

# SECTION **PWC**

## POWER WINDOW CONTROL SYSTEM

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# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000012172908

DETAILED FLOW

#### 1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

#### 2.REPRODUCE THE MALFUNCTION INFORMATION

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Check the malfunction on the vehicle that the customer describes.  
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

#### 3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

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Use "Symptom diagnosis" from the symptom inspection result in step 2. Then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 4.

#### 4.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

---

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

>> GO TO 5.

#### 5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

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Repair or replace the specified malfunctioning parts.

>> GO TO 6.

#### 6.FINAL CHECK

---

Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 2.

Is the malfunctioning part repaired or replaced?

YES >> Trouble diagnosis is completed.

NO >> GO TO 3.

# INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

## INSPECTION AND ADJUSTMENT

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000012172909

When battery negative terminal is disconnected, initialization is necessary.

If any of the following operations are performed, initialization is necessary as well as when battery negative terminal is disconnected.

[PWC-5. "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

- Power supply to the power window control unit is cut off by the removal of battery terminal or the battery fuse is blown.
- Disconnection and connection of power window control unit harness connector.
- Removal and installation of motor from regulator assembly.
- Operation of regulator assembly as an independent unit.
- Removal and installation of rear power window control unit.
- Removal and installation of door glass.
- Removal and installation of door glass run.

The operations as per the following cannot be performed while initialization is not complete.

- AUTO-UP operation
- Anti-pinch function
- Door key cylinder power window function

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:000000012172910

#### INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or power window control unit connector. Reconnect it after a minute or more.
2. Turn ignition switch ON.
3. Operate power window switch to fully open door glass. (This operation is unnecessary if door glass is already fully open.)
4. Pull and hold power window switch UP (AUTO-UP operation). Even after door glass stops at the fully closed position, pull the switch for 2 seconds or more.
5. Initialization procedure is complete.
6. Inspect anti-pinch function.

#### CHECK ANTI-PINCH FUNCTION

1. Fully open door glass.
  2. Place a piece of wood near the fully closed position.
  3. Close door glass completely using AUTO-UP.
- Check that door glass lowers approximately 150 mm (5.9 in) without pinching piece of wood and stops.
  - Check that door glass does not rise when operating power window main switch while lowering.

#### **CAUTION:**

- Perform initialization when AUTO-UP operation or anti-pinch function does not operate normally.
- Check that AUTO-UP operates before inspection when initialization is performed.
- Never check with hands or other body parts because they may be pinched. Never get pinched.
- It may switch to the fail-safe mode if open/close operation is performed continuously without fully closing door glass. Perform initialization in the above situation. Refer to [PWC-89. "Fail-safe"](#).
- Finish initialization. Otherwise, the next operation cannot be done.

1. AUTO-UP operation
2. Anti-pinch function
3. Door key cylinder power window function

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

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When the control unit is replaced, initialization is necessary.

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# INSPECTION AND ADJUSTMENT

## < BASIC INSPECTION >

If any of the following operations are performed, initialization is necessary as well as when the control unit is disconnected.

Refer to [PWC-6. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#).

- Power supply to the power window control unit is cut off by the removal of battery terminal or the battery fuse is blown.
- Disconnection and connection of power window control unit harness connector.
- Removal and installation of motor from regulator assembly.
- Disconnection and connection of battery negative terminal.
- Removal and installation of rear power window control unit.
- Removal and installation of door glass.
- Removal and installation of door glass run.

The following specified operations cannot be performed while initialization is not complete.

- AUTO-UP operation
- Anti-pinch function
- Door key cylinder power window function

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000012172912

### INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or power window control unit connector. Reconnect it after a minute or more.
2. Turn ignition switch ON.
3. Operate power window switch to fully open door glass. (This operation is unnecessary if door glass is already fully open.)
4. Pull and hold power window switch UP (AUTO-UP operation). Even after door glass stops at the fully closed position, pull the switch for 2 seconds or more.
5. Initialization procedure is complete.
6. Inspect anti-pinch function.

### CHECK ANTI-PINCH FUNCTION

1. Fully open door glass.
  2. Place a piece of wood near the fully closed position.
  3. Close door glass completely using AUTO-UP.
- Check that door glass lowers approximately 150 mm (5.9 in) without pinching piece of wood and stops.
  - Check that door glass does not rise when operating power window main switch while lowering.

#### **CAUTION:**

- **Perform initialization when AUTO-UP operation or anti-pinch function does not operate normally.**
  - **Check that AUTO-UP operates before inspection when initialization is performed.**
  - **Never check with hands or other body parts because they may be pinched. Never get pinched.**
  - **It may switch to the fail-safe mode if open/close operation is performed continuously without fully closing. Perform initialization in the above situation. Refer to [PWC-89. "Fail-safe"](#).**
  - **Finish initialization. Otherwise, the next operation cannot be done.**
1. **AUTO-UP operation**
  2. **Anti-pinch function**
  3. **Door key cylinder power window function**

