

SECTION **DEF**  
**DEFOGGER**

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# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

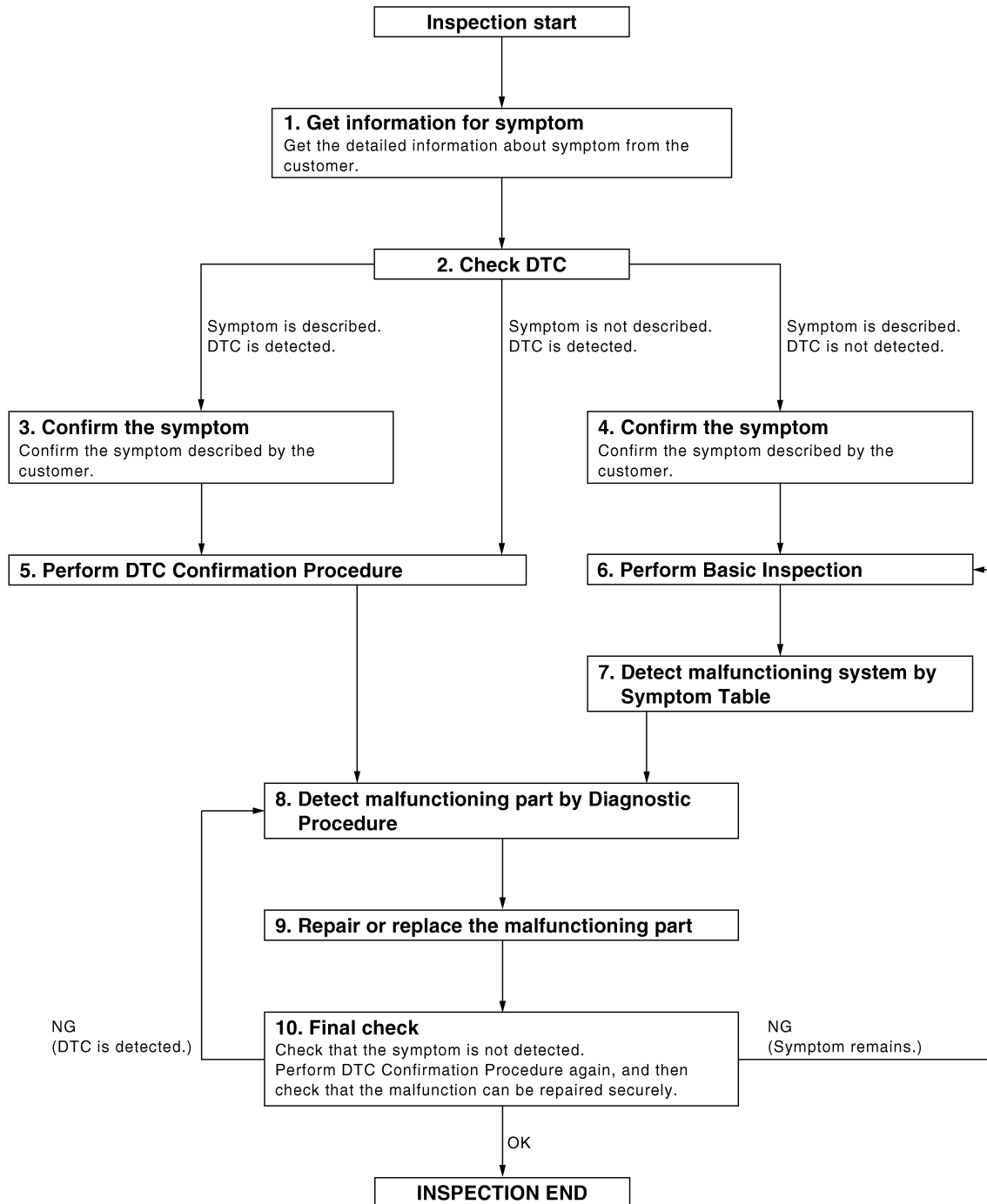
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000005434660

OVERALL SEQUENCE



DETAILED FLOW

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

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## 1. GET INFORMATION FOR SYMPTOM

---

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2

## 2. CHECK DTC

---

1. Check DTC.
2. Perform the following procedure if DTC is displayed.
  - Record DTC and freeze frame data (Print them out with CONSULT-III.)
  - Erase DTC.
  - Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related service bulletins for information.

Is any symptom described and any DTC detected?

Symptom is described, DTC is displayed>>GO TO 3

Symptom is described, DTC is not displayed>>GO TO 4

Symptom is not described, DTC is displayed>>GO TO 5

## 3. CONFIRM THE SYMPTOM

---

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5

## 4. CONFIRM THE SYMPTOM

---

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real time diagnosis results.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6

## 5. PERFORM DTC CONFIRMATION PROCEDURE

---

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again.

At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time.

If two or more DTCs are detected, refer to [BCS-69. "DTC Inspection Priority Chart"](#) and determine trouble diagnosis order.

### NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check. If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

YES >> GO TO 8

NO >> Refer to [GI-41. "Intermittent Incident"](#).

## 6. PERFORM BASIC INSPECTION

---

Perform [DEF-3. "Work Flow"](#).

>> GO TO 7

## 7. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

---

Detect malfunctioning system according to [DEF-6. "System Description"](#) based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 8

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

---

## 8. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

---

Inspect according to Diagnostic Procedure of the system.

**NOTE:**

The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

Is malfunctioning part detected?

YES >> GO TO 9

NO >> Check voltage of related BCM terminals using CONSULT-III.

---

## 9. REPAIR OR REPLACE THE MALFUNCTIONING PART

---

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement.
3. Check DTC. If DTC is displayed, erase it.

>> GO TO 10

---

## 10. FINAL CHECK

---

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.

When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8

YES (Symptom remains)>>GO TO 6

NO >> Inspection End.

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# REAR WINDOW DEFOGGER SYSTEM

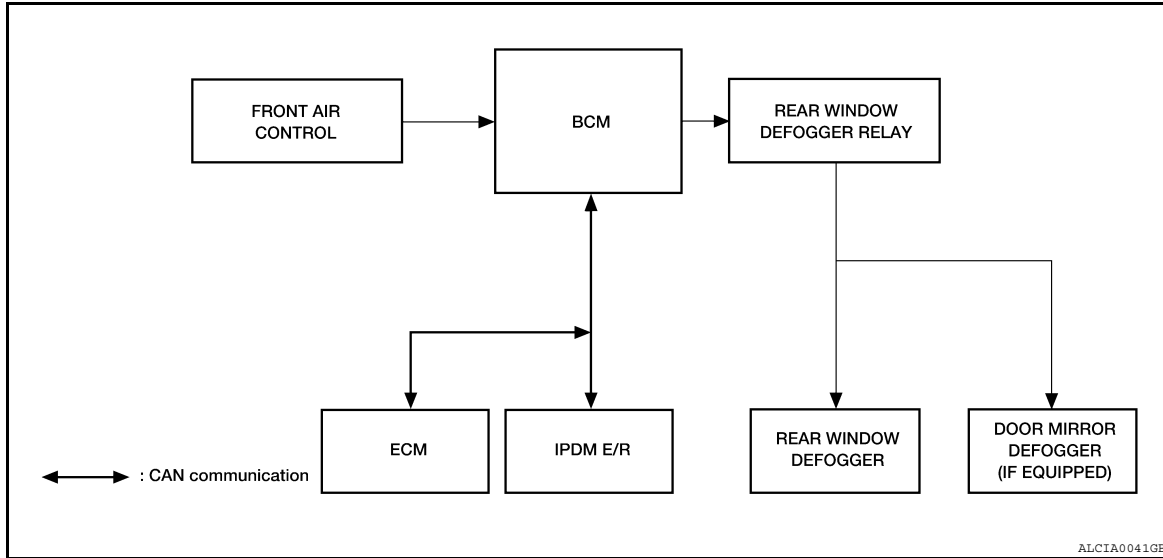
< FUNCTION DIAGNOSIS >

## FUNCTION DIAGNOSIS

### REAR WINDOW DEFOGGER SYSTEM

#### System Diagram

INFOID:000000005434661



#### System Description

INFOID:000000005434662

#### Operation Description

- When rear window defogger switch is turned ON while ignition switch is ON, the front air control (rear window defogger switch) transmits rear window defogger switch signal to BCM.
- BCM turns rear window defogger relay ON when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger (with door mirror defogger) are supplied with power and operate when rear window defogger relay turns ON.
- BCM transmits rear window defogger control signal to IPDM E/R via CAN communication when rear window defogger operates.
- Rear window defogger ON is displayed when front air control receives signals.

#### Timer function

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON while ignition switch is ON. It makes rear window defogger and door mirror defogger (with door mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same reaction also occurs during timer operation, if the ignition switch is turned OFF.

#### INPUT/OUTPUT SIGNAL CHART

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

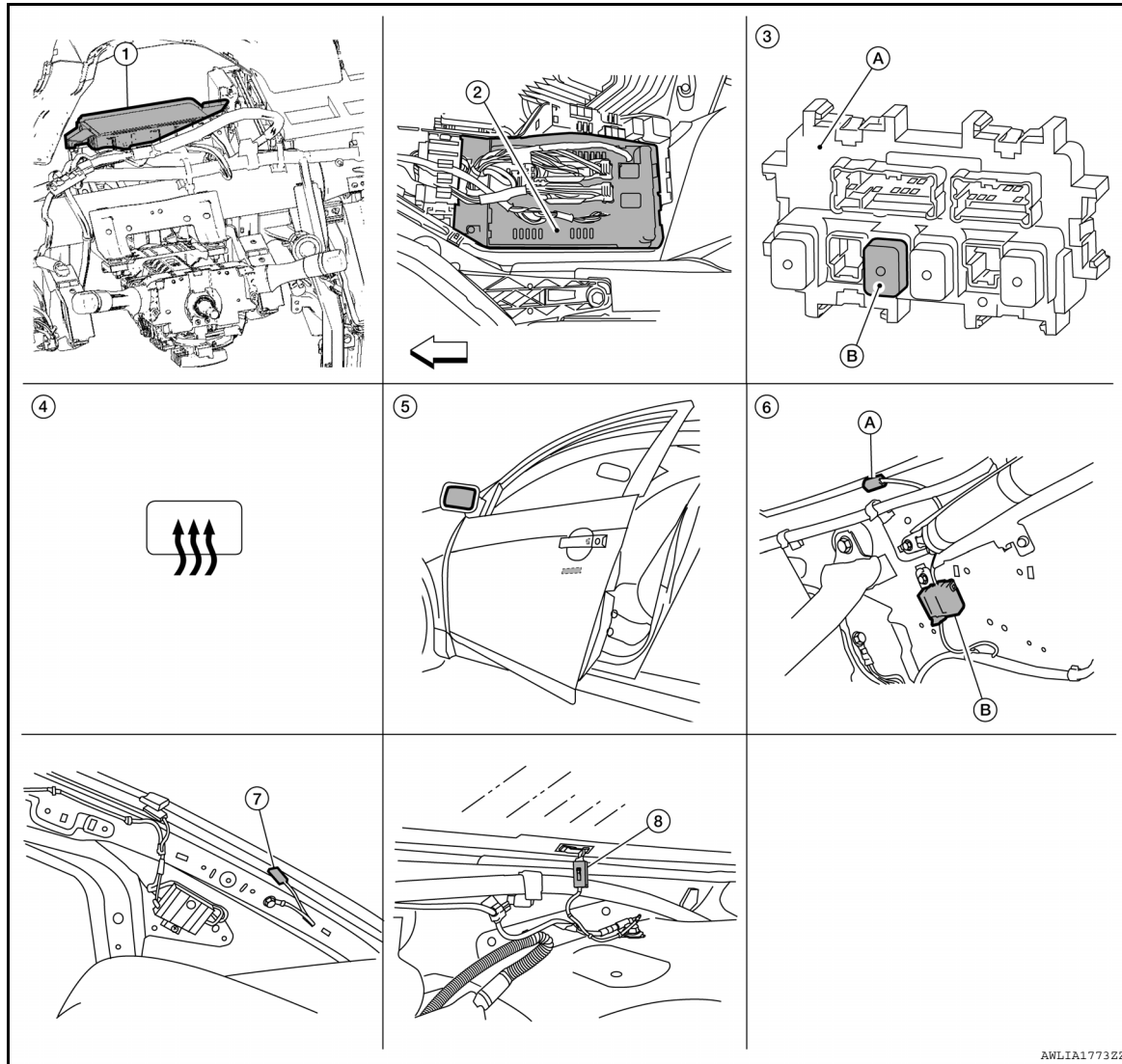
\*: With door mirror defogger

# REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >

## Component Parts Location

INFOID:000000005434663



AWLIA1773Z2

- |  |  |  |
|--|--|--|
| <p>1. BCM M16, M17, M18, M19 (view with instrument panel removed)</p> <p>4. Front air control (rear window defogger switch) M37(without auto A/C) M152 (with auto A/C)</p> <p>7. Rear window defogger (-) B54 (all models except coupe with sunroof) (view with upper pillar finisher removed)</p> | <p>2. IPDM E/R E17</p> <p>5. Door mirror (door mirror defogger) LH D4, RH D107 (if equipped)</p> <p>8. Rear window defogger (-) B54 (coupe models with sunroof) (view with parcel shelf removed)</p> | <p>3. A. Fuse block (J/B)<br/>B. Rear window defogger relay J-2</p> <p>6. A. Rear window defogger (+) B53<br/>B. Condenser B52 (view with rear pillar finisher LH removed)</p> |
|--|--|--|

