

SECTION **DEF**
DEFOGGER

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000010581559

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much malfunction information (conditions and environment when the malfunction occurred) as possible when the customer brings the vehicle in.

>> GO TO 2.

2.CHECK DTC

Perform self diagnosis using CONSULT.

Is any DTC detected?

YES >> Refer to [BCS-88. "DTC Index"](#).

NO >> GO TO 3.

3.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes.

Inspect the relation of the symptoms and the condition when the symptoms occur.

>> 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 performing the diagnosis based on possible causes and symptoms.

>> GO TO 5.

5.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

Perform the diagnosis with "Component diagnosis" of the applicable system.

>> GO TO 6.

6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

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.

Are all malfunctions corrected?

YES >> INSPECTION END

NO >> GO TO 4.

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REAR WINDOW DEFOGGER SYSTEM

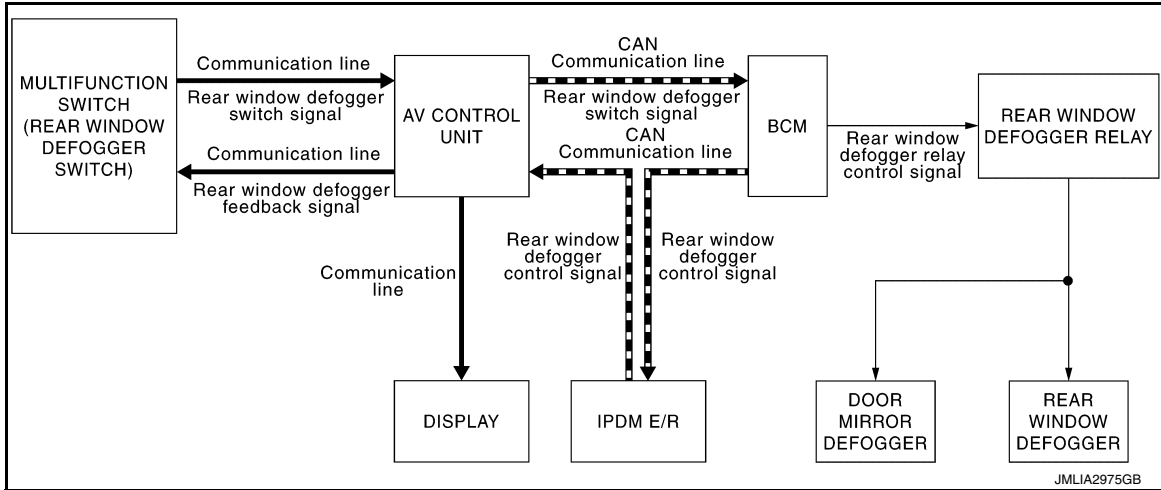
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

REAR WINDOW DEFOGGER SYSTEM

System Diagram

INFOID:0000000010581560



System Description

INFOID:0000000010581561

Operation Description

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

Timer function

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch turns 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.

INPUT/OUTPUT SIGNAL CHART

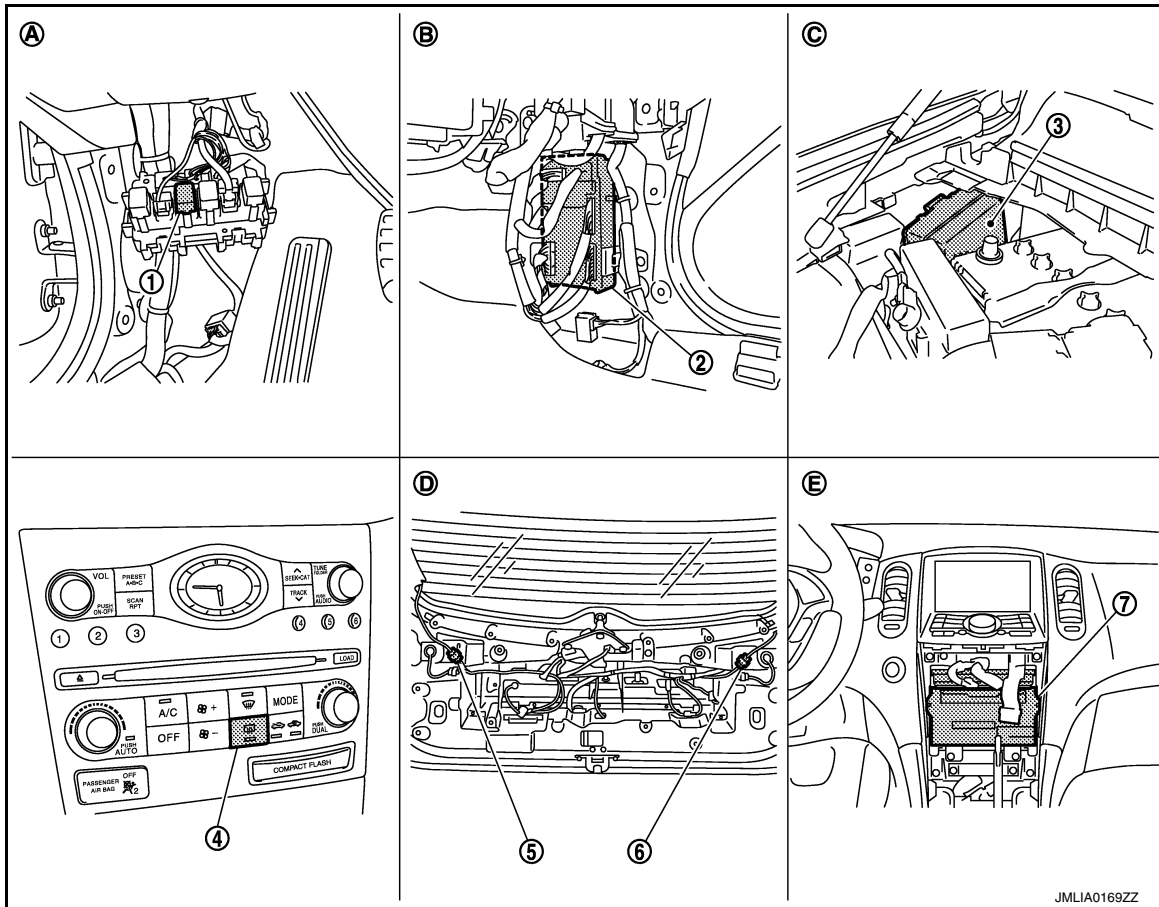
Switch	Input signal to BCM	BCM function	Actuator
Rear window defogger switch	Defogger switch signal	Rear window defogger and Door mirror defogger control	Rear window defogger Door mirror defogger
Push button ignition switch	Ignition signal		

REAR WINDOW DEFOGGER SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000010581562



- | | | |
|--|-------------------------------------|-----------------------------------|
| 1. Rear window defogger relay | 2. BCM | 3. IPDM E/R |
| 4. Rear window defogger switch (built-in multifunction switch) | 5. Rear window defogger connector | 6. Rear window defogger connector |
| 7. AV control unit | | |
| A. Dash side lower (driver side) | B. Dash side lower (passenger side) | C. Engine room dash panel (RH) |
| D. Behind back door finisher | E. Behind cluster lid C | |

Component Description

INFOID:000000010581563

Item	Function
BCM	<ul style="list-style-type: none"> Operates the rear window defogger relay with the operation of rear window defogger switch. Performs the timer control of rear window defogger.
Rear window defogger relay	<ul style="list-style-type: none"> Operates the rear window defogger and the door mirror defogger with the control signal from BCM.
IPDM E/R	<ul style="list-style-type: none"> Transmits rear window defogger control signal to AV control unit via CAN communication.
Multifunction switch (Rear window defogger switch)	<ul style="list-style-type: none"> The rear window defogger switch is installed. Turns the indicator lamp ON when detecting the operation of rear window defogger.
AV control unit	<ul style="list-style-type: none"> Displays the rear window defogger ON to the display when detecting the operation of rear window defogger.
Rear window defogger	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000010782860

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub 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*			
<ul style="list-style-type: none"> Intelligent Key system Engine start system 	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×

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.

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		A
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected		
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected*	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)	B
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	C
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"	
	ACC>ON		While turning power supply position from "ACC" to "IGN"	D
	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)	E
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	F
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*	G
	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	H
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode	I
	LOCK		Power supply position is "LOCK"*	
	OFF		Power supply position is "OFF" (Ignition switch OFF)	J
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	K
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
CRANKING	Power supply position is "CRANKING" (At engine cranking)	DEF		
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 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. 		M

NOTE:

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

REAR WINDOW DEFOGGER

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

INFOID:0000000010581565

DATA MONITOR

NOTE:

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

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

ACTIVE TEST

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000010581566

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	L (40A)
11		10 (10A)

Is the fuse blown?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Voltage (V) (Approx.)
BCM			
Connector	Terminal	Ground	Battery voltage
M118	1		
M119	11		

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair or replace harness.

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REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH

Description

INFOID:000000010581567

- 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:000000010581568

1.CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

Check that the indicator lamp of rear window defogger illuminates when rear window defogger switch ON.

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
NO >> Refer to [DEF-10, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000010581569

1.CHECK PRESET SWITCH

Does preset switch operate normally?

- Without navigation system. Refer to [AV-18, "On Board Diagnosis Function"](#).
- With navigation system. Refer to [AV-170, "On Board Diagnosis Function"](#).

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Replace preset switch. Refer to [AV-143, "Removal and Installation"](#) (without navigation system) or [AV-362, "Removal and Installation"](#) (with navigation system).

REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

INFOID:000000010581570

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

Component Function Check

INFOID:000000010581571

1.CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

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

Is the inspection result normal?

- YES >> Rear window defogger relay power supply circuit is OK.
NO >> Refer to [DEF-11. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000010581572

1.CHECK FUSE

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

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 1

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

(+)		(-)	Condition	Voltage (V) (Approx.)
BCM				
Connector	Terminal			
M123	151	Ground	Rear window defogger switch: ON	0
			Rear window defogger switch: OFF	Battery voltage

Is the inspection result normal?

- YES >> Rear window defogger power supply circuit is OK.
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 2

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

BCM		Fuse block (J/B)		Continuity
Connector	Terminal	Connector	Terminal	
M123	151	M2	4B	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	151		Not existed

Is the inspection result normal?

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

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REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK REAR WINDOW DEFOGGER RELAY

1. Disconnect rear window defogger relay,
2. Check rear window defogger relay.
Refer to [DEF-12. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace rear window defogger relay.

5. CHECK FUSE BLOCK (J/B)

1. Install the rear window defogger relay.
2. Turn ignition switch ON.
3. Check voltage between fuse block (J/B) connector (fuse block side) and ground.

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

Is the inspection result normal?

- YES >> GO TO 6.
NO >> Replace fuse block (J/B).

6. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-47. "Intermittent Incident"](#).

>> INSPECTION END.

Component Inspection

INFOID:0000000010581573

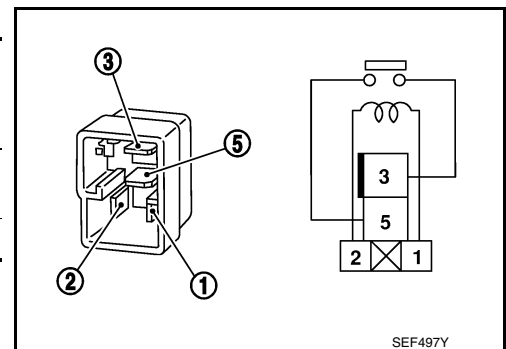
1. CHECK REAR WINDOW DEFOGGER RELAY

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

Rear window defogger relay		Condition	Continuity
Terminal			
3	5	12 V direct current supply between terminals 1 and 2.	Existed
		No current supply	Not existed

Is the inspection result normal?

- YES >> INSPECTION END.
NO >> Replace rear window defogger relay.



SEF497Y

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER

Description

INFOID:000000010581574

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

Component Function Check

INFOID:000000010581575

1.CHECK REAR WINDOW DEFOGGER

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

Is the inspection result normal?

- YES >> Rear window defogger is OK.
NO >> Refer to [DEF-13. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000010581576

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following items.
 - 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 harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
D108	1	Ground	Rear window defogger switch: ON	Battery voltage
			Rear window defogger 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 window defogger		Ground	Continuity
Connector	Terminal		
D120	2		Existed

Is the inspection result normal?

- YES >> GO TO 7.
NO >> Repair or replace harness.

4.CHECK REAR WINDOW DEFOGGER POWER SUPPLY CIRCUIT

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

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

Fuse block (J/B)		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
B6	10G	D108	1	Existed
	11G			

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

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK FUSE BLOCK (J/B)

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

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

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 6.

6. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay. Refer to [DEF-12, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace rear window defogger relay.

7. CHECK FILAMENT

Check the filament for damage or blown.
Refer to [DEF-75, "Inspection and Repair"](#).

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair filament.

8. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-47, "Intermittent Incident"](#).

>> INSPECTION END

DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Description

INFOID:000000010581577

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

Component Function Check

INFOID:000000010581578

1.CHECK DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

- YES >> Door mirror defogger is OK.
NO >> Refer to [DEF-15. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000010581579

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 FUSE BLOCK (J/B)

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

(+)		(-)	Condition	Voltage (V) (Approx.)
Fuse block (J/B)				
Connector	Terminal			
M3	9C	Ground	Rear window defogger switch: ON	Battery voltage
			Rear window defogger switch: OFF	0
	10C		Rear window defogger switch: ON	Battery voltage
			Rear window defogger switch: OFF	0

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Replace fuse block (J/B).

3.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-47. "Intermittent Incident"](#).