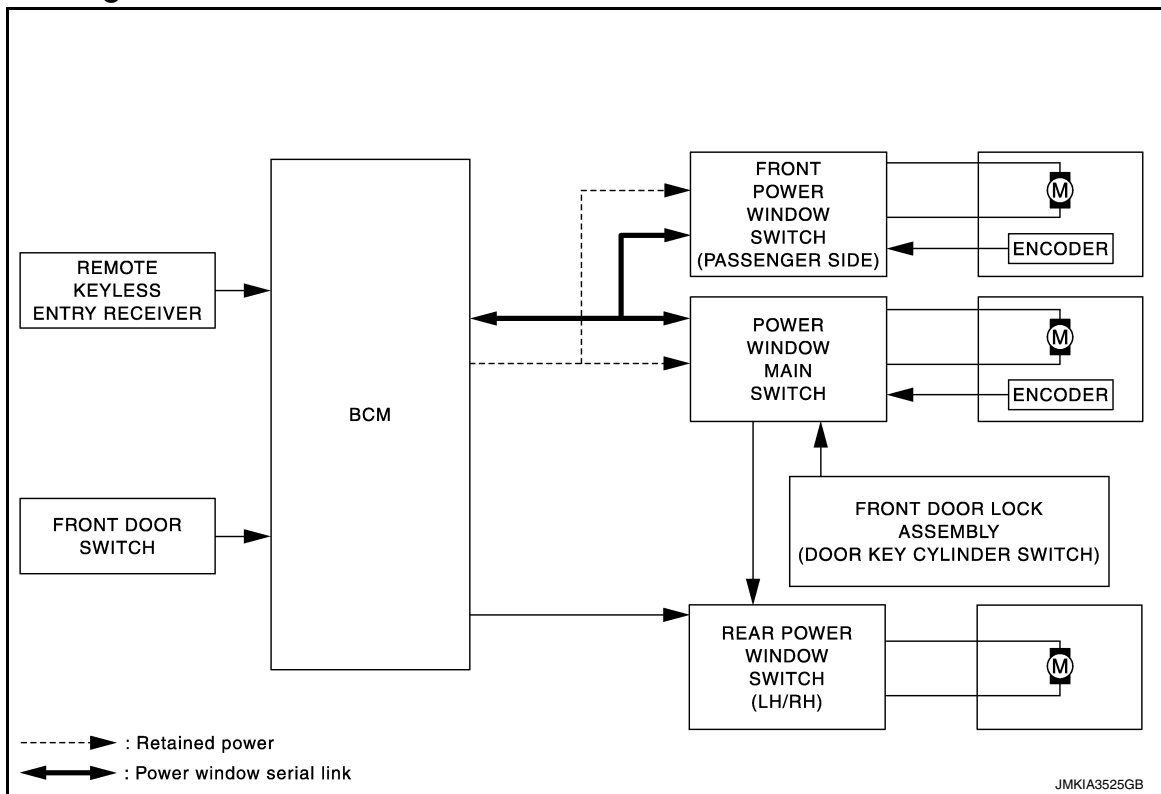
# POWER WINDOW SYSTEM

< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

### POWER WINDOW SYSTEM

#### System Diagram



#### System Description

INFOID:000000012172914

#### POWER WINDOW SYSTEM

- Power window system is operable during the retained power operation timer after turning ignition switch OFF.
- Power window main switch can open/close door glass.
- Front and rear power window switch can open/close the corresponding door glass.
- AUTO UP/DOWN operation can be performed when front power window switch turns to AUTO.
- Power window lock switch can lock all power windows other than driver seat.
- Power window serial link transmits the signals from power window main switch to front power window switch (passenger side).
- If door glass receives resistance that is the specified value or more while power window of front seat is in AUTO-UP operation, power window of front seat operates in the reverse direction.
- Hold the door key cylinder to the LOCK or UNLOCK direction for 1 second or more to OPEN or CLOSE front power windows when ignition switch OFF.
- Front power windows open when pressing Intelligent Key unlock button for 3 seconds.

#### POWER WINDOW AUTO-OPERATION

- AUTO UP/DOWN operation can be performed when front power window motor turns to AUTO.
- Encoder continues detecting the movement of power window motor and transmits to power window switch as the encoder pulse signal while power window motor is operating.
- Power window switch reads the changes of encoder signal and stops AUTO operation when door glass is at fully opened/closed position.
- Power window motor is operable in case encoder is malfunctioning.

#### RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate for 45 seconds after ignition switch turns OFF.

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# POWER WINDOW SYSTEM

## < SYSTEM DESCRIPTION >

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### RETAINED POWER FUNCTION CANCEL CONDITIONS

- Front door CLOSE (door switch OFF) → OPEN (door switch ON).
- When ignition switch turns ON again.
- When timer times out. (45 seconds)

### POWER WINDOW LOCK FUNCTION

Ground circuit inside power window main switch shuts off when power window lock switch is ON. This inhibits power window switch operation except with the power window main switch.

### POWER WINDOW SERIAL LINK

- Front power window switches and BCM transmit and receive the power window serial link.
- Power window serial link transmits the power window main switch operation signals and IGN signal to power window main switch module, front power window switch (passenger side) module.

### ANTI-PINCH OPERATION

- Pinch the foreign matter in the door glass during AUTO-UP operation is the anti-pinch function that lowers the door glass 150 mm (5.9 in) when detected.
- Encoder continues detecting the movement of power window motor and transmits to power window switch as the encoder pulse signal while power window motor is operating.
- Resistance is applied to the power window motor rotation that changes the frequency of encoder pulse signal if foreign material is trapped in the door glass.
- Power window switch controls to lower the door glass for 150 mm (5.9 in) after it detects encoder pulse signal frequency change.

### OPERATION CONDITION

- When front door glass AUTO-UP operation is performed (anti-pinch function does not operate just before the door glass closes and is fully closed)

#### **NOTE:**

Depending on environment and driving conditions, if a similar impact or load is applied to the door glass, it may lower.

### DOOR KEY CYLINDER SWITCH OPERATION

Hold the door key cylinder to the LOCK or UNLOCK direction for 1.5 seconds or more to OPEN or CLOSE front power windows when ignition switch is OFF. In addition, it stops when key position is moved to NEUTRAL when operating.

### OPERATION CONDITION

- Ignition switch OFF.
- Hold door key cylinder to LOCK position for 1.5 seconds or more to perform CLOSE operation of the door glass.
- Hold door key cylinder to UNLOCK position for 1.5 seconds or more to perform OPEN operation of the door glass.

### KEYLESS POWER WINDOW DOWN FUNCTION

Front power windows open when the unlock button on Intelligent Key is activated and kept pressed for more than 3\* seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.

The power window opening stops when the following operations are performed.

- When the unlock button is kept pressed more than 15 seconds.
- When the ignition switch is turned ON while the power window opening is operated.
- When the unlock button is released.

While retained power operation activate, keyless power window down function cannot be operated.

Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUPPORT". Refer to [DLK-51, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

#### **NOTE:**

Use CONSULT to change settings.