## Component Description

INFOID:000000005434664

BCM	<ul style="list-style-type: none"> <li>Operates the rear window defogger with the operation of rear window defogger switch.</li> <li>Performs the timer control of rear window defogger.</li> </ul>
Rear window defogger relay	<ul style="list-style-type: none"> <li>Operates the rear window defogger and the door mirror defogger with the control signal from BCM.</li> </ul>
Front air control (rear window defogger switch)	<ul style="list-style-type: none"> <li>The rear window defogger switch is turned ON.</li> <li>Turns the indicator lamp ON when detecting the operation of rear window defogger.</li> </ul>

## REAR WINDOW DEFOGGER SYSTEM

### < FUNCTION DIAGNOSIS >

Rear window defogger	<ul style="list-style-type: none"><li>• Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up.</li></ul>
Door mirror defogger*	<ul style="list-style-type: none"><li>• Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.</li></ul>

\*: With heated mirrors



# DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

## DIAGNOSIS SYSTEM (BCM)

### COMMON ITEM

COMMON ITEM : CONSULT-III Function

INFOID:000000005778777

#### ECU IDENTIFICATION

Displays the BCM part No.

#### SELF-DIAG RESULT

Refer to [BCS-70, "DTC Index"](#).

### REAR WINDOW DEFOGGER

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

INFOID:000000005778778

#### DATA MONITOR

Monitor Item [Unit]	Description
PUSH SW [ON/OFF]	Indicates condition of push switch
REAR DEF SW [ON/OFF]	Displays "Press (ON)/other (OFF)" status determined with the rear window defogger switch

#### ACTIVE TEST

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

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# REAR WINDOW DEFOGGER SWITCH

< COMPONENT DIAGNOSIS >

## COMPONENT DIAGNOSIS

### REAR WINDOW DEFOGGER SWITCH

#### Description

INFOID:000000005434667

- The rear window defogger is operated by pressing the rear window defogger switch ON.
- The indicator lamp in the rear window defogger switch illuminates while the rear window defogger is ON.

#### Component Function Check

INFOID:000000005434668

#### 1. CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

1. Push ignition switch to ON.
2. Press rear window defogger switch.
3. Check that the indicator lamp of the rear window defogger switch illuminates.
4. Press rear window defogger switch.
5. Check that the indicator lamp of the rear window defogger switch extinguishes.

##### Is the inspection result normal?

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

#### Diagnosis Procedure

INFOID:000000005434669

Regarding Wiring Diagram information, refer to [DEF-45. "COUPE : Wiring Diagram"](#) (Coupe) or [DEF-51. "SEDAN : Wiring Diagram"](#) (Sedan).

#### 1. CHECK REAR WINDOW DEFOGGER RELAY OPERATION

Check that an operation noise of rear window defogger relay [located in fuse block (J/B)] can be heard when pressing the rear window defogger switch ON and OFF.

##### Is the inspection result normal?

- YES >> GO TO 2  
NO >> GO TO 5

#### 2. CHECK FUSE

Check if Fuse 13 from the rear window defogger relay output is blown.

##### Is the fuse blown?

- YES >> Replace the blown fuse after repairing the affected circuit.  
NO >> GO TO 3

#### 3. CHECK FOR VOLTAGE FROM THE REAR WINDOW DEFOGGER RELAY

1. Connect a voltmeter between Fuse 13 and ground.
2. While pressing the rear window defogger switch ON and OFF, check for voltage between Fuse 13 and ground.

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
Fuse	Terminal	ON	Battery voltage
13	-	OFF	0

##### Is the inspection result normal?

- YES >> GO TO 4  
NO >> GO TO 11

#### 4. CHECK REAR WINDOW DEFOGGER SWITCH INDICATOR CIRCUIT

# REAR WINDOW DEFOGGER SWITCH

## < COMPONENT DIAGNOSIS >

1. Press rear window defogger switch
2. Check for voltage between front air control connector and ground.

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
Front air control connector	Terminal	Ground	Battery voltage
M37 (without auto A/C)	4		
M152 (with auto A/C)	22	OFF	0

Is the inspection result normal?

- YES >> Replace front air control. Refer to [VTL-8, "Removal and Installation"](#).  
 NO >> Repair or replace harness.

## 5. CHECK FRONT AIR CONTROL FUNCTION

### CONSULT-III

1. Select BCM (REAR DEFOGGER) DATA MONITOR.
2. While pressing and releasing the rear window defogger switch, check that the switch state changes between ON/OFF.

**REAR DEF SW : ON**

**REAR DEF SW : OFF**

Is the inspection result normal?

- YES >> GO TO 8  
 NO >> GO TO 6

## 6. CHECK REAR WINDOW DEFOGGER ON SIGNAL CIRCUIT

1. Push ignition switch to ON.
2. Check voltage between BCM connector M18 terminal 38 and ground.

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
BCM connector	Terminal	Ground	Battery voltage
M18	38		
		ON	0
		OFF	Battery voltage

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).  
 NO >> GO TO 7

## 7. CHECK HARNESS CONTINUITY

1. Push ignition switch to OFF.
2. Disconnect BCM and Front Air Control.
3. Check continuity between BCM connector and front air control connector.

BCM connector	Terminal	Front air control connector	Terminal	Continuity
M18 (without auto A/C)	38	M152 (without auto A/C)	12	Yes
M18 (with auto A/C)	38	M37 (with auto A/C)	23	Yes

4. Check continuity between BCM harness connector M18 terminal 38 and ground.

BCM connector	Terminal	Ground	Terminal	Continuity
M18	38	-	-	Yes

Is the inspection result normal?

- YES >> Replace front air control. Refer to [VTL-8, "Removal and Installation"](#).  
 NO >> Repair or replace harness.

# REAR WINDOW DEFOGGER SWITCH

## < COMPONENT DIAGNOSIS >

### 8. CHECK BCM REAR WINDOW DEFOGGER RELAY CONTROL FUNCTION

#### CONSULT-III

1. Select BCM (REAR DEFOGGER) ACTIVE TEST.
2. Turn REAR DEFOGGER active test ON.
3. Check that an operation noise of rear window defogger relay [located in fuse block (J/B)] can be heard when REAR DEFOGGER active test is turned ON.

**REAR DEFOGGER : ON**

**REAR DEFOGGER : OFF**

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).

NO >> GO TO 9

### 9. CHECK REAR WINDOW DEFOGGER RELAY GROUND CIRCUIT

#### CONSULT-III

1. Push the ignition switch to ON.
2. Select BCM (REAR DEFOGGER) ACTIVE TEST.
3. Turn REAR DEFOGGER active test ON.
4. Check voltage between fuse block (J/B) connector M4 terminal 4Q and ground.

**REAR DEFOGGER : ON**

**REAR DEFOGGER : OFF**

Terminals		Condition of rear window defogger Active Test	Voltage (V) (Approx.)	
(+)				(-)
Fuse Block	Terminal			
M4	4Q	Ground	ON	0
			OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 12

NO >> GO TO 10

### 10. CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT

1. Push ignition switch to ON.
2. Check voltage between fuse block (J/B) connector M4 terminal 4Q and ground.

Terminals		Condition of Push switch	Voltage (V) (Approx.)	
(+)				(-)
Fuse block (J/B)	Terminal			
M4	4Q	Ground	ON	Battery Voltage
			OFF	0

Is the inspection result normal?

YES >> GO TO 11

NO >> Replace rear window defogger relay.

### 11. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and fuse block (J/B).
3. Check continuity between BCM connector M18 terminal 59 and fuse block (J/B) connector M4 terminal 4Q.

# REAR WINDOW DEFOGGER SWITCH

## < COMPONENT DIAGNOSIS >

BCM connector	Terminal	Fuse block (J/B) connector	Terminal	Continuity
M18	59	M4	4Q	Yes

4. Check continuity between fuse block (J/B) connector M4 terminal 4Q and ground.

Fuse block (J/B) connector	Terminal	Ground	Terminal	Continuity
M4	4Q	-	-	Yes

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).  
NO >> Repair or replace harness.

## 12. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-15, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 12  
NO >> Replace rear window defogger relay.

## 13. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-41, "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following.
  - Battery power supply circuit.
  - Fuse block (J/B).NO >> Repair or replace the malfunctioning parts.

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# REAR WINDOW DEFOGGER RELAY

< COMPONENT DIAGNOSIS >

## REAR WINDOW DEFOGGER RELAY

### Description

INFOID:000000005434670

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

### Component Function Check

INFOID:000000005434671

#### 1. CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

Check that an operation noise of rear window defogger relay [located in fuse block (J/B)] can be heard when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Rear window defogger relay power supply circuit is OK.
- NO >> Refer to [DEF-14, "Diagnosis Procedure"](#).

### Diagnosis Procedure

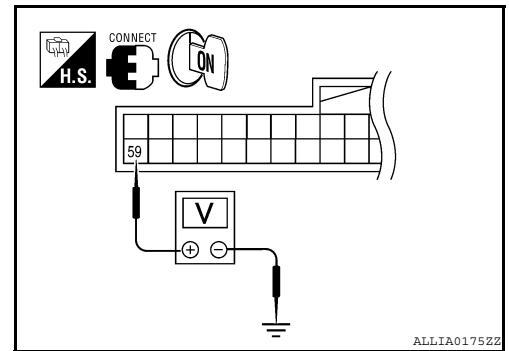
INFOID:000000005434672

Regarding Wiring Diagram information, refer to [DEF-45, "COUPE : Wiring Diagram"](#) or [DEF-51, "SEDAN : Wiring Diagram"](#).

#### 1. CHECK REAR WINDOW DEFOGGER RELAY GROUND CIRCUIT

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

Terminals		(-)	Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	BCM connector			
	Terminal			
M18	59	Ground	ON	0
			OFF	Battery voltage



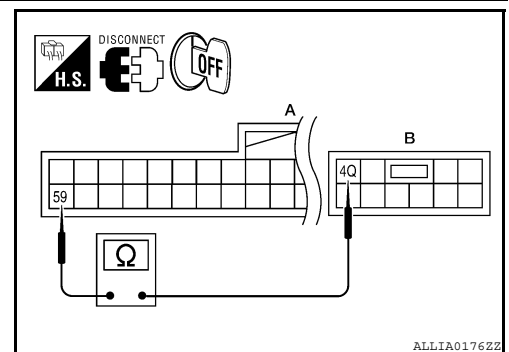
Is the inspection result normal?