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000010581580

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

INFOID:000000010581581

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

- YES >> Driver side door mirror defogger is OK.
NO >> Refer to [DEF-16, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000010581582

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.

(+)		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
D3	7	Ground	Rear window defogger switch: ON	Battery voltage
			Rear window defogger switch: OFF	0

Is the inspection result normal?

- YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. 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	
M3	10C	D3	7	Existed

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness between fuse block (J/B) and door mirror (driver side).

3.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

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

DRIVER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Condition	Voltage (V) (Approx.)
Fuse block (J/B)				
Connector	Terminal			
M3	10C	Ground	Rear window defogger switch: ON	Battery voltage
			Rear window defogger switch: OFF	0

Is the inspection result normal?

YES >> GO TO 5.

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

4. CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> Replace door mirror glass (driver side). Refer to [MIR-76. "GLASS MIRROR : Removal and Installation"](#) (With ADP) or [MIR-100. "GLASS MIRROR : Removal and Installation"](#) (Without ADP).

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

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-47. "Intermittent Incident"](#).

>> INSPECTION END

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PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000010581583

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

INFOID:000000010581584

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

- YES >> Passenger side door mirror defogger is OK.
NO >> Refer to [DEF-18, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000010581585

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			
D33	7	Ground	Rear window defogger switch: ON	Battery voltage
			Rear window defogger switch: OFF	0

Is the inspection result normal?

- YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER CIRCUIT

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

Fuse block (J/B)		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	D33	7	Existed

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness between fuse block (J/B) and door mirror (passenger side).

3.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

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

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Condition	Voltage (V) (Approx.)
Fuse block (J/B)				
Connector	Terminal			
M3	9C	Ground	Rear window defogger switch: ON	Battery voltage
			Rear window defogger switch: OFF	0

Is the inspection result normal?

YES >> GO TO 5.

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

4. CHECK GROUND CIRCUIT

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

Door mirror (passenger side)		Ground	Continuity
Connector	Terminal		
D33	19		Existed

Is the inspection result normal?

YES >> Replace door mirror glass (passenger side). Refer to [MIR-76, "GLASS MIRROR : Removal and Installation"](#) (With ADP) or [MIR-100, "GLASS MIRROR : Removal and Installation"](#) (Without ADP).

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

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-47, "Intermittent Incident"](#)

>> INSPECTION END

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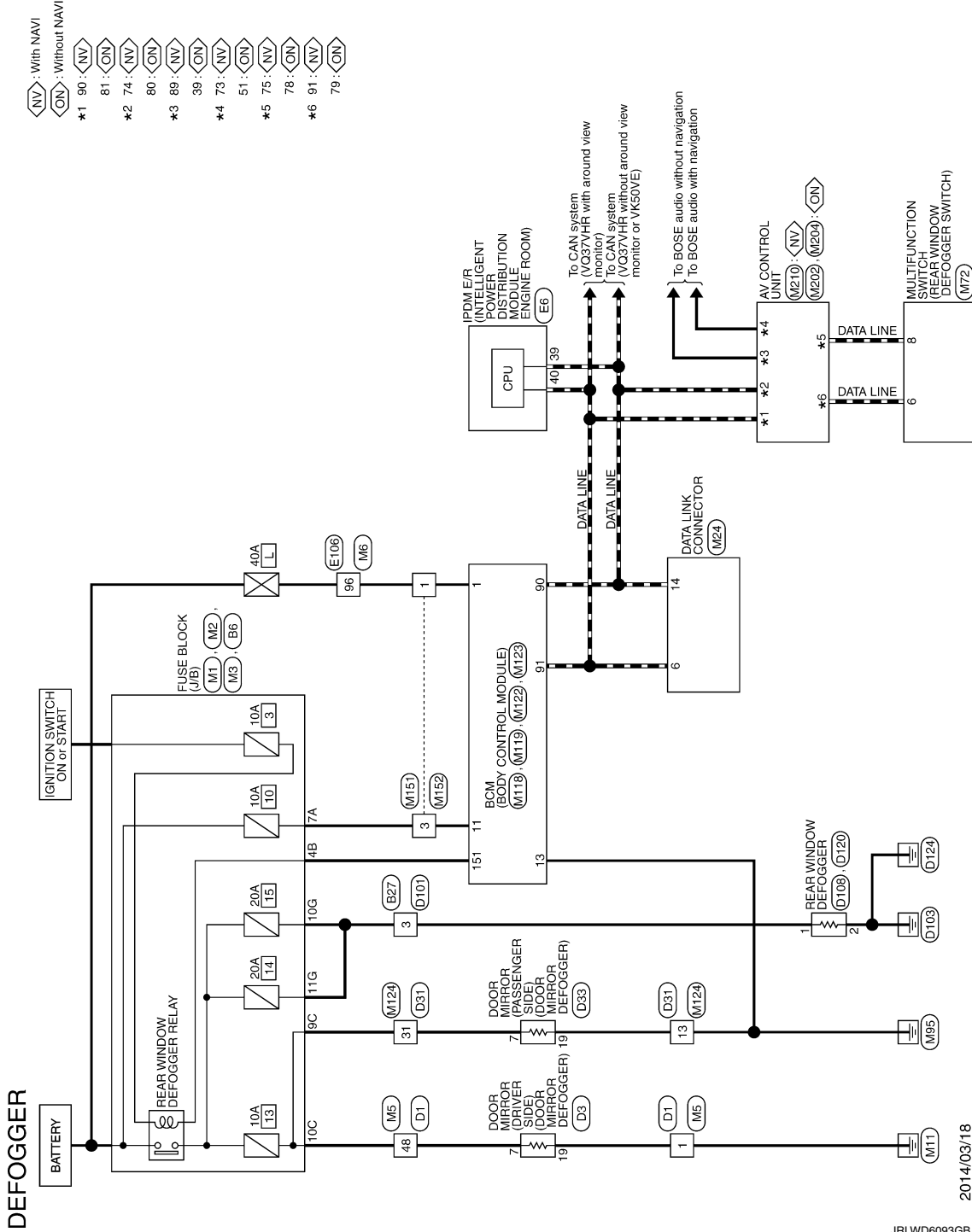
REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER SYSTEM

Wiring Diagram - DEFOGGER SYSTEM -

INFOID:000000010581586

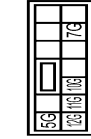


REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

Connector No.	B6
Connector Name	FUSE BLOCK (UB)
Connector Type	NS12FBR-CS



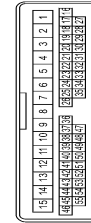
Terminal No.	Color Of Wire	Signal Name [Specification]
10G	W	-
11G	W	-
12G	GR	-
13G	LG	-
14G	BG	-

Connector No.	B27
Connector Name	WIRE TO WIRE
Connector Type	MD8MM-GY-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-
3	W	-
4	B	-
6	BR	-
7	G	-
8	SHIELD	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FM-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
3	G	-
6	GR	-
7	W	-
8	SB	-
9	BR	-
10	O	-
11	R	-
12	LG	-
13	Y	-
14	P	-
15	L	-
20	V	-
21	Y	-
22	GR	-
23	SB	-
24	LG	-
26	G	-
27	V	-
28	P	-
29	Y	-
30	LG	-
31	O	-
32	BR	-
33	L	-
34	GR	-
35	B	-
36	R	-
37	G	-
38	SHIELD	-
39	W	-
40	B	-
41	SHIELD	-
42	G	-
43	R	-

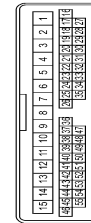
44	BR	-
45	V	-
46	P	-
47	W	-
48	GR	-
49	R	-
50	B	-
51	SB	-
52	L	-
53	G	-
54	O	-
55	GR	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TR4MM-NHT



Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-
3	W	-
5	G	-
6	R	-
7	GR	-
8	SB	-
9	L	-
10	G	-
11	GR	-
12	O	-
14	B	-
17	SHIELD	-
18	B	-
19	B	-
21	P	-
22	BR	-
23	W	-
24	V	-

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FM-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
3	P	-
4	L	-
6	W	-
7	P	-
7	G	-
8	R	-
9	LG	-
13	B	-
14	V	-
15	Y	-
19	G	-
20	LG	-
22	W	-
23	B	-
24	SHIELD	-
25	G	-
26	R	-
31	LG	-
32	R	-
33	SB	-
34	Y	-
35	GR	-
36	O	-
37	GR	-
38	G	-
39	O	-
40	Y	-
41	L	-
42	O	-
43	BR	-
44	V	-
45	P	-
46	W	-
47	R	-
48	G	-

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REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

49	SHIELD	-
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Connector No. D333
 Connector Name DOOR MIRROR (PASSENGER SIDE)
 Connector Type TH24MV-AH

Terminal Color Of No. Wire Signal Name [Specification]

1	Y	-
2	W	-
4	LG	-
5	G	-
6	R	-
7	LG	-
8	O	-
9	L	-
10	G	-
11	GR	-
12	O	-
14	O	-
16	G	-
17	SHIELD	-
18	B	-
19	B	-
21	P	-
22	BR	-
23	W	-
24	V	-

Connector No. D101
 Connector Name WIRE TO WIRE
 Connector Type M08FY-GY-LC

Terminal Color Of No. Wire Signal Name [Specification]

1	G	-
2	B	-
3	R	-
4	GR	-
6	LW	-
7	LB	-
8	SHIELD	-

Connector No. D108
 Connector Name REAR WINDOW DEFOGGER
 Connector Type M02MW-LC

Terminal Color Of No. Wire Signal Name [Specification]

1	R	-
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Connector No. D120
 Connector Name REAR WINDOW DEFOGGER
 Connector Type M02MW-LC

Terminal Color Of No. Wire Signal Name [Specification]

2	B	-
---	---	---

Connector No. E56
 Connector Name REAR WINDOW DEFOGGER POWER DISTRIBUTION MODULE ENGINE ROOM
 Connector Type TH08FY-AH

Terminal Color Of No. Wire Signal Name [Specification]

39	P	-
40	L	-
41	B	-
42	Y	-
43	SB	-
44	W	-
45	G	-
46	BR	-

Connector No. E106
 Connector Name WIRE TO WIRE
 Connector Type TH09FY-GS16-TM4

Terminal Color Of No. Wire Signal Name [Specification]

1	G	-
2	BG	-
3	SB	-
4	LG	-
6	Y	-
6	W	-
7	G	-
8	V	-
9	R	-
10	BR	-
11	B	-
12	G	-
13	R	-
14	W	-
15	SHIELD	-
16	SB	-
17	L	-
18	P	-
19	G	-
20	W	- [With ICC]
20	Y	- [Without ICC]
21	BR	-
22	R	- [With ICC]
22	V	- [Without ICC]
23	G	-
24	L	- [With ICC]
24	P	- [Without ICC]
25	L	- [With ICC]
25	Y	- [Without ICC]
26	SHIELD	-
28	G	-
29	LG	-
30	BG	-
32	W	-
33	Y	-
34	BG	-

JRLWD6095GB

REAR WINDOW DEFOGGER SYSTEM


< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

37	Y	-	-	-	15	L	-
38	GR	-	-	-	20	BG	-
39	LG	-	-	-	21	LG	-
41	LG	-	-	-	22	V	-
42	V	-	-	-	23	Y	-
43	R	-	-	-	24	P	-
44	G	-	-	-	26	SB	-
45	GR	-	-	-	27	V	-
46	W	-	-	-	28	LG	-
47	L	-	-	-	29	R	-
48	P	-	-	-	30	P	-
49	SB	-	-	-	31	BG	-
50	BR	-	-	-	32	SB	-
51	B	-	-	-	33	L	-
52	Y	-	-	-	34	R	-
53	BG	-	-	-	35	B	-
54	B	-	-	-	36	R	-
55	SB	-	-	-	37	G	-
59	P	-	-	-	38	SHIELD	-
60	SB	-	-	-	39	W	-
61	V	-	-	-	40	B	-
62	P	-	-	-	41	SHIELD	-
63	LG	-	-	-	42	G	-
64	L	-	-	-	43	R	-
65	BG	-	-	-	44	G	-
69	L	-	-	-	45	Y	-
70	SHIELD	-	-	-	46	GR	-
71	G	-	-	-	47	W	-
72	G	-	-	-	48	L	-
73	R	-	-	-	49	R	-
74	BR	-	-	-	50	BG	-
76	L	-	-	-	51	SB	-
77	W	-	-	-	52	R	-
78	Y	-	-	-	53	Y	-
80	SB	-	-	-	54	LG	-
81	L	-	-	-	55	L	-
83	LG	-	-	-			
84	GR	-	-	-			
85	G	-	-	-			
86	P	-	-	-			
87	W	-	-	-			
88	BG	-	-	-			
89	LG	-	-	-			
90	BR	-	-	-			
91	GR	-	-	-			
92	BR	-	-	-			
93	SB	-	-	-			
95	Y	-	-	-			
96	W	-	-	-			

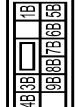
97	W	-	-	-	9B	BR	-
98	SHIELD	-	-	-			
100	Y	-	-	-			

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FM-42



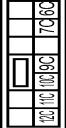
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	BG	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FM-CS



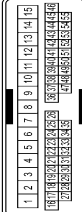
Terminal No.	Color Of Wire	Signal Name [Specification]
1B	LG	-
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-
7B	L	-
8B	R	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FM-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
12C	R	-
6C	P	-
7C	B	-
9C	BG	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH00MW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
3	SB	-
6	R	-
7	W	-
8	G	-
9	L	-
10	BG	-
11	G	-
12	V	-
13	Y	-
14	P	-