MODE 1 (3 sec) / MODE 2 (OFF) / MODE 3 (5 sec)

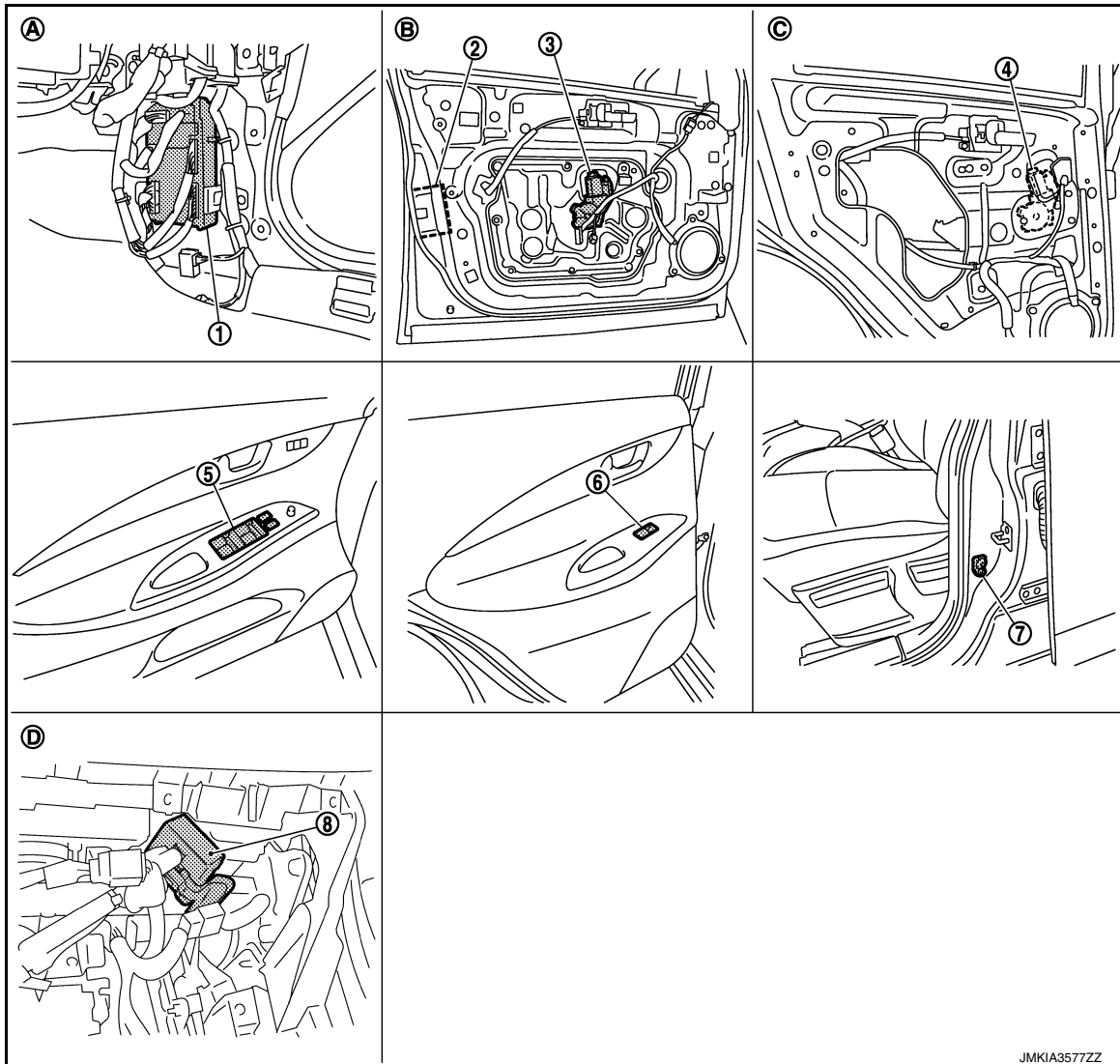


# POWER WINDOW SYSTEM

< SYSTEM DESCRIPTION >

## Component Parts Location

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- |  |   |   |
|--|---|---|
| 1. BCM M118,M119,M122,M123                                   | 2. Front door lock assembly (driver side) (key cylinder switch) D15 | 3. Front power window motor (driver side) D10 |
| 4. Rear power window motor LH D52                            | 5. Power window main switch D8,D9                                   | 6. Rear power window switch LH D54            |
| 7. Front door switch (driver side) B16                       | 8. Remote keyless entry receiver                                    |   |
| A. View with dash side lower (passenger side)                | B. View with front door finisher removed                            | C. View with rear door finisher removed       |
| D. View with instrument lower panel (passenger side) removed |   |   |

## Component Description

INFOID:000000012172916

Component	Function
BCM	<ul style="list-style-type: none"> <li>Supplies power supply to power window switch.</li> <li>Controls retained power function.</li> </ul>
Power window main switch	<ul style="list-style-type: none"> <li>Directly controls all power window motor of all doors.</li> <li>Controls anti-pinch operation of power window.</li> </ul>
Front power window switch	<ul style="list-style-type: none"> <li>Controls anti-pinch operation of power window.</li> <li>Controls power window motor of passenger door.</li> </ul>

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## POWER WINDOW SYSTEM

### < SYSTEM DESCRIPTION >

Component	Function
Rear power window switch	Controls power window motor of rear right and left doors.
Power window motor	<ul style="list-style-type: none"><li>• Integrates the ENCODER and WINDOW MOTOR.</li><li>• Starts operating with signals from each power window switch.</li><li>• Transmits power window motor rotation as a pulse signal to power window switch.</li></ul>
Front door lock assembly (key cylinder switch)	Transmits operation condition of key cylinder switch to power window main switch.
Front door switch	Detects door open/close condition and transmits to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the intelligent Key, and then transmits to BCM.

# DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (BCM)

### COMMON ITEM

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

INFOID:000000012172917

#### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

#### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

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

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
<ul style="list-style-type: none"> <li>Intelligent Key system</li> <li>Engine start system</li> </ul>	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

#### NOTE:

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

#### FREEZE FRAME DATA (FFD)

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

# DIAGNOSIS SYSTEM (BCM)

## < SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power supply position status of the moment a particular DTC is detected*	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*
	OFF>ACC		While turning power supply position from "OFF" to "ACC"
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*. ) to low power consumption mode
	LOCK		Power supply position is "LOCK"*
	OFF		Power supply position is "OFF" (Ignition switch OFF)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)
ENGINE RUN	Power supply position is "RUN" (Ignition switch ON with engine running)		
CRANKING	Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> <li>• The number is 0 when a malfunction is detected now.</li> <li>• The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON.</li> <li>• The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul>	

### NOTE:

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

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

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

## RETAIND PWR

### RETAIND PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000012172918

### Data monitor

#### NOTE:

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

# DIAGNOSIS SYSTEM (BCM)

## < SYSTEM DESCRIPTION >

Monitor Item	Description
DOOR SW-DR	Indicates [ON/OFF] condition of driver side door switch.
DOOR SW-AS	Indicates [ON/OFF] condition of passenger side door switch.

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P

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## DTC/CIRCUIT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT

#### BCM

#### BCM : Diagnosis Procedure

INFOID:0000000012172919

#### 1. CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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

NO >> GO TO 2.

