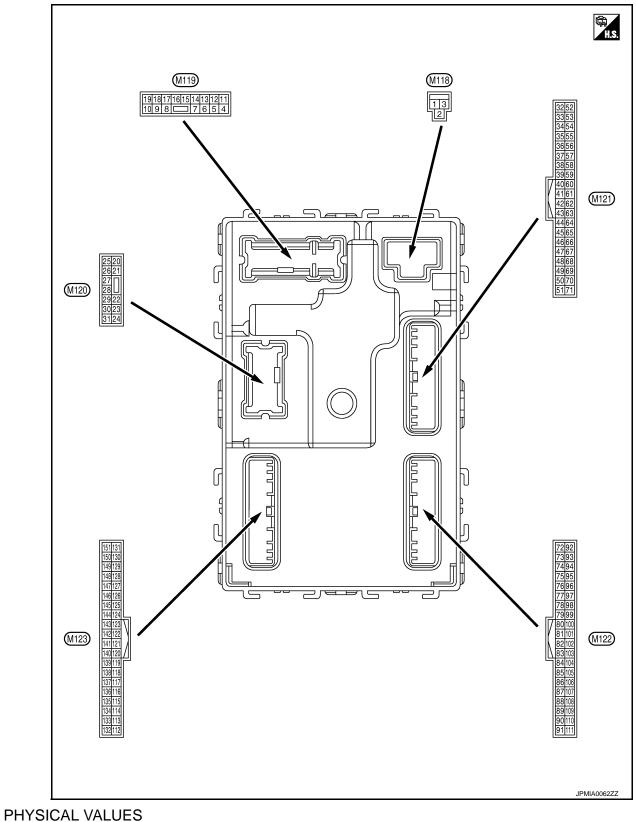
Monitor Item	Condition	Value/Status	
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	-
	Trunk lid opener request switch is not pressed	Off	-
EQ SW -BD/TR	Trunk lid opener request switch is pressed	On	-
	Push-button ignition switch (push switch) is not pressed	Off	
PUSH SW	Push-button ignition switch (push switch) is pressed	On	-
	Ignition switch in OFF or ACC position	Off	-
GN RLY2 -F/B	Ignition switch in ON position	On	-
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	-
	The clutch pedal is not depressed	Off	-
CLUCH SW	The clutch pedal is depressed	On	-
	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 nor- mal	On	-
	The brake pedal is not depressed	Off	-
BRAKE SW 2	The brake pedal is depressed	On	-
	Selector lever in P position (Except M/T models) The clutch pedal is depressed (M/T models)	Off	-
DETE/CANCL SW	 Selector lever in any position other than P (Except M/T models) The clutch pedal is not depressed (M/T models) 	On	_
	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	Steering is unlocked	Off	-
IOTE: For models without steering lock unit, this tem is not monitored.	Steering is locked	On	_
S/L -UNLOCK	Steering is locked	Off	-
IOTE: For models without teering lock unit, this tem is not monitored.	Steering is unlocked	On	-
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off	-
NOTE: For models without steering lock unit, this tem is not monitored.	Ignition switch in ON position	On	_
JNLK SEN -DR	Driver door is unlocked	Off	
	Driver door is locked	On	-
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	-
	Push-button ignition switch (push-switch) is pressed	On	-
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	-
JN RLI I -F/D	Ignition switch in ON position	On	-
	Selector lever in any position other than P	Off	-
DETE SW -IPDM	Selector lever in P position	On	-
	 Selector lever in any position other than P and N (Except M/T models) The clutch pedal is not depressed (M/T models) 	Off	_
SFT PN -IPDM	 Selector lever in P or N position The clutch pedal is depressed 	On	-

Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	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	Steering is unlocked	Off
NOTE: For models without steering lock unit, this item is not monitored.	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
NOTE: For models without steering lock unit, this item is not monitored.	Steering is unlocked	On
S/L RELAY-REQ NOTE:	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
For models without steering lock unit, this item is not monitored.	Steering lock system are not the LOCK condition or the changing condition from LOCK to UNLOCK	On
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 (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Selector lever is in the P position except for M/T models)	Reset
	Ignition switch is ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
FRWITEING STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEV SWI SLOT	The Intelligent Key is not inserted into key slot	Off
KEY SW -SLOT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done

Monitor Item	Condition	Value/Status		
	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet		
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done		
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID regis- tered to BCM.	Yet		
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done		
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID reg- istered to BCM.	Yet		
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done		
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet		
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done		
ГР 4	The ID of fourth Intelligent Key is not registered to BCM	Yet		
	The ID of fourth Intelligent Key is registered to BCM	Done		
	The ID of third Intelligent Key is not registered to BCM	Yet		
ГР 3	The ID of third Intelligent Key is registered to BCM	Done		
	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		
	The ID of first Intelligent Key is not registered to BCM	Yet		
ГР 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		
D REGST FL1	ID of front LH tire transmitter is registered	Done		
	ID of front LH tire transmitter is not registered	Yet		
D REGST FR1	ID of front RH tire transmitter is registered	Done		
	ID of front RH tire transmitter is not registered	Yet		
D REGST RR1	ID of rear RH tire transmitter is registered	Done		
	ID of rear RH tire transmitter is not registered	Yet		
	ID of rear LH tire transmitter is registered	Done		
D REGST RL1	ID of rear LH tire transmitter is not registered	Yet		
	Tire pressure indicator OFF	Off		
WARNING LAMP	Tire pressure indicator ON	On		
	Tire pressure warning alarm is not sounding	Off		
BUZZER	Tire pressure warning alarm is sounding	On		