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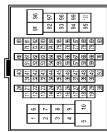
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REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

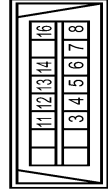


Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	BG	-
3	LG	- [Without Auto aircon seat] - [With Auto aircon seat]
4	SB	-
5	LG	-
6	GR	-
7	W	-
8	W	-
9	P	-
10	BR	-
11	B	-
12	G	-
13	R	-
14	W	-
15	SHIELD	-
16	BR	-
17	L	-
18	P	-
19	G	-
20	GR	- [Without ICC] - [With ICC]
21	BR	- [Without ICC] - [With ICC]
22	L	- [Without ICC] - [With ICC]
23	R	- [Without ICC] - [With ICC]
24	L	- [Without ICC] - [With ICC]
25	W	- [Without ICC] - [With ICC]
26	SHIELD	-
28	GR	-
29	V	-
30	BG	-
32	W	-

33	Y	-
34	L	-
37	G	-
38	R	-
39	G	-
41	L	-
42	W	-
43	R	-
44	LG	-
45	GR	-
46	W	-
47	L	-
48	P	-
49	BG	-
50	LG	-
51	SB	-
52	Y	-
53	BG	-
54	BR	-
55	SB	-
59	SB	-
60	SB	-
61	V	-
62	P	-
63	R	-
64	L	-
65	BG	-
69	V	-
70	SHIELD	-
71	BG	-
72	GR	-
73	W	-
74	SB	-
76	V	-
77	V	-
78	Y	-
80	BG	-
81	L	-
82	W	-
83	Y	-
84	L	-
85	P	-
86	BR	-
87	P	-
88	V	-
89	G	-
90	P	-
91	R	-
92	R	-
93	GR	-

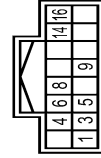
95	G	-
96	W	-
97	W	-
98	SHIELD	-
100	Y	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	GR	-
8	G	-
11	SB	-
12	P	-
13	L	-
14	P	-
16	BG	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FM-AH



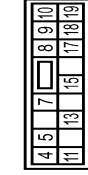
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
3	V	ACC
4	R	ILL
5	R	ILL CONT
6	SB	AV COMM (H)
8	LG	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL
16	G	HAZARD ON

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	Y	POWER WINDOW POWER SUPPLY (BAT)
3	BG	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FM-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	P	INT ROOM LAMP PWR SUPPLY (BAT SAVE)
5	V	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT

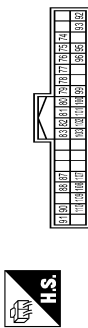
REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT. (FUSE)
13	B	GROUND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	SB	ROOM LAMP TIMER

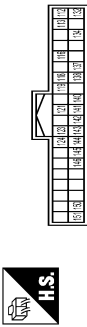
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Wire	Signal Name [Specification]
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT-
79	BR	ROOM ANT+
80	GR	NATS ANT AMP.
81	W	NATS ANT AMP.
82	P	IGN RELAY (F/B) CONT
83	GR	KEYLESS ENTRY RECEIVER SIGNAL
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CANL
91	L	CANH
92	LG	KEY SLOT ILL
93	V	ON IND
95	BG	ACC RELAY CONT
96	GR	AT SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	BR	RETLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2

110	G	HAZARD SW
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Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
112	GR	RAIN SENSOR SERIAL LINK
113	P	OPTICAL SENSOR
116	BR	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
122	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BG	POWER WINDOW SW COM1
134	GR	LOCK IND
137	B	RECEIVER/SENSOR GND
138	Y	SENSOR POWER SUPPLY
140	R	SHIFT NP
141	G	SECURITY INDICATOR OUTPUT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	LG	-
5	SB	-
6	BR	-
7	G	-
8	V	-
9	LG	-
13	B	-
14	BG	-
15	W	-
19	G	-
20	LG	-
22	W	-
23	B	-
24	SHIELD	-
25	G	-
26	R	-
31	BG	-
32	Y	-
33	LG	-
34	SB	-
35	V	-
36	BG	-
37	GR	-
38	G	- [Without automatic drive positioner]
39	R	- [With automatic drive positioner]
40	R	-
41	P	-
42	LG	-
43	L	-
44	V	-
45	R	-
46	W	-
47	Y	-
48	BR	-

49	SHIELD	-
----	--------	---

Connector No.	M151
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M152
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

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REAR WINDOW DEFOGGER SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

DEFOGGER

Connector No.	M202
Connector Name	AV CONTROL UNIT
Connector Type	TH2/FW-NH



36	37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52							57

Terminal No.	Color Of Wire	Signal Name [Specification]
36	BG	SIGNAL VCC
37	LG	SIGNAL GND
38	R	HP
39	BR	COMM (DISP->CONT)
40	B	RGB AREA (Y) SIGNAL
41	SHIELD	SHIELD
42	G	RGB SYNC
43	B	RGB (R/RED) SIGNAL
44	W	RGB (G/GREEN) SIGNAL
45	R	RGB (B/BLUE) SIGNAL
46	BG	COMPOSITE IMAGE SIGNAL GND
47	SB	COMPOSITE IMAGE SIGNAL
48	Y	INVERTER VCC
49	BR	INVERTER GND
50	W	VP
51	Y	COMM (CONT->DISP)
52	SB	SHIELD
57	SHIELD	SHIELD

Connector No.	M204
Connector Name	AV CONTROL UNIT
Connector Type	TH2/FW-NH



76	77	78	79	80	81	82
83	84	85	86	87	88	

Terminal No.	Color Of Wire	Signal Name [Specification]
76	LG	AV COMM (L)
77	SB	AV COMM (H)
78	LG	AV COMM (L)
79	SB	AV COMM (H)
80	P	CAN-L
81	L	CAN-H
82	BR	SW GND
86	SHIELD	SHIELD
87	L	TEL VOICE SIGNAL (*)
88	P	TEL VOICE SIGNAL (*)
92	R	VEHICLE SPEED SIGNAL (8-PULSE)
93	V	PARKING BRAKE SIGNAL
94	BG	REVERSE SIGNAL
95	G	IGNITION SIGNAL
96	SB	DISK EJECT SIGNAL
102	B	AUX GND
103	W	AUX AUDIO L/H
104	R	AUX AUDIO R/H

Connector No.	M210
Connector Name	AV CONTROL UNIT
Connector Type	TH2/FW-NH



63	67	68	71	72	74	78
79	80	81	82	83	84	85

Terminal No.	Color Of Wire	Signal Name [Specification]
65	V	PARKING BRAKE SIGNAL
67	B	COMPOSITE IMAGE SIGNAL GND
68	R	COMPOSITE IMAGE SIGNAL
71	SHIELD	MICROPHONE SHIELD
72	G	MICROPHONE VCC
73	R	COMM (CONT->DISP)
74	P	CAN-L
75	LG	AV COMM (L)
76	LG	AV COMM (L)
79	R	ILLUMINATION
80	C	IGNITION SIGNAL
81	BG	REVERSE SIGNAL
82	R	VEHICLE SPEED SIGNAL (8-PULSE)
87	R	MICROPHONE SIGNAL

88	B	SHIELD
89	G	COMM (DISP->CONT)
90	L	CAN-H
91	SB	AV COMM (H)
92	SB	AV COMM (H)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000010782861

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	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
	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	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
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
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
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
	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	NOTE: The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed and held	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off	A
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On	B
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	
	Dark outside of the vehicle	Close to 0 V	
REQ SW -DR	Driver door request switch is not pressed	Off	C
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	D
	Passenger door request switch is pressed	On	
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	E
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	
REQ SW -BD/TR	Back door request switch is not pressed	Off	F
	Back door request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	G
	Push-button ignition switch (push switch) is pressed	On	
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off	H
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off	I
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off	J
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On	
BRAKE SW 2	The brake pedal is not depressed	Off	K
	The brake pedal is depressed	On	
DETE/CANCL SW	Selector lever in P position	Off	
	Selector lever in any position other than P	On	
SFT PN/N SW	Selector lever in any position other than P and N	Off	DEF
	Selector lever in P or N position	On	
S/L -LOCK	NOTE: The item is indicated but not monitored.	Off	M
S/L -UNLOCK	NOTE: The item is indicated but not monitored.	Off	
S/L RELAY-F/B	NOTE: The item is indicated but not monitored.	Off	N
UNLK SEN -DR	Driver door is unlocked	Off	O
	Driver door is locked	On	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	P
	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	
SFT PN -IPDM	Selector lever in any position other than P and N	Off	
	Selector lever in P or N position	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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 STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 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)	Reset
	Ignition switch ON	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
	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.	—
CONFIRM 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 accords with 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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered 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
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	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
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent Key is registered to BCM	Done

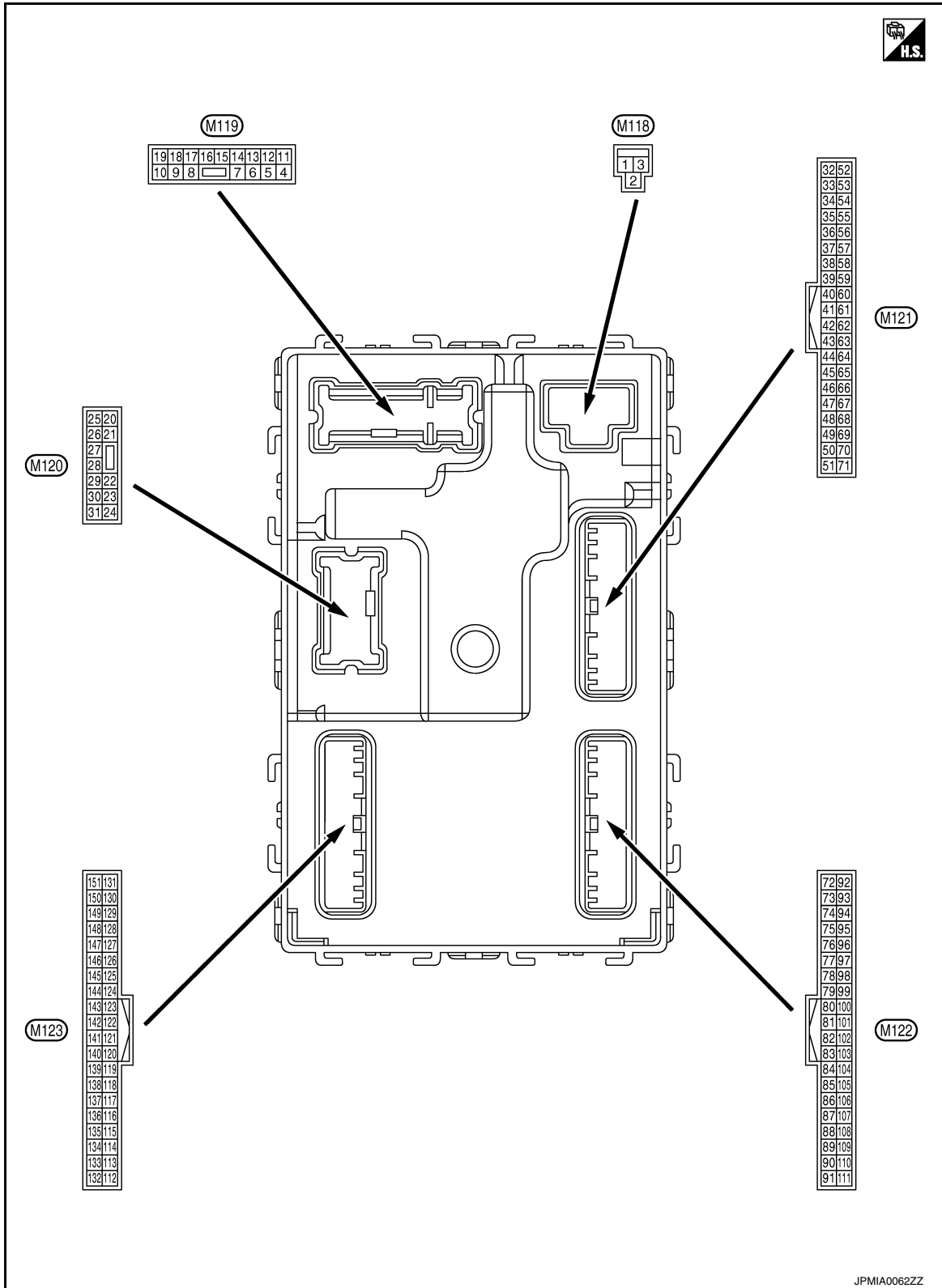
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT

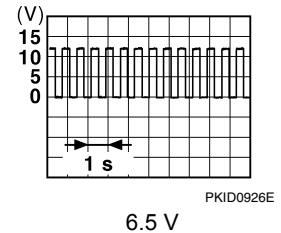


PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

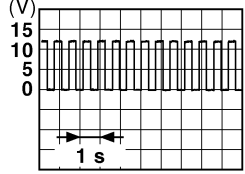
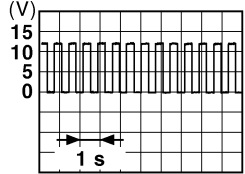
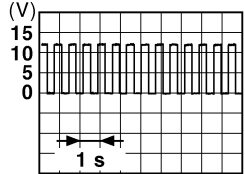
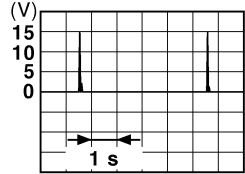
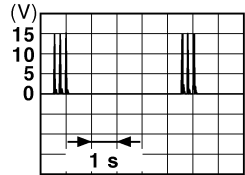
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
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 (IGN)	Output	Ignition switch ON	12 V
4 (P)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)	0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)	12 V
5 (V)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)
					Other than UNLOCK (Actuator is not activated)
7 (Y)	Ground	Step lamp control	Output	Step lamp	ON
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door, fuel lid	UNLOCK (Actuator is activated)
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON	0 V
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
18 (BG)	Ground	Turn signal LH (Front)	Output	Turn signal switch OFF	0 V
				Ignition switch ON Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
19 (SB)	Ground	Interior room lamp control	Output	Other than under condition	5.0 V
				<ul style="list-style-type: none"> • Interior room lamp timer is activated. (Door is unlocked. etc...) • Welcome light function is activated. 	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Turn signal switch OFF	0 V
				Ignition switch ON Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
25 (G)	Ground	Turn signal LH (Rear)	Output	Turn signal switch OFF	0 V
				Ignition switch ON Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
26 (P)	Ground	Rear wiper	Output	Rear wiper	
				OFF (Stopped)	0 V
				ON (Operated)	12 V
34 (SB)	Ground	Luggage room anten- na (-)	Output	Ignition switch OFF	
				When Intelligent Key is in the passenger compart- ment	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger com- partment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
35 (V)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	<p>When Intelligent Key is in the passenger compartment</p> <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				<p>When Intelligent Key is not in the passenger compartment</p> <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
38 (B)	Ground	Back door antenna (-)	Output	When the back door opener request switch is operated with ignition switch OFF	<p>When Intelligent Key is in the antenna detection area</p> <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				<p>When Intelligent Key is not in the antenna detection area</p> <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
39 (W)	Ground	Back door antenna (+)	Output	When the back door opener request switch is operated with ignition switch OFF	<p>When Intelligent Key is in the antenna detection area</p> <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				<p>When Intelligent Key is not in the antenna detection area</p> <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	<p>OFF or ACC</p> <p style="text-align: center;">12 V</p> <p>ON</p> <p style="text-align: center;">0 V</p>

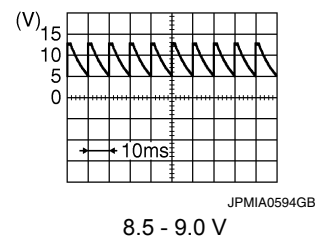
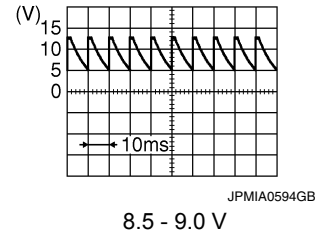
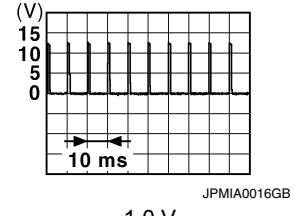
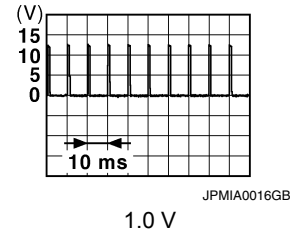
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BCM (BODY CONTROL MODULE)

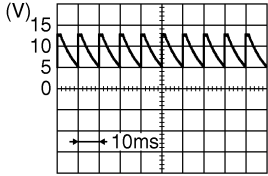
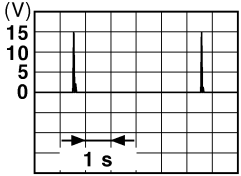
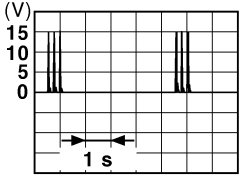
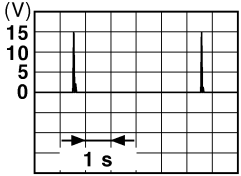
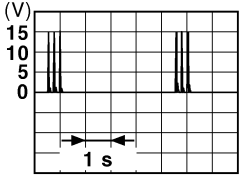
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
52 (LG)	Ground	Starter relay control	Output	Ignition switch ON	12 V
				When selector lever is not in P or N position	0 V
60 (SB)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ignition switch (Push switch)	0 V
				Not pressed	12 V
61 (W)	Ground	Back door opener request switch	Input	Back door request switch	0 V
				ON (Pressed)	0 V
64 (L)	Ground	Intelligent Key warning buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	0 V
				Not sounding	12 V
65 (BG)	Ground	Rear wiper stop position	Input	Rear wiper	0 V
				In stop position	12 V
66 (LG)	Ground	Back door switch	Input	Back door switch	0 V
				OFF (Door close)	12 V
67 (P)	Ground	Back door opener switch	Input	Back door opener switch	0 V
				Not pressed	8.5 - 9.0 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	0 V
				OFF (Door close)	8.5 - 9.0 V
				ON (Door open)	0 V



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	 <p style="text-align: right; margin-right: 50px;">JPMIA0594GB</p>
				ON (Door open)	0 V	
74 (SB)	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; margin-right: 50px;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; margin-right: 50px;">JMKIA0063GB</p>	
75 (BR)	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; margin-right: 50px;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; margin-right: 50px;">JMKIA0063GB</p>	

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>	
				When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detec- tion area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
77 (LG)	Ground	Driver door antenna (+)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>	
				When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detec- tion area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
78 (Y)	Ground	Room antenna (-) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger com- partment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>	

BCM (BODY CONTROL MODULE)

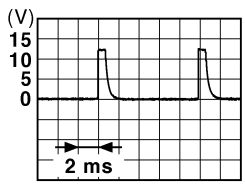
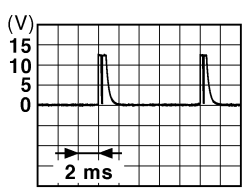

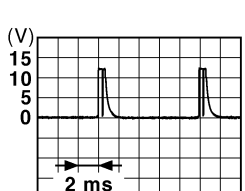
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
79 (BR)	Ground	Room antenna (+) (Instrument panel)	Output	Ignition switch OFF		
				When Intelligent Key is not in the passenger compart- ment		
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 (P)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
83 (GR)	Ground	Remote keyless entry receiver communica- tion	Input/ Output	During waiting		
				When operating either button on the Intelli- gent Key		

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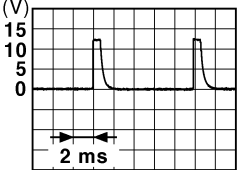


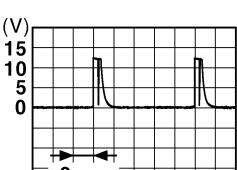

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper volume dial 4) <div style="text-align: right;">  <p>1.4 V</p> </div>
					Front fog lamp switch ON (Wiper volume dial 4) <div style="text-align: right;">  <p>1.3 V</p> </div>
					Rear wiper switch ON (Wiper volume dial 4) <div style="text-align: right;">  <p>1.3 V</p> </div>
					Any of the conditions be- low with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7 <div style="text-align: right;">  <p>1.3 V</p> </div>

BCM (BODY CONTROL MODULE)

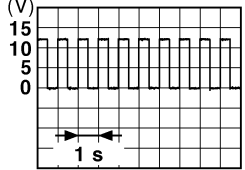
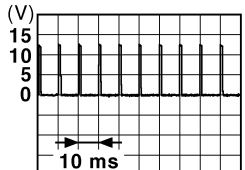
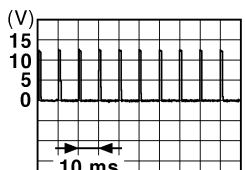
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper volume dial 4)	 <p style="text-align: center;">1.4 V</p>
					Lighting switch HI (Wiper volume dial 4)	 <p style="text-align: center;">1.3 V</p>
					Lighting switch 2ND (Wiper volume dial 4)	 <p style="text-align: center;">1.3 V</p>
					Rear washer switch ON (Wiper volume dial 4)	 <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF	<ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3  <p style="text-align: center;">1.3 V</p>
90 (P)	Ground	CAN-L	Input/ Output	—	—	
91 (L)	Ground	CAN-H	Input/ Output	—	—	

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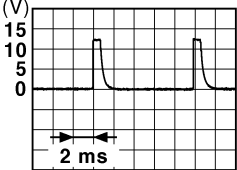

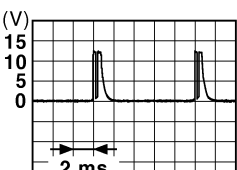
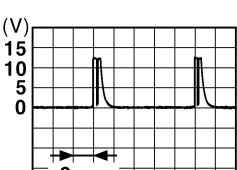
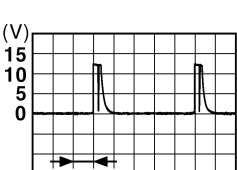
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)		
+	-	Signal name	Input/ Output				
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	12 V	
					Blinking	 <p style="text-align: right; font-size: small;">JPMIA0015GB</p>	6.5 V
					ON	0 V	
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	
					ON or ACC	0 V	
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V	
					ACC or ON	12 V	
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	—	12 V		
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V	
					Any position other than P	12 V	
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V	
					OFF (Not pressed)	 <p style="text-align: right; font-size: small;">JPMIA0016GB</p>	1.0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V	
					OFF (Not pressed)	 <p style="text-align: right; font-size: small;">JPMIA0016GB</p>	1.0 V
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V	
					ON	12 V	
103 (BR)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF	12 V		

BCM (BODY CONTROL MODULE)

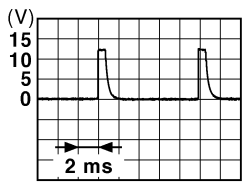
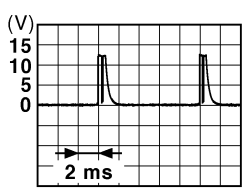
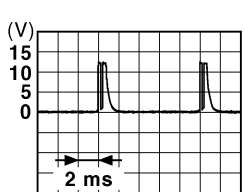
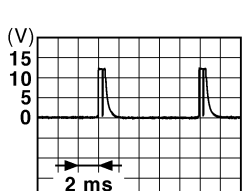
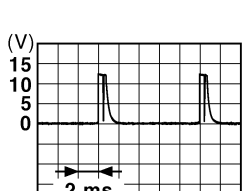
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper volume dial 4)	All switches OFF  1.4 V
					Turn signal switch LH  1.3 V
					Turn signal switch RH  1.3 V
					Front wiper switch LO  1.3 V
					Front washer switch ON  1.3 V

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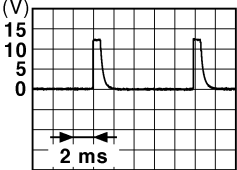

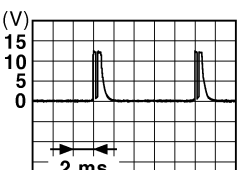
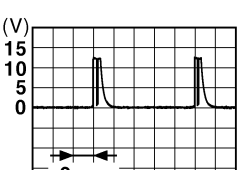
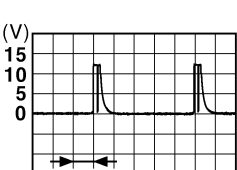
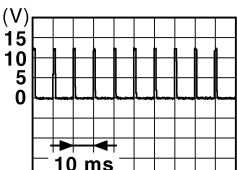
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper volume dial 4)	 <p style="text-align: right; margin-right: 50px;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch AUTO (Wiper volume dial 4)	 <p style="text-align: right; margin-right: 50px;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 1ST (Wiper volume dial 4)	 <p style="text-align: right; margin-right: 50px;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Rear wiper switch INT (Wiper volume dial 4)	 <p style="text-align: right; margin-right: 50px;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6 	 <p style="text-align: right; margin-right: 50px;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

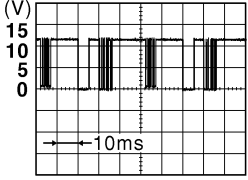
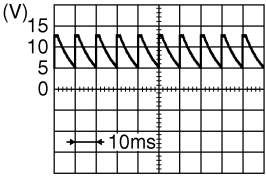
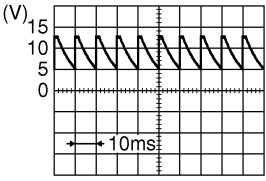
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper volume dial 4)	All switches OFF	 <p style="text-align: center;">1.4 V</p>
					Lighting switch PASS	 <p style="text-align: center;">1.3 V</p>
					Lighting switch 2ND	 <p style="text-align: center;">1.3 V</p>
					Front wiper switch INT/ AUTO	 <p style="text-align: center;">1.3 V</p>
					Front wiper switch HI	 <p style="text-align: center;">1.3 V</p>
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	 <p style="text-align: center;">1.1 V</p>

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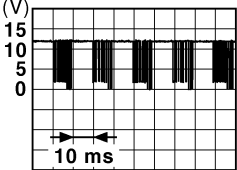
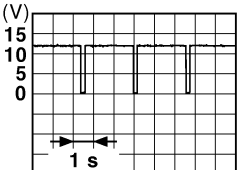

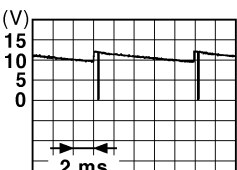
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
112 (GR)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON	 <p style="text-align: right; margin-right: 20px;">JPMIA0156GB</p> <p style="text-align: center;">8.7 V</p>
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle Close to 5 V
				Ignition switch ON	When dark outside of the vehicle Close to 0 V
116 (BR)	Ground	Stop lamp switch 1	Input	—	Battery voltage
118 (P)	Ground	Stop lamp switch 2 (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed) 0 V
				Stop lamp switch	ON (Brake pedal is depressed) Battery voltage
		Stop lamp switch 2 (With ICC)		Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF 0 V	
				Stop lamp switch ON (Brake pedal is depressed) or ICC brake hold relay ON Battery voltage	
119 (SB)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	 <p style="text-align: right; margin-right: 20px;">JPMIA0594GB</p> <p style="text-align: center;">8.5 - 9.0 V</p>
				Driver door	UNLOCK status (Unlock switch sensor ON) 0 V
121 (BR)	Ground	Key slot switch	Input	When the Intelligent Key is inserted into key slot 12 V	
				When the Intelligent Key is not inserted into key slot 0 V	
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC 0 V
				Ignition switch	ON Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	 <p style="text-align: right; margin-right: 20px;">JPMIA0594GB</p> <p style="text-align: center;">8.5 - 9.0 V</p>
				Passenger door switch	ON (Door open) 0 V

