SECTION DEFOGGER C

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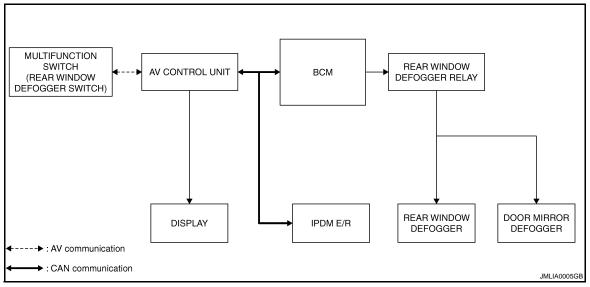
< BASIC INSPECTION >	
BASIC INSPECTION	А
DIAGNOSIS AND REPAIR WORK FLOW	1
Work Flow	В
DETAILED FLOW	
1.OBTAIN INFORMATION ABOUT SYMPTOM	С
Interview the customer to obtain the malfunction information (conditions and environment when the malfunc- tion occurred) as much as possible when the customer brings the vehicle in.	D
>> GO TO 2.	
2.CHECK DTC	Е
Perform self diagnosis with CONSULT-III	
<u>Is any DTC detected?</u> YES >> Refer to <u>DEF-60, "DTC Index"</u>	F
NO >> GO TO 3.	
3.REPRODUCE THE MALFUNCTION INFORMATION	G
Check the malfunction on the vehicle that the customer describes. Inspect the relation of the symptoms and the condition when the symptoms occur.	
>> GO TO 4.	Н
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	DEF
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	0
NO $>>$ GO TO 4.	
	Ρ

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION REAR WINDOW DEFOGGER SYSTEM

System Diagram

INFOID:000000004638925



System Description

INFOID:000000004638926

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.

Component Parts Location

< SYSTEM DESCRIPTION >

۹	8	© A
		З
		E
	6	F
		G
۹		JMLIA0003ZZ
. Rear window defogger relay	2. BCM M118, M119, M122, M123	3. IPDM E/R E6
. Rear window defogger switch (built-in multifunction switch M72)	5. Rear window defogger connector B401, B402	6. Condenser B26
. AV control unit With NAVI M87,M88 Without NAVI M83, M85	,	J
. Dash side lower (driver side)	B. Dash side lower (passenger side)	C. Engine room dash panel (RH)
. Behind rear pillar finisher (LH)	E. Behind cluster lid C	K

Component Description

BCM	Operates the rear window defogger with the operation of rear window defogger switchPerforms 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:000000004638971

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.

Sustem	Out another a depatient items	Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
Intelligent Key systemEngine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	ВСМ	×		
IVIS - 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	TPMS (AIR PRESSURE MONITOR)	×	×	Х

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 moment a particular DTC is detected				
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected				
	SLEEP>LOCK			While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")		
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)			
Vehicle Speed	LOCK>ACC	-	While turning power supply position from "LOCK" to "ACC"			
	ACC>ON		While turning power supply position from "ACC" to "IGN"			
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)			
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)			
	RUN>URGENT	Power position status of the moment a particular DTC is detected	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		While turning power supply position from "OFF" to "LOCK"			
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"			
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"			
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode			
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode			
	LOCK		Power supply position is "LOCK" (Ignition switch OFF 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		Power supply position is "CRANKING" (At engine cranking)			
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 				

REAR WINDOW DEFOGGER

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

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Data monitor

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

ACTIVE TEST

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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.

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	K (40 A)	D
11	Dattery power supply	10 (10 A)	=

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK POWER SUPPLY CIRCUIT

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

· · · · · · · · · · · · · · · · · · ·	(+) BCM		Voltage (Approx.)	Н
Connector	Terminal		(//pp/0x.)	
M118	1	Ground	Pottony voltago	-
M119	11	Giouna	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM			Continuity	DE
Connector	Terminal	Ground	Continuity	
M119	13		Existed	
- the sime section as sold as such	10			N

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

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REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH

Description

• 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:000000004638933

INFOID:000000004638932

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 <u>DEF-10</u>, "Diagnosis Procedure"

Diagnosis Procedure

INFOID:000000004638934

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Does multifunction switch operate normally?

- Base audio without navigation. Refer to <u>AV-19, "Diagnosis Description"</u>
- BOSE audio without navigation. Refer to AV-141, "Diagnosis Description"
- BOSE audio with navigation. Refer to <u>AV-369, "Diagnosis Description"</u>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace multifunction switch (rear window defogger switch). Refer to <u>AV-122, "Removal and</u> <u>Installation"</u>

REAR WINDOW DEFOGGER RELAY

		WINDOW D	EFOGGER REL	.AY	
<pre>< DTC/CIRCUIT DIA REAR WINDO\</pre>		FR RELAY	/		
Description					
					INFOID:000000004638935
Power is supplied to the	_	befogger with BC	CM control.		
Component Func	tion Check				INFOID:000000004638936
1.CHECK REAR WI		GER RELAY PO	WER SUPPLY CIRCU	JIT	
 Perform Active Te Touch "ON". 	st ("REAR DEFC	OGGER") with C	ONSULT-III.		
3. Check that the real	ar window heatin	ng wire is getting	warmer.		
Is the inspection resul					
	dow defogger rela		circuit is OK.		
Diagnosis Proced	dure				INFOID:000000004638937
1.CHECK FUSE					
1. Turn ignition swite	ch off.				
 Check the following 10A fuse [No.3, logonal content of the second s		ock (.I/B)]			
Is the inspection resul					
YES >> GO TO 2.				aa ia klauwa	
NO >> Replace t 2.CHECK REAR WI			affected circuit if a fu	ise is diown.	
1. Turn ignition swite					
2. Check voltage be		ness connector a	and ground.		
(+)					
BCM	1	(-)	Conditio	n	Voltage (V) (Approx.)
Connector	Terminal			I	(+)
M123	151	Ground	Rear window defogger switch	ON	0
Is the inspection resul	lt pormal?		ownor	OFF	Battery voltage
YES >> GO TO 6.					
NO >> GO TO 3.					
3 .CHECK REAR WI	NDOW DEFOGO	GER CIRCUIT 2			
1. Turn ignition swite					
 Disconnect BCM Check continuity 			gger relay. r and fuse block (J/B)) harness con	nector.
	BCM		Fuse block (J/B)		
Connector	Terminal	Con		minal	Continuity
M123	151	1	W2 4	4B	Existed
Is the inspection resul	t 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-12</u>. "Component Inspection" Is the inspection result normal?

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 5.

NO >> Replace rear window defogger relay.

5.CHECK FUSE BLOCK (J/B)

1. Install the rear window defogger relay.

2. Turn ignition switch ON.

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

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

Is the inspection result normal?

YES >> GO TO 6.

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

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-41, "Intermittent Incident"

>> INSPECTION END

Component Inspection

1.CHECK REAR WINDOW DEFOGGER RELAY

1. Turn ignition switch OFF.

- 2. Disconnect rear window defogger relay.
- 3. Check rear window defogger relay.

Ter	minal			3	
	window ger relay	Condition	Continuity	5723 (5	
3	5	12 V direct current supply between termi- nals 1 and 2.	Existed		3
		No current supply	Not existed		
Is the insp	ection re	sult normal?		2 1	

YES >> INSPECTION END

NO >> Replace rear window defogger relay.