- YES >> Rear window defogger power supply circuit is OK.
- NO >> GO TO 2

#### 2. CHECK HARNESS CONTINUITY

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

BCM connector	Terminal	Fuse block (J/B) connector	Terminal	Continuity
M18 (A)	59	M4 (B)	4Q	Yes



Is the inspection result normal?

- YES >> GO TO 3
- NO >> Repair or replace harness.

#### 3. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-15, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4
- NO >> Replace rear window defogger relay.

# REAR WINDOW DEFOGGER RELAY

## < COMPONENT DIAGNOSIS >

### 4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-41, "Intermittent Incident"](#)

Is the inspection result normal?

- YES >> Check the following.
- Battery power supply circuit.
  - Fuse block (J/B).
- NO >> Repair or replace the malfunctioning parts.

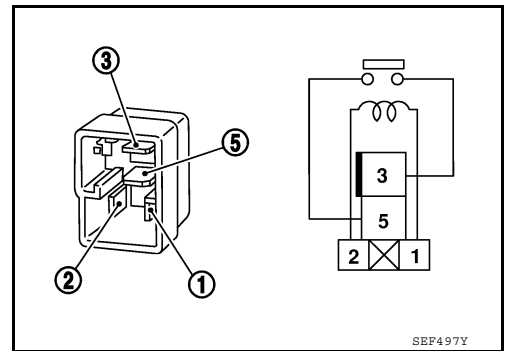
### Component Inspection

INFOID:000000005434673

### 1. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Terminal		Condition	Continuity
Rear window defogger relay			
3	5	12V direct current supply between terminals 1 and 2.	Yes
		No current supply	No



Is the inspection result normal?

- YES >> Inspection End.
- NO >> Replace rear window defogger relay.

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# REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

## REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

### Description

INFOID:000000005434674

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:000000005434675

### 1. CHECK REAR WINDOW DEFOGGER

Check that the heating wire of rear window defogger is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Rear window defogger is OK.
- NO >> Refer to [DEF-16, "Diagnosis Procedure"](#).

### Diagnosis Procedure

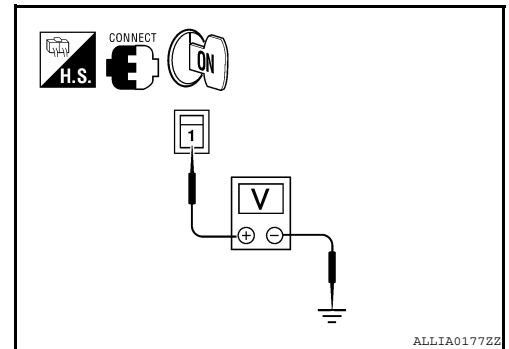
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Regarding Wiring Diagram information, refer to [DEF-45, "COUPE : Wiring Diagram"](#) or [DEF-51, "SEDAN : Wiring Diagram"](#).

### 1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between rear window defogger connector and ground.

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
Rear window defogger connector	Terminal		
B53	1	ON	Battery voltage
		OFF	0



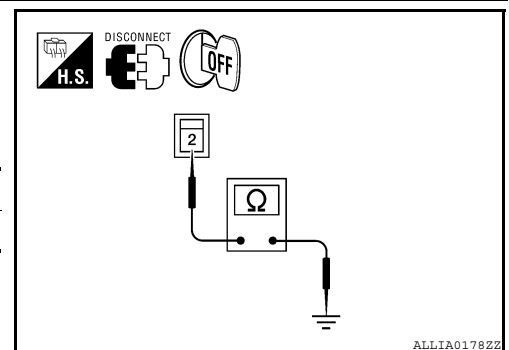
Is the inspection result normal?

- YES >> GO TO 2
- NO >> GO TO 3

### 2. CHECK GROUND CIRCUIT

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

Rear window defogger connector	Terminal	Ground	Continuity
B54	2		Yes



Is the inspection result normal?

- YES >> GO TO 5
- NO >> Repair or replace harness.

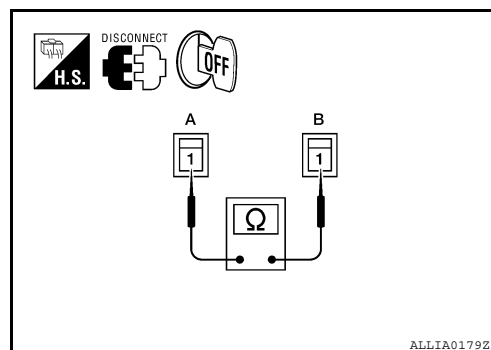
### 3. CHECK HARNESS CONTINUITY 1



# REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

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



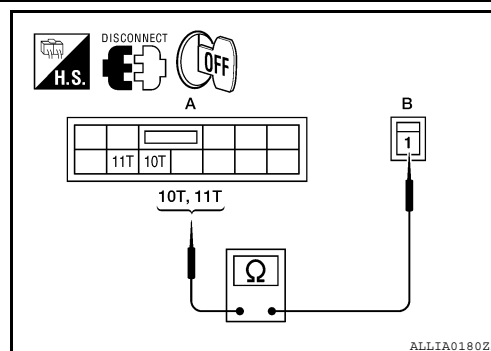
Condenser connector	Terminal	Rear window defogger connector	Terminal	Continuity
B52 (A)	1	B53 (B)	1	Yes

Is the inspection result normal?

- YES >> GO TO 4  
 NO >> Replace condenser. Refer to [DEF-66, "Removal and Installation - Coupe"](#) or [DEF-66, "Removal and Installation - Sedan"](#).

## 4. CHECK HARNESS CONTINUITY 2

1. Disconnect fuse block (J/B).
2. Check continuity between fuse block (J/B) connector (A) and condenser connector (B).



Fuse block (J/B) connector	Terminal	Condenser connector	Terminal	Continuity
B4 (A)	10T	B52 (B)	1	Yes
	11T			

Is the inspection result normal?

- YES >> GO TO 6  
 NO >> Replace or repair harness.

## 5. CHECK FILAMENT

Check filament.

Refer to [DEF-17, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Refer to [GI-41, "Intermittent Incident"](#).  
 NO >> Repair filament. Refer to [DEF-64, "Inspection and Repair"](#).

## 6. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-41, "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following.
- Battery power supply circuit.
  - Fuse block (J/B).
- NO >> Repair or replace the malfunctioning parts.

## Component Inspection

INFOID:000000005434677

### 1. CHECK FILAMENT

Check the filament for damage or open circuits.

Refer to [DEF-64, "Inspection and Repair"](#).

Is the inspection result normal?

- YES >> Inspection End.  
 NO >> Repair filament. Refer to [DEF-64, "Inspection and Repair"](#).

# DRIVER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

## DRIVER SIDE DOOR MIRROR DEFOGGER

### Description

INFOID:000000005434678

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:000000005434679

#### 1. CHECK DOOR MIRROR DEFOGGER LH

Check that heating wire of door mirror defogger LH is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

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

### Diagnosis Procedure

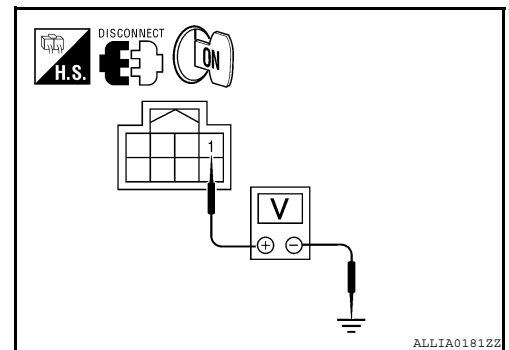
INFOID:000000005434680

Regarding Wiring Diagram information, refer to [DEF-45, "COUPE : Wiring Diagram"](#) or [DEF-51, "SEDAN : Wiring Diagram"](#).

#### 1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Turn ignition switch ON.
4. Check voltage between door mirror LH connector and ground.

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
Door mirror LH connector	Terminal		
D4	1	ON	Battery voltage
		OFF	0



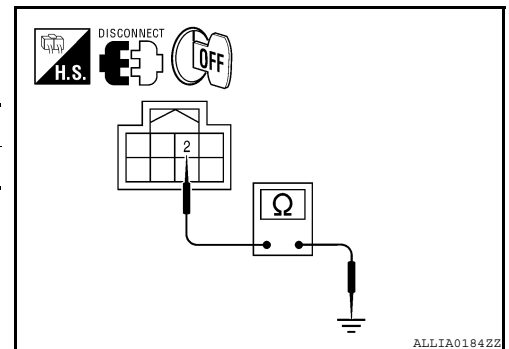
Is the inspection result normal?

- YES >> GO TO 2
- NO >> Repair or replace harness.

#### 2. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror LH connector and ground.

Door mirror LH connector	Terminal	Ground	Continuity
D4	2		Yes



Is the inspection result normal?

- YES >> GO TO 3
- NO >> Repair or replace harness.

#### 3. CHECK DOOR MIRROR DEFOGGER LH

Check door mirror defogger LH.  
Refer to [DEF-19, "Component Inspection"](#).

Is the inspection result normal?

# DRIVER SIDE DOOR MIRROR DEFOGGER

## < COMPONENT DIAGNOSIS >

- YES >> GO TO 4  
NO >> Replace door mirror. Refer to [MIR-19, "Removal and Installation"](#).

### 4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.  
Refer to [GI-41, "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following.
- Battery power supply circuit.
  - Fuse block (J/B).
- NO >> Repair or replace the malfunctioning parts.

### Component Inspection

INFOID:000000005434681

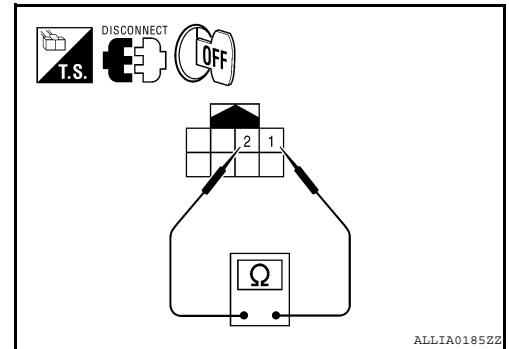
### 1. CHECK DOOR MIRROR DEFOGGER LH

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Check continuity between door mirror terminals.

Terminal		Continuity
1	2	Yes

Is the inspection result normal?

- YES >> Inspection End.  
NO >> Replace door mirror LH. Refer to [MIR-19, "Removal and Installation"](#).



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# PASSENGER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

## PASSENGER SIDE DOOR MIRROR DEFOGGER

### Description

INFOID:000000005434682

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:000000005434683

#### 1. CHECK DOOR MIRROR DEFOGGER RH

Check that the heating wire of door mirror defogger RH is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Door mirror defogger RH is OK.
- NO >> Refer to [DEF-20, "Diagnosis Procedure"](#).

### Diagnosis Procedure

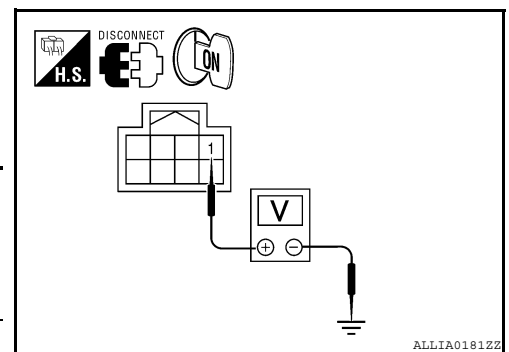
INFOID:000000005434684

Regarding Wiring Diagram information, refer to [DEF-45, "COUPE : Wiring Diagram"](#) or [DEF-51, "SEDAN : Wiring Diagram"](#).

#### 1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Turn ignition switch ON.
4. Check voltage between door mirror RH connector and ground.