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value	
(vvire +	-	Signal name	Input/ Output	Condition		(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V	
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		12 V	
4 (LG) Gro		Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V	
	Ground			Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		12 V	
5 (P)	Oracia	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V	
	Ground				Other than UNLOCK (Ac- tuator is not activated)	0 V	
7	Ground	Step lamp	0	Step lamp	ON	0 V	
(SB)	Ground		Output		OFF	12 V	
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)	12 V	
	Ground				Other than LOCK (Actuator is not activated)	0 V	
9 (G) G	Ground	Driver door, fuel lid UNLOCK	Output	Driver door, fuel lid	UNLOCK (Actuator is activated)	12 V	
	Ground				Other than UNLOCK (Actuator is not activated)	0 V	
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	
13 (B)	Ground	Ground		Ignition switch ON		0 V	
					OFF	0 V	
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position.	
15 (BG)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	JSNIA0010GB	
. ,					ACC	0 V	

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Terminal No.		Description					
(Wire +	color) –	Signal name	Input/ Output	Condition		Value (Approx.)	
					Turn signal switch OFF	0 V	
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 10 10 10 10 10 10 10 10 10	
					Turn signal switch OFF	0 V	
18 (BG)	Ground	Turn signal LH (Front)	Output	lgnition switch ON	Turn signal switch LH	(V) 15 0 10 10 10 10 10 10 10 10 10	
19	Ground	Room lamp timer	Output	Interior room	OFF	12 V	
(V)	Ground	control	Output	lamp	ON	0 V	
					Turn signal switch OFF	0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 1 5 0 1 5 0 1 5 0 1 5 0 0 0 0 0 0 0 0 0 0 0 0 0	
23 (LG)	Ground	Trunk lid open	Output	Trunk lid	OPEN (Trunk lid opener actuator is activated)	12 V	
					Other than OPEN (Trunk lid opener actuator is not activated)	0 V	
					Turn signal switch OFF	0 V	
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s	
30 (P)	Ground	round Trunk room lamp	Output	Trunk room lamp	ON	0 V	
					OFF	12 V	

	nal No.	Description				Value	
(VVire +	color)	Signal name	Input/ Output		Condition	(Approx.)	A
34	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 10 1 s JMKIA0062GB	B C D
(SB)	Ground	()	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 1 1 1 1 1 1 1 1 1 1 1 1 1	E
35	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	G H
(V)	Clound	(+)	Culpur	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	J K DEF
38	Ground	Rear bumper anten-	Output	When the trunk lid opener re- quest switch is	When Intelligent Key is in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 1 1 1	M
(B)	Sround	na (–)	Cuput	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
39	39 (M) Ground Rear bumper anten- (M) Output Quest switch is	When Intelligent Key is in the antenna detection area	(V) 15 0 10 0 15 10 10 10 10 10 10 10 10 10 10			
(W)		na (+)		quest 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	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	12 V
(Y)	Ground	E/R) control	Output	Ignition Switch	ON	0 V
50 (BG)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB
						11.8 V
					ON (Trunk lid is opened) When selector lever is in P	0 V
				Ignition switch ON (A/T mod-	or N position	12 V
52	Ground	Starter relay control	Output	els)	When selector lever is not in P or N position	0 V
(R)	Cround	Clarton rolay control	Output	Ignition switch	When the clutch pedal is depressed	Battery voltage
				ON (M/T mod- els)	When the clutch pedal is not depressed	0 V
60* ³	Ground	Push-button ignition	Input	Push-button ig- nition switch	Pressed	0 V
(BR)	Ground	switch (Push switch)	input	(Push switch)	Not pressed	Battery voltage
					ON (Pressed)	0 V
61 (SB)	Ground	Trunk lid opener re- quest switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0 V
64		Intelligent Key warn-		Intelligent Key	Sounding	0 V
(G)	Ground	ing buzzer (Engine room)	Output	warning buzzer (Engine room)	Not sounding	12 V

< ECU DIAGNOSIS INFORMATION >

	nal No. e color)	Description				Value
+		Signal name	Input/ Output		Condition	(Approx.)
					Pressed	0 V
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Not pressed	(V) 15 10 10 ms JPMIA0011GB 11.8 V
72	Ground	Room antenna 2 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)	Giound	(Center console)	Cutput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB
73	Ground	Room antenna 2 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(G)	Sidurd	(Center console)	Capat	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
74	74 Passanger door an senger door re	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB		
(SB)	Ground	tenna (-)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 15 0 15 0 15 0 15 15 0 15 15 15 15 15 15 15 15 15 15 15 15 15
75	Ground	Passenger door an-	Output	When the pas- senger door re- quest switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)		tenna (+)			When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
76	76 Driver door antenna Oriver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB			
(V)	Ground	Output Switch is oper- ated with igni- tion switch OFF	ated with igni- tion switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 – – – – – – – – – – – – – – – – – – –	

	nal No.	Description				Value	Λ
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)	А
77		Driver door antenna		When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(LG)	Ground	(+)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 10 10 10 10 15 10 10 15 10 10 10 10 10 10 10 10 10 10	E
78	Ground	Room antenna 1 (-)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(Y)		(Instrument panel)	Cuput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 15 0 15 15 15 15 15 15 15 15 15 15	J K DEF
79	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M
(BR)		(Instrument panel)	Cuput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	P