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REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAG					
REAR WINDOW	DEFOG	GER			ŀ
Description					INFOID:000000004638939
Heats the heating wire from fogging up.	with the powe	r supply from the	rear window defogg	er relay to pre	vent the rear window $_{\rm E}$
Component Functi	on Check				INFOID:000000004638940
Diagnosis Procedu 1.CHECK FUSE 1. Turn ignition switch 2. Check the following - 20A fuse [No.14, lo - 20A fuse [No.15, lo Is the inspection result in YES >> GO TO 2.	("REAR DEF window heat <u>hormal?</u> w defogger is F-13, "Diagn IFC OFF. cated in fuse cated in fuse hormal?	FOGGER") with C ing wire is getting to OK. osis Procedure" block (J/B)] block (J/B)]			INFOID:00000004638941
2.CHECK POWER SU					
 Turn ignition switch Check voltage betw 		dow defogger cor	nnector and ground.		
(+)					k
Rear window de	fogger	()	Conditi	on	Voltage (V) (Approx.)
Connector	Terminal				Botton / voltage
B401	1	Ground	Rear window defogger switch	ON OFF	Battery voltage
Is the inspection result in YES >> GO TO 3. NO >> GO TO 4. 3. CHECK GROUND CO 1. Turn ignition switch 2. Disconnect rear wir 3. Check continuity be	IRCUIT OFF. dow defogge		arness connector an	d around	N
Rear	window defogge	er Terminal	Ground		Continuity
B402		2			Existed
Is the inspection result of YES >> GO TO 7. NO >> Repair or re 4.CHECK REAR WIND	place harnes				

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2. Disconnect condenser connector and rear window defogger connector.
- 3. Check continuity between condenser (condenser side) and rear window defogger harness connector.

Condenser		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B26	1	B401	1	Existed

4. Check continuity between condenser (condenser side) connector and ground.

Conc	lenser		Continuity
Connector	Connector Terminal		Continuity
B26	1		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace condenser. Refer to <u>DEF-72</u>, "Removal and Installation"

5.CHECK REAR WINDOW DEFOGGER CIRCUIT 2

1. Disconnect fuse block (J/B) connector.

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

Fuse b	lock (J/B)	Conc	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
B6	10G	B 26	1	Existed
Во	11G	B26	I	Existed

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

Fuse bl	Fuse block (J/B)		Continuity
Connector	Terminal	Ground	Continuity
B6	10G	Ground	Not existed
B0	11G		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.

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

(+) Fuse block (J/B)		()	Condition		Voltage (V) (Approx.)
Connector	Terminal				(
	10G	Orevert	Rear window defogger	ON	Battery voltage
Pc				OFF	0
B6	Ground	switch	ON	Battery voltage	
	11G			OFF	0

Is the inspection result normal?

YES >> GO TO 8.

7.CHECK FILAMENT

Check filament. Refer to <u>DEF-15. "Component Inspection"</u>

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >	
Is the inspection result normal?	—
YES >> GO TO 8.	А
NO >> Repair filament.	
8. CHECK INTERMITTENT INCIDENT	— В
Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>	
	0
>> INSPECTION END	С
Component Inspection INFOLD:0000004638	
1.CHECK FILAMENT	D
Check the filament for damage or blown.	
Refer to DEF-70. "Inspection and Repair"	E
Is the inspection result normal?	
YES >> INSPECTION END NO >> Repair filament.	F
	0
	G
	Н
	I
	J
	K
	_
	DEF
	M
	Ν
	~
	0

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DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Description

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

Component Function Check

1.CHECK DOOR MIRROR DEFOGGER

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

2. Touch "ON".

3. Check that both side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Door mirror defogger is OK.

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

Diagnosis Procedure

1.CHECK FUSE

1. Turn ignition switch OFF.

2. Check 10A fuse [No.13, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect door mirror (driver side) connector.

2. Turn ignition switch ON.

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

	+) (driver side)	(–) Condition		Condition		
Connector	Terminal				(Approx.)	
D3	Δ			ON	Battery voltage	
D3	4 Ground	Ground switch	OFF	0		

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 3.

3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect fuse block (J/B) connector.

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

Fuse block (J/B)		Door mirror (driver side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M3	10C	D3	4	Existed	

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?

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INFOID:000000004638944

DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Turn ignition switch Check voltage betw		k (J/B) (fuse blo	ock side) and ground			
		. , .	ock side) and ground.			
(+) Fuse block (J/B)	(-)	Condition	ı	Voltage (V) (Approx.)	
Connector	Terminal				(//pp/0/.)	
М3	10C	Ground	Rear window defogger	ON	Battery voltage	
IVIS	100	switch OFF		0		
CHECK INTERMITT eck intermittent incid er to <u>GI-41, "Intermi</u> t	ent.					
>> INSPECTIO	ON END					

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DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

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

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

- 2. Touch "ON".
- 3. Check that the driver side door mirror glass is getting warmer.

Is the inspection result normal?

- YES >> Driver side door mirror defogger is OK.
- NO >> Refer to <u>DEF-18</u>, "Diagnosis Procedure"

Diagnosis Procedure

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

(Door mirror	+) (driver side)	(–) Condition		Voltage (V) (Approx.)	
Connector	Terminal				(11 - 7
D3	Δ			ON	Battery voltage
	4	Ground switch	switch	OFF	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

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

Fuse bl	Fuse block (J/B)		Door mirror (driver side)		
Connector	Terminal	Connector	Terminal	Continuity	
M3	10C	D3	4	Existed	

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

Fuse blo	ock (J/B)		Continuity
Connector	Terminal	Ground	Continuity
M3	10C		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.

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

DEF-18

INFOID:000000004638946

INFOID-00000004638947

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

Door mirror	(driver side)		
Connector	Terminal	Ground	Continuity
D3	8		Existed
Is the inspection result norma			
YES >> Replace door mi	rror glass (driver side). F	Refer to <u>MIR-18, "GLASS I</u>	MIRROR : Disassembly and
NO >> Repair or replace	harness.		
4. CHECK INTERMITTENT			
Check intermittent incident.			
Refer to <u>GI-41, "Intermittent I</u>	ncident"		
Is the inspection result norma			
>> INSPECTION EN			

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 from fogging up.

Component Function Check

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

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

2. Touch "ON".

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

Is the inspection result normal?

YES >> Passenger side door mirror defogger is OK.

NO >> Refer to <u>DEF-20, "Diagnosis Procedure"</u>

Diagnosis Procedure

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

(+) Door mirror (passenger side)		()	Condition		Voltage (V) (Approx.)	
Connector	Terminal				V FF - 7	
D22	D33 4 Ground Rear window defog switch	Rear window defogg		ON	Battery voltage	
		Ground	switch	OFF	Battery voltage	

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

Fuse bl	Fuse block (J/B)		Door mirror (passenger side)		
Connector	Terminal	Connector	Terminal	Continuity	
M3	9C	D33	4	Existed	

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

Fuse bl	ock (J/B)		Continuity
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.

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

DEF-20

INFOID:000000004638949

INFOID:00000004638950

PASSENGER SIDE DOOR MIRROR DEFOGGER

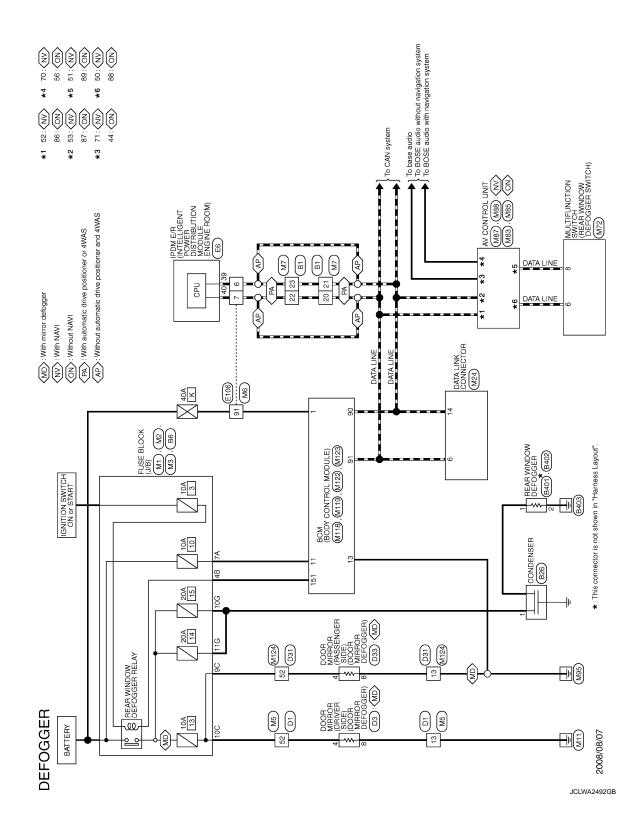
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Connector Terminal Ground Continuity 33 8 Image: State of the inspection result normal? Existed YES >> Replace door miror glass (passenger side). Refer to MIR-18, "GLASS MIRROR : Disass and Assembly". NO >> Repair or replace harness. ACHECK INTERMITTENT INCIDENT Existed Image: State of the intermittent incident. Image: State of the intermittent incident. Check intermittent incident. Refer to GL-41. "Intermittent Incident" >> INSPECTION END	Existed
 <u>s the inspection result normal?</u> YES >> Replace door mirror glass (passenger side). Refer to <u>MIR-18, "GLASS MIRROR : Disass</u> and <u>Assembly"</u> NO >> Repair or replace harness. <u>CHECK INTERMITTENT INCIDENT</u> Check intermittent incident. tefer to <u>GI-41, "Intermittent Incident"</u> 	
 YES >> Replace door mirror glass (passenger side). Refer to <u>MIR-18, "GLASS MIRROR : Disass</u> and <u>Assembly"</u> NO >> Repair or replace harness. CHECK INTERMITTENT INCIDENT Check intermittent incident. Cefer to <u>GI-41, "Intermittent Incident"</u> 	18, "GLASS MIRROR : Disassembl
Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>	
Refer to <u>GI-41, "Intermittent Incident"</u>	
>> INSPECTION END	