Terminals		(-)	Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	Terminal			
Door mirror RH connector			ON	Battery voltage
D107	1	Ground	OFF	0



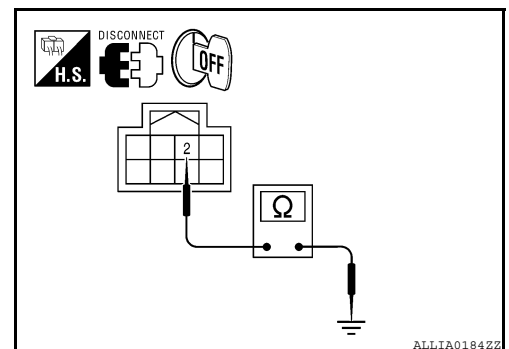
Is the inspection result normal?

- YES >> GO TO 2
- NO >> Repair or replace harness.

#### 2. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror RH connector and ground.

Door mirror RH connector	Terminal	Ground	Continuity
D107	2		



Is the inspection result normal?

- YES >> GO TO 3
- NO >> Repair or replace harness.

#### 3. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check door mirror defogger RH.  
Refer to [DEF-21, "Component Inspection"](#).

Is the inspection result normal?

# PASSENGER SIDE DOOR MIRROR DEFOGGER

## < COMPONENT DIAGNOSIS >

YES >> GO TO 4

NO >> Replace door mirror RH. Refer to [MIR-19, "Removal and Installation"](#).

## 4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-41, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Check the following.

- Battery power supply circuit.
- Fuse block (J/B).

NO >> Repair or replace the malfunctioning parts.

## Component Inspection

INFOID:000000005434685

## 1. CHECK DOOR MIRROR DEFOGGER RH

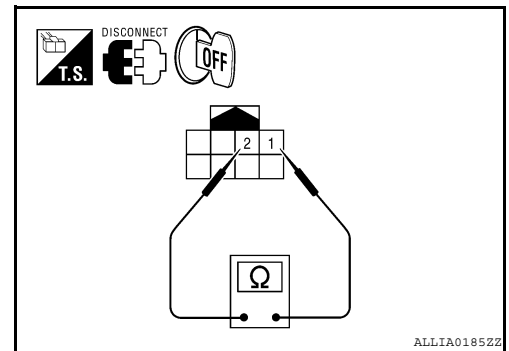
1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Check continuity between door mirror terminals.

Terminal		Continuity
1	2	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror RH. Refer to [MIR-19, "Removal and Installation"](#).



ALLIA0185Z2

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## BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

### ECU DIAGNOSIS

#### BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000005778779

#### VALUES ON THE DIAGNOSIS TOOL

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	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
	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
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
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 door RH closed	OFF
	Rear door RH opened	ON
DOOR SW-RL	Rear door LH closed	OFF
	Rear door LH opened	ON

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
CDL LOCK SW	Other than power door lock switch LOCK	OFF	A
	Power door lock switch LOCK	ON	
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF	B
	Power door lock switch UNLOCK	ON	
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF	C
	Driver door key cylinder LOCK position	ON	
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF	D
	Driver door key cylinder UNLOCK position	ON	
HAZARD SW	When hazard switch is not pressed	OFF	
	When hazard switch is pressed	ON	
REAR DEF SW	When rear window defogger switch is pressed	ON	E
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF	
	Trunk lid opener cancel switch ON	ON	
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF	F
	While the trunk lid opener switch is turned ON	ON	
TRNK/HAT MNTR	Trunk lid closed	OFF	G
	Trunk lid opened	ON	
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF	H
	When LOCK button of Intelligent Key is pressed	ON	
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF	I
	When UNLOCK button of Intelligent Key is pressed	ON	
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF	J
	When TRUNK OPEN button of Intelligent Key is pressed	ON	
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF	K
	When PANIC button of Intelligent Key is pressed	ON	
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF	
	When UNLOCK button of Intelligent Key is pressed and held	ON	
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF	DEF
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON	
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V	M
	When outside of the vehicle is dark	Close to 0 V	
REQ SW-DR	When driver door request switch is not pressed	OFF	N
	When driver door request switch is pressed	ON	
REQ SW-AS	When passenger door request switch is not pressed	OFF	O
	When passenger door request switch is pressed	ON	
REQ SW-BD/TR	When trunk request switch is not pressed	OFF	P
	When trunk request switch is pressed	ON	
PUSH SW	When engine switch (push switch) is not pressed	OFF	
	When engine switch (push switch) is pressed	ON	
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF	
	Ignition switch ON	ON	
ACC RLY-F/B	Ignition switch OFF	OFF	
	Ignition switch ACC or ON	ON	

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
CLUTCH SW	When the clutch pedal is not depressed	OFF
	When the clutch pedal is depressed	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
UNLK SEN-DR	Driver door UNLOCK status	OFF
	Driver door LOCK status	ON
PUSH SW-IPDM	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY1 F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
DETE SW -IPDM	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN -IPDM	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
SFT P-MET	When selector lever is in any position other than P	OFF
	When selector lever is in P position	ON
SFT N-MET	When selector lever is in any position other than N	OFF
	When selector lever is in N position	ON
ENGINE STATE	Engine stopped	STOP
	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
DOOR STAT-AS	Passenger door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
	Ignition switch OFF	SET
PRMT ENG STAT	When the engine start is prohibited	RESET
	When the engine start is permitted	SET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
CONFIRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE



## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

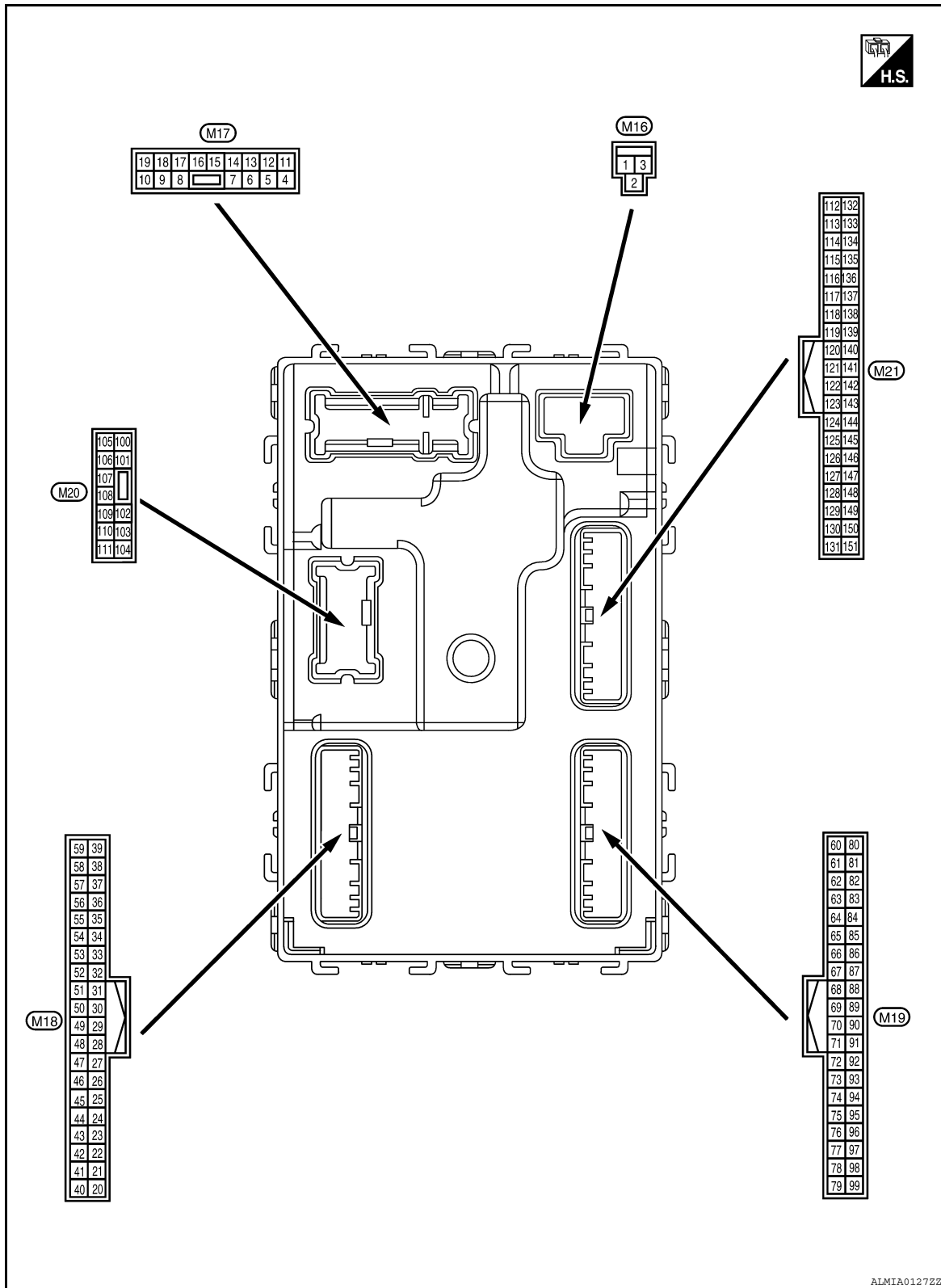
Monitor Item	Condition	Value/Status	
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET	A
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE	B
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET	C
	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE	
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET	D
	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE	
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET	E
	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE	F
TP 4	The ID of fourth key is not registered to BCM	YET	
	The ID of fourth key is registered to BCM	DONE	G
TP 3	The ID of third key is not registered to BCM	YET	
	The ID of third key is registered to BCM	DONE	H
TP 2	The ID of second key is not registered to BCM	YET	
	The ID of second key is registered to BCM	DONE	I
TP 1	The ID of first key is not registered to BCM	YET	
	The ID of first key is registered to BCM	DONE	J
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire	K
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire	
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire	
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire	
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE	DEF
	When ID of front LH tire transmitter is not registered	YET	
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE	M
	When ID of front RH tire transmitter is not registered	YET	
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE	N
	When ID of rear RH tire transmitter is not registered	YET	
ID REGST RL1	When ID of rear LH tire transmitter is registered	DONE	O
	When ID of rear LH tire transmitter is not registered	YET	
WARNING LAMP	Tire pressure indicator OFF	OFF	
	Tire pressure indicator ON	ON	
BUZZER	Tire pressure warning alarm is not sounding	OFF	P
	Tire pressure warning alarm is sounding	ON	

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## Terminal Layout

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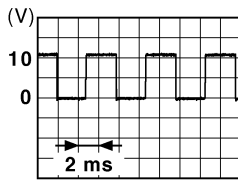


Physical Values

INFOID:000000005778781

# BCM (BODY CONTROL MODULE)

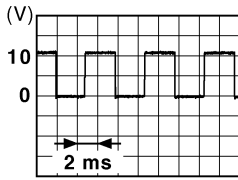
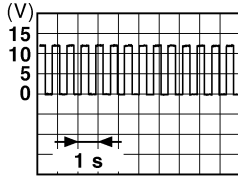
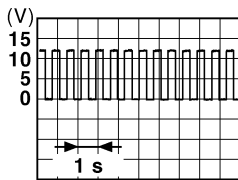
## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
(+)	(-)				
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFF	Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON	Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time	0V
				Any other time after passing the interior room lamp battery saver operation time	Battery voltage
5 (G/Y)	Ground	Front door RH UNLOCK	Output	Front door RH	UNLOCK (actuator is activated) Battery voltage
					Other than UNLOCK (actuator is not activated) 0V
7 (R/W)	Ground	Step lamp	Output	Step lamp	ON 0V
					OFF Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated) Battery voltage
					Other than LOCK (actuator is not activated) 0V
9 (G)	Ground	Front door LH UNLOCK	Output	Front door LH	UNLOCK (actuator is activated) Battery voltage
					Other than UNLOCK (actuator is not activated) 0V
10 <sup>1</sup> (G/Y)	Ground	Rear door RH and rear door LH UNLOCK	Output	Rear door RH and rear door LH	UNLOCK (actuator is activated) Battery voltage
					Other than UNLOCK (actuator is not activated) 0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON	0V
14 <sup>6</sup> (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF 0V
					ON <b>NOTE:</b> When the illumination brightening/dimming level is in the neutral position  0V