#### 2. CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

#### 3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

### POWER WINDOW MAIN SWITCH

#### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000012172920

#### 1. CHECK POWER SUPPLY CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect power window main switch connectors.
3. Turn ignition switch ON.
4. Check voltage between power window main switch harness connector and ground.

# POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Voltage (V) (Approx.)
Power window main switch			
Connector	Terminal	Ground	Battery voltage
D8	10		
D9	19		

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

### 2. CHECK POWER SUPPLY CIRCUIT 2

- Turn ignition switch OFF.
- Disconnect BCM connector.
- Check continuity between BCM harness connector and power window main switch harness connector.

BCM		Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	
M118	2	D9	19	Existed
	3	D8	10	

- Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M118	2		Ground
	3		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-97, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3. CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Check continuity between power window main switch harness connector and ground.

Power window main switch		Ground	Continuity
Connector	Terminal		
D9	17		Ground

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

### FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:000000012172921

#### 1. CHECK POWER SUPPLY CIRCUIT 1

- Turn ignition switch OFF.
- Disconnect front power window switch (passenger side) connector.
- Check voltage between front power window switch (passenger side) harness connector and ground.

# POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Voltage (V) (Approx.)
Front power window switch (passenger side)			
Connector	Terminal	Ground	Battery voltage
D38	10		

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK POWER SUPPLY CIRCUIT 2

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and front power window switch (passenger side) harness connector.

BCM		Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M118	2	D38	10	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M118	2		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-97, "Removal and Installation"](#).

NO >> Repair or replace harness.

## 3.CHECK GROUND CIRCUIT

Check continuity between front power window switch (passenger side) harness connector and ground.

Front power window switch (passenger side)		Ground	Continuity
Connector	Terminal		
D38	11		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

## REAR POWER WINDOW SWITCH

### REAR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:0000000012172922

## 1.CHECK POWER SUPPLY CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH connectors or rear power window switch RH.
3. Turn ignition switch ON.
4. Check voltage between rear power window switch harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Rear power window switch			
Connector	Terminal	Ground	Battery voltage
LH	D54		
RH	D74		



# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK POWER SUPPLY CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector and rear power window switch harness connector.

BCM		Rear power window switch		Continuity
Connector	Terminal	Connector	Terminal	
M118	3	LH	D54	Existed
		RH	D74	

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M118	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-97. "Removal and Installation"](#).

NO >> Repair or replace harness.

## 3.CHECK GROUND CIRCUIT

Check continuity between rear power window switch harness connector and ground.

Rear power window switch		Ground	Continuity
Connector	Terminal		
LH	D54	7	Existed
RH	D74		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

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PWC

# REAR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## REAR POWER WINDOW SWITCH

### Description

INFOID:000000012172923

- BCM supplies power.
- Rear power window motor will be operated if rear power window switch is operated. Rear power window switch.

### Component Function Check

INFOID:000000012172924

#### 1. CHECK REAR POWER WINDOW OPERATION

Check rear power window motor operation with rear power window switch.

Is the inspection result normal?

- YES >> Rear power window switch is OK.  
 NO >> Refer to [PWC-18. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000012172925

#### 1. CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH or rear power window switch RH.
3. Turn ignition switch ON.
4. Check voltage between rear power window switch harness connector and ground.

(+)		Terminal	(-)	Condition	Voltage (V) (Approx.)	
Rear power window switch						
Connector						
LH	D54	2	Ground	Power window main switch (rear LH)	UP	Battery voltage
		3			DOWN	0
RH	D74			2	Power window main switch (rear RH)	UP
		3				DOWN
					UP	0
				DOWN	Battery voltage	

Is the measurement value within the specification?

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

#### 2. CHECK REAR POWER WINDOW SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check continuity between power window main switch harness connector and rear power window switch harness connector.

Power window main switch		Rear power window switch		Continuity
Connector	Terminal	Connector	Terminal	
D8	1	LH	D54	2
	3			3
	5	RH	D74	3
	7			2

4. Check continuity between power window main switch connector and ground.

# REAR POWER WINDOW SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

Power window main switch		Ground	Continuity
Connector	Terminal		
D8	1	Ground	Not existed
	3		
	5		
	7		

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-127, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3.CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Refer to [PWC-19, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace rear power window switch. Refer to [PWC-127, "Removal and Installation"](#).

### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#)

>> INSPECTION END

## Component Inspection

INFOID:000000012172926

### 1.CHECK REAR POWER WINDOW SWITCH

1. Turn ignition switch OFF.
2. Disconnect rear power window switch terminals.
3. Check rear power window switch.

Rear power window switch	Terminal		Power window switch condition	Continuity
D54 (LH) D74 (RH)	1	5	UP	Existed
	3	4		
	3	4	NEUTRAL	
	5	2	DOWN	
	1	4		
	5	2		

Is the inspection result normal?

YES >> Rear power window switch is OK.

NO >> Replace rear power window switch. Refer to [PWC-127, "Removal and Installation"](#).

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PWC

# POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## POWER WINDOW MOTOR DRIVER SIDE

### DRIVER SIDE : Description

INFOID:000000012172927

Door glass moves UP/DOWN by receiving the signal from power window main switch.

### DRIVER SIDE : Component Function Check

INFOID:000000012172928

#### 1. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE) OPERATION

Check front power window motor (driver side) operation with power window main switch.

Is the inspection result normal?

YES >> Power window motor (driver side) is OK.

NO >> Refer to [PWC-20. "DRIVER SIDE : Diagnosis Procedure"](#).

### DRIVER SIDE : Diagnosis Procedure

INFOID:000000012172929

#### 1. CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front power window motor (driver side) connector.
3. Turn ignition switch ON.
4. Check voltage between front power window motor (driver side) harness connector and ground.

(+) Front power window motor (driver side)		(-)	Condition	Voltage (V) (Approx.)	
Connector	Terminal			UP	DOWN
D10	2	Ground	Power window main switch	UP	Battery voltage
				DOWN	0
	1			UP	0
				DOWN	Battery voltage

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check continuity between power window main switch harness connector and front power window motor (driver side) harness connector.

Power window main switch		Front power window motor (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
D8	8	D10	2	Existed
	11		1	

4. Check continuity between power window main switch harness connector and ground.

Power window main switch		Ground	Continuity
Connector	Terminal		
D8	8		Not existed
	11		

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-127. "Removal and Installation"](#).