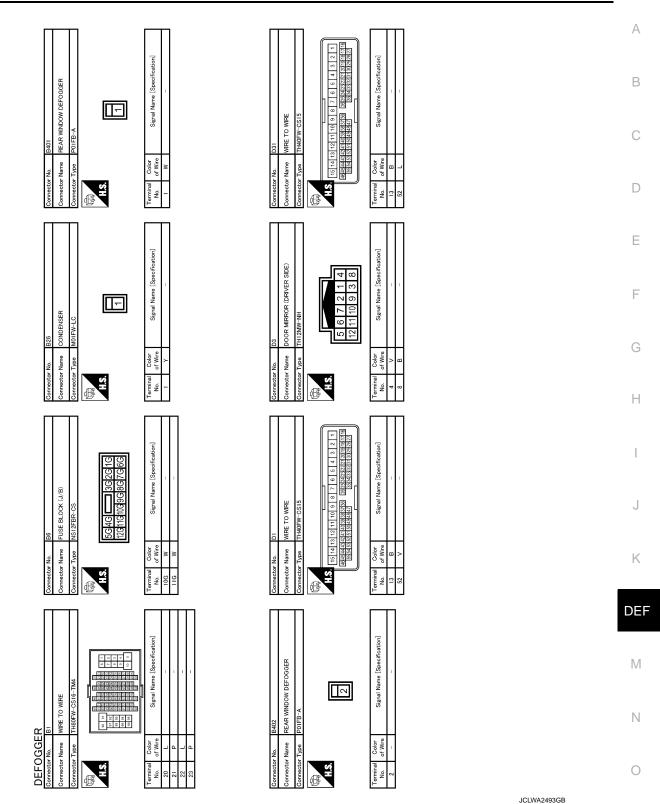
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REAR WINDOW DEFOGGER SYSTEM

Wiring Diagram - DEFOGGER CONTROL SYSTEM -



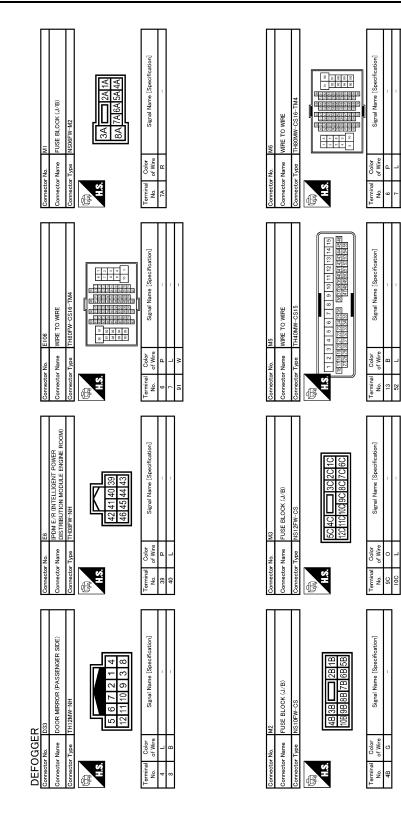
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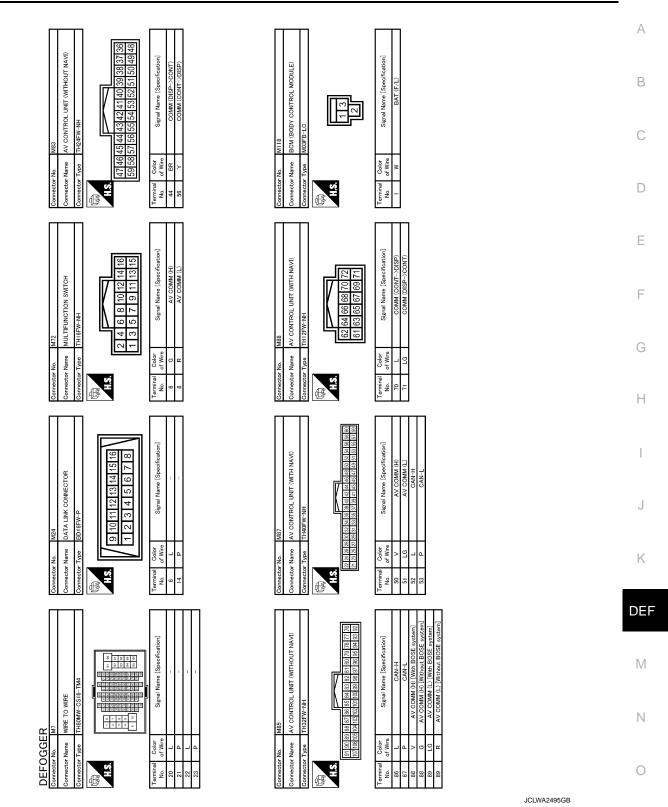
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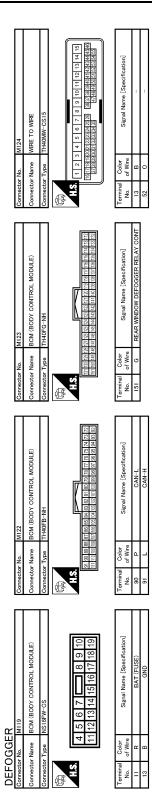
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< DTC/CIRCUIT DIAGNOSIS >



JCLWA2496GB

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 WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
-K WIFER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	Off
I UNIN SIGINAL K	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	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
TEAD LAIVIP SVV I	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
TEAD LAIVIP SVV 2	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
LYOSING 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
	Rear RH door closed	Off
DOOR SW-RR	Rear LH door opened	On

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В

С

Monitor Item	Condition	Value/Status
DOOR SW-RL	Rear LH door closed	Off
DOOK SW-KE	Rear LH door opened	On
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
	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK	Off
NET CTL LK-SW	Driver door key cylinder LOCK	On
	Other than driver door key cylinder UNLOCK	Off
KEY CYL UN-SW	Driver door key cylinder LOCK	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
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off
IR CANCEL SW	Trunk lid opener cancel switch ON	On
	Trunk lid opener switch OFF	Off
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	On
TRNK/HAT MNTR	Trunk lid closed	Off
	Trunk lid opened	On
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
RRE-LOCK	LOCK button of the Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off
TRE-TR/DD	TRUNK OPEN button of the Intelligent Key is pressed	On
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
TRE-FAINIC	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
INE-F/W OF EN	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
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
OF HUAL SENSUK	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