JSNIA0010GB

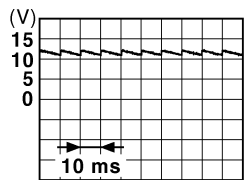
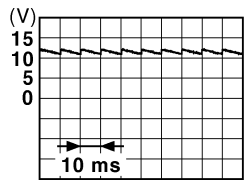
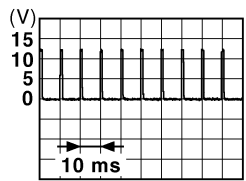
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
(+)	(-)	Signal name	Input/ Output			
14 <sup>1</sup> (O/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	0V
					ON	<b>NOTE:</b> When the illumination brightening/dimming level is in the neutral position  <small>JSNIA0010GB</small>
15 (Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0V
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch RH	 <small>PKID0926E</small>
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch LH	 <small>PKID0926E</small>
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehicle is bright	Close to 5V
					When outside of the vehicle is dark	Close to 0V
22 (R/Y)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (clutch pedal is not depressed)	0V
					ON (clutch pedal is depressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input	—	Battery voltage	
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
					ON (brake pedal is depressed)	Battery voltage

# BCM (BODY CONTROL MODULE)

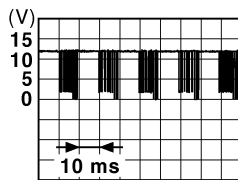
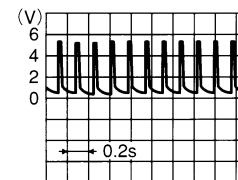
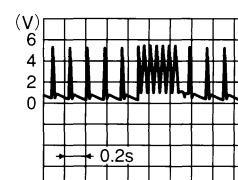
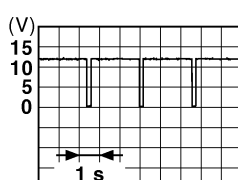
## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8V</p>
					UNLOCK status	0V
29 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot	Battery voltage	
				When Intelligent Key is not inserted into key slot	0V	
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0
				ACC or ON	Battery voltage	
31 (G)	Ground	Rear window defogger feedback signal	Input	Rear window defogger switch	OFF	0V
				ON	Battery voltage	
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p>
					ON (when front door RH opens)	0V
33 (SB)	Ground	Compressor ON signal	Input	A/C switch	OFF	9.0 - 12.0V
				ON	0V	
34 <sup>2</sup> (L/R)	Ground	Front door lock assembly LH (key cylinder switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
				ON (unlock)	0V	
36 <sup>2</sup> (GR)	Ground	Lock switch signal	Input	Door lock/unlock switch	Lock	Battery voltage
				Unlock	0V	
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 <p style="text-align: right; font-size: small;">JPMIA0012GB</p> <p style="text-align: center;">1.1V</p>
					ON	0V
38 (GR/W)	Ground	Rear window defogger ON signal	Input	Rear window defogger switch	OFF	5V
				ON	0V	
39 <sup>2</sup> (GR/R)	Ground	Unlock switch signal	Input	Door lock/unlock switch	Unlock	Battery voltage
				Lock	0V	

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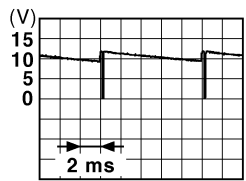
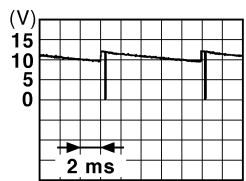
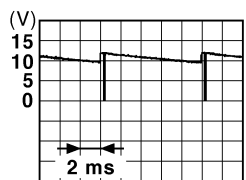
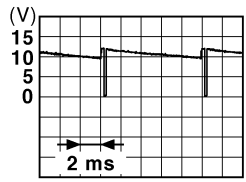
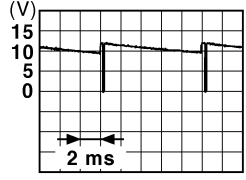
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
40 <sup>3</sup> (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		 <small>JPMIA0013GB</small> 10.2V
				Ignition switch OFF or ACC		0V
41 (W)	Ground	Engine switch (push switch) illumination	Output	Engine switch (push switch) illumination	ON	5.5V
					OFF	0V
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0V
					OFF	Battery voltage
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF	0V
					ACC or ON	5.0V
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	 <small>OCC3881D</small>
					When receiving the signal from the transmitter	 <small>OCC3880D</small>
48 (R/G)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position	12.0V
					Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	0V
					Blinking	 <small>JPMIA0014GB</small> 11.3V
					OFF	Battery voltage

# BCM (BODY CONTROL MODULE)

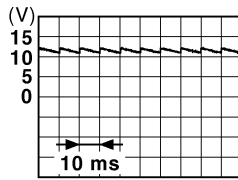
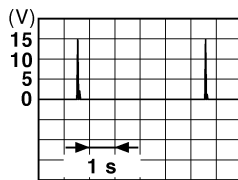
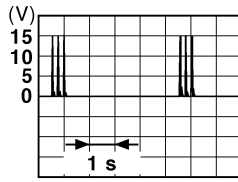
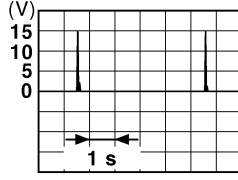
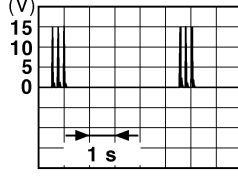
## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	0V
				All switch OFF	
				Lighting switch 1ST	
				Lighting switch high-beam	
				Turn signal switch RH	10.7V
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	0V
				All switch OFF (Wiper intermittent dial 4)	
				Front wiper switch HI (Wiper intermittent dial 4)	
				Any of the conditions below with all switch OFF <ul style="list-style-type: none"> <li>• Wiper intermittent dial 1</li> <li>• Wiper intermittent dial 2</li> <li>• Wiper intermittent dial 3</li> <li>• Wiper intermittent dial 6</li> <li>• Wiper intermittent dial 7</li> </ul>	
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	0V
				All switch OFF (Wiper intermittent dial 4)	
				Front washer switch ON (Wiper intermittent dial 4)	
				Any of the conditions below with all switch OFF <ul style="list-style-type: none"> <li>• Wiper intermittent dial 1</li> <li>• Wiper intermittent dial 5</li> <li>• Wiper intermittent dial 6</li> </ul>	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	0V
				All switch OFF	
				Front wiper switch INT	
Front wiper switch LO					
				Lighting switch AUTO	10.7V
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	0V
				All switch OFF	
				Front fog lamp switch ON	
				Lighting switch 2ND	
Lighting switch flash-to-pass					
				Turn signal switch LH	10.7V
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower motor switch	Battery voltage
				ON	0V
				OFF	0V

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
(+)	(-)					
56 <sup>2</sup> (L/B)	Ground	Front door lock assembly LH (key cylinder switch) (lock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (lock)	0V
57 (W)	Ground	Tire pressure warning check switch	Input	—	—	5V
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	 <p style="text-align: right; margin-right: 50px;">JPMIA0011GB</p> <p style="text-align: center;">11.8V</p>
					ON (front door LH OPEN)	0V
59 (G/R)	Ground	Rear window defogger relay	Output	Rear window defogger	Active	Battery voltage
					Not activated	0V
60 (B/R)	Ground	Front console antenna 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 <p style="text-align: right; margin-right: 50px;">JMKIA0062GB</p>
					When Intelligent Key is not in the passenger compartment	 <p style="text-align: right; margin-right: 50px;">JMKIA0063GB</p>
61 (W/R)	Ground	Center console antenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 <p style="text-align: right; margin-right: 50px;">JMKIA0062GB</p>
					When Intelligent Key is not in the passenger compartment	 <p style="text-align: right; margin-right: 50px;">JMKIA0063GB</p>



# BCM (BODY CONTROL MODULE)

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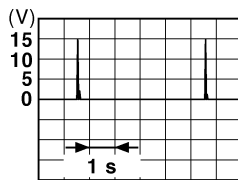
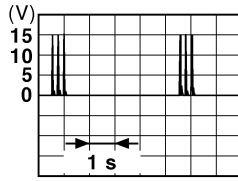
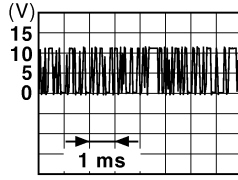
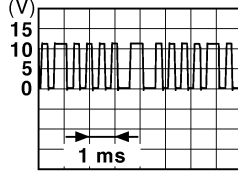
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
(+)	(-)				
62 <sup>4</sup> (B/Y)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operat- ed with ignition switch OFF	
				When Intelligent Key is not in the antenna detection area	
63 <sup>4</sup> (LG)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operat- ed with ignition switch OFF	
				When Intelligent Key is not in the antenna detection area	
64 <sup>4</sup> (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operat- ed with ignition switch OFF	
				When Intelligent Key is not in the antenna detection area	

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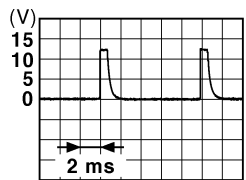

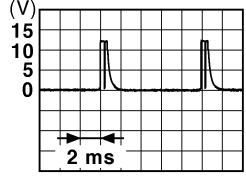
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
(+)	(-)	Signal name	Input/ Output			
65 <sup>4</sup> (P)	Ground	Front outside handle LH antenna (+)	Output	When the front door LH request switch is operat- ed with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>	
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 con- trol	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting	 <p style="text-align: right; font-size: small;">JMKIA0064GB</p>	
				When operating either button on Intelligent Key	 <p style="text-align: right; font-size: small;">JMKIA0065GB</p>	

# BCM (BODY CONTROL MODULE)

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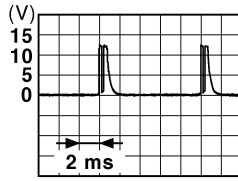
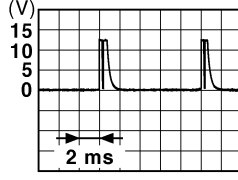
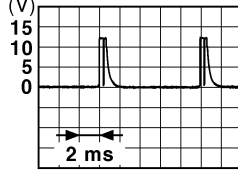
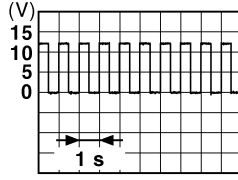
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4) <div style="text-align: right;">  <p>1.4V</p> </div>
					Front fog lamp switch ON (Wiper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

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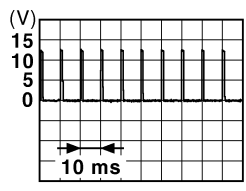
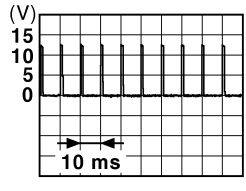
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)  1.4V
					Lighting switch high-beam (Wiper intermittent dial 4)  1.3V
					Lighting switch 2ND (Wiper intermittent dial 4)  1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3  1.3V
78 (P)	Ground	CAN-L	Input/ Output	—	—
79 (L)	Ground	CAN-H	Input/ Output	—	—
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	OFF 0V
					Blinking  6.5V
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	ON Battery voltage
					OFF or ACC 0V
				ON	Battery voltage

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
83 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0V
					ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT shift selector	Output	—		Battery voltage
87 (G/B)	Ground	Selector lever P position switch	Input	Selector lever	P position	0V
					Any position other than P	Battery voltage
88 <sup>4</sup> (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	ON (pressed)	0V
					OFF (not pressed)	 <p style="text-align: center;">1.0V</p>
89 <sup>4</sup> (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	ON (pressed)	0V
					OFF (not pressed)	 <p style="text-align: center;">1.0V</p>
90 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage