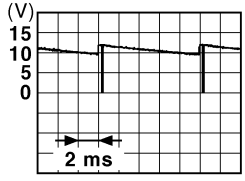
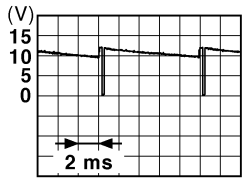
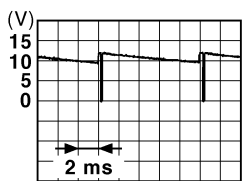
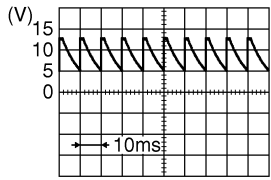
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
132 (BG)	Ground	Power window switch communication	Input/ Output	Ignition switch ON	 10.2 V	
				Ignition switch OFF or ACC	12 V	
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
				ON	0 V	
137 (B)	Ground	Receiver and sensor ground	Input	Ignition switch ON	0 V	
138 (Y)	Ground	Sensor power supply	Output	Ignition switch	OFF	0 V
				ACC or ON	5.0 V	
140 (R)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	12 V
				Except P and N positions	0 V	
141 (G)	Ground	Security indicator lamp	Output	Security indicator lamp	ON	0 V
				Blinking	 11.3 V	
				OFF	12 V	
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper volume dial 4)	All switches OFF	0 V
				 10.7 V		
					Lighting switch 1ST	
					Lighting switch HI	
					Lighting switch 2ND	
Turn signal switch RH						
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper volume dial 4)	0 V
				 10.7 V		
					Front wiper switch HI (Wiper volume dial 4)	
					Rear wiper switch INT (Wiper volume dial 4)	
Any of the conditions below with all switches OFF						
<ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 • Wiper volume dial 6 • Wiper volume dial 7 						

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

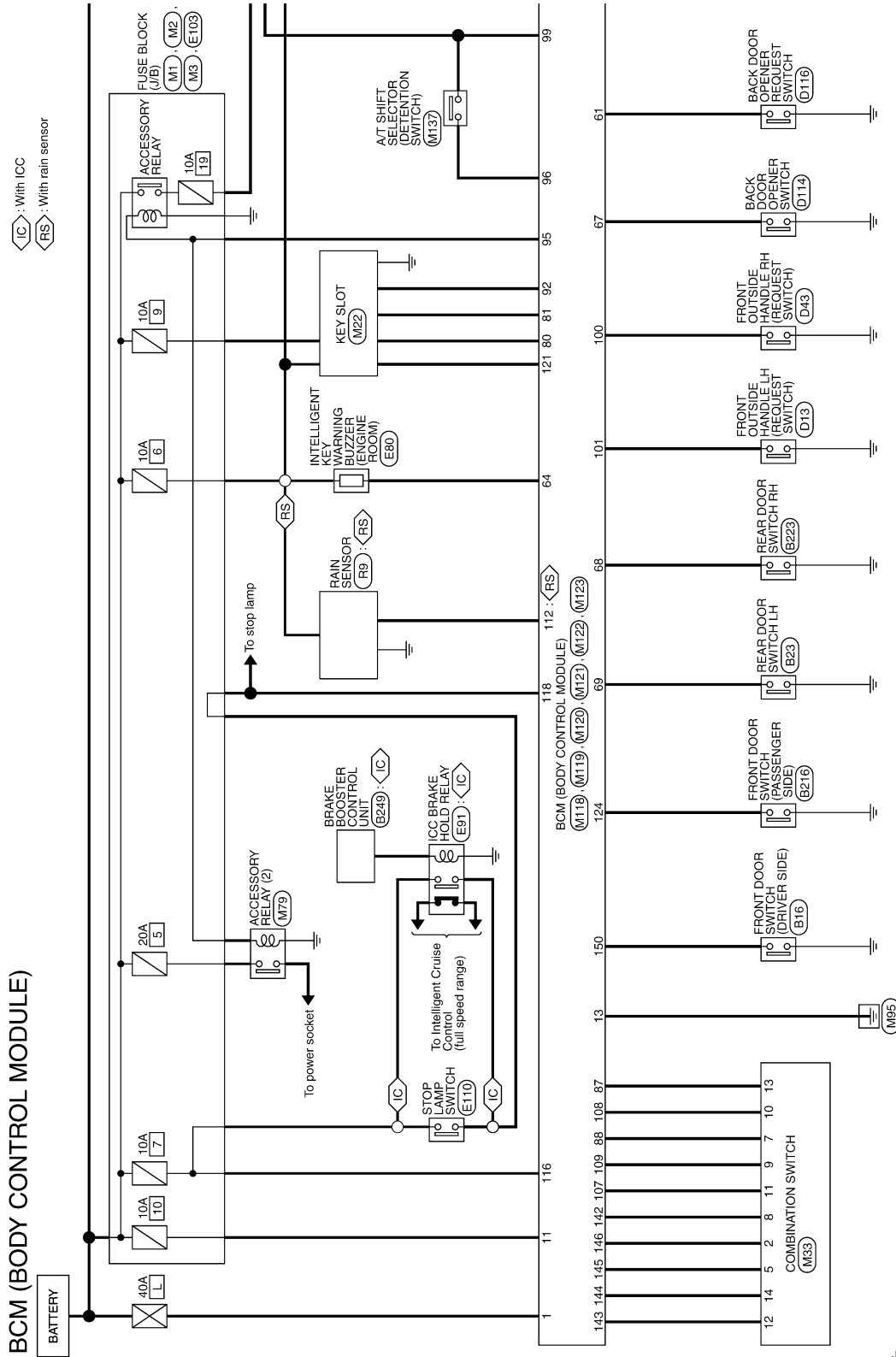
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper volume dial 4)	0 V
					Front washer switch ON (Wiper volume dial 4)	
					Rear wiper switch ON (Wiper volume dial 4)	
					Rear washer switch ON (Wiper volume dial 4)	
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6 	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper volume dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	
					Front wiper switch LO	
					Lighting switch AUTO	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper volume dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 8.5 - 9.0 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
				Not activated	Battery voltage	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

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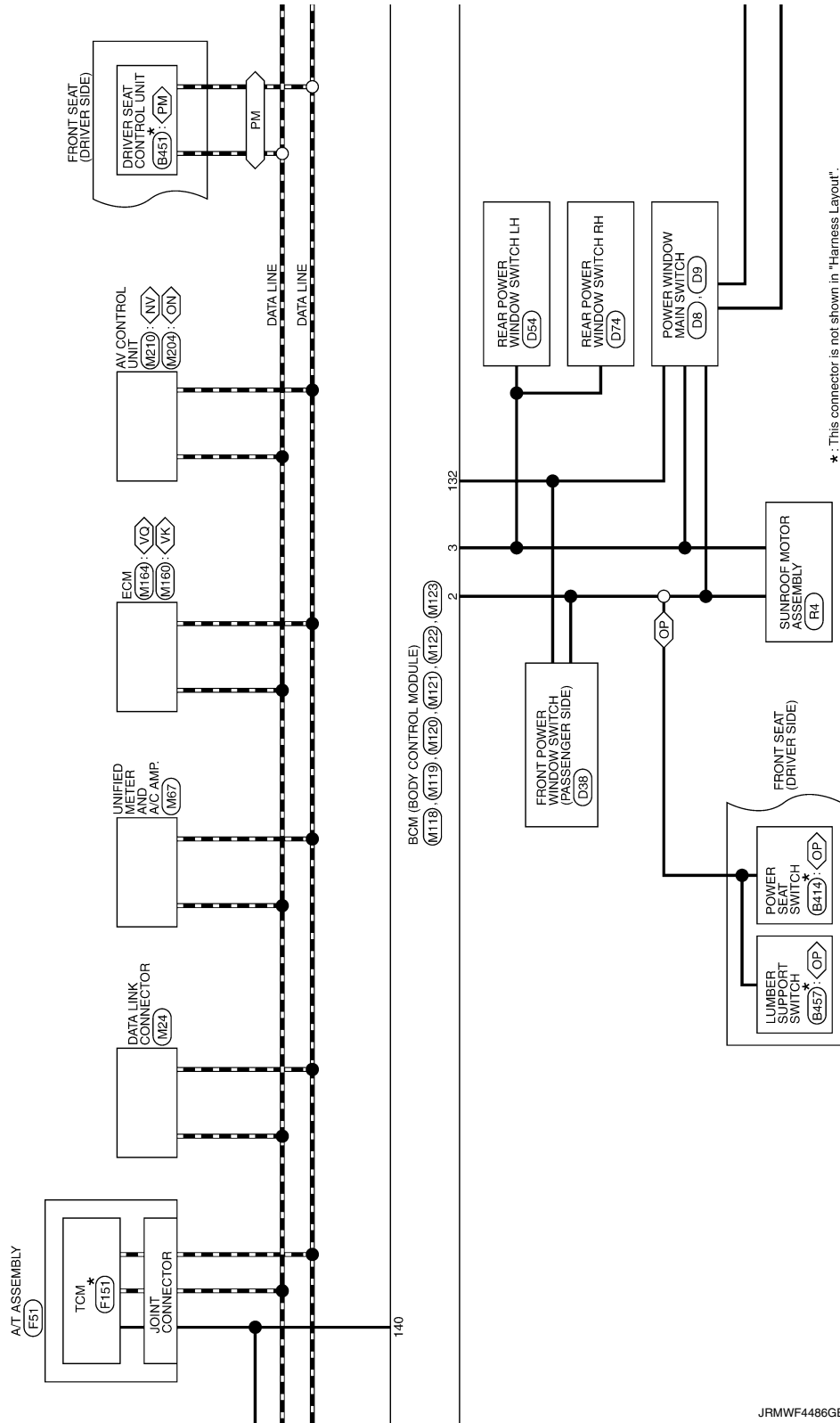
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

- ◊VQ◊ : With VQ engine
- ◊VK◊ : With VK engine
- ◊NV◊ : With NAVI
- ◊ON◊ : Without NAVI
- ◊PM◊ : With automatic drive positioner
- ◊OP◊ : Without automatic drive positioner



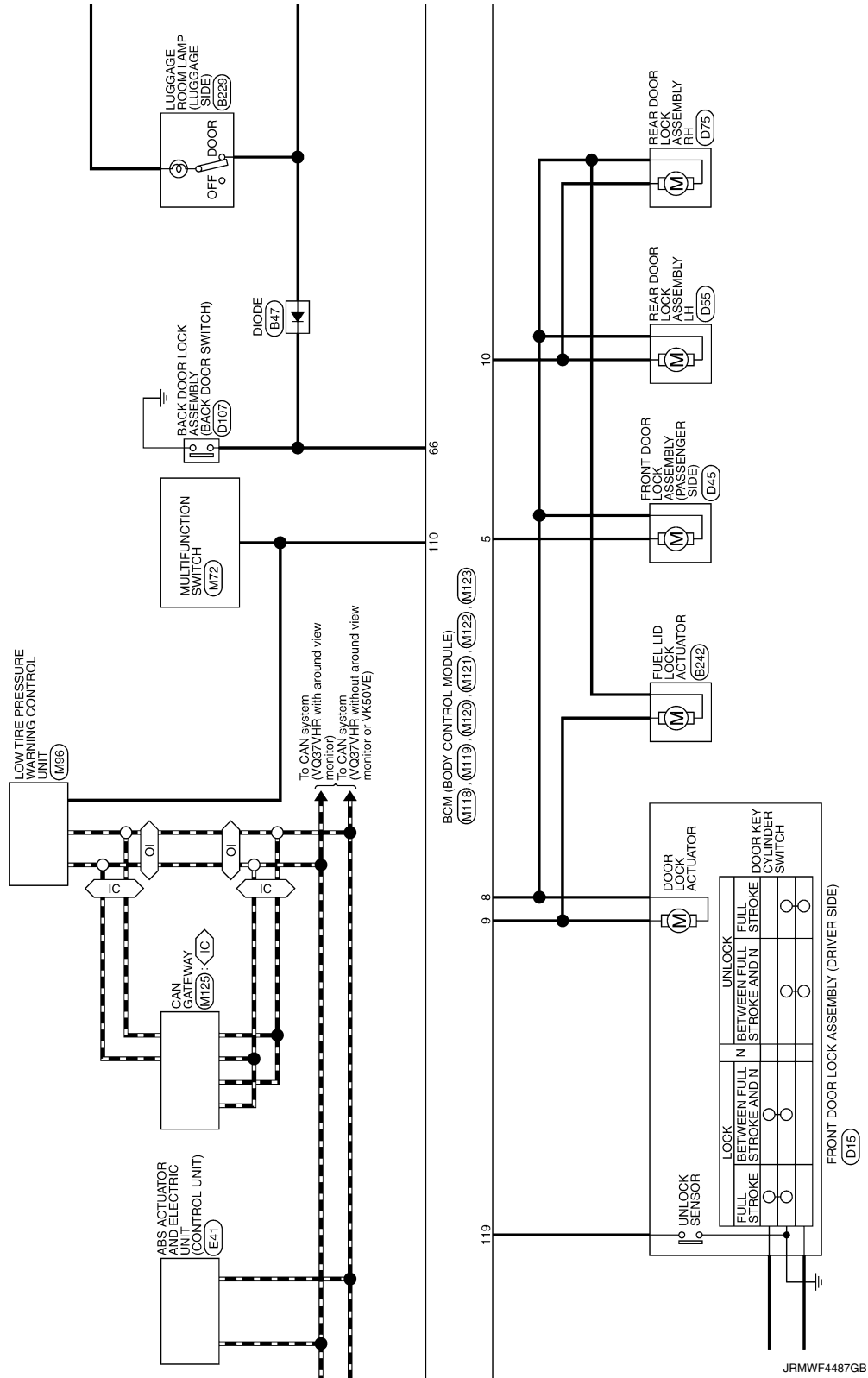
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BCM (BODY CONTROL MODULE)