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
EQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
EQ 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
USH SW	Push-button ignition switch (push switch) is pressed	On
GN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
JN RLIZ -F/D	Ignition switch in ON position	On
CC 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
RAKE 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
DETE/CANCL SW	Selector lever in P position (Except M/T models) The clutch pedal is depressed (M/T models)	Off
	Selector lever in any position other than P (Except M/T models) The clutch pedal is not depressed (M/T models)	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
	Steering is unlocked	Off
S/L -LOCK	Steering is locked	On
/L -UNLOCK	Steering is locked	Off
	Steering is unlocked	On
	Ignition switch in OFF or ACC position	Off
/L RELAY-F/B	Ignition switch in ON position	On
INLK SEN -DR	Driver door is unlocked	Off
NER SEN -DR	Driver door is locked	On
USH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	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 (Except M/T models) The clutch pedal is depressed (M/T models)	On
SET D MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is unlocked	Off
3/L LOCK-IF DIVI	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
3/L UNLK-IF DIVI	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
	Steering lock system is 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	Steering is locked	Reset
ID OK FLAG	Steering is unlocked	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
RET 3W -3LOT	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
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	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 registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

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< ECU DIAGNOSIS INFORMATION >

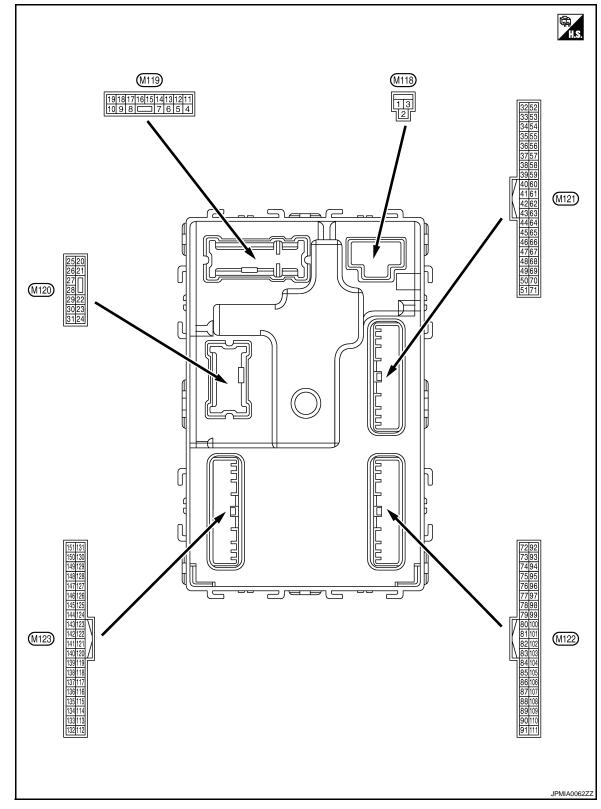
Monitor Item	Condition	Value/Status
	The key ID that the key slot receives is not recognized by the second key ID reg- istered to BCM.	Yet
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID regis- tered to BCM.	Done
	The key ID that the key slot receives is not recognized by the first key ID regis- tered to BCM.	Yet
CONFIRM ID1	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
1P 4	The ID of fourth Intelligent Key is registered to BCM	Done
	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
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
IP 2	The ID of second Intelligent Key is registered to BCM	Done
	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 of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
ID 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

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< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. color)	Description	1		O a stitle s	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (DFF	12 V
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch (NC	12 V
					np battery saver is activated. or room lamp power supply)	0 V
4 (LG)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V
(P)	Ground	LOCK	Juiput	door	Other than UNLOCK) Ac- tuator is not activated	0 V
7	Ground	Step lamp	Output	Step lamp	ON	0 V
(BR)	Cibaid	erob ionib	Carpor	erop iditip	OFF	12 V
8	Ground	All doors, fuel lid	Output	All doors, fuel	LOCK (Actuator is activated)	12 V
(V)	Cround	LOCK	Output	lid	Other than LOCK (Actuator is not activated)	0 V
9	Ground	Driver door, fuel lid	er door, fuel lid	Driver door, UNLOCK (Actuator is activated)	12 V	
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V
10	Cround	Rear RH door and	Rear RH door	(Actuator is activated)	12 V	
(BR)	Ground	rear LH UNLOCK	Output	door	Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage
13 (B)	Ground	Ground		Ignition switch (NC	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 (O)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(0)					ACC	0 V

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 10 5 0 1 s PKID0926E 6.5 V
					Turn signal switch OFF	0 V
18 (O)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 15 15 15 15 15 15 15 15
19	Ground	Room lamp timer	Output	Interior room	OFF	12 V
(V)	Croana	control	ouput	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 1 1 1 1 1 1 1 1 1 1 1 1
23	Orrent	Trunk lid open	Output	Trunk lid	OPEN (Trunk lid opener actuator is activated)	12 V
(L)	Ground				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 PKID0926E 6.5 V
30	Ground	Trunk room lamp	Output	Trunk room	ON	0 V
(P)	Cround		Supul	lamp	OFF	12 V

	nal No.	Description				Value	
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	А
34	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(SB)	(SB) Ground (-)	()	Cutput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	E F
35	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H I
(V)	Ground	(+)	Supul	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	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 10 5 0 1 s JMKIA0062GB	M
(B)		na (–)	Cathar	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	O P

	nal No.	Description				Value										
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)										
39	Ground	Rear bumper anten-	Output	When the trunk lid opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 1 1 1 1 1 1 1 1 1 1 1 1 1										
(W)	Giound	na (+)	Guiput	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 1 s JMKIA0063GB										
47	Onested	Ignition relay (IPDM	Outrast	leveltiere ervitete	OFF or ACC	12 V										
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V										
50 (O)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 10 10 10 ms JPMIA0011GB 11.8 V										
					ON (Trunk lid is opened)	0 V										
														Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V
52	Ground	round Starter relay control	Output	Output Ignition switch ON (M/T mod- els)	When selector lever is not in P or N position	0 V										
(SB)		,,			When the clutch pedal is depressed	Battery voltage										
					When the clutch pedal is not depressed	0 V										
					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 JPMA0016GB										
		Intelligent Kousser		Intollizant V-	Sounding	1.0 V										
64 (G)	Ground	Intelligent Key warn- ing buzzer (Engine	Output	Intelligent Key warning buzzer	Sounding	0 V										
(0)			(Engine room)	Not sounding	12 V											

	nal No.	Description		Oraclitica		Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Pressed Not pressed	0 V (V) 15 0 10 5 0 10 ms JPMIA0011GB 11.8 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes) ON (When rear RH door	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 0 5 0 10 ms JPMIA0011GB 11.8 V
					ON (When rear LH door opens)	0 V
					When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
72 (R)	Ground	Room antenna 2 (–) (Center console)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB

	nal No.	Description				Value
(Wire +	color) -	Signal name	Input/ Output		Condition	(Approx.)
73	Ground	Room antenna 2 (+)		Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(G)		(Center console)	Output		When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s 1 s JMKIA0063GB
74	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 0 5 0 1 s JMKIA0062GB
(SB)		tenna (-)			When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB
75	Ground	Passenger door an-	senger door re	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0062GB
(BR)	Ground	tenna (+)	Output	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 1 s JMKIA0063GB

	nal No.	Description				Value	А
(vvire +	e color)	Signal name	Input/ Output		Condition	(Approx.)	A
76		Driver door antenna		When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 15 10 15 10 15 10 15 10 10 15 10 10 10 15 10 10 15 10 10 15 15 10 15 10 15 10 15 10 15 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	B C D
(V)	Ground	()	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 0 1 s JMKIA0063GB	E
77	Ground	Driver door antenna	Output	When the driv- er door request t switch is oper- ated with igni- tion switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(LG)		(+)	Cuput		When Intelligent Key is not in the antenna detection area	(V) 10 50 1 s JMKIA0063GB	J K DEF
78	Ground	Room antenna 1 (-)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 1 s JMKIA0062GB	M
(Y)	Ground	(Instrument panel)	Culput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	O

	nal No.	Description				Value
(vvire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
79	Ground	Room antenna 1 (+)		Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 5 0 1 5 10 1 5 10 1 5 10 1 5 10 1 5 10 10 10 10 10 10 10 10 10 10 10 10 10
(BR)	Giound	(Instrument panel)	Output		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
80 (GR)	Ground	NATS antenna amp (Built in key slot)	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 (Built in key slot)	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 (D)	Ground	Ignition relay [Fuse	Output	Ignition switch	OFF or ACC	0 V
(R)		block (J/B)] control	•		ON	12 V
83	Ground	Remote keyless entry receiver communica- tion	Input/ Output	During waiting		(V) 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1
(Y)				When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	٨
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C D
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 0 5 0 2 ms JPMIA0037GB 1.3 V	E
					Any of the conditions be- low 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 1.3 V	G H I