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (SB)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON	0 V 12 V
83	Remote keyless entry	Input/	During waiting		(V) 15 10 5 0 1 1 ms JMKIA0064GB	
(Y)	Ground	receiver communica- tion	Output	When operating either button on the Intelli- gent Key		(V) 15 10 5 0 1 ms JMKIA0065GB
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V
				Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7	(V) 15 0 2 ms JPMIA0040GB 1.3 V	

Terminal No. Description Value А (Wire color) Condition Input/ (Approx.) Signal name + _ Output В (V 15 10 All switches OFF С (Wiper volume dial 4) 2 ms JPMIA0041GB D 1.4 V $(\setminus$ 15 10 Ε Lighting switch HI ſ (Wiper volume dial 4) F 2 ms JPMIA0036GB 1.3 V 88 Combination switch Combination Ground Input (BG) **INPUT 3** switch 15 10 Н Lighting switch 2ND ٢ (Wiper volume dial 4) 2 ms JPMIA0037GB 1.3 V J 15 Any of the conditions be-10 low with all switches OFF C · Wiper volume dial 1 Κ · Wiper volume dial 2 · Wiper volume dial 3 2 ms JPMIA0040GB DEF 1.3 V Push-button ig-0 V Pressed 89*⁴ Push-button ignition Ground Input nition switch switch (Push switch) (BR) Not pressed Battery voltage (push switch) Μ 90 Input/ Ground CAN-L (P) Output 91 Input/ Ν CAN-H Ground (L) Output OFF 0 V 0 (V 15 10 Ρ 92 Key slot illumi-Ground Key slot illumination Output Blinking (LG) nation 1 s JPMIA0015GB 6.5 V ON 12 V

BCM (BODY CONTROL MODULE)

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
93 (GR)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BG)	Clound	nee relay control	Output	Ignition ownon	ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V
97* ⁴	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)		tion No. 1			UNLOCK status	12 V
98* ⁴	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V
(P)		tion No. 2		g	UNLOCK status	0 V
		Selector lever P posi-		Selector lever	P position	0 V
		tion switch			Any position other than P	12 V
99		ASCD clutch switch (M/T models without	t A	ASCD clutch	OFF (Clutch pedal is de- pressed)	0 V
(R)* ¹ (BR)* ²	Ground	ICC)	Input	switch	ON (Clutch pedal is not depressed)	12 V
()		ICC clutch switch (M/		ICC clutch	OFF (Clutch pedal is de- pressed)	0 V
		T models with ICC)		switch	ON (Clutch pedal is not depressed)	12 V
					ON (Pressed)	0 V
100 (Y)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 10 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 0 10 ms JPMIA0016GB 1.0 V
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC ON	0 V 12 V
103 (P)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch C		12 V 12 V
106* ⁴	0	Steering lock unit	Out	lendtien is 201	OFF or ACC	12 V
(SB)	Ground	power supply	Output	Ignition switch	ON	0 V

Terminal No. Description Value А (Wire color) Condition Input/ (Approx.) Signal name + _ Output В (V 15 10 Ō All switches OFF С 2 ms JPMIA0041GB D 1.4 V (V) 15 10 Ε 0 Turn signal switch LH F 2 ms JPMIA0037GB 1.3 V G (V 15 10 Combination Н 107 Combination switch switch Ground Input Turn signal switch RH 0 **INPUT 1** (LG) (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V J (V 15 10 0 Front wiper switch LO Κ 2 ms JPMIA0038GB DEF 1.3 V (V 15 Μ 10 5 0 Front washer switch ON Ν 2 ms JPMIA0039GB 1.3 V Ο

BCM (BODY CONTROL MODULE)

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	nal No. color)	Description	I		2	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0038GB 1.3 V
(R)		INPUT 4		switch	Lighting switch 1ST (Wiper volume dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V
					Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	(V) 15 10 2 ms JPMIA0039GB 1.3 V

Terminal No. Description Value А (Wire color) Condition Input/ (Approx.) Signal name + _ Output В (V 15 10 ٢ All switches OFF С 2 m s JPMIA0041GB D 1.4 V (V) 15 10 Ε C Lighting switch PASS F 2 ms JPMIA0037GB 1.3 V G (V 15 10 Combination Н 109 switch Combination switch Lighting switch 2ND n Ground Input **INPUT 2** (W) (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V J (V 15 10 Front wiper switch INT/ 0 Κ AUTO 2 ms JPMIA0038GB DEF 1.3 V (V 15 Μ 10 5 Front wiper switch HI 0 Ν 2 ms JPMIA0040GB 1.3 V Ο ON 0 V Ρ 10 110 Ground Hazard switch Input Hazard switch 5 (G) OFF 10 ms JPMIA0012GB 1.1 V