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

### 3. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE)

Check front power window motor (driver side).

Refer to [PWC-21, "DRIVER SIDE : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front power window motor (driver side). Refer to [GW-20, "Removal and Installation"](#).

### 4. CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

## DRIVER SIDE : Component Inspection

INFOID:0000000012172930

### 1. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE)

1. Turn ignition switch OFF.
2. Disconnect front power window motor (driver side) connector.
3. Check motor operation by connecting the battery voltage directly to front power window motor (driver side) terminals.

Front power window motor (driver side) connector	Terminal		Motor operation
	(+)	(-)	
D10	1	2	DOWN
	2	1	UP

Is the inspection result normal?

YES >> Front power window motor (driver side) is OK.

NO >> Replace front power window motor (driver side). Refer to [GW-20, "Removal and Installation"](#).

## PASSENGER SIDE

### PASSENGER SIDE : Description

INFOID:0000000012172931

Door glass moves UP/DOWN by receiving the signal power window main switch or front power window switch (passenger side).

### PASSENGER SIDE : Component Function Check

INFOID:0000000012172932

### 1. CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE) OPERATION

Check front power window motor (passenger side) operation with power window main switch or front power window switch (passenger side).

Is the inspection result normal?

YES >> Power window motor (passenger side) is OK.

NO >> Refer to [PWC-21, "PASSENGER SIDE : Diagnosis Procedure"](#).

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012172933

### 1. CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front power window motor (passenger side) connector.
3. Turn ignition switch ON.
4. Check voltage between front power window motor (passenger side) harness connector and ground.

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# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Condition	Voltage (V) (Approx.)	
Front power window motor (passenger side)					
Connector	Terminal				
D40	1	Ground	Front power window switch (passenger side)	UP	Battery voltage
				DOWN	0
	2			UP	0
				DOWN	Battery voltage

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.CHECK POWER WINDOW MOTOR (PASSENGER SIDE) CIRCUIT

- Turn ignition switch OFF.
- Disconnect front power window switch (passenger side) connector.
- Check continuity between front power window switch (passenger side) harness connector and front power window motor (passenger side) harness connector.

Front power window switch (passenger side)		Front power window motor (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
D38	9	D40	1	Existed
	8		2	

- Check continuity between front power window switch (passenger side) connector and ground.

Front power window switch (passenger side)		Ground	Continuity
Connector	Terminal		
D38	8		Not existed
	9		

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-127, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3.CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE)

Check front power window motor (passenger side).

Refer to [PWC-22, "PASSENGER SIDE : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front power window motor (passenger side). Refer to [GW-20, "Removal and Installation"](#).

### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

## PASSENGER SIDE : Component Inspection

INFOID:000000012172934

### 1.CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE)

- Turn ignition switch OFF.
- Disconnect front power window motor (passenger side) connector.
- Check motor operation by connecting the battery voltage directly to front power window motor (passenger side) terminals.

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

Front power window motor (passenger side) connector	Terminal		Motor condition
	(+)	(-)	
D40	2	1	DOWN
	1	2	UP

Is the inspection result normal?

YES >> Front power window motor (passenger side) is OK.

NO >> Replace front power window motor (passenger side). Refer to [GW-20, "Removal and Installation"](#).

## REAR LH

### REAR LH : Description

INFOID:000000012172935

Door glass moves UP/DOWN by receiving the signal from power window main switch or rear power window switch LH.

### REAR LH : Component Function Check

INFOID:000000012172936

#### 1.CHECK REAR POWER WINDOW MOTOR LH OPERATION

Check rear power window motor LH operation with power window main switch or rear power window switch LH.

Is the inspection result normal?

YES >> Power window motor LH is OK.

NO >> Refer to [PWC-23, "REAR LH : Diagnosis Procedure"](#)

### REAR LH : Diagnosis Procedure

INFOID:000000012172937

#### 1.CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear power window motor LH connector.
3. Turn ignition switch ON.
4. Check voltage between rear power window motor LH harness connector and ground.

(+) Rear power window motor LH Connector		Terminal	(-)	Condition	Voltage (V) (Approx.)
D52	1				
		DOWN	0		
	3	UP	0		
		DOWN	Battery voltage		

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2.CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH connector.
3. Check continuity between rear power window switch LH harness connector and rear power window motor LH harness connector.

Rear power window switch LH		Rear power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D54	5	D52	1	Existed
	4		3	

4. Check continuity between rear power window switch LH harness connector and ground.

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PWC

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

Rear power window switch LH		Ground	Continuity
Connector	Terminal		
D54	5		Not existed
	4		

### Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to [PWC-127, "Removal and Installation"](#).

NO >> Repair or replace harness.

## 3.CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to [PWC-24, "REAR LH : Component Inspection"](#).

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace rear power window motor LH. Refer to [GW-25, "Removal and Installation"](#).

## 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

## REAR LH : Component Inspection

INFOID:000000012172938

### 1.CHECK REAR POWER WINDOW MOTOR LH

1. Turn ignition switch OFF.
2. Disconnect rear power window motor LH connector.
3. Check motor operation by connecting the battery voltage directly to rear power window motor LH terminals.

Rear power window motor LH connector	Terminal		Motor condition
	(+)	(-)	
D52	3	1	DOWN
	1	3	UP

### Is the inspection result normal?

YES >> Rear power window motor LH is OK.

NO >> Replace rear power window motor LH. Refer to [GW-25, "Removal and Installation"](#).

## REAR RH

### REAR RH : Description

INFOID:000000012172939

Door glass moves UP/DOWN by receiving the signal from power window main switch or rear power window switch RH.

### REAR RH : Component Function Check

INFOID:000000012172940

#### 1. CHECK REAR POWER WINDOW MOTOR RH OPERATION

Check rear power window motor RH operation with power window main switch or rear power window switch RH.

### Is the inspection result normal?

YES >> Power window motor RH is OK.

NO >> Refer to [PWC-24, "REAR RH : Diagnosis Procedure"](#).

## REAR RH : Diagnosis Procedure

INFOID:000000012172941

#### 1.CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL



# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Disconnect rear power window motor RH connector.
3. Turn ignition switch ON.
4. Check voltage between rear power window motor RH harness connector and ground.

(+)		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
D72	1	Ground	Rear power window switch RH	UP Battery voltage
			DOWN 0	
	3		UP 0	
			DOWN Battery voltage	

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK REAR POWER WINDOW MOTOR RH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch RH connector.
3. Check continuity between rear power window switch RH harness connector and rear power window motor RH harness connector.