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Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + _ Output (V 15 10 5 All switches OFF Õ (Wiper intermittent dial 4) 2 ms JPMIA0041GB 1.4 V (V 15 iŏ Lighting switch HI 0 (Wiper intermittent dial 4) 2 ms JPMIA0036GB 1.3 V 88 Combination switch Combination Ground Input (O) **INPUT 3** switch 15 10 Lighting switch 2ND n (Wiper intermittent dial 4) 2 ms JPMIA0037GB 1.3 V 15 Any of the conditions be-10 low with all switches OFF 5 0 • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 2 ms JPMIA0040GB 1.3 V Push-button ig-0 V Pressed 89 Push-button ignition Ground Input nition switch (BR) switch (Push switch) Not pressed Battery voltage (push switch) 90 Input/ Ground CAN-L (P) Output 91 Input/ CAN-H Ground (L) Output OFF 0 V (V 15 10 92 Key slot illumin 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
+	color)	Signal name	Input/ Output		Condition	(Approx.)
93 (V)	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
(O)		-			ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)		tion No. 1	mput	g.co	UNLOCK status	12 V
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V
(P)		tion No. 2		3	UNLOCK status	0 V
		Selector lever P posi- tion switch (A/T mod-		Selector lever	P position	0 V
		els)		Selector lever	Any position other than P	12 V
99	ASCD clutch switch (M/T models without		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 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) 10 10 10 10 10 10 10 10 10 10
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(O)	C.Gana	lay control	- arpar	.gorr ownorr	ON	12 V
103 (L)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch C)FF	12 V
106	Crowned	Steering lock unit	0	Ignition outlet	OFF or ACC	12 V
(W)	Ground	power supply	Output	Ignition switch	ON	0 V

	nal No.	Description				Value
(vvire +	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 5 0 2 ms JPMIA0037GB 1.3 V
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch LO	(V) 15 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

	nal No.	Description				Value	Λ
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B C D
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0038GB	E
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch		1.3 V	G
					Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms	Н
						JPMIA0036GB 1.3 V	
					Any of the conditions be- low with all switches OFF		J
					 Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6 	2 ms	K
						JPMIA0039GB 1.3 V	DE

< ECU DIAGNOSIS INFORMATION >

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Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + _ Output (V) 15 10 5 Õ All switches OFF 2 ms JPMIA0041GB 1.4 V (V 15 10 5 õ Lighting switch PASS 2 ms JPMIA0037GB 1.3 V (V 15 10 Combination Combination switch 109 switch Ō Ground Input Lighting switch 2ND INPUT 2 (W) (Wiper intermittent dial 4) 2 ms JPMIA0036GB 1.3 V (V 15 10 5 0 Front wiper switch INT 2 ms JPMIA0038GB 1.3 V (V 15 10 ŏ Front wiper switch HI 2 ms JPMIA0040GB 1.3 V ON 0 V 110 Ground Hazard switch Input Hazard switch (G) õ OFF 10 ms JPMIA0012GB 1.1 V

BCM (BODY CONTROL MODULE)

Terminal No. (Wire color)		Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					LOCK status	12 V
111 Ground (Y)	Ind Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	15 10 50 50 ms JMKIA0066GB	
				For 15 seconds after UN- LOCK	12 V	
				15 seconds or later after UNLOCK	0 V	
113	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
(O)	Ground	Optical School	mput		When dark outside of the vehicle	Close to 0 V
114		Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V	
(R)		switch		switch	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		- Input	switch	ON (Brake pedal is de- pressed)	Battery voltage
(BR)	2.00110			Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF		0 V
		(With ICC)		Stop lamp switch ON (Brake pedal is de- pressed) or ICC brake hold relay ON		Battery voltage
119 (SB) Ground	Ground	Ground Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 10 10 10 11 11 12 11 12 12 12 12 12 12
					UNLOCK status (Unlock switch sensor ON)	0 V
121	Ground	Koy olot owitch	lanut	When the Intellig	gent Key is inserted into key	12 V
(SB)	Ground	Key slot switch	Input	When the Intellig	gent Key is not inserted into	0 V
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(W)			mpar	-gorr ownorr	ON	Battery voltage

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
129 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 10 10 10 10 11 11 11 11 11
					ON	0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C	DN	(V) 15 10 10 10 10 10 10 10 10 10 10
				Ignition switch C	OFF or ACC	12 V
				Push-button ig-	ON (Tail lamps OFF)	9.5 V NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level. (V)
133 (L)	Ground	d Push-button ignition switch illumination	Output	Pusn-button ig- nition switch il- lumination	ON (Tail lamps ON)	15 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
					OFF	0 V
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage
137 (O)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V
138	Crossed	Receiver and sensor	0	labition as its	OFF	0 V
(V)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V

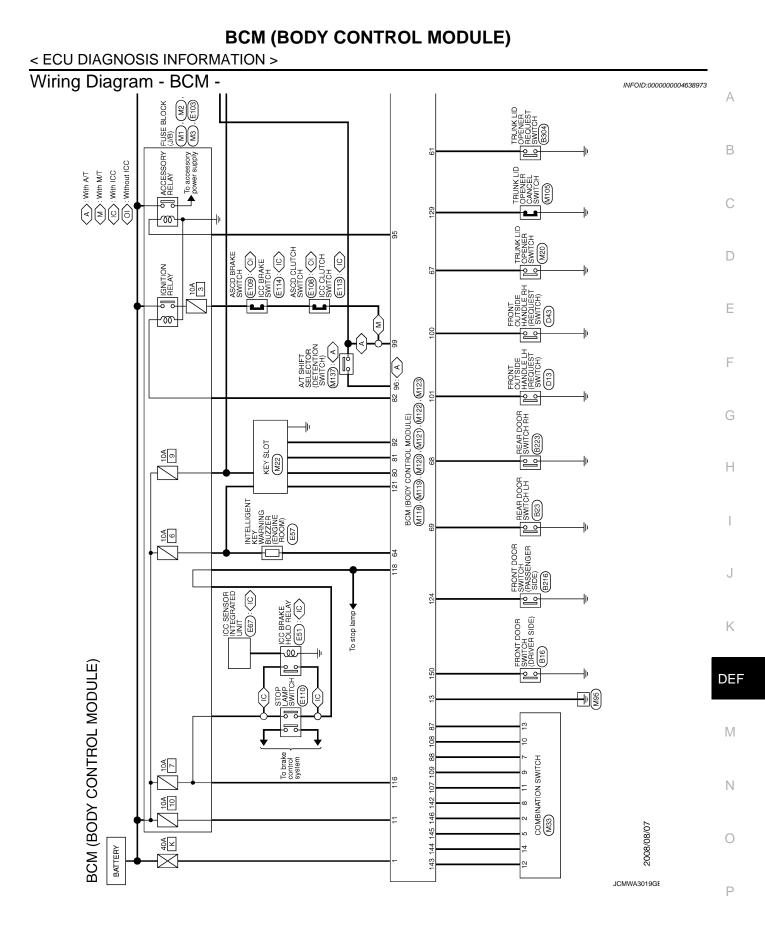
Terminal No. (Wire color)		Description			0	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
139		Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 + 0.2s OCC3981D
(L)	Ground	er communication	Output	ŎN	When receiving the signal from the transmitter	(V) 6 4 2 0 • • 0.25
140		Selector lever P/N			P or N position	12 V
(GR)	Ground	position	Input	Selector lever	Except P and N positions	0 V
					ON	0 V
141 Ground (R)	Ground	Security indicator	Output	Security indica- tor	Blinking	(V) 15 10 5 0 15 15 10 15 15 10 15 10 15 10 15 10 15 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 15 15 10 15 15 10 10 10 10 10 10 10 10 10 10 10 10 10
					OFF	12 V
					All switches OFF	0 V
					Lighting switch 1ST	
4.40				Combination	Lighting switch HI	(V) 15
142 (BR)	Ground	Combination switch	Output	switch	Lighting switch 2ND	
. *		OUTPUT 5	Culput	(Wiper intermit- tent dial 4)	Turn signal switch RH	0 2 ms 10.7 V
					All switches OFF (Wiper intermittent dial 4)	0 V
143 (P) Ground	und Combination switch OUTPUT 1			Front wiper switch HI (Wiper intermittent dial 4)	(V) 15	
		Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	10 10 0 2 ms 10 10 10 10 10 10 10 10 10 10 10 10 10	