BCM (BODY CONTROL MODULE)

	nal No.	Description				\/_\
(Wire +	color) –	Signal name	Input/ Output		Condition	Value (Approx.)
					LOCK status	12 V
111* ⁴ (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	12 V
					15 seconds or later after UNLOCK	0 V
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 10 10 10 10 10 10 10 10
113 (BG)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle When dark outside of the	Close to 5 V Close to 0 V
					vehicle OFF (Clutch pedal is not	0 V
114 (R)	Ground	Clutch interlock switch	Input	Clutch interlock switch	depressed) ON (Clutch pedal is de- pressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2		Stop lamp	OFF (Brake pedal is not depressed)	0 V
118	Ground	(Without ICC)	Input	switch	ON (Brake pedal is de- pressed)	Battery voltage
(BR)	Cround	Stop lamp switch 2	mput		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 0 10 10 ms JPMIA0012GB 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V

	nal No.	Description				
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)
121 (SB)	Ground	Key slot switch	Input	When the Intelligent Key is inserted into key slot When the Intelligent Key is not inserted into		12 V 0 V
123				key slot	OFF or ACC	0 V
(V)	Ground	IGN feedback	Input	Ignition switch	ON	Battery voltage
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 0 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
129 (BG)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB
					ON	1.1 V 0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 10 ms JPMIA0013GB
						10.2 V
				Ignition switch C		12 V
133 (L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps OFF) ON (Tail lamps ON)	9.5 V NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level. (V) 15 10 10 10 10 10 10 10 10 10 10
					OFF	JPMIA0159GB
				LOCK indicator	OFF	Battery voltage
134	<u> </u>		\sim	LOCK indicator OFF lamp ON		
134 (LG)	Ground	LOCK indicator lamp	Output		ON	0 V

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(V)	Giouna	power supply	Output	Ignition Switch	ACC or ON	5.0 V
139	Ground	Tire pressure receiv- er communication	Input/	Ignition switch	Standby state	(V) 6 4 2 0 • • 0.2s OCC3881D
(L)		er communication	Output	Output ON	When receiving the signal from the transmitter	(V) 6 2 0 + 0.2s OCC3880D
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	12 V
(B)	Cround	position (A/T models)	mput		Except P and N positions	0 V
141 (W)	Ground	Security indicator	Output	Security indica- tor	ON Blinking	0 V
					OFF	12 V
					All switches OFF	0 V
					Lighting switch 1ST	(V),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Combination	Lighting switch HI	15
142 (BR)	Ground	Combination switch OUTPUT 5	Output switch (Wiper volume dial 4)	(Wiper volume	Lighting switch 2ND	10 50 2 ms 10.7 V
					All switches OFF (Wiper volume dial 4)	0 V
					Front wiper switch HI (Wiper volume dial 4)	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 • Wiper volume dial 6 • Wiper volume dial 7	15 10 5 0 <i>2</i> ms JPMIA0032GB 10.7 V