Rear power window switch RH		Rear power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D74	5	D72	1	Existed
	4		3	

4. Check continuity between rear power window switch RH harness connector and ground.

Rear power window switch RH		Ground	Continuity
Connector	Terminal		
D74	5		Not existed
	4		

Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to [PWC-127, "Removal and Installation"](#).

NO >> Repair or replace harness.

## 3.CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to [PWC-25, "REAR RH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace rear power window motor RH. Refer to [GW-25, "Removal and Installation"](#).

## 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

## REAR RH : Component Inspection

INFOID:000000012172942

## 1.CHECK REAR POWER WINDOW MOTOR RH

1. Turn ignition switch OFF.
2. Disconnect rear power window motor RH connector.

## POWER WINDOW MOTOR

### < DTC/CIRCUIT DIAGNOSIS >

3. Check motor operation by connecting the battery voltage directly to rear power window motor RH terminals.

Rear power window motor RH connector	Terminal		Motor condition
	(+)	(-)	
D72	3	1	DOWN
	1	3	UP

#### Is the inspection result normal?

YES >> Rear power window motor RH is OK.

NO >> Replace rear power window motor RH. Refer to [GW-25. "Removal and Installation"](#).

# ENCODER

< DTC/CIRCUIT DIAGNOSIS >

## ENCODER DRIVER SIDE

### DRIVER SIDE : Description

INFOID:000000012172943

Detects condition of the front power window motor (driver side) operation and transmits to power window main switch as the pulse signal.

### DRIVER SIDE : Component Function Check

INFOID:000000012172944

#### 1.CHECK ENCODER OPERATION

Check driver side door glass perform AUTO open/close operation normally by power window main switch.

Is the inspection result normal?

- YES >> Encoder is OK.  
NO >> Refer to [PWC-27, "DRIVER SIDE : Diagnosis Procedure"](#).

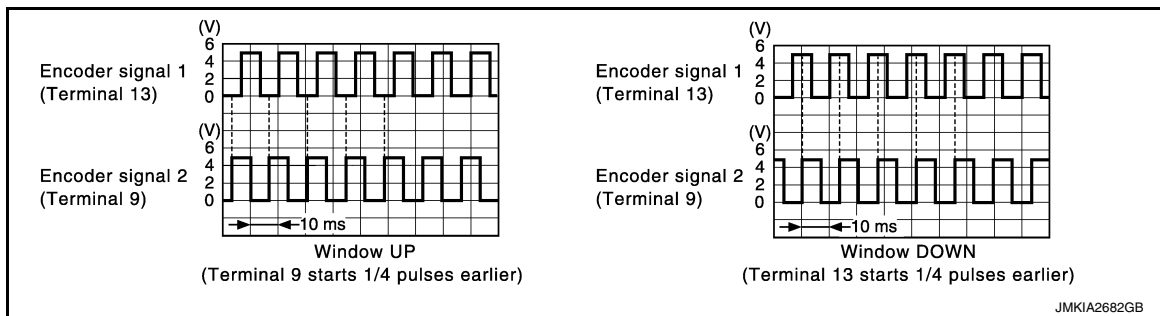
### DRIVER SIDE : Diagnosis Procedure

INFOID:000000012172945

#### 1.CHECK ENCODER SIGNAL

- Turn ignition switch ON.
- Check signal between power window main switch harness connector and ground using oscilloscope.

(+)		(-)	Signal (Reference value)
Power window main switch			
Connector	Terminal	Ground	Refer to following signal
D8	9		
	13		



Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-127, "Removal and Installation"](#).  
NO >> GO TO 2.

#### 2.CHECK ENCODER SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect power window main switch connector and front power window motor (driver side) connector.
- Check continuity between power window main switch harness connector and front power window motor (driver side) harness connector.

Power window main switch		Front power window motor (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
D8	9	D10	3	Existed
	13		5	

- Check continuity between power window main switch harness connector and ground.

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

Power window main switch		Ground	Continuity
Connector	Terminal		
D8	9		
	13		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3.CHECK ENCODER POWER SUPPLY CIRCUIT 1

1. Connect power window main switch connector.
2. Turn ignition switch ON.
3. Check voltage between front power window motor (driver side) harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Front power window motor (driver side)			
Connector	Terminal		
D10	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4.CHECK ENCODER POWER SUPPLY CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check continuity between power window main switch harness connector and front power window motor (driver side) harness connector.

Power window main switch		Front power window motor (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
D8	15	D10	4	Existed

4. Check continuity between power window main switch harness connector and ground.

Power window main switch		Ground	Continuity
Connector	Terminal		
D8	15		

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-127. "Removal and Installation"](#).

NO >> Repair or replace harness.

### 5.CHECK GROUND CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check continuity between power window main switch harness connector and front power window motor (driver side) harness connector.

Power window main switch		Front power window motor (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
D8	2	D10	6	Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

### 6.CHECK GROUND CIRCUIT 2

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

1. Connect power window main switch connector.
2. Check continuity between power window main switch harness connector and ground.

Power window main switch		Ground	Continuity
Connector	Terminal		
D8	2		Existed

Is the inspection result normal?

- YES >> Replace front power window motor (driver side). Refer to [GW-20. "Removal and Installation"](#).  
 NO >> Replace power window main switch. Refer to [PWC-127. "Removal and Installation"](#).

## PASSENGER SIDE

### PASSENGER SIDE : Description

INFOID:000000012172946

Detects condition of the front power window motor (passenger side) operation and transmits to front power window switch (passenger side) as the pulse signal.

### PASSENGER SIDE : Component Function Check

INFOID:000000012172947

#### 1.CHECK ENCODER OPERATION

Check passenger side door glass perform AUTO open/close operation normally by power window main switch or front power window switch (passenger side).

Is the inspection result normal?

- YES >> Encoder is OK.  
 NO >> Refer to [PWC-29. "PASSENGER SIDE : Diagnosis Procedure"](#).