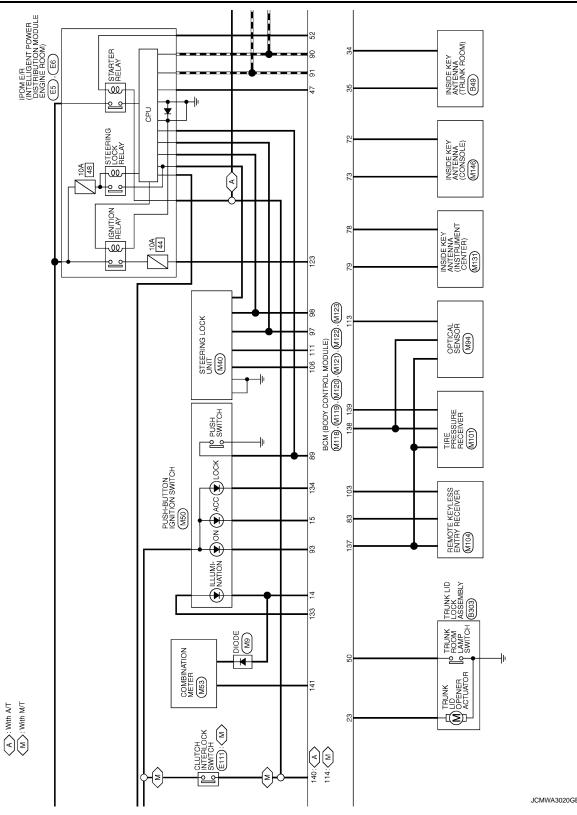
< ECU DIAGNOSIS INFORMATION >

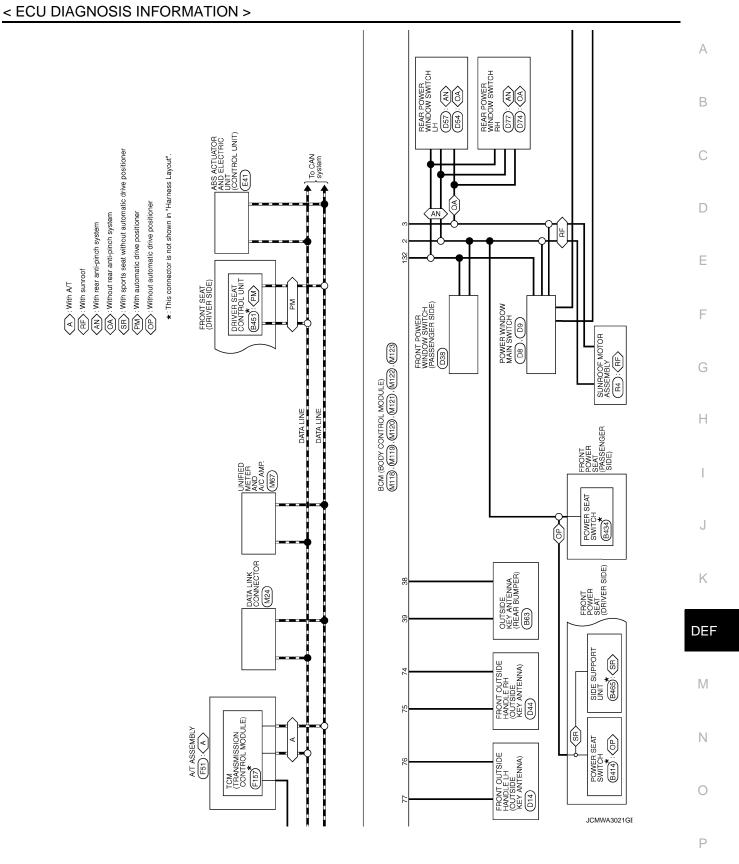
	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	(V) 15
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	10 5 0 2 ms 10.7 V
					All switches OFF	0 V
					Front wiper switch INT	(V)
145 (L)	Ground	Combination switch OUTPUT 3	Output	put (Wiper intermit- tent dial 4)	Front wiper switch LO	10 5 0 2.ms 10 2.ms 10 10 10 10 10 10 10 10 10 10 10 10 10
				Combination	All switches OFF	0 V
					Front fog lamp switch ON	
					Lighting switch 2ND	(V) 15
146 (SB)	Ground	Combination switch OUTPUT 4	Output	switch (Wiper intermit- tent dial 4)	Lighting switch PASS	10 0 2 ms 10.7 V
149 (W)	Ground	Tire pressure warning check switch	Input		_	12 V
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151 (C)	Ground	Rear window defog-	Output	Rear window	Active	0 V
(G)	madala	ger relay control	-	defogger	Not activated	Battery voltage