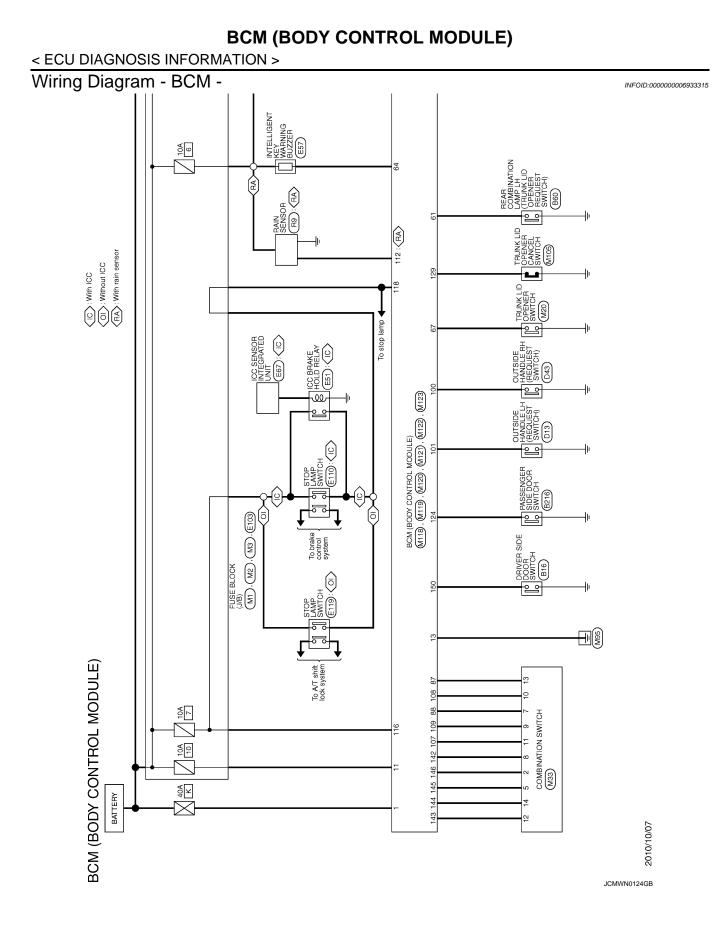
< ECU DIAGNOSIS INFORMATION >

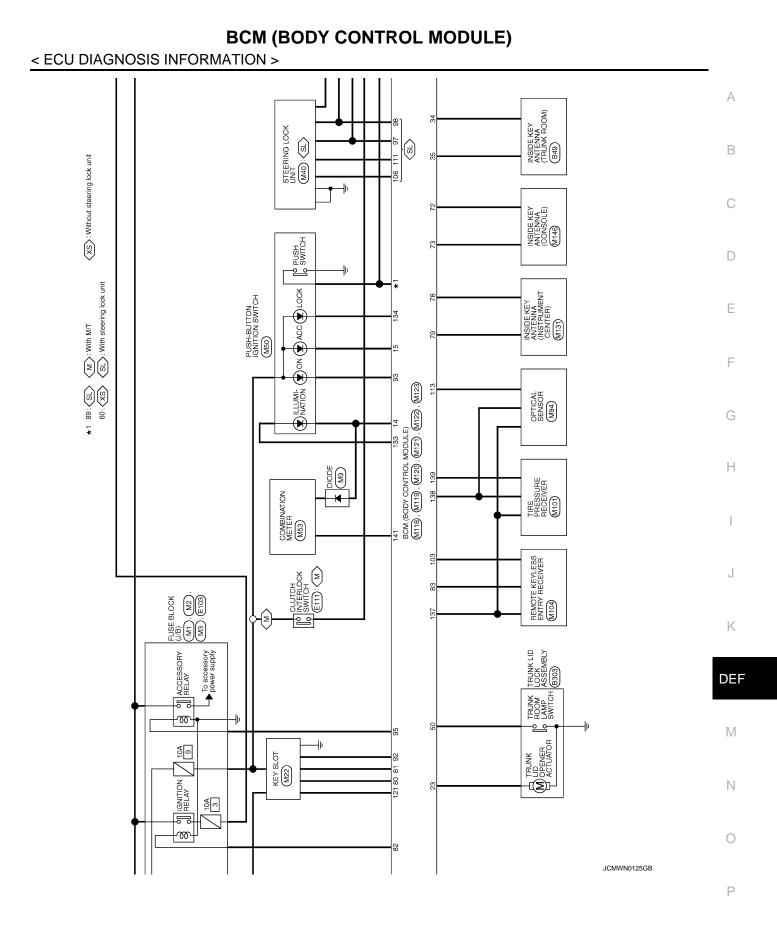
	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	0 V
					Front washer switch ON (Wiper volume dial 4)	(V) 15
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5	10 5 0 2 ms
					Wiper volume dial 6	JPMIA0033GB 10.7 V
					All switches OFF	0 V
				Combination switch (Wiper volume dial 4)	Front wiper switch INT/ AUTO	(V)
145		Combination switch			Front wiper switch LO	
(L)	Ground	OUTPUT 3	Output		Lighting switch AUTO	5 0 2 ms JPMIA0034GB
					All switches OFF	10.7 V 0 V
				Combination switch (Wiper volume dial 4)	Front fog lamp switch ON	
		Combination switch			Lighting switch 2ND	(V)
146					Lighting switch PASS	15 10 5
(SB)	Ground	OUTPUT 4	Output		Turn signal switch LH	5 2.ms 10.7 V
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 10 10 10 10 11.8 V
					ON (Door open)	0 V
151		Rear window defog-		Rear window	Active	0 V
(G)	Ground	ger relay control	Output	Rear window defogger	Not activated	Battery voltage