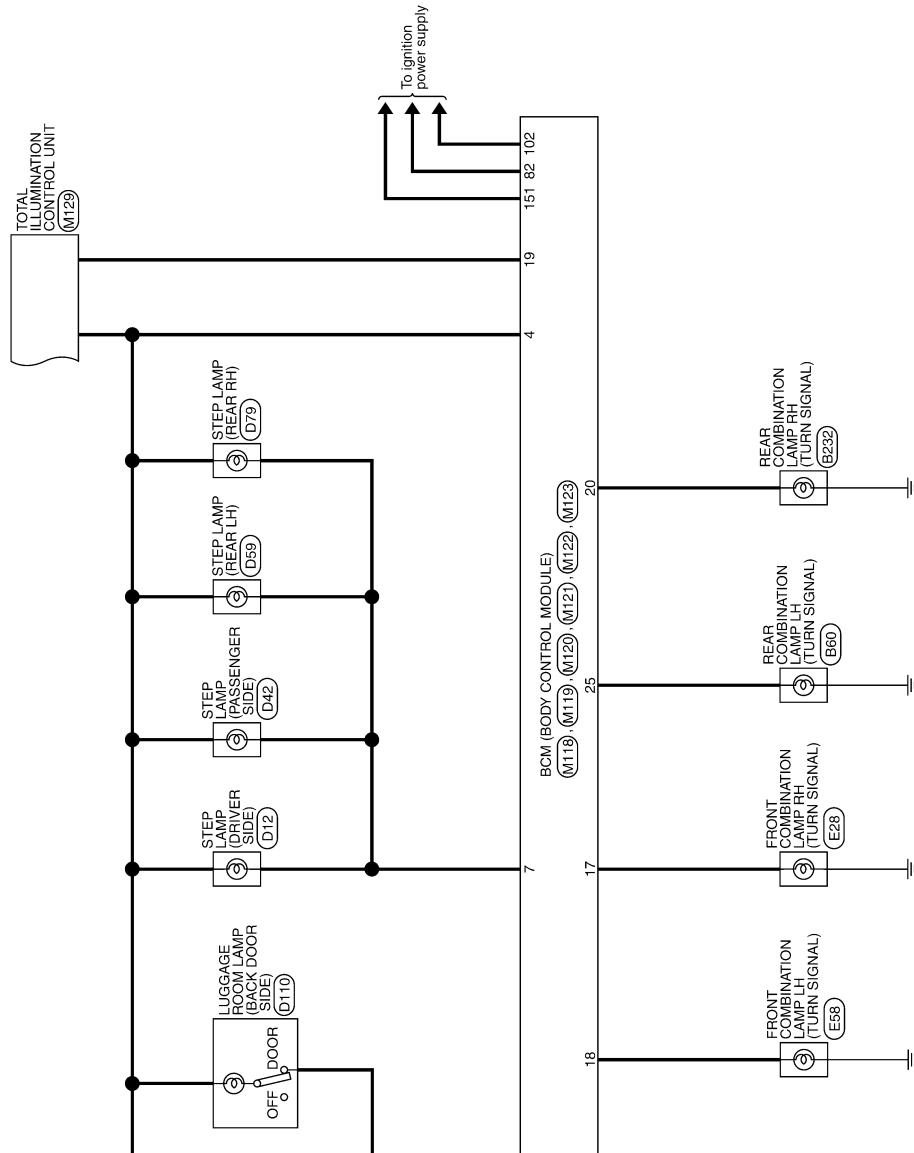
< ECU DIAGNOSIS INFORMATION >

IC : With ICC
OI : Without ICC



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



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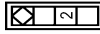
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

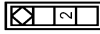
BCM (BODY CONTROL MODULE)

Connector No.	B116
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



Terminal Color Of No.	Wire	Signal Name [Specification]
2	GR	-

Connector No.	B23
Connector Name	REAR DOOR SWITCH-LH
Connector Type	A03FW



Terminal Color Of No.	Wire	Signal Name [Specification]
2	W	-

Connector No.	B47
Connector Name	DIODE
Connector Type	24335_C9800



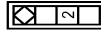
Terminal Color Of No.	Wire	Signal Name [Specification]
1	GR	-
2	V	-

Connector No.	B60
Connector Name	REAR COMBINATION LAMP LH
Connector Type	TH04MW-NH



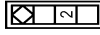
Terminal Color Of No.	Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	G	-
4	B	-

Connector No.	B216
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



Terminal Color Of No.	Wire	Signal Name [Specification]
2	GR	-

Connector No.	B223
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



Terminal Color Of No.	Wire	Signal Name [Specification]
2	BG	-

Connector No.	B228
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	FKG2FGY



Terminal Color Of No.	Wire	Signal Name [Specification]
1	V	-
2	SB	-

Connector No.	B229
Connector Name	LUGGAGE ROOM LAMP (LUGGAGE SIDE)
Connector Type	TK03FW



Terminal Color Of No.	Wire	Signal Name [Specification]
1	W	-
2	L	-

Connector No.	B232
Connector Name	REAR COMBINATION LAMP RH
Connector Type	TH04MW-NH



Terminal Color Of No.	Wire	Signal Name [Specification]
1	P	-
2	LG	-
3	V	-
4	B	-

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

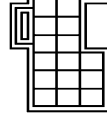
BCM (BODY CONTROL MODULE)

Connector No.	B242
Connector Name	FUEL LID LOCK ACTUATOR
Connector Type	MD4FW-LC



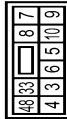
Terminal No.	Wire	Signal Name [Specification]
1	W	-
2	V	-

Connector No.	B249
Connector Name	BRAKE BOOSTER CONTROL UNIT
Connector Type	TK2AFGY



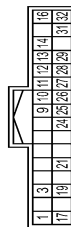
Terminal No.	Wire	Signal Name [Specification]
33	G	IGNITION
40	SB	IBA OFF SW
42	G	IGNITION
46	B	GROUND
47	LG	BRAKE HOLD RLY DRIVE SIGNAL

Connector No.	B414
Connector Name	POWER SEAT SWITCH
Connector Type	NS10FW-CS



Terminal No.	Wire	Signal Name [Specification]
3	GY	-
4	P	-
5	W	-
6	V	-
7	LY	-
8	L	-
9	L/R	-
10	GW	-
33	R	-
48	B	-

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32FW



Terminal No.	Wire	Signal Name [Specification]
1	LW	RX
3	RY	CANH
9	W/G	PULSE (RECLINING)
10	P/B	PULSE (RLIFTING)
11	BR	SLIDING SW (BACKWARD)
12	SB	RECLINING SW (BACKWARD)
13	LG/R	FRONT LIFTING SW (DOWNWARD)
14	GB	REAR LIFTING SW (DOWNWARD)
16	O	VCC
17	Y/R	TX

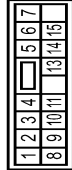
19	V	CAN-L
21	LY	P RANGE SW
24	R	PULSE (SLIDING)
25	Y/B	PULSE (RLIFTING)
26	Y	SLIDING SW (FORWARD)
27	R/G	RECLINING SW (FORWARD)
28	W/B	FRONT LIFTING SW (UPWARD)
29	P/L	REAR LIFTING SW (UPWARD)
31	GR	SENSOR GND
32	B/W	GND (SIGNAL)

Connector No.	B457
Connector Name	LUMBAR SUPPORT SWITCH
Connector Type	NS04FM-CS



Terminal No.	Wire	Signal Name [Specification]
33	R	-
48	B	-
57	W	-
58	L	-

Connector No.	D8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS16FM-CS



Terminal No.	Wire	Signal Name [Specification]
1	W	-
2	LG	-
3	GR	-
4	V	-

5	SB	-
6	Y	-
7	BR	-
8	L	-
9	W	-
10	O	-
11	G	-
13	P	-
14	V	-
15	W	-

Connector No.	D9
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS03FM-CS



Terminal No.	Wire	Signal Name [Specification]
17	B	-
19	Y	-

Connector No.	D12
Connector Name	STEP LAMP (DRIVER SIDE)
Connector Type	TB02FW



Terminal No.	Wire	Signal Name [Specification]
1	LG	-
2	SB	-

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BCM (BODY CONTROL MODULE)

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BCM (BODY CONTROL MODULE)

Connector No.	D13
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RK02FL-B



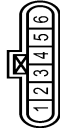
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-

Connector No.	D14
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



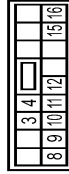
Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	V	-

Connector No.	D15
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVERSIDE)
Connector Type	E08FGY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	-
4	B	-
5	V	-
6	V	-

Connector No.	D38
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NST16FW-GS



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	W	-
8	L	-
9	G	-
10	Y	-
11	B	-
12	P	-
15	R	-
16	V	-

Connector No.	D42
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	TB02FM



Terminal No.	Color Of Wire	Signal Name [Specification]
1	SB	-
2	R	-

Connector No.	D43
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RK02FL-B



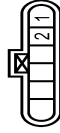
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-

Connector No.	D44
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	W	-

Connector No.	D45
Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Type	E08FGY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	LG	-

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	D54
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS08FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	L	-
3	R	-
4	L	-
5	G	-
7	B	-

Connector No.	D55
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	E08FGY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-

Connector No.	D59
Connector Name	STEP LAMP (REAR LH)
Connector Type	TB02FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	O	-

Connector No.	D74
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS08FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	P	-
3	R	-
4	L	-
5	G	-
7	B	-

Connector No.	D75
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	E08FGY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	L	-

Connector No.	D79
Connector Name	STEP LAMP (REAR RH)
Connector Type	TB02FW



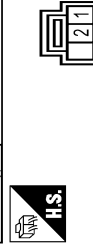
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	O	-

Connector No.	D107
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS08FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LW	-
2	LB	-
4	G	-
5	L	-
6	W	-
7	LG	-
8	GR	-

Connector No.	D110
Connector Name	LUGGAGE ROOM LAMP (BACK DOOR SIDE)
Connector Type	TK03FW



















Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	L	-

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)		ECU DIAGNOSIS INFORMATION	
Connector No.	D114	Connector No.	E5
Connector Name	BACK DOOR OPENER SWITCH	Connector Name	IPDM ER INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TK02MBR-P	Connector Type	TH20FM-LCS12-M4-1V
			
			
Terminal No.	1	Terminal No.	4
Wire	W	Wire	V
			L
			R
			SB
			B
			Y
			LG
			W
			G
			R
			Y
			BG
			GR
			G
Signal Name [Specification]		Signal Name [Specification]	
Connector No.	D115	Connector No.	E6
Connector Name	REAR WIPER MOTOR	Connector Name	IPDM ER INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	CJ04FM-1V	Connector Type	TH38FM-NH
			
			
Terminal No.	2	Terminal No.	42
Wire	G	Wire	41
			40
			39
			P
			L
			B
			W
			Y
			SB
			W
Signal Name [Specification]		Signal Name [Specification]	
Connector No.	D116	Connector No.	E28
Connector Name	BACK DOOR OPENER REQUEST SWITCH	Connector Name	FRONT COMBINATION LAMP RH
Connector Type	TK02MBR-P	Connector Type	RSM4FB-FR
			
			
Terminal No.	1	Terminal No.	1
Wire	V	Wire	BR
			V
			B
			P
Signal Name [Specification]		Signal Name [Specification]	
Connector No.	D118	Connector No.	E41
Connector Name	OUTSIDE KEY ANTENNA (BACK DOOR)	Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	RK02FGY	Connector Type	BAM42FB-AH24-LH
			
			
Terminal No.	1	Terminal No.	1
Wire	B	Wire	B
			G
			LBWR
			LBVR
			B
			Y
			BG
			BR
			B
			W
			L
			VAC
			P
			CANL
			SHIELD
			AGND
Signal Name [Specification]		Signal Name [Specification]	

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BCM (BODY CONTROL MODULE)

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BCM (BODY CONTROL MODULE)

19	P	UST
25	Y	BUS-L
26	R	DP FL
27	GR	DS RL
28	G	LZ
29	LG	DS RR
30	SB	BLS
31	R	VDC OFF SW
35	L	CANH
45	B	BUS-H

Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS4AFBFR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	G	-
3	B	-
4	BG	-

Connector No.	E80
Connector Name	INTELLIGENT KEY WARNING BUZZER (B/W/LE ROOM)
Connector Type	RK03FBR



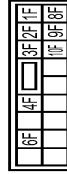
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	+BAT (VOL. SMALL)
3	GR	BUZZER SIGNAL

Connector No.	E91
Connector Name	ICC BRAKE HOLD RELAY
Connector Type	MD6FCY-R-US



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	B	-
3	G	-
4	G	-
6	W	-
7	L	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10F	L	-
1F	SB	-
2F	W	-
3F	Y	-
4F	G	-
6F	BG	-
8F	L	-
9F	R	-