• *1: A/T models

• *2: M/T models

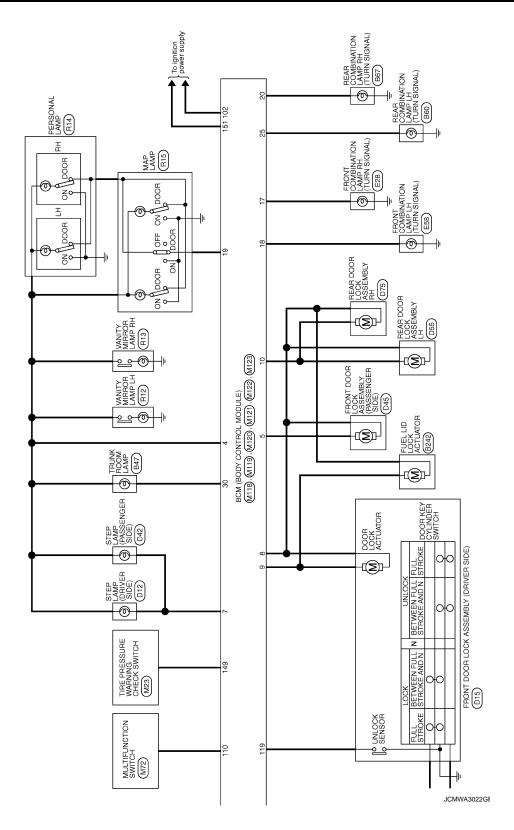


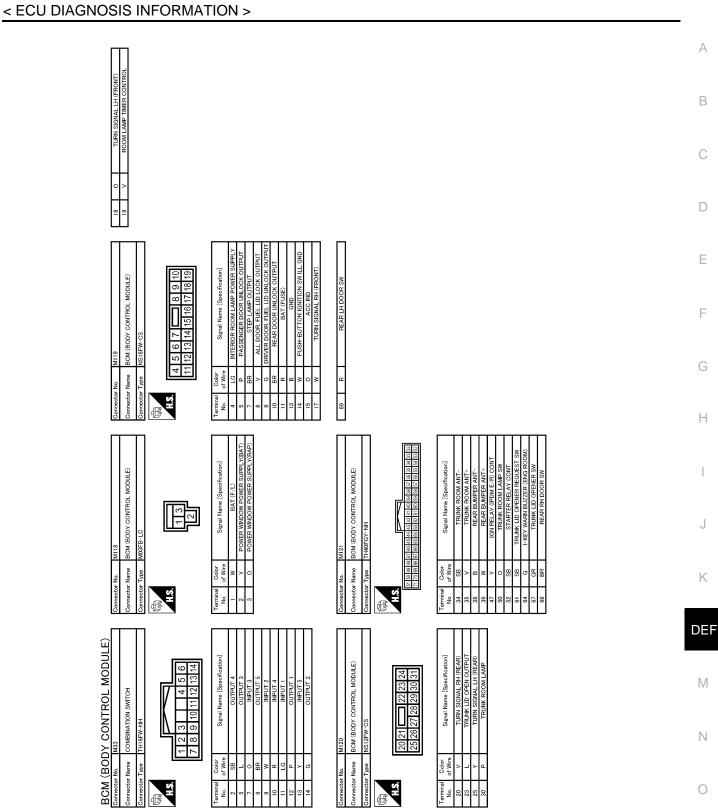




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2009 G37 Sedan





JCMWA3023GE

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	134 LG	137 O RECE	138 V RECEIVER/	139 L TIRE PRES	140 GR	141 R SEC	142 BR CON	143 P CON	144 G CON	145 L CON	146 SB CON	149 W TIRE PRES	150 GR D	151 G REAR WINDOV											
	M123			TH40FG-NH					3 127 126 125 124 123 122 121 120 119 119 118 117 116 115 114 113 112	147 146 145 144 143 142 141 140 139 138 137 136 135 134 133 132			Cinnel Name [Carriferedual]	olgnar Marrie Lopecification	OPTICAL SENSOR	CLUTCH INTERLOCK SW	STOP LAMP SW 1	STOP LAMP SW 2	DR DOOR UNLOCK SENSOR	KEY SLOT SW	IGN F/B	PASSENGER DOOR SW	TRUNK LID OPENER CANCEL SW	POWER WINDOW SW COMM	PUSH-BUTTON IGNITION SW ILL POWER
	Connector No.	N	JOILINGCOL NALLIN	Connector Type			e ا	i -	131 130 129 12	151 150 149 14			Ferminal Color	No. of Wire	113 0	114 R	116 SB	118 BR	119 SB	121 SB	123 W	124 LG	129 0	132 V	133 L
	KEYLESS ENTRY RECEIVER COMM	COMBI SW INPUT 5	COMBI SW INPUT 3	MS HSUH	CAN-L	CAN-H	KEY SLOT ILL	ONI NO	ACC RELAY CONT	A/T SHIFT SELECTOR POWER SUPPLY	S/L CONDITION 1	S/L CONDITION 2	ASCD CLUTCH SW [With M/T without ICC]	ICC CLUTCH SW [With M/T and ICC]	SHIFT P [With A/T]	PASSENGER DOOR REQUEST SW	DRIVER DOOR REQUEST SW	BLOWER FAN MOTOR RELAY CONT	KEYLESS ENTRY RECEIVER POWER SUPPLY	S/L UNIT POWER SUPPLY	COMBI SW INPUT 1	COMBI SW INPUT 4	COMBI SW INPUT 2	HAZARD SW	S/L UNIT COMM
	>	7	0	BR	٩		DLG	>	0	GR	-	۵.	BB	BR	æ	7	٩	0	-	M	PT .	<u>د</u>	M	9	Y
	83	87	88	89	66	91	92	93	96	96	67	86	66	66	66	100	101	102	103	106	107	108	109	110	111
BCM (BODY CONTROL MODULE)	M122	POM (PODV CONTROL MODULE)		TH40FB-NH					87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72	107 106 105 104 103 102 101 100 99 98 97 96 95 94 93 92			Cinnel Name [Survice restand	orginal Marile Lopecification]	ROOM ANT2-	ROOM ANT2+	PASSENGER DOOR ANT-	PASSENGER DOOR ANT+	DRIVER DOOR ANT-	DRIVER DOOR ANT+	ROOM ANTI-	ROOM ANT1+	IMMOBI ANTENNA CONTROL	IMMOBI ANTENNA SIGNAL	IGN RELAY (F/B) CONT
(BOD				Connector Type					91 90 89 88	111 110 108 108			I Color	of Wire	æ	g	SB	BR	>	DLG	γ	BR	GR	M	æ
BCM	Connector No.		nonlinecit	Connecto		ľ							Terminal	No.	72	73	74	75	76	<i>LL</i>	78	56	80	81	82

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Fail-safe

FAIL-SAFE CONTROL BY DTC

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

BCM (BODY CONTROL MODULE)

Revision: 2009 October

JCMWA3024GE

INFOID:000000004638974

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 becomes consistent Starter control relay signal Starter 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 ful- filled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) 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 (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP 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 (battery voltage) 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 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 (battery voltage) 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)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation				
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) 				
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 (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 fulfilledPower position changes to ACCReceives engine status signal (CAN)				
B2612: S/L STATUS	 Inhibit engine cranking Inhibit 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: 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 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 cranking Inhibit 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 (Battery voltage) 				

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.

DTC Inspection Priority Chart

INFOID:000000004638975

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

< ECU DIAGNOSIS INFORMATION >

Priority	DTC	A
1	B2562: LOW VOLTAGE	
2	U1000: CAN COMMU1010: CONTROL UNIT(CAN)	В
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING 	C
	B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP	D
	 B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION 	E
	 B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW 	F
	 B2606: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY 	G
4	 B2609: S/L STATUS B260A: IGNITION RELAY B260B: STEERING LOCK UNIT B260C: STEERING LOCK UNIT 	Н
	 B260D: STEERING LOCK UNIT B260F: ENG STATE SIG LOST B2612: S/L STATUS B2614: ACC RELAY CIRC 	Ι
	 B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC 	J
	 B2618: BCM B2619: BCM B261A: PUSH-BTN IGN SW B261E: VEHICLE TYPE 	K
	 B26E8: CLUTCH SW B26E9: S/L STATUS B26EA: KEY REGISTRATION 	DEF
	C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG	M

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< ECU DIAGNOSIS INFORMATION >

Priority	DTC	
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] RR C1711: [NO DATA] RL C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] RR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] FR C1719: [PRESSDATA ERR] FR C1719: [PRESSDATA ERR] RR C1719: [CODE ERR] FR C1720: [CODE ERR] FR C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL C1727: [BATT VOLT LOW] RL 	
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)".

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-35
U1010: CONTROL UNIT(CAN)	—	_	_	_	<u>BCS-36</u>
U0415: VEHICLE SPEED SIG	—	_	_		BCS-37
B2013: ID DISCORD BCM-S/L	×	×	_	_	<u>SEC-55</u>
B2014: CHAIN OF S/L-BCM	×	×	_		<u>SEC-56</u>
B2190: NATS ANTENNA AMP	×	_	_	_	<u>SEC-47</u>
B2191: DIFFERENCE OF KEY	×	—	_	—	<u>SEC-50</u>
B2192: ID DISCORD BCM-ECM	×	_	_	_	<u>SEC-51</u>
B2193: CHAIN OF BCM-ECM	×	—	—	—	<u>SEC-53</u>
B2195: ANTI SCANNING	×	—	_	—	<u>SEC-54</u>
B2553: IGNITION RELAY	—	×	_	—	PCS-49
B2555: STOP LAMP	—	×	—	—	<u>SEC-59</u>