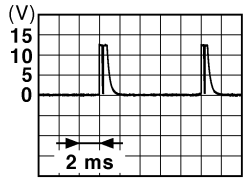
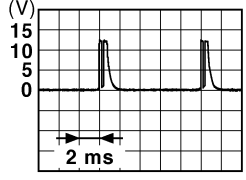

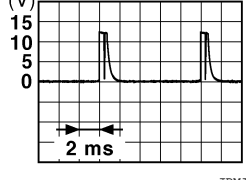
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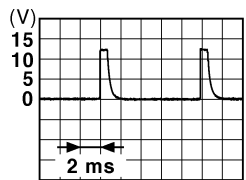
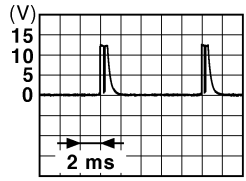
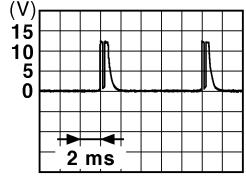
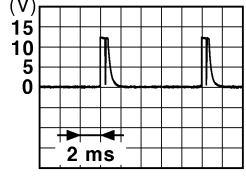
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
(+)	(-)	Signal name	Input/ Output			
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p style="text-align: right; margin-right: 20px;">JPMIA0041GB</p> <p style="text-align: center;">1.4V</p>
					Turn signal switch LH	 <p style="text-align: right; margin-right: 20px;">JPMIA0037GB</p> <p style="text-align: center;">1.3V</p>
					Turn signal switch RH	 <p style="text-align: right; margin-right: 20px;">JPMIA0036GB</p> <p style="text-align: center;">1.3V</p>
					Front wiper switch LO	 <p style="text-align: right; margin-right: 20px;">JPMIA0038GB</p> <p style="text-align: center;">1.3V</p>
					Front washer switch ON	 <p style="text-align: right; margin-right: 20px;">JPMIA0039GB</p> <p style="text-align: center;">1.3V</p>

# BCM (BODY CONTROL MODULE)

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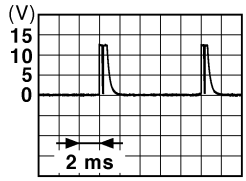
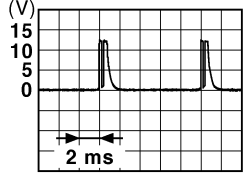

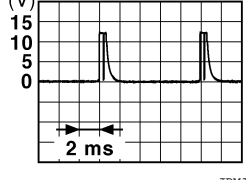
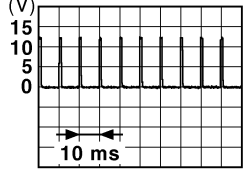
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
96 (P/B)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)  <p style="text-align: right; font-size: small;">JPMIA0041GB</p> 1.4V
					Lighting switch AUTO (Wiper intermittent dial 4)  <p style="text-align: right; font-size: small;">JPMIA0038GB</p> 1.3V
					Lighting switch 1ST (Wiper intermittent dial 4)  <p style="text-align: right; font-size: small;">JPMIA0036GB</p> 1.3V
					Any of the conditions below with all switch OFF <ul style="list-style-type: none"> <li>• Wiper intermittent dial 1</li> <li>• Wiper intermittent dial 5</li> <li>• Wiper intermittent dial 6</li> </ul>  <p style="text-align: right; font-size: small;">JPMIA0039GB</p> 1.3V

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# BCM (BODY CONTROL MODULE)

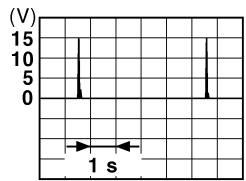
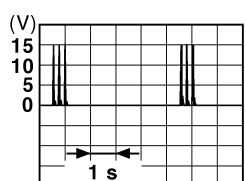
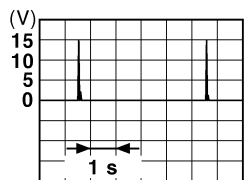
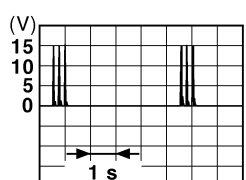
## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
(+)	(-)	Signal name	Input/ Output			
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p style="text-align: right;">1.4V</p>
					Lighting switch flash-to-pass	 <p style="text-align: right;">1.3V</p>
					Lighting switch 2ND	 <p style="text-align: right;">1.3V</p>
					Front wiper switch INT	 <p style="text-align: right;">1.3V</p>
					Front wiper switch HI	 <p style="text-align: right;">1.3V</p>
					Pressed	0 V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	 <p style="text-align: right;">1.1V</p>



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
103 (V)	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated) Battery voltage
				Close (trunk lid opener actuator is not activated) 0V	
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON 0V
				OFF Battery voltage	
114 (B)	Ground	Rear parcel shelf antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment  JMKIA0062GB
				When Intelligent Key is not in the passenger compartment  JMKIA0063GB	
115 (W)	Ground	Rear parcel shelf antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment  JMKIA0062GB
				When Intelligent Key is not in the passenger compartment  JMKIA0063GB	

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DEF

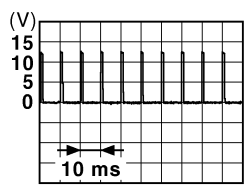
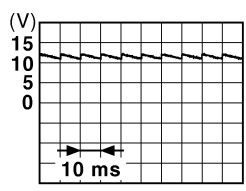
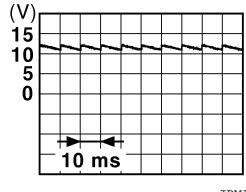
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
118 <sup>4</sup> (L/O)	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
119 <sup>4</sup> (BR/W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
127 (BR/W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC
				ON	Battery voltage
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)
				ON (trunk is open)	0V
					<p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8V</p>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
132 (R)	Ground	Starter motor relay control	Output	Ignition switch OFF (M/T vehicle)	When the clutch pedal is depressed	Battery voltage
					When the clutch pedal is not depressed	0V
				Ignition switch ON (other than M/T vehicle)	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V
140 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	ON (pressed)	0V
					OFF (not pressed)	 <p style="text-align: center;">1.0V</p>
144 <sup>4</sup> (GR)	Ground	Intelligent Key warning buzzer	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
144 <sup>5</sup> (GR)	Ground	Outside warning buzzer	Output	Outside warning buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	Battery voltage
148 <sup>1</sup> (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	 <p style="text-align: center;">11.8V</p>
					ON (when rear door RH opens)	0V
149 <sup>1</sup> (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	 <p style="text-align: center;">11.8V</p>
					ON (when rear door LH opens)	0V

1: Sedan

2: With LH front window anti-pinch

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

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3: With LH and RH front window anti-pinch

4: With Intelligent Key

5: Without Intelligent Key

6: Coupe

# REAR WINDOW DEFOGGER

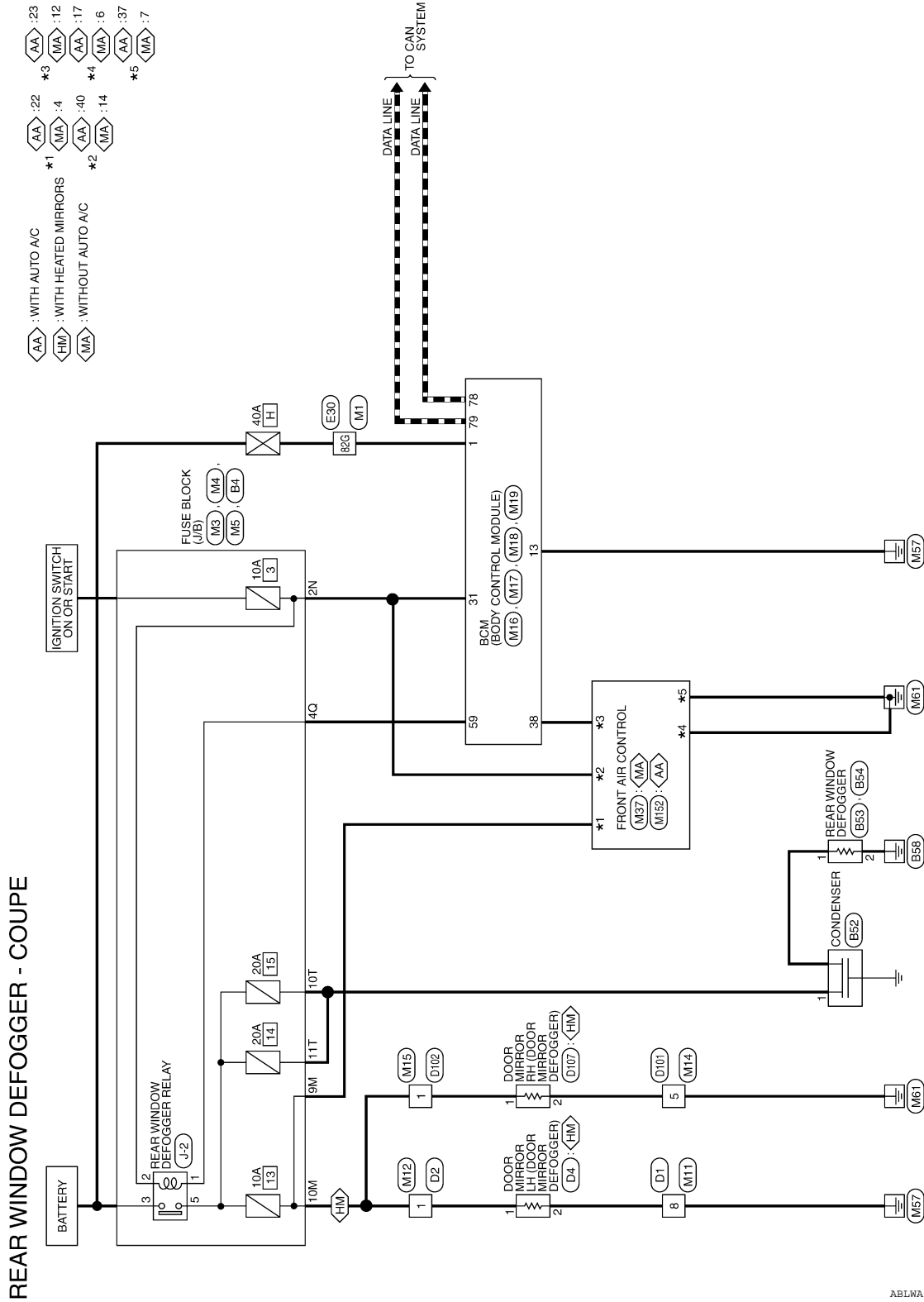
< WIRING DIAGRAM >

## WIRING DIAGRAM

### REAR WINDOW DEFOGGER COUPE

#### COUPE : Wiring Diagram

INFOID:000000005434689



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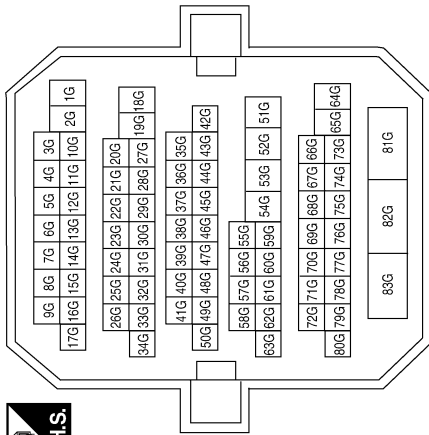
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# REAR WINDOW DEFOGGER

< WIRING DIAGRAM >

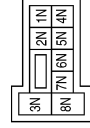
## REAR WINDOW DEFOGGER CONNECTORS - COUPE

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



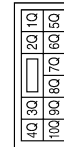
Terminal No.	Color of Wire	Signal Name
82G	W/B	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



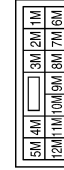
Terminal No.	Color of Wire	Signal Name
2N	G	-