• *2: M/T models

• *3: Without steering lock unit

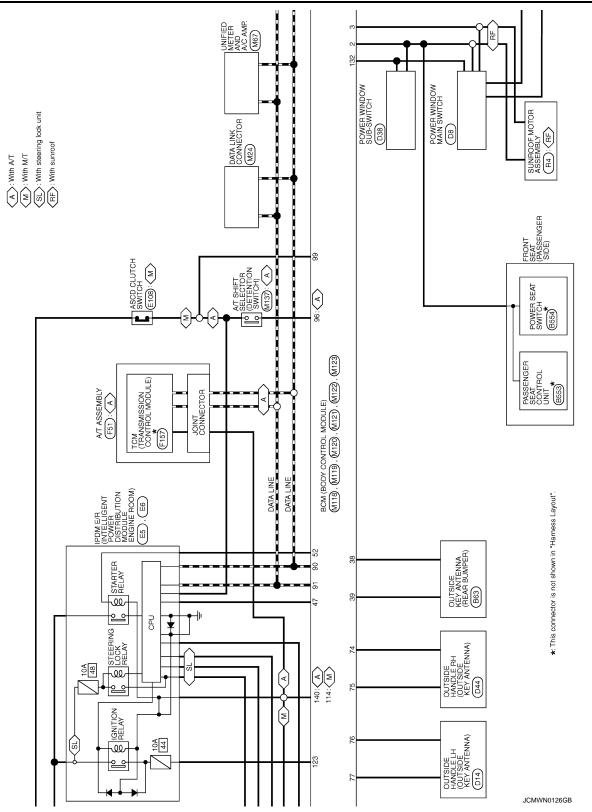
• *4: With steering lock unit



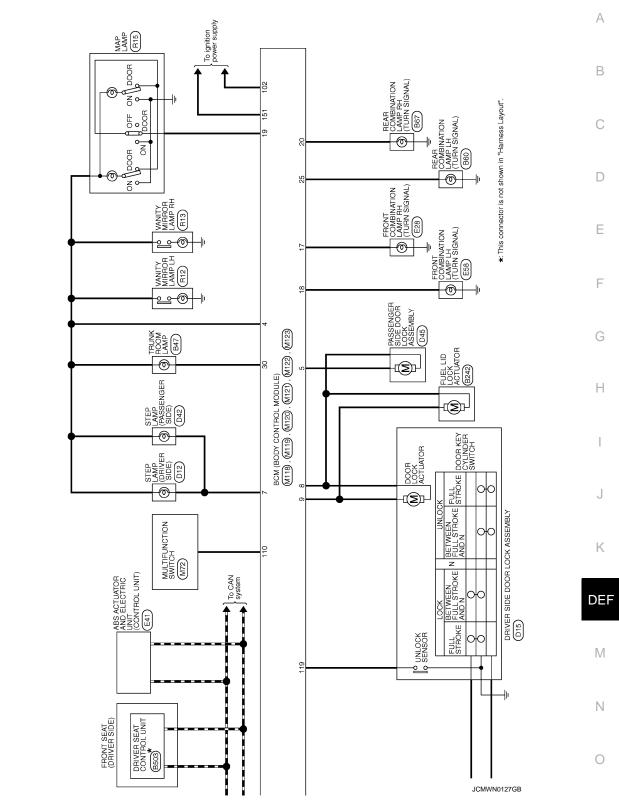


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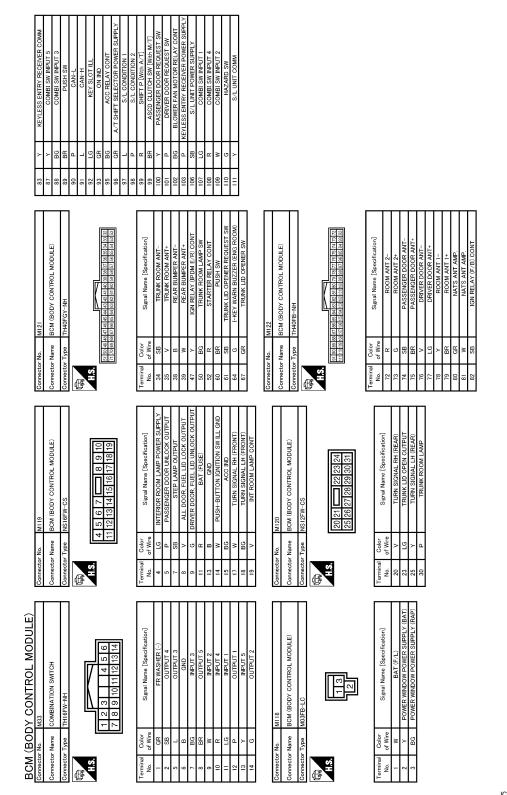
2011 G Coupe



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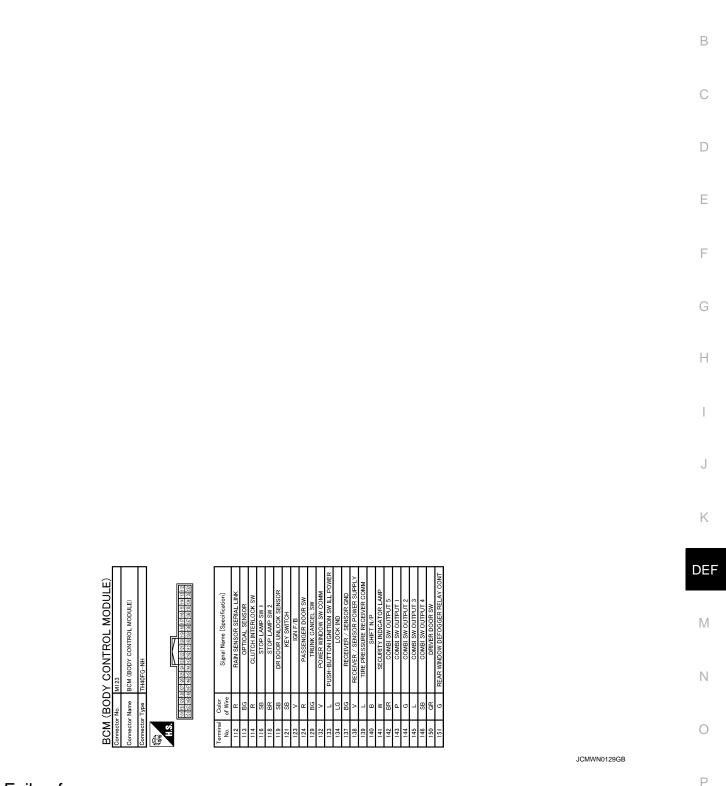


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JCMWN0128GB

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Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

INFOID:000000006933316

А

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
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 $ON \rightarrow OFF$
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actua- tor and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status be- comes consistentStarter control relay signalStarter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (12 V) Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (12 V) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (12 V) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) Interlock/PNP switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (12 V) PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
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)
B2609: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (12 V) 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 fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: BCM	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 be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	 When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: ON (Battery voltage)
B26E9: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No. 1 signal: LOCK (0 V) Steering condition No. 2 signal: LOCK (12 V)

DTC Inspection Priority Chart

INFOID:000000006933317

Ν

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

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 	

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Priority	DTC
4	 B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2555: IGNITION RELAY B2555: VEHICLE SPEED B2560: STARTER CONT RELAY B2501: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSITION B2604: PNP/CLUTCH SW B2605: SNR RELAY B2605: S/L RELAY B2606: S/L RELAY B2606: S/L RELAY B2607: S/L RELAY B2609: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B26009: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B26000: STEERING LOCK UNIT B26000: STEERING LOCK UNIT B26000: STEERING LOCK UNIT B26010: STEERING LOCK UNIT B26010: STEERING LOCK UNIT B26011: SLOM B2614: BCM B2614: BCM B2616: BCM B2616: BCM B2616: BCM B2617: BCM B2618: BCM B2618: BCM B2619: SL STATUS B2619: BCM B2619: SL STATUS B2619: BCM B2619: BCM B2619: BCM B2619: BCM B2619: SL STATUS B2
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 C1770: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT
6	B2621: INSIDE ANTENNA 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 <u>DEF-6</u>, "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)".