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	MD4FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	G	-
4	BR	-

Connector No.	F51
Connector Name	AT ASSEMBLY
Connector Type	RK10FG-BSY



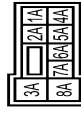
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	R	BATTERY POWER SUPPLY (MEMORY BACKUP)
3	L	CANH
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	P	CANL
9	GR	STARTER RELAY (with VQ engine)
10	B	STARTER RELAY (with VK engine)
		GROUND

Connector No.	F151
Connector Name	TCM
Connector Type	SP10FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	IGNITION POWER SUPPLY
2	B	BATTERY POWER SUPPLY (MEMORY BACKUP)
3	R	CANH
4	O	K-LINE
5	G	GROUND
6	GR	IGNITION POWER SUPPLY
7	L	BACK-UP LAMP RELAY
8	BR	CANL
9	Y	STARTER RELAY
10	W/B	GROUND

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FM-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	BG	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

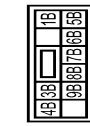
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

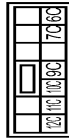
BCM (BODY CONTROL MODULE)

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



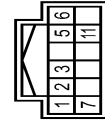
Terminal No.	Color Of Wire	Signal Name [Specification]
1B	LG	-
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-
7B	L	-
8B	R	-
9B	BR	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



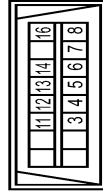
Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	LG	-
12C	R	-
6C	P	-
7C	B	-
9C	BG	-

Connector No.	M22
Connector Name	KEY SLOT
Connector Type	TH12FW-NH



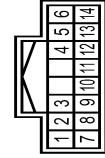
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	BAT
2	GR	CLOCK
3	W	DATA
5	Y	ILL BAT
6	LG	ILL BAT
7	B	GROUND
11	BR	KEY SWITCH SIGNAL

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



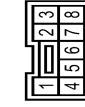
Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	GR	-
8	G	-
11	SB	-
12	P	-
13	L	-
14	B	-
16	BG	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER (-)
2	SB	OUTPUT 4
3	BG	FR WASHER (+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

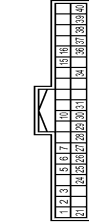
Connector No.	M50
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	BG	-
4	SB	-
6	GR	-
6	Y	-

7	V	-
8	P	-

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



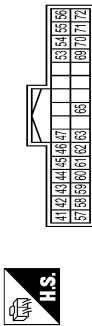
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
5	B	GROUND
6	W	ALTERNATOR SIGNAL
7	P	AIR BAG SIGNAL
10	G	SECURITY INDICATOR SIGNAL
15	B	GROUND
16	B	METER CONTROL SWITCH GROUND
21	R	IGNITION SIGNAL
24	BR	COMMUNICATION SIGNAL (LCD->AMP)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (8-PULSE)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
30	G	PASSENGER SEAT BELT WARNING SIGNAL
31	L	WASHER LEVEL SWITCH SIGNAL
34	B	ILLUMINATION CONTROL SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP AB RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (-)
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (+)

BCM (BODY CONTROL MODULE)

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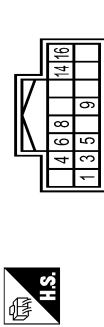
BCM (BODY CONTROL MODULE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FM-NH



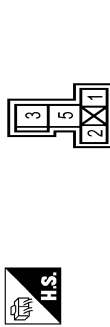
Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL
46	BG	SUNLOAD SENSOR SIGNAL
47	V	GAS SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	BG	BATTERY POWER SUPPLY
55	B	GROUND
56	L	GNDH
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	B	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	ION MODE SIGNAL
65	BG	ECV SIGNAL
69	L	A/C LAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CANH

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	V	ACC
3	R	ILL CONT
4	R	ILL CONT
5	R	AV COMM (H)
6	SB	AV COMM (L)
8	LG	SW GND
9	BR	DISK EJECT SIGNAL
14	SB	HAZARD ON
16	G	HAZARD ON

Connector No.	M79
Connector Name	ACCESSORY RELAY (2)
Connector Type	MS02FL-M2-LC



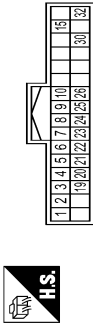
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-
3	LG	-
5	L	-

Connector No.	M94
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	POWER
2	P	OUTPUT
3	B	GROUND

Connector No.	M96
Connector Name	LOW TIRE PRESSURE WARNING CONTROL UNIT
Connector Type	TH32FM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	CAN- (L)
2	L	CAN+ (H)
3	BG	RR TUNER (SIG)
4	L	RL TUNER (SIG)
5	R	FR TUNER (SIG)
6	P	FL TUNER (SIG)
7	SB	RR TUNER (VCC)
8	R	RL TUNER (VCC)
9	GR	FR TUNER (VCC)
10	G	FL TUNER (VCC)
15	Y	IGN
19	W	RR TUNER (SSS)
20	BR	RL TUNER (SSS)
21	LG	FR TUNER (SSS)
22	V	FL TUNER (SSS)
23	B	RR TUNER (GND)
24	Y	RL TUNER (GND)

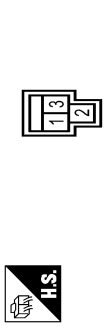
25	W	FR TUNER (GND)
26	P	FL TUNER (GND)
30	LG	BCM FLASHER
32	B	GROUND

Connector No.	M104
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	GR	SIGNAL OUTPUT
4	BR	BATTERY

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	Y	POWER WINDOW POWER SUPPLY (BAT)
3	BG	POWER WINDOW POWER SUPPLY (RAB)

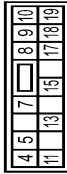
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BCM (BODY CONTROL MODULE)

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BCM (BODY CONTROL MODULE)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



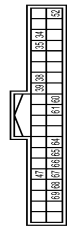
Terminal No.	Color Of Wire	Signal Name [Specification]
4	P	INT ROOM LAMP PWR SUPPLY (BAT SAME)
5	V	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEER LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	SB	ROOM LAMP-TIMER

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
25	G	TURN SIGNAL LH (REAR)
26	P	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-YH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANTI-LUGGAGE ROOM ANTI+
35	V	BACK DOOR ANTI+
38	B	BACK DOOR ANTI-
39	W	BACK DOOR ANTI-
47	V	IGN RELAY (REM FIB) CONT
52	LG	STARTER RELAY CONT
60	SB	ENG START SW
61	W	TRUNK REQUEST SW
64	L	LKEY WARN BUZZER (ENG ROOM)
65	BG	REAR WIPER STOP POSITION
66	LG	BACK DOOR SW
67	P	BACK DOOR OPENER SW
68	BR	REAR RH DOOR SW
69	R	REAR LH DOOR SW

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
74	SB	PASSENGER DOOR ANTI-
75	BR	PASSENGER DOOR ANTI+
76	V	DRIVER DOOR ANTI-
77	LG	DRIVER DOOR ANTI+
78	Y	ROOM ANTI-
79	BR	ROOM ANTI+

Terminal No.	Color Of Wire	Signal Name [Specification]
80	GR	NATS ANT AMP.
81	W	NATS ANT AMP.
82	P	IGN RELAY (FIB) CONT
83	GR	KEYLESS ENTRY RECEIVER SIGNAL
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL
93	V	ON IND
95	BG	ACC RELAY CONT
96	GR	AT SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	BR	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

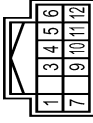
Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
112	GR	RAIN SENSOR SERIAL LINK
113	P	OPTICAL SENSOR
116	BR	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN FIB
124	LG	PASSENGER DOOR SW
132	BG	POWER WINDOW SW COMM
134	GR	LOCK IND
137	B	RECEIVER SENSOR GND
138	Y	SENSOR POWER SUPPLY
140	R	SHIFT NP

Terminal No.	Color Of Wire	Signal Name [Specification]
141	G	SECURITY INDICATOR OUTPUT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	CAN GATEWAY
Connector Type	TH12EW-NH



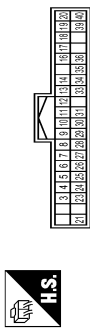
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-H
3	GR	BATTERY
4	L	CAN-H
5	B	GROUND
6	L	CAN-H
7	P	CAN-L
9	LG	IGNITION
10	P	CAN-L
11	B	GROUND
12	P	CAN-L

BCM (BODY CONTROL MODULE)

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BCM (BODY CONTROL MODULE)

Connector No.	M123
Connector Name	TOTAL ILLUMINATION CONTROL UNIT
Connector Type	TH40FM-NH



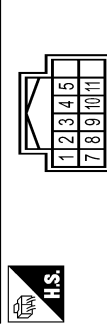
Terminal No.	Color	Wire	Signal Name [Specification]
3	V		DDL2
4	L		TAIL LAMP SIGNAL
5	V		ACC SIGNAL
6	P		BAT SAVER SIGNAL
7	W		IGN SIGNAL
8	G		DOOR SW (AS)
9	BG		DOOR SW (RL)
10	SB		MOOD LAMP (FR ARMREST RH)
11	Y		MOOD LAMP (RR ARMREST RH)
12	P		MAP LAMP (AS)
13	G		PERSONAL LAMP (LH)
14	R		PERSONAL LAMP (RH)
16	GR		FOOT LAMP (RH)
17	LG		HSP1 ILLUMINATIONS
18	L		MAP LAMP (DR)
19	R		PUSH ENG START SW LED
20	Y		AMBIENCE LAMP
21	R		BAT POWER SUPPLY
23	B		GROUND
24	B		ILL CONT INPUT
25	BR		DOOR SW (RR)
26	BR		MAP LAMP SW (DOOR)
27	R		MAP LAMP SW (ALL ON)
28	SB		ROOM LAMP TIMER
29	GR		DOOR SW (DR)
30	LG		MOOD LAMP (FR ARMREST LH)
31	BG		MOOD LAMP (RR ARMREST LH)
33	W		HSP1 POWER SUPPLY 3
34	R		HSP1 POWER SUPPLY 2
35	Y		HSP1 POWER SUPPLY 1
36	L		FOOT LAMP (LH)
39	B		PUDDLE LAMP (RH)
40	BG		PUDDLE LAMP (LH)

Connector No.	M131
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02MGY



Terminal No.	Color	Wire	Signal Name [Specification]
1	BR		-
2	Y		-

Connector No.	M137
Connector Name	AT SHIFT SELECTOR
Connector Type	TH12FM-NH



Terminal No.	Color	Wire	Signal Name [Specification]
1	W		-
2	V		-
3	L		-
4	B		-
5	G		-
7	BG		-
8	SB		-
9	B		-
10	GR		-
11	R		-

Connector No.	M160
Connector Name	ECM
Connector Type	RH24FGY-RZ8-R-LH-Z



Terminal No.	Color	Wire	Signal Name [Specification]
97	R		ENGINE SPEED SIGNAL OUTPUT
99	G		SENSOR POWER SUPPLY Y
100	L		SENSOR POWER SUPPLY
101	P		CAN COMMUNICATION LINE
102	SB		ASCD/ICC STEERING SWITCH
103	R		ACCELERATOR PEDAL POSITION SENSOR 1
105	L		CAN COMMUNICATION LINE
106	L		IGNITION SWITCH
108	P		ACCELERATOR PEDAL POSITION SENSOR 2
110	P		STOP LAMP SWITCH
111	V		SENSOR GROUND
112	LG		FUEL PUMP CONTROL MODULE (FFCM) CHECK
114	GR		DATA LINK CONNECTOR
115	GR		SENSOR GROUND
116	G		TRANSMISSION RANGE SWITCH
117	BR		ASCD/ICC BRAKE SWITCH
118	R		POWER SUPPLY FOR ECM (BACK-UP)
119	W		SENSOR GROUND
120	W		FUEL TANK TEMPERATURE SENSOR
121	GR		POWER SUPPLY FOR ECM
123	B		ECM GROUND
125	R		FUEL PUMP CONTROL MODULE (FFCM)
128	B		ECM GROUND

Connector No.	M164
Connector Name	ECM
Connector Type	RH24FGY-RZ8-R-LH-Z



Terminal No.	Color	Wire	Signal Name [Specification]
97	R		ACCELERATOR PEDAL POSITION SENSOR 1
98	P		ACCELERATOR PEDAL POSITION SENSOR 2 (WITH NAVI)
99	Y		ACCELERATOR PEDAL POSITION SENSOR 3 (WITH NAVI)
88	V		SENSOR POWER SUPPLY Y (With NAVI)
89	G		SENSOR POWER SUPPLY (With NAVI)
89	L		SENSOR POWER SUPPLY (Without NAVI)
100	W		SENSOR GROUND
101	SB		ASCD/ICC STEERING SWITCH
102	LG		EVAP CONTROL SYSTEM PRESSURE SENSOR
103	G		SENSOR POWER SUPPLY (With NAVI)
103	L		SENSOR POWER SUPPLY (Without NAVI)
104	BR		SENSOR GROUND (With NAVI)
104	GR		SENSOR GROUND (Without NAVI)
105	L		REFRIGERANT PRESSURE SENSOR
106	W		FUEL TANK TEMPERATURE SENSOR
107	BG		SENSOR POWER SUPPLY
108	V		SENSOR GROUND
109	G		PNP SIGNAL
110	R		ENGINE SPEED OUTPUT SIGNAL
112	V		ENGINE CONTROL SYSTEM PRESSURE SENSOR
112	W		ENGINE CONTROL SYSTEM PRESSURE SENSOR
113	P		CAN COMMUNICATION LINE
114	L		CAN COMMUNICATION LINE
117	GR		DATA LINK CONNECTOR
121	LG		EVAP CANISTER VENT CONTROL VALVE
122	P		STOP LAMP SWITCH
123	B		ECM GROUND
124	B		ECM GROUND
125	GR		POWER SUPPLY FOR ECM
126	BR		ASCD/ICC BRAKE SWITCH
127	B		ECM GROUND
128	B		ECM GROUND