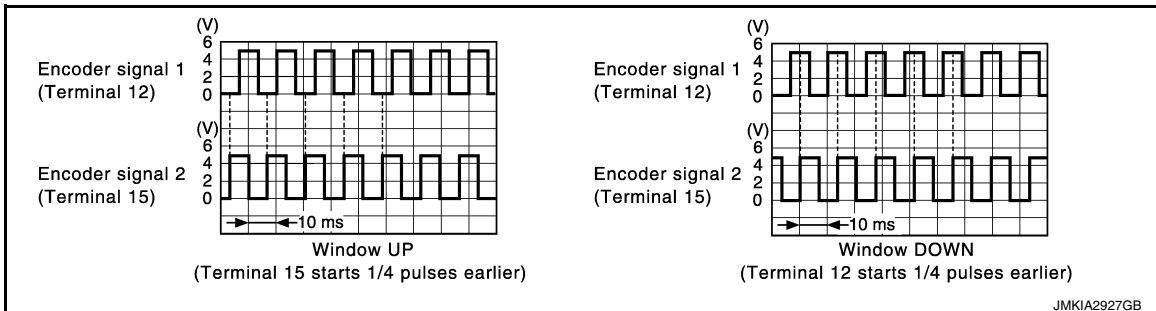
### PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012172948

#### 1.CHECK ENCODER SIGNAL

1. Turn ignition switch ON.
2. Check signal between front power window switch (passenger side) harness connector and ground using oscilloscope.

(+)		(-)	Signal (Reference value)
Front power window switch (passenger side)			
Connector	Terminal		
D38	12	Ground	Refer to following signal
	15		



Is the inspection result normal?

- YES >> Replace front power window switch (passenger side). Refer to [PWC-127. "Removal and Installation"](#).  
 NO >> GO TO 2.

#### 2.CHECK ENCODER SIGNAL CIRCUIT

1. Turn ignition switch OFF.

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

2. Disconnect front power window switch (passenger side) connector and front power window motor (passenger side) connector.
3. Check continuity between front power window switch (passenger side) harness connector and front power window motor (passenger side) harness connector.

Front power window switch (passenger side)		Front power window motor (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
D38	12	D40	5	Existed
	15		3	

4. Check continuity between front power window switch (passenger side) harness connector and ground.

Front power window switch (passenger side)		Ground	Continuity
Connector	Terminal		
D38	12		Not existed
	15		

Is the inspection result normal?

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

### 3. CHECK ENCODER POWER SUPPLY CIRCUIT

1. Connect front power window switch (passenger side) connector.
2. Turn ignition switch ON.
3. Check voltage between front power window motor (passenger side) harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Front power window motor (passenger side)			
Connector	Terminal		
D40	4	Ground	Battery voltage

Is the inspection result normal?

- YES >> GO TO 5.  
 NO >> GO TO 4.

### 4. CHECK ENCODER POWER SUPPLY CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect front power window switch (passenger side) connector.
3. Check continuity between front power window switch (passenger side) harness connector and front power window motor (passenger side) harness connector.

Front power window switch (passenger side)		Front power window motor (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
D38	4	D40	4	Existed

4. Check continuity between front power window switch (passenger side) harness connector and ground.

Front power window switch (passenger side)		Ground	Continuity
Connector	Terminal		
D38	4		Not existed

Is the inspection result normal?

- YES >> Replace front power window switch (passenger side). Refer to [PWC-127. "Removal and Installation"](#).  
 NO >> Repair or replace harness.

### 5. CHECK GROUND CIRCUIT 1

1. Turn ignition switch OFF.

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

2. Disconnect front power window switch (passenger side) connector.
3. Check continuity between front power window switch (passenger side) harness connector and front power window motor (passenger side) harness connector.

Front power window switch (passenger side)		Front power window motor (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
D38	3	D40	6	Existed

Is the inspection result normal?

- YES >> GO TO 6.  
NO >> Repair or replace harness.

## 6. CHECK GROUND CIRCUIT 2

1. Connect front power window switch (passenger side) connector.
2. Check continuity between front power window switch (passenger side) harness connector and ground.

Front power window switch (passenger side)		Ground	Continuity
Connector	Terminal		
D38	3		Existed

Is the inspection result normal?

- YES >> Replace front power window motor (passenger side). Refer to [GW-20, "Removal and Installation"](#).  
NO >> Replace front power window switch (passenger side). Refer to [PWC-127, "Removal and Installation"](#).

A  
B  
C  
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E  
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H  
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P

PWC

# POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

## POWER WINDOW SERIAL LINK

### POWER WINDOW MAIN SWITCH

#### POWER WINDOW MAIN SWITCH : Description

INFOID:000000012172949

Power window main switch, front power window switch (passenger side) and BCM transmit and receive the signal by power window serial link.

The signal mentioned below is transmitted from BCM to power window main switch, front power window switch (passenger side).

- Keyless power window down signal

The signal mentioned below is transmitted from power window main switch to front power window switch (passenger side).

- Front passenger side door window operation signal
- Power window control by key cylinder switch signal
- Power window lock switch signal
- Retained power operation signal

#### POWER WINDOW MAIN SWITCH : Component Function Check

INFOID:000000012172950

### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

#### With CONSULT

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [DLK-49. "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

Monitor item	Condition
CDL LOCK SW	LOCK : ON
	UNLOCK : OFF
CDL UNLOCK SW	LOCK : OFF
	UNLOCK : ON

Is the inspection result normal?

YES >> Power window serial link is OK.

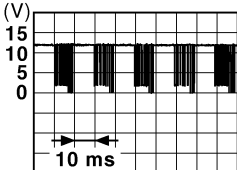
NO >> Refer to [PWC-32. "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

#### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000012172951

### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check signal between power window main switch harness connector and ground.

(+)		(-)	Signal (Reference value)
Connector	Terminal		
D8	14	Ground	 <p style="text-align: right;">JPMA0013GB</p>

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

### 2.CHECK POWER WINDOW SERIAL LINK SIGNAL



# POWER WINDOW SERIAL LINK

## < DTC/CIRCUIT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Turn ignition switch ON.
4. Check voltage between power window main switch harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Power window main switch			
Connector	Terminal	Ground	Battery voltage
D8	14		

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-127, "Removal and Installation"](#).  
NO >> GO TO 3.

### 3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector and power window main switch connector.

BCM		Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	
M123	132	D8	14	Existed

4. Check continuity between BCM connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	132		Not existed

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-97, "Removal and Installation"](#).  
NO >> Repair or replace harness.

### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-42, "Intermittent Incident"](#).

>> INSPECTION END

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

### FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Description

INFOID:000000012172952

Power window main switch, front power window switch (passenger side) and BCM transmit and receive the signal by power window serial link.

The signal mentioned below is transmitted from BCM to power window main switch, front power window switch (passenger side).