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



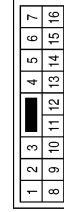
Terminal No.	Color of Wire	Signal Name
4Q	G/R	-

Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
9M	GR	-
10M	L/Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

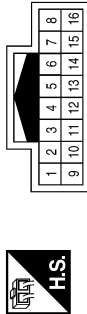


Terminal No.	Color of Wire	Signal Name
8	B	-

# REAR WINDOW DEFOGGER

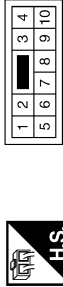
< WIRING DIAGRAM >

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE



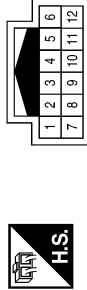
Terminal No.	1	Color of Wire	L/Y	Signal Name	-
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Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Color	WHITE



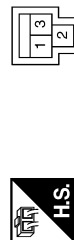
Terminal No.	5	Color of Wire	B	Signal Name	-
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Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	1	Color of Wire	L/Y	Signal Name	-
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Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



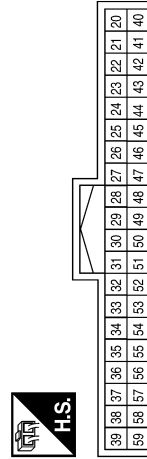
Terminal No.	1	Color of Wire	W/B	Signal Name	BAT_POWER_F/L
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Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	13	Color of Wire	B	Signal Name	GND1
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Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



Terminal No.	31	Color of Wire	G	Signal Name	IGN_F/B
	38		GR/W		REAR_DEFOGGER_SW
	59		G/R		REAR_DEFOGGER_RLY

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# REAR WINDOW DEFOGGER

< WIRING DIAGRAM >

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
89	88	87	86	85	84	83	82	81	80										

Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H

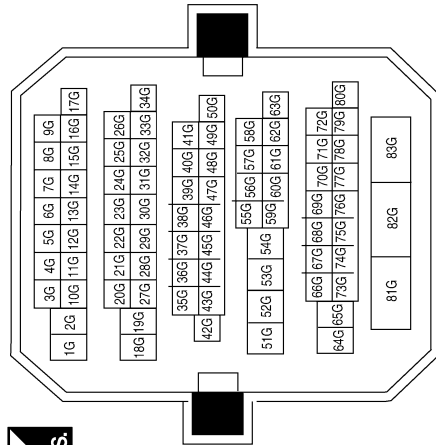
Connector No.	M37
Connector Name	FRONT AIR CONTROL (WITHOUT AUTO A/C)
Connector Color	WHITE



1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
4	GR	RR DEF F/B
6	B	GND
7	B	GND(POWER)
12	GR/W	RR DEF ON
14	G	IGN

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M152
Connector Name	FRONT AIR CONTROL (WITH AUTO A/C)
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
17	B	GND
22	GR	RR DEF F/B
23	GR/W	RR DEF ON
37	B	GND(POWER)
40	G	IGN

Connector No.	B4
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



5T	4T	3T	2T	1T		
12T	11T	10T	9T	8T	7T	6T

Terminal No.	Color of Wire	Signal Name
10T	Y	-
11T	Y	-



# REAR WINDOW DEFOGGER

< WIRING DIAGRAM >

Connector No.	B52
Connector Name	CONDENSER
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	-

Connector No.	B53
Connector Name	REAR WINDOW DEFOGGER
Connector Color	BLACK



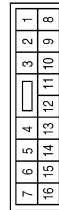
Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	B54
Connector Name	REAR WINDOW DEFOGGER
Connector Color	BLACK



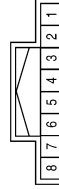
Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8	B	-

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	G	-

Connector No.	D4
Connector Name	DOOR MIRROR LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	G	HEATER(+)
2	B	HEATER_GND

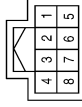
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# REAR WINDOW DEFOGGER

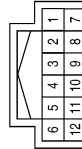
## < WIRING DIAGRAM >

Connector No.	D107
Connector Name	DOOR MIRROR RH
Connector Color	WHITE



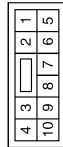
Terminal No.	Color of Wire	Signal Name
1	O	HEATER(+)
2	B	HEATER_GND

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE



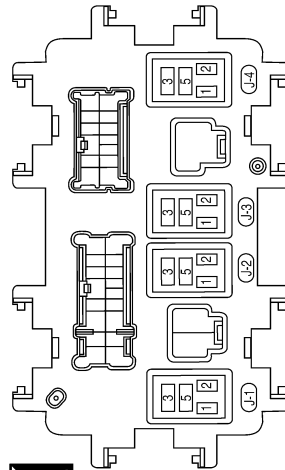
Terminal No.	Color of Wire	Signal Name
1	O	-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	B	-

Connector No.	J-2
Connector Name	FUSE BLOCK (J/B) (REAR WINDOW DEFOGGER RELAY)
Connector Color	-



SEDAN

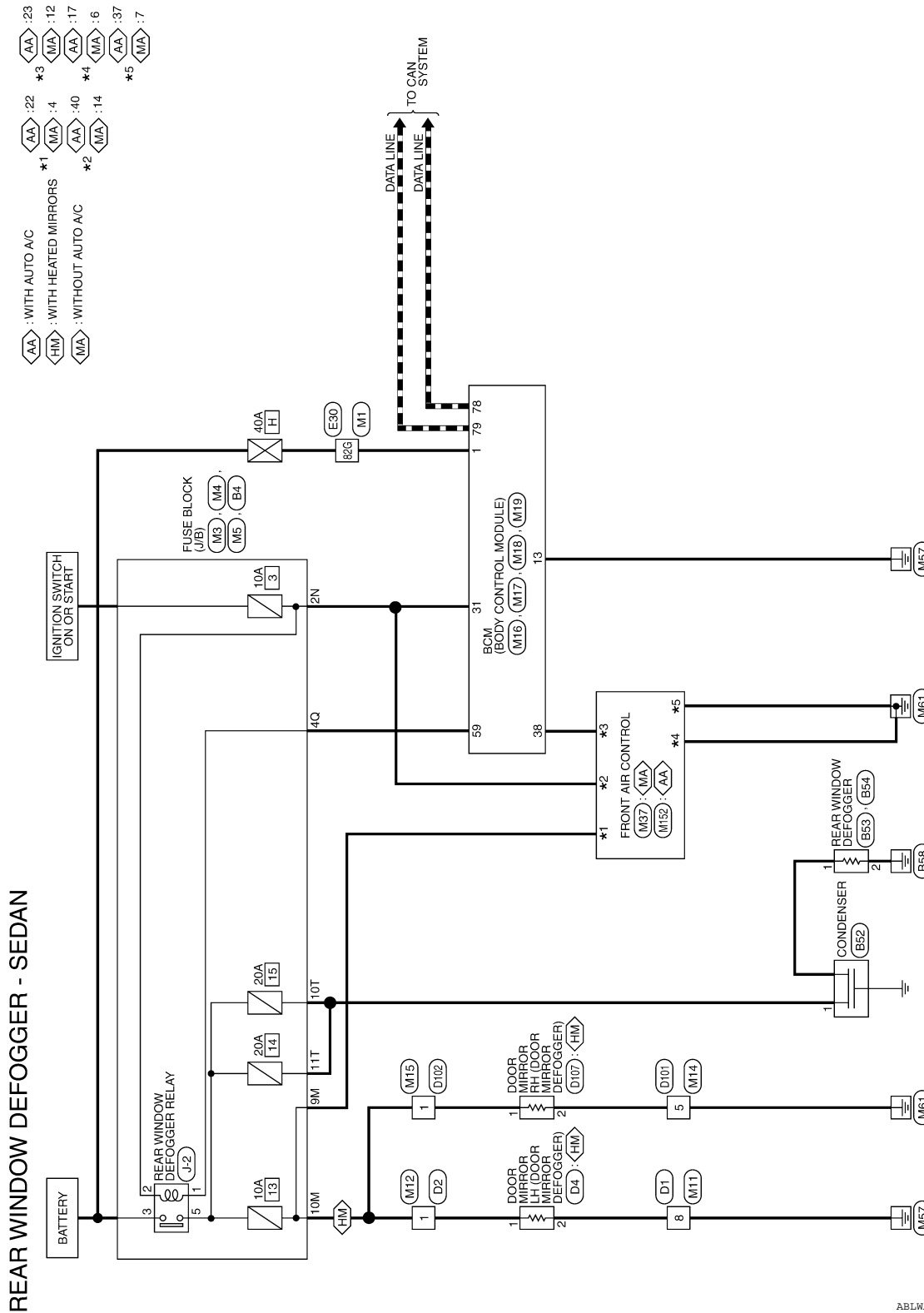
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# REAR WINDOW DEFOGGER

< WIRING DIAGRAM >

## SEDAN : Wiring Diagram

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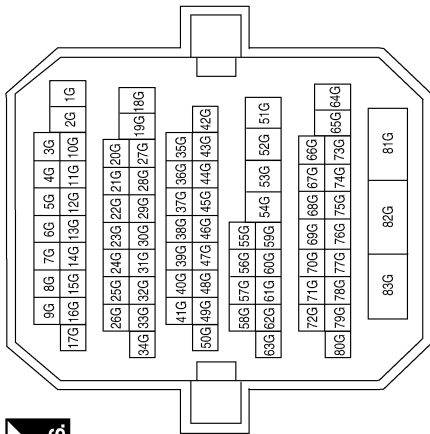
DEF

# REAR WINDOW DEFOGGER

< WIRING DIAGRAM >

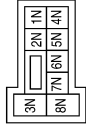
## REAR WINDOW DEFOGGER CONNECTORS - SEDAN

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



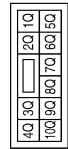
Terminal No.	Color of Wire	Signal Name
82G	W/B	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



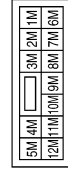
Terminal No.	Color of Wire	Signal Name
2N	G	-

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



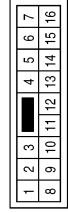
Terminal No.	Color of Wire	Signal Name
4Q	G/R	-

Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
9M	GR	-
10M	L/Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

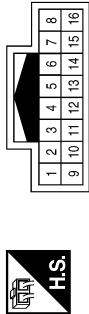


Terminal No.	Color of Wire	Signal Name
8	B	-

# REAR WINDOW DEFOGGER

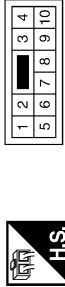
< WIRING DIAGRAM >

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE



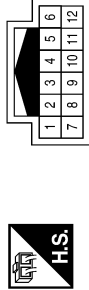
Terminal No.	1	Color of Wire	L/Y	Signal Name	-
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Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	5	Color of Wire	B	Signal Name	-
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Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	1	Color of Wire	L/Y	Signal Name	-
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Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



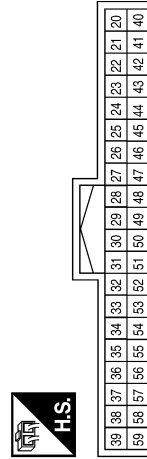
Terminal No.	1	Color of Wire	W/B	Signal Name	BAT_POWER_F/L
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Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	13	Color of Wire	B	Signal Name	GND1
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Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



Terminal No.	31	Color of Wire	G	Signal Name	IGN_F/B
	38		GR/W		REAR_DEFOGGER_SW
	59		G/R		REAR_DEFOGGER_R LY

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# REAR WINDOW DEFOGGER

< WIRING DIAGRAM >

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
89	88	87	86	85	84	83	82	81	80										

Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H

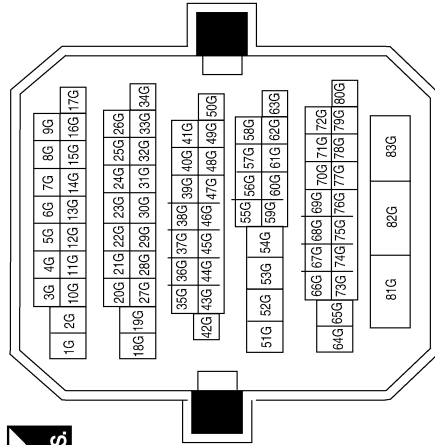
Connector No.	M37
Connector Name	FRONT AIR CONTROL (WITHOUT AUTO A/C)
Connector Color	WHITE