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BCM (BODY CONTROL MODULE)

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Terminal No.	Color Of Wire	Signal Name [Specification]
65	V	PARKING BRAKE SIGNAL
67	B	COMPOSITE IMAGE SIGNAL GND
68	R	COMPOSITE IMAGE SIGNAL
71	SHIELD	MICROPHONE SHIELD
72	G	MICROPHONE VCC
73	R	COMM (CONT->DISP)
74	P	CANL
75	LG	AV COMM (L)
76	LG	AV COMM (L)
79	R	ILLUMINATION
80	G	IGNITION SIGNAL
81	BG	REVERSE SIGNAL
82	R	VEHICLE SPEED SIGNAL (R-PULSE)
87	R	MICROPHONE SIGNAL
88	B	SHIELD
89	G	COMM (DISP->CONT)
90	L	CANLH
91	SB	AV COMM (H)
92	SB	AV COMM (H)

Terminal No.	Color Of Wire	Signal Name [Specification]
76	LG	AV COMM (L)
77	SB	AV COMM (H)
78	LG	AV COMM (L)
79	SB	AV COMM (H)
80	P	CANL
81	L	CANLH
82	BR	SW GND
86	SHIELD	SHIELD
87	L	TEL VOICE SIGNAL (+)
88	P	TEL VOICE SIGNAL (-)
92	R	VEHICLE SPEED SIGNAL (R-PULSE)
93	V	PARKING BRAKE SIGNAL
94	BG	REVERSE SIGNAL
95	G	IGNITION SIGNAL
96	SB	DISK EJECT SIGNAL
102	B	AUX AUDIO LH+
103	W	AUX AUDIO LH-
104	R	AUX AUDIO RH+

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	SW-BIT1
5	P	SW-BIT0
7	BR	+B
8	L	SPEED SENSOR (2P)
9	Y	TIMER (+IGN)
10	G	GROUND

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	SW-BIT1
5	P	SW-BIT0
7	BR	+B
8	L	SPEED SENSOR (2P)
9	Y	TIMER (+IGN)
10	G	GROUND

BCM (BODY CONTROL MODULE)

Connector No.	Terminal No.	Signal Name [Specification]
M204	1	TEL VOICE SIGNAL (+)
M204	2	TEL VOICE SIGNAL (-)
M204	3	VEHICLE SPEED SIGNAL (R-PULSE)
M204	4	PARKING BRAKE SIGNAL
M204	5	REVERSE SIGNAL
M204	6	IGNITION SIGNAL
M204	7	DISK EJECT SIGNAL
M204	8	AUX AUDIO LH+
M204	9	AUX AUDIO LH-
M204	10	AUX AUDIO RH+

Connector No.	Terminal No.	Signal Name [Specification]
M210	1	SW-BIT1
M210	5	SW-BIT0
M210	7	+B
M210	8	SPEED SENSOR (2P)
M210	9	TIMER (+IGN)
M210	10	GROUND

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

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BCM (BODY CONTROL MODULE)

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Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> Starter control relay signal Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> Starter relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled <ul style="list-style-type: none"> Power position changes to ACC Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

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

NOTE:

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

REAR WIPER MOTOR PROTECTION

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

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

Condition of cancellation

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

DTC Inspection Priority Chart

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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	<ul style="list-style-type: none"> U1000: CAN COMM U1010: CONTROL UNIT(CAN)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
3	<ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING
4	<ul style="list-style-type: none"> • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP/CLUTCH SW • B2605: PNP/CLUTCH SW • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: BCM • B2615: BCM • B2616: BCM • B2617: BCM • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26EA: KEY REGISTRATION • U0415: VEHICLE SPEED SIG
5	<ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2623: INSIDE ANTENNA
6	B26E7: TPMS CAN COMM

DTC Index

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NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [DEF-6, "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warn- ing lamp ON	Reference
No DTC is detected. Further testing may be required.	—	—	—	—
U1000: CAN COMM	—	—	—	BCS-39
U1010: CONTROL UNIT(CAN)	—	—	—	BCS-40
U0415: VEHICLE SPEED SIG	—	—	—	BCS-41
B2190: NATS ANTENNA AMP	×	—	—	SEC-47
B2191: DIFFERENCE OF KEY	×	—	—	SEC-50
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-51
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-53
B2195: ANTI SCANNING	×	—	—	SEC-54
B2553: IGNITION RELAY	—	×	—	PCS-53
B2555: STOP LAMP	—	×	—	SEC-55

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warn- ing lamp ON	Reference	A
B2556: PUSH-BTN IGN SW	—	×	×	SEC-57	B
B2557: VEHICLE SPEED	×	×	×	SEC-59	C
B2560: STARTER CONT RELAY	×	×	×	SEC-60	D
B2562: LOW VOLTAGE	—	×	—	BCS-42	E
B2601: SHIFT POSITION	×	×	×	SEC-61	F
B2602: SHIFT POSITION	×	×	×	SEC-64	G
B2603: SHIFT POSI STATUS	×	×	×	SEC-66	H
B2604: PNP/CLUTCH SW	×	×	×	SEC-69	I
B2605: PNP/CLUTCH SW	×	×	×	SEC-71	J
B2608: STARTER RELAY	×	×	×	SEC-73	K
B260A: IGNITION RELAY	×	×	×	PCS-55	L
B260F: ENG STATE SIG LOST	×	×	×	SEC-75	M
B2614: BCM	—	×	×	PCS-57	N
B2615: BCM	—	×	×	PCS-59	O
B2616: BCM	—	×	×	PCS-61	P
B2617: BCM	×	×	×	SEC-77	Q
B2618: BCM	×	×	×	PCS-63	R
B261A: PUSH-BTN IGN SW	—	×	×	SEC-79	S
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	SEC-82	T
B2621: INSIDE ANTENNA	—	×	—	DLK-101	U
B2623: INSIDE ANTENNA	—	×	—	DLK-103	V
B26E7: TPMS CAN COMM	—	—	—	BCS-43	W
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	SEC-76	X

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REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE

Diagnosis Procedure

INFOID:0000000010581592

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.
Refer to [DEF-9, "BCM : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
Refer to [DEF-10, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to [DEF-11, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:000000010581593

1. CHECK REAR WINDOW DEFOGGER

Check rear window defogger.

Refer to [DEF-13, "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-47, "Intermittent Incident"](#).

NO >> GO TO 1.

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DOOR MIRROR DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DOOR MIRROR DEFOGGER DOES NOT OPERATE BOTH SIDES

BOTH SIDES : Diagnosis Procedure

INFOID:000000010581594

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.

Refer to [DEF-15, "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-47, "Intermittent Incident"](#).

NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:000000010581595

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to [DEF-16, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-47, "Intermittent Incident"](#).

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000010581596

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.

Refer to [DEF-18, "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-47, "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:000000010581597

1. CHECK AV CONTROL UNIT FUNCTION

Check that the AV control unit is operating normally.

- Without navigation system. Refer to [AV-71, "Work Flow"](#).
- With navigation system. Refer to [AV-237, "Work Flow \(Multi AV\)"](#).

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-47, "Intermittent Incident"](#).

NO >> GO TO 1.

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REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:000000010581598

1. CHECK PRESET SWITCH

Check rear window defogger operation.

- YES >> Replace preset switch. Refer to [AV-143. "Removal and Installation"](#) (without navigation system) or [AV-362. "Removal and Installation"](#) (with navigation system).
- NO >> Check rear window defogger system. Refer to [DEF-3. "Work Flow"](#).

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000010581599

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:

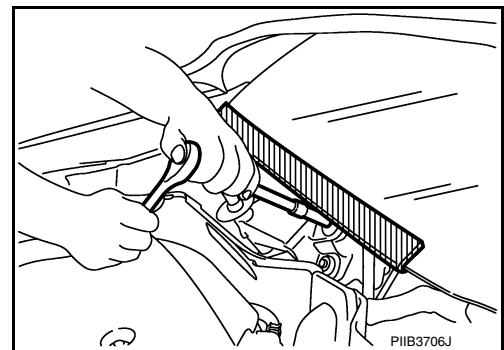
Always observe the following items for preventing accidental activation.

- 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 Procedure without Cowl Top Cover

INFOID:000000010782866

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



Precautions For Xenon Headlamp Service

INFOID:000000010782867

WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector.

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PRECAUTIONS

< PRECAUTION >

(Turning it ON outside the lamp case may cause fire or visual impairments.)

- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

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

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

Precautions for Removing Battery Terminal

INFOID:000000010782868

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

NOTE:

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

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

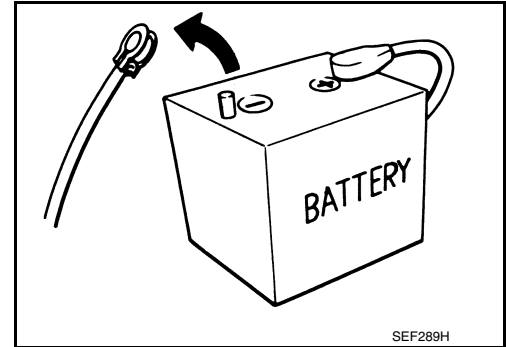
NOTE:

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

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

NOTE:

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



FILAMENT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

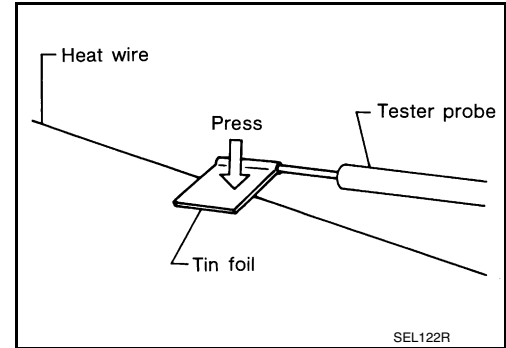
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Inspection and Repair

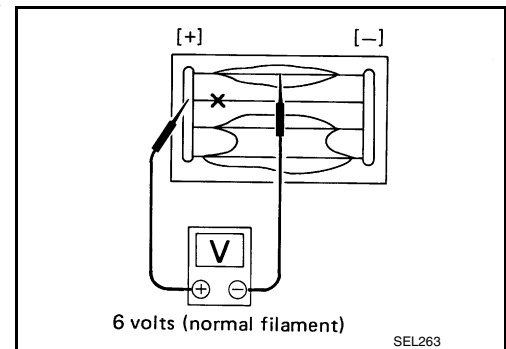
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INSPECTION

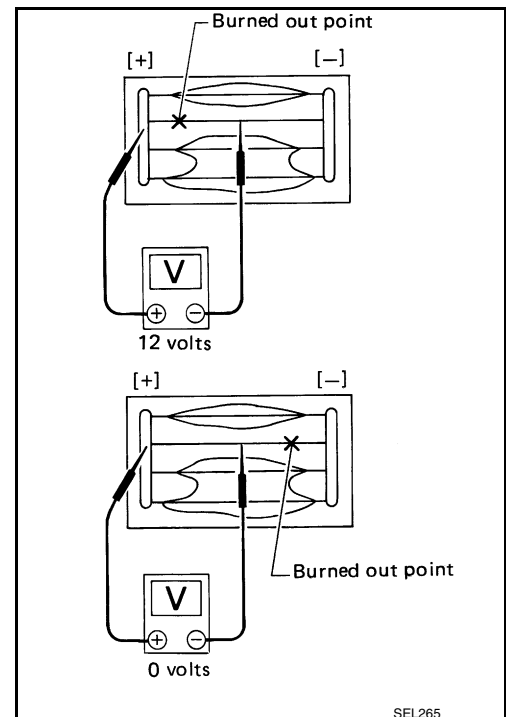
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with finger.



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)

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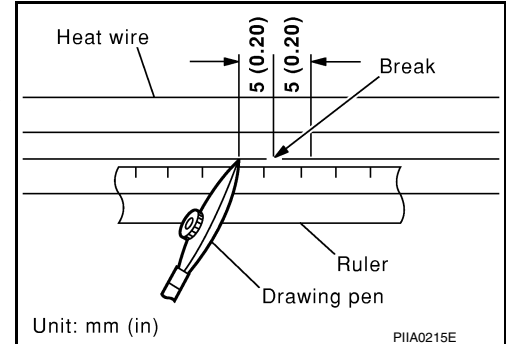
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< REMOVAL AND INSTALLATION >

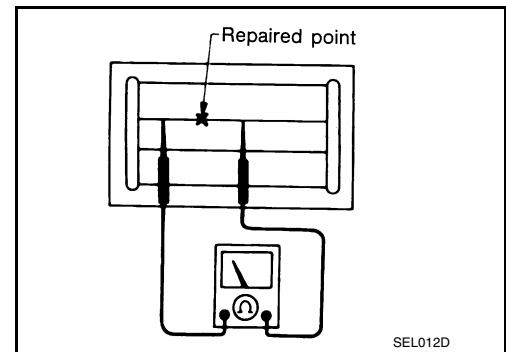
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

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



4. After repair is completed, check repaired wire for continuity. This check must be conducted 10 minutes after silver composition is deposited. Do not touch repairing area while test is being conducted.



5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. The minimum distance of 3 cm (1.2 in) must be kept between repaired area and hot air outlet. If a heat gun is not available, let the repaired area dry for 24 hours.