- Keyless power window down signal

The signal mentioned below is transmitted from power window main switch to front power window switch (passenger side).

- Front passenger side door window operation signal
- Power window control by key cylinder switch signal
- Power window lock switch signal
- Retained power operation signal

### FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Component Function

#### Check

INFOID:000000012172953

### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

# POWER WINDOW SERIAL LINK

## < DTC/CIRCUIT DIAGNOSIS >

### Ⓟ With CONSULT

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [DLK-49, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)".](#)

Monitor item	Condition
CDL LOCK SW	LOCK : ON
	UNLOCK : OFF
CDL UNLOCK SW	LOCK : OFF
	UNLOCK : ON

### Is the inspection result normal?

YES >> Power window serial link is OK.

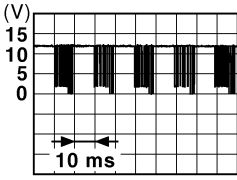
NO >> Refer to [PWC-34, "FRONT POWER WINDOW SWITCH \(PASSENGER SIDE\) : Diagnosis Procedure".](#)

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:000000012172954

### 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check signal between front power window switch (passenger side) harness connector and ground.

(+)		(-)	Signal (Reference value)
Connector	Terminal		
D38	16	Ground	 <p>JPMAI0013GB</p>

### Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-127, "Removal and Installation".](#)

NO >> GO TO 2.

### 2. CHECK POWER WINDOW SERIAL LINK SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front power window switch (passenger side) connector.
3. Turn ignition switch ON.
4. Check voltage between front power window switch (passenger side) harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Connector	Terminal		
D38	16	Ground	Battery voltage

### Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-127, "Removal and Installation".](#)

NO >> GO TO 3.

### 3. CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector and front power window switch (passenger side) connector.

# POWER WINDOW SERIAL LINK

## < DTC/CIRCUIT DIAGNOSIS >

BCM		Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M123	132	D38	16	Existed

4. Check continuity between BCM connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	132		Not existed

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-97. "Removal and Installation"](#).
- NO >> Repair or replace harness.

PWC

## BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

# ECU DIAGNOSIS INFORMATION

## BCM (BODY CONTROL MODULE)

### Reference Value

INFOID:0000000012829231

### VALUES ON THE DIAGNOSIS TOOL

**NOTE:**

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	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
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
FR FOG SW	Front fog lamp switch OFF	Off	A
	Front fog lamp switch ON	On	
RR FOG SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	B
DOOR SW-DR	Driver door closed	Off	C
	Driver door opened	On	
DOOR SW-AS	Passenger door closed	Off	D
	Passenger door opened	On	
DOOR SW-RR	Rear RH door closed	Off	E
	Rear RH door opened	On	
DOOR SW-RL	Rear LH door closed	Off	F
	Rear LH door opened	On	
DOOR SW-BK	Back door closed	Off	G
	Back door opened	On	
CDL LOCK SW	Other than power door lock switch LOCK	Off	H
	Power door lock switch LOCK	On	
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off	I
	Power door lock switch UNLOCK	On	
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off	J
	Driver door key cylinder LOCK position	On	
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off	K
	Driver door key cylinder UNLOCK position	On	
KEY CYL SW-TR	<b>NOTE:</b> The item is indicated, but not monitored.	Off	L
HAZARD SW	Hazard switch is OFF	Off	M
	Hazard switch is ON	On	
REAR DEF SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	PWC
TR CANCEL SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	N
TR/BD OPEN SW	Back door opener switch OFF	Off	O
	While the back door opener switch is turned ON	On	
TRNK/HAT MNTR	<b>NOTE:</b> The item is indicated, but not monitored.	Off	P
REVERSE SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	
RKE-LOCK	LOCK button of the key is not pressed	Off	
	LOCK button of the key is pressed	On	
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off	
	UNLOCK button of the key is pressed	On	
RKE-TR/BD	<b>NOTE:</b> The item is indicated, but not monitored.	Off	
RKE-PANIC	PANIC button of the key is not pressed	Off	
	PANIC button of the key is pressed	On	
RKE-P/W OPEN	UNLOCK button of the key is not pressed	Off	
	UNLOCK button of the key is pressed and held	On	

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	<b>NOTE:</b> The item is indicated, but not monitored.	Off
REQ SW -RL	<b>NOTE:</b> The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	<b>NOTE:</b> The item is indicated, but not monitored.	Off
ACC RLY -F/B	<b>NOTE:</b> The item is indicated, but not monitored.	Off
CLUCH SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	<b>NOTE:</b> The item is indicated, but not monitored.	Off
S/L -UNLOCK	<b>NOTE:</b> The item is indicated, but not monitored.	Off
S/L RELAY-F/B	<b>NOTE:</b> The item is indicated, but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
SFT P -MET	Selector lever in any position other than P	Off	A
	Selector lever in P position	On	
SFT N -MET	Selector lever in any position other than N	Off	B
	Selector lever in N position	On	
ENGINE STATE	Engine stopped	Stop	C
	While the engine stalls	Stall	
	At engine cranking	Crank	
	Engine running	Run	D
S/L LOCK-IPDM	<b>NOTE:</b> The item is indicated, but not monitored.	Off	
S/L UNLK-IPDM	<b>NOTE:</b> The item is indicated, but not monitored.	Off	E
S/L RELAY-REQ	<b>NOTE:</b> The item is indicated, but not monitored.	Off	F
VEH SPEED 1	While driving	Equivalent to speedometer reading	
VEH SPEED 2	While driving	Equivalent to speedometer reading	G
DOOR STAT-DR	Driver door is locked	LOCK	
	Wait with selective UNLOCK operation (5 seconds)	READY	H
	Driver door is unlocked	UNLOCK	
DOOR STAT-AS	Passenger door is locked	LOCK	I
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Passenger door is unlocked	UNLOCK	
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset	J
	Ignition switch ON	Set	
PRMT ENG STRT	The engine start is prohibited	Reset	PWC
	The engine start is permitted	Set	
PRMT RKE STRT	<b>NOTE:</b> The item is indicated, but not monitored.	Reset	L
KEY SW -SLOT	The key is not inserted into key slot	Off	
	The key is inserted into key slot	On	
RKE OPE COUN1	During the operation of the key	Operation frequency of the key	M
RKE OPE COUN2	<b>NOTE:</b> The item is indicated, but not monitored.	—	N
CONFIRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet	O
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done	
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet	P
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done	
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet	
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done	

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS INFORMATION >