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< 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	Refer- ence page
No DTC is detected. further testing may be required.	_	_	—	_	_
U1000: CAN COMM	—	-	_	—	BCS-34
U1010: CONTROL UNIT(CAN)	—	_	_	_	BCS-35
U0415: VEHICLE SPEED	_	—	_	—	BCS-36
B2013: ID DISCORD BCM-S/L*	×	×	_	_	<u>SEC-57</u>
B2014: CHAIN OF S/L-BCM*	×	×	_	_	<u>SEC-58</u>
B2190: NATS ANTENNA AMP	×	-	_	—	<u>SEC-49</u>
B2191: DIFFERENCE OF KEY	×	-	—	—	<u>SEC-52</u>
B2192: ID DISCORD BCM-ECM	×	-	—	—	<u>SEC-53</u>
B2193: CHAIN OF BCM-ECM	×	_	_	_	<u>SEC-55</u>
B2195: ANTI-SCANNING	×	-	—	—	<u>SEC-56</u>
B2553: IGNITION RELAY	_	×	_	—	PCS-51
B2555: STOP LAMP	_	×	_	—	<u>SEC-61</u>
B2556: PUSH-BTN IGN SW	—	×	×	—	<u>SEC-63</u>
B2557: VEHICLE SPEED	×	×	×	—	<u>SEC-65</u>
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-66</u>
B2562: LOW VOLTAGE		×	_	_	BCS-37
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-67</u>
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-70</u>
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-72</u>
B2604: PNP/CLUTCH SW	×	×	×	_	<u>SEC-75</u>
B2605: PNP/CLUTCH SW	×	×	×	_	<u>SEC-77</u>
B2606: S/L RELAY*	×	×	×	_	<u>SEC-79</u>
B2607: S/L RELAY*	×	×	×	_	<u>SEC-80</u>
B2608: STARTER RELAY	×	×	×	_	<u>SEC-82</u>
B2609: S/L STATUS*	×	×	×	_	<u>SEC-84</u>
B260A: IGNITION RELAY	×	×	×	_	PCS-53
B260B: STEERING LOCK UNIT*	_	×	×	_	<u>SEC-88</u>
B260C: STEERING LOCK UNIT*	_	×	×	_	<u>SEC-89</u>
B260D: STEERING LOCK UNIT*	_	×	×	_	<u>SEC-90</u>
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-91</u>
B2612: S/L STATUS*	×	×	×	_	<u>SEC-96</u>
B2614: BCM	_	×	×	_	PCS-55
B2615: BCM	_	×	×	_	PCS-57
B2616: BCM		×	×		PCS-59
B2617: BCM	×	×	×	_	SEC-100
B2618: BCM	×	×	×	_	PCS-61
B2619: BCM*	×	×	×	_	SEC-102
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-62
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-103</u>

Revision: 2011 December

< 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	Refer- ence page
B2621: INSIDE ANTENNA	—	×	—	_	DLK-56
B2622: INSIDE ANTENNA	—	×	—	—	<u>DLK-58</u>
B2623: INSIDE ANTENNA	—	×	—	_	DLK-60
B26E8: CLUTCH SW	×	×	×	_	<u>SEC-92</u>
B26E9: S/L STATUS*	×	×	imes (Turn ON for 15 seconds)	_	<u>SEC-94</u>
B26EA: KEY REGISTRATION	_	×	imes (Turn ON for 15 seconds)	_	<u>SEC-95</u>
C1704: LOW PRESSURE FL		_	—	×	
C1705: LOW PRESSURE FR			—	×	N/T 04
C1706: LOW PRESSURE RR			—	×	<u>WT-24</u>
C1707: LOW PRESSURE RL		_		×	
C1708: [NO DATA] FL		_	—	×	
C1709: [NO DATA] FR			—	×	
C1710: [NO DATA] RR	_		—	×	<u>WT-26</u>
C1711: [NO DATA] RL		_	—	×	
C1716: [PRESSDATA ERR] FL			—	×	
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	<u>WT-29</u>
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-30</u>
C1734: CONTROL UNIT	_	_	—	×	<u>WT-31</u>

*: For models without steering lock unit, this DTC is not applied.

REAR WINDOW DEFOGGER DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS >	
SYMPTOM DIAGNOSIS	Δ
REAR WINDOW DEFOGGER DOES NOT OPERATE	A
Diagnosis Procedure	В
1.CHECK REAR WINDOW DEFOGGER SWITCH	
Check rear window defogger switch. Refer to <u>DEF-9, "Component Function Check"</u> .	С
<u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D
2. CHECK REAR WINDOW DEFOGGER RELAY	E
Check rear window defogger relay. Refer to <u>DEF-10. "Component Function Check"</u> .	
Is the inspection result normal?	F
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	Г
3. CHECK REAR WINDOW DEFOGGER	G
Check rear window defogger. Refer to <u>DEF-12, "Component Function Check"</u> .	
Is the inspection result normal?	Н
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. CONFIRM THE OPERATION	
Confirm the operation again.	
Is the inspection result normal?	J
YES >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u> . NO >> GO TO 1.	-
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REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPER-ATE.