9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
4	GR	RR DEF F/B
6	B	GND
7	B	GND(POWER)
12	GR/W	RR DEF ON
14	G	IGN

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M152
Connector Name	FRONT AIR CONTROL (WITH AUTO A/C)
Connector Color	WHITE



21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Terminal No.	Color of Wire	Signal Name
17	B	GND
22	GR	RR DEF F/B
23	GR/W	RR DEF ON
37	B	GND(POWER)
40	G	IGN

Connector No.	B4
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



5T	4T	3T	2T	1T		
12T	11T	10T	9T	8T	7T	6T

Terminal No.	Color of Wire	Signal Name
10T	Y	-
11T	Y	-

# REAR WINDOW DEFOGGER

< WIRING DIAGRAM >

Connector No.	B54
Connector Name	REAR WINDOW DEFOGGER
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
2	B	-

Connector No.	B53
Connector Name	REAR WINDOW DEFOGGER
Connector Color	BLACK



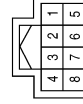
Terminal No.	Color of Wire	Signal Name
1	B	-

Connector No.	B52
Connector Name	CONDENSER
Connector Color	WHITE



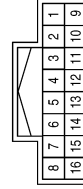
Terminal No.	Color of Wire	Signal Name
1	Y	-

Connector No.	D4
Connector Name	DOOR MIRROR LH
Connector Color	WHITE



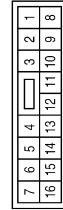
Terminal No.	Color of Wire	Signal Name
1	G	HEATER(+)
2	B	HEATER_GND

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	G	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8	B	-

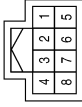
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# REAR WINDOW DEFOGGER

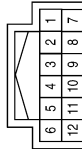
## < WIRING DIAGRAM >

Connector No.	D107
Connector Name	DOOR MIRROR RH
Connector Color	WHITE



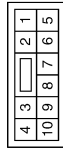
Terminal No.	Color of Wire	Signal Name
1	O	HEATER(+)
2	B	HEATER_GND

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE



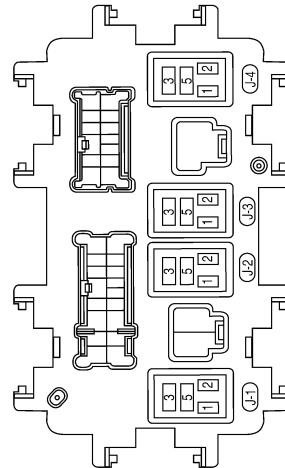
Terminal No.	Color of Wire	Signal Name
1	O	-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	B	-

Connector No.	J-2
Connector Name	FUSE BLOCK (J/B) (REAR WINDOW DEFOGGER RELAY)
Connector Color	-



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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:000000005434691

#### 1. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.

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

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

#### 2. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-14, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-41, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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# REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH OF DOOR MIRROR DEFOGGER OPERATE.

< SYMPTOM DIAGNOSIS >

---

REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH OF DOOR MIRROR DEFOGGER OPERATE.

## Diagnosis Procedure

INFOID:000000005434692

### 1. CHECK REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

---

Check rear window defogger power supply and ground circuit.

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

Is the inspection result normal?

YES >> Refer to [GI-41, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

# BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

## BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES

### Diagnosis Procedure

INFOID:000000005434693

#### 1. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-41, "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following.
- Battery power supply circuit.
  - Fuse block (J/B).
- NO >> Repair or replace the malfunctioning parts.

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## DRIVER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

< SYMPTOM DIAGNOSIS >

---

## DRIVER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

### Diagnosis Procedure

INFOID:000000005434694

#### 1. CHECK DOOR MIRROR DEFOGGER LH

---

Check door mirror defogger LH.

Refer to [DEF-18, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-41, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

# PASSENGER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

< SYMPTOM DIAGNOSIS >

## PASSENGER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

### Diagnosis Procedure

INFOID:000000005434695

#### 1. CHECK DOOR MIRROR DEFOGGER RH

Check door mirror defogger RH.

Refer to [DEF-20, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-41, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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# REAR WINDOW DEFOGGER SWITCH DOES NOT LIGHT, BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

---

## REAR WINDOW DEFOGGER SWITCH DOES NOT LIGHT, BUT REAR WINDOW DEFOGGER OPERATES

### Diagnosis Procedure

INFOID:000000005434696

#### 1. CHECK FRONT AIR CONTROL (REAR WINDOW DEFOGGER SWITCH)

---

Check that the front air control (rear window defogger switch) is operating normally.

Is the inspection result normal?

- YES >> Refer to [GI-41, "Intermittent Incident"](#).
- NO >> Refer to [DEF-10, "Diagnosis Procedure"](#).

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

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

INFOID:000000005778782

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 SR and SB section of this Service Manual.

#### **WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

#### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

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# FILAMENT

< ON-VEHICLE REPAIR >

## ON-VEHICLE REPAIR

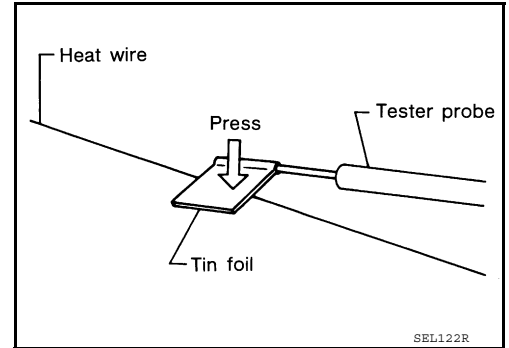
### FILAMENT

#### Inspection and Repair

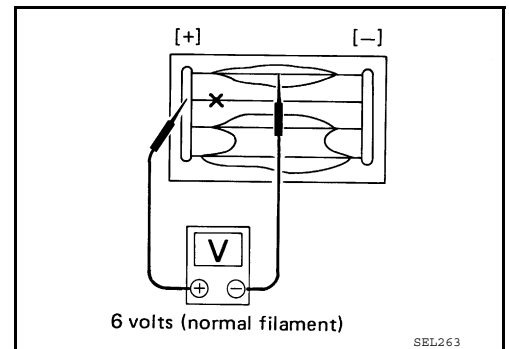
INFOID:000000005434699

#### INSPECTION

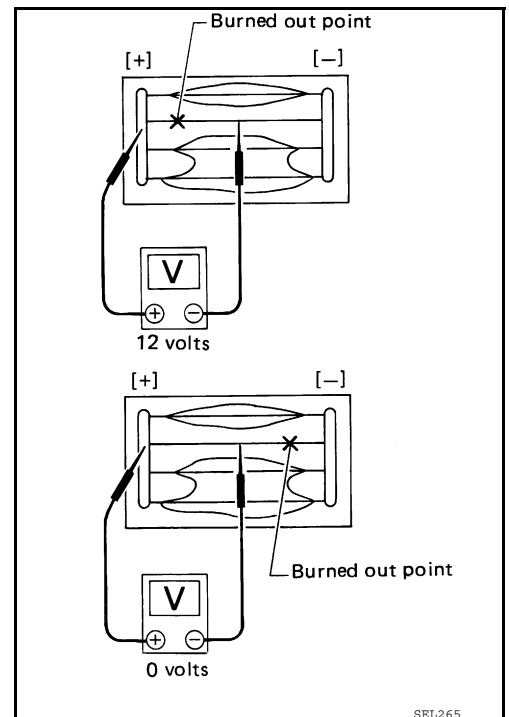
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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



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



#### REPAIR

##### REPAIR EQUIPMENT

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



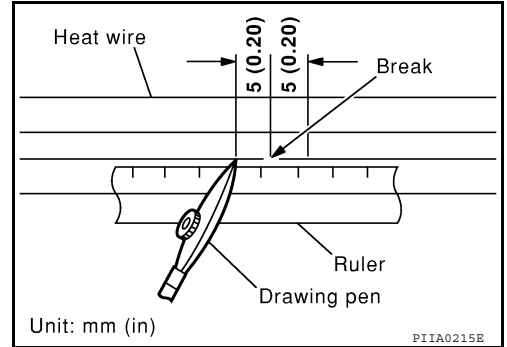
# FILAMENT

## < ON-VEHICLE REPAIR >

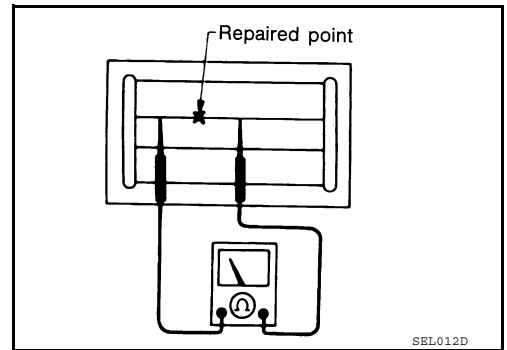
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

### REPAIRING PROCEDURE

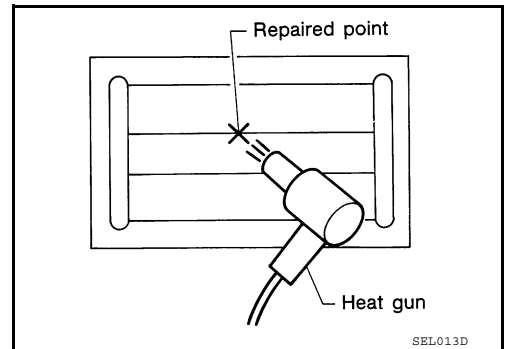
1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen. Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on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



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



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



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# CONDENSER

< ON-VEHICLE REPAIR >

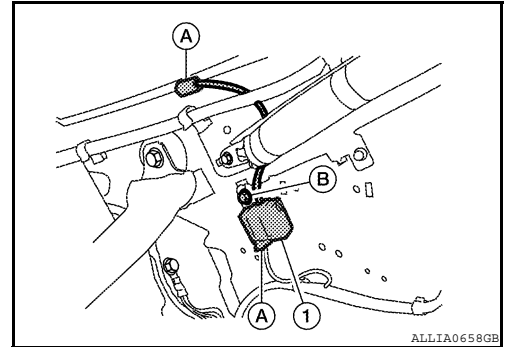
## CONDENSER

### Removal and Installation - Coupe

INFOID:000000005434700

#### REMOVAL

1. Remove the rear seat cushion and the rear seatback.  
Refer to [SE-29, "Removal and Installation"](#).
2. Remove the rear kicking plate, rear lower finisher, upper pillar finisher and rear pillar finisher.  
Refer to [INT-14, "Removal and Installation"](#).
3. Disconnect the connectors (A), remove bolt (B), and then remove condenser (1) from the vehicle body.



#### INSTALLATION

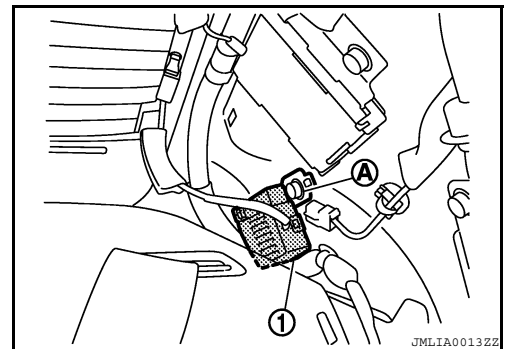
Installation is in the reverse order of removal.

### Removal and Installation - Sedan

INFOID:000000005434701

#### REMOVAL

1. Remove the rear pillar finisher.  
Refer to [INT-37, "Removal and Installation"](#).
2. Disconnect the electrical connector, remove bolt (A), and then remove condenser (1) from the vehicle body.



#### INSTALLATION

Installation is in the reverse order of removal.