INFOID:000000004638976

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	ļ
B2556: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-61</u>	E
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-63</u>	
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-64</u>	
B2562: LOW VOLTAGE	—	×	—	—	BCS-38	(
B2601: SHIFT POSITION	×	×	×	—	<u>SEC-65</u>	•
B2602: SHIFT POSITION	×	×	×	—	<u>SEC-68</u>	
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-70</u>	
B2604: PNP SW	×	×	×	_	<u>SEC-73</u>	
B2605: PNP SW	×	×	×	_	<u>SEC-75</u>	E
B2606: S/L RELAY	×	×	×	_	<u>SEC-77</u>	•
B2607: S/L RELAY	×	×	×		<u>SEC-78</u>	
B2608: STARTER RELAY	×	×	×		<u>SEC-80</u>	- F
B2609: S/L STATUS	×	×	×		<u>SEC-82</u>	•
B260A: IGNITION RELAY	×	×	×		PCS-51	(
B260B: STEERING LOCK UNIT		×	×		<u>SEC-86</u>	•
B260C: STEERING LOCK UNIT	_	×	×		<u>SEC-87</u>	
B260D: STEERING LOCK UNIT	_	×	×		<u>SEC-88</u>	-
B260F: ENG STATE SIG LOST	×	×	×		<u>SEC-89</u>	-
B2612: S/L STATUS	×	×	×		SEC-94	
B2614: ACC RELAY CIRC	_	×	×		PCS-53	-
B2615: BLOWER RELAY CIRC		×	×		PCS-55	-
B2616: IGN RELAY CIRC	_	×	×		PCS-57	
B2617: STARTER RELAY CIRC	×	×	×		<u>SEC-98</u>	
B2618: BCM	×	×	×		PCS-59	-
B2619: BCM	×	×	×		SEC-100	
B261A: PUSH-BTN IGN SW	_	×	×		PCS-60	
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)		<u>SEC-101</u>	D
B2621: INSIDE ANTENNA	_	×			DLK-59	•
B2622: INSIDE ANTENNA	_	×			DLK-61	- 1
B2623: INSIDE ANTENNA	_	×	_	—	DLK-63	
B26E8: CLUTCH SW	×	×	×		<u>SEC-90</u>	-
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)		<u>SEC-92</u>	. '
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-93</u>	(
C1704: LOW PRESSURE FL	_	_	—	×		•
C1705: LOW PRESSURE FR	_	_	—	×		
C1706: LOW PRESSURE RR	_	_		×	<u>WT-17</u>	
C1707: LOW PRESSURE RL		_		×	-	

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	
C1708: [NO DATA] FL	_	—	_	×		
C1709: [NO DATA] FR	—	—	_	×	WT 10	
C1710: [NO DATA] RR	_	—	_	×	<u>WT-19</u>	
C1711: [NO DATA] RL	—	—	_	×	-	
C1712: [CHECKSUM ERR] FL	_	—	—	×		
C1713: [CHECKSUM ERR] FR	_	—		×		
C1714: [CHECKSUM ERR] RR	_	—	_	×	<u>WT-21</u>	
C1715: [CHECKSUM ERR] RL	_	—	—	×		
C1716: [PRESSDATA ERR] FL	—	—	_	×		
C1717: [PRESSDATA ERR] FR	_	—	_	×	<u>WT-24</u>	
C1718: [PRESSDATA ERR] RR	_	—	_	×		
C1719: [PRESSDATA ERR] RL	—	—	_	×	-	
C1720: [CODE ERR] FL	_	—	_	×		
C1721: [CODE ERR] FR	_	—	_	×		
C1722: [CODE ERR] RR	_	—	_	×	<u>WT-26</u>	
C1723: [CODE ERR] RL	—	—	_	×	-	
C1724: [BATT VOLT LOW] FL	_	—	_	×		
C1725: [BATT VOLT LOW] FR	_	—	—	×	WT 20	
C1726: [BATT VOLT LOW] RR	_	—	—	×	<u>WT-29</u>	
C1727: [BATT VOLT LOW] RL	_	—	—	×		
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-32</u>	
C1734: CONTROL UNIT	—	—	_	×	<u>WT-33</u>	

REAR WINDOW DEFOGGER DOES NOT OPERA	TE
< SYMPTOM DIAGNOSIS >	
SYMPTOM DIAGNOSIS	
REAR WINDOW DEFOGGER DOES NOT OPERATE	
Diagnosis Procedure	INFOID:000000004638958
1. CHECK POWER SUPPLY AND GROUND CIRCUIT	
Check power supply and ground circuit. Refer to <u>DEF-9</u> , " <u>Diagnosis Procedure</u> ". <u>Is the inspection result normal?</u>	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CHECK REAR WINDOW DEFOGGER SWITCH	
Check rear window defogger switch. Refer to <u>DEF-10, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK REAR WINDOW DEFOGGER RELAY	
Check rear window defogger relay. Refer to <u>DEF-11, "Component Function Check"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. CHECK REAR WINDOW DEFOGGER	
Check rear window defogger. Refer to <u>DEF-13</u> , "Component Function Check". Is the inspection result normal? YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts. 5.CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the inspection result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "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:000000004638959

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit. Refer to <u>DEF-9</u>, "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 <u>DEF-10, "Component Function Check"</u>.

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 <u>DEF-11, "Component Function Check"</u>.

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 <u>GI-41, "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:000000004638960	В
1.CHECK REAR WINDOW DEFOGGER		D
Check rear window defogger. Refer to <u>DEF-13, "Component Function Check"</u> .		С
Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION		D
Confirm the operation again Is the inspection result normal?		Ε
YES >> Check intermittent incident. Refer to <u>GI-41, "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:000000004638961

INFOID:000000004638962

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger. Refer to <u>DEF-16, "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-41, "Intermittent Incident"</u>.

NO >> GO TO 1. DRIVER SIDE

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side 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-41, "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-20, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION $\mathbf{1}$

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 1.

INFOID:000000004638963

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:000000004638964	В
1. CHECK AV CONTROL UNIT FUNCTION		D
Check that the AV control unit is operating normally. Base audio without navigation refer to <u>AV-10, "Work Flow"</u> . BOSE audio without navigation refer to <u>AV-128, "Work Flow"</u> . BOSE audio with navigation refer to <u>AV-348, "Work Flow"</u> .		С
Is the inspection result normal?		D
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION		E
Confirm the operation again. <u>Is the inspection result normal?</u>		F
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.		Г
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REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE < SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:000000004638965

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-122, "Removal and</u> <u>Installation"</u>
- 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:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which 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 the "SRS AIR BAG".
- Do not 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:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT 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.

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< REMOVAL AND INSTALLATION >

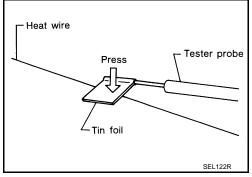
REMOVAL AND INSTALLATION FILAMENT

Inspection and Repair

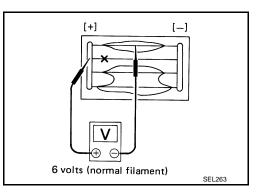
INFOID:000000004239905

INSPECTION

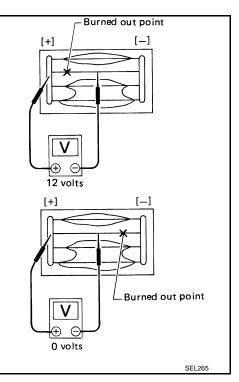
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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

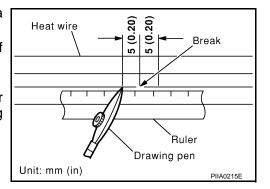
REPAIRING PROCEDURE

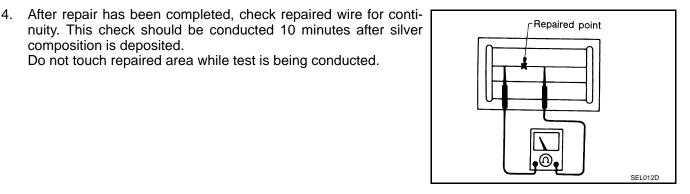
composition is deposited.

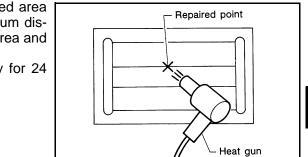
- 1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
- 2. Apply a small amount of conductive silver composition to tip of drawing pen.

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

Do not touch repaired area while test is being conducted.

for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and hot air outlet.

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

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< REMOVAL AND INSTALLATION >

CONDENSER

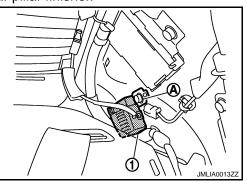
Exploded View

Refer to INT-14, "Exploded View"

Removal and Installation

REMOVAL

- 1. Remove the rear seat cushion and the rear seatback. Refer to <u>SE-125, "Removal and Installation"</u>
- 2. Remove the rear kicking plate, rear wheel well garnish and the rear pillar finisher. Refer to <u>INT-14, "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:000000004239906

INFOID:000000004239907