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

Diagnosis Procedure

INFOID:000000006457044

1.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch. Refer to <u>DEF-9</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay. Refer to <u>DEF-10, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

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

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:00000006457045
1.CHECK REAR WINDOW DEFOGGER	
Check rear window defogger. Refer to <u>DEF-12, "Component Function Check"</u> .	C
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D
2.CONFIRM THE OPERATION	
Confirm the operation again <u>Is the inspection result normal?</u>	E
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	F
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DOOR MIRROR DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DOOR MIRROR DEFOGGER DOES NOT OPERATE BOTH SIDES

BOTH SIDES :	Diagnosis Procedure
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INFOID:000000006457046

INFOID:000000006457047

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger. Refer to <u>DEF-15, "Component Function Check"</u>.

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 <u>GI-43, "Intermittent Incident"</u>.

NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger. Refer to <u>DEF-17</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-43, "Intermittent Incident".

NO >> GO TO 1. PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger. Refer to <u>DEF-19, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

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

NO >> GO TO 1.

INFOID:000000006457048

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure	INFOID:000000006457049	В
1. CHECK AV CONTROL UNIT FUNCTION		D
Check that the AV control unit is operating normally. Base audio without rear view camera refer to <u>AV-11, "Work Flow"</u> . Base audio with rear view camera refer to <u>AV-157, "Work Flow"</u> .		С
BOSE audio without navigation refer to <u>AV-283, "Work Flow"</u> . BOSE audio with navigation refer to <u>AV-415, "Work Flow"</u> .		D
Is the inspection result normal?		
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CONFIRM THE OPERATION		Ε
Confirm the operation again. <u>Is the inspection result normal?</u>		F
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.		G

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REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE < SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:000000006457050

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check rear window defogger operate.

- YES >> Replace multifunction switch (rear window defogger switch). Refer to <u>AV-98. "Removal and Instal-</u> lation"
- NO >> Check rear window defogger system. Refer to <u>DEF-3</u>, "Work Flow"

< PRECAUTION > PRECAUTION PRECAUTIONS

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

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

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, 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.

Precaution for Battery Service

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

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INFOID:000000006457052

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< REMOVAL AND INSTALLATION >

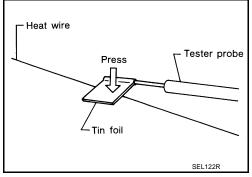
REMOVAL AND INSTALLATION FILAMENT

Inspection and Repair

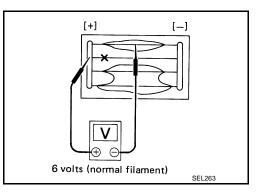
INFOID:000000006457053

INSPECTION

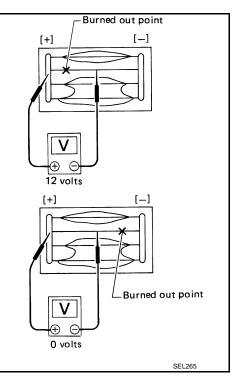
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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



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



REPAIR

REPAIR EQUIPMENT

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

FILAMENT

- < REMOVAL AND INSTALLATION >
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

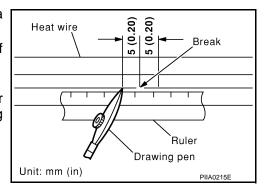
REPAIRING PROCEDURE

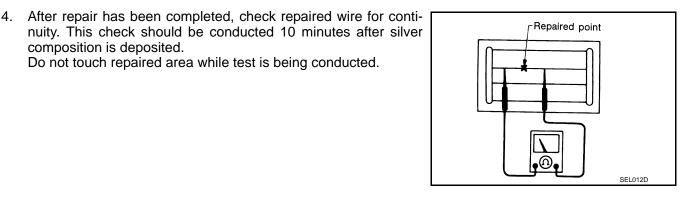
composition is deposited.

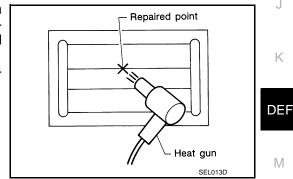
- 1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
- 2. Apply a small amount of conductive silver composition to tip of drawing pen.

Shake silver composition container before use.

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







5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and

Do not touch repaired area while test is being conducted.

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

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< REMOVAL AND INSTALLATION >

CONDENSER

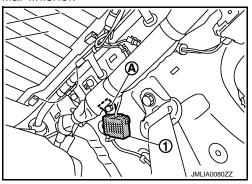
Exploded View

Refer to INT-15, "Exploded View"

Removal and Installation

REMOVAL

- 1. Remove the rear seat cushion and the rear seatback. Refer to <u>SE-201, "Removal and Installation"</u>
- 2. Remove the rear kickplate, rear wheel well garnish and the rear pillar finisher. Refer to <u>INT-15, "Removal and Installation"</u>
- 3. Remove bolt (A), and then remove condenser (1) from the vehicle body.



INSTALLATION Install in the reverse order of removal. INFOID:000000006457054

INFOID:000000006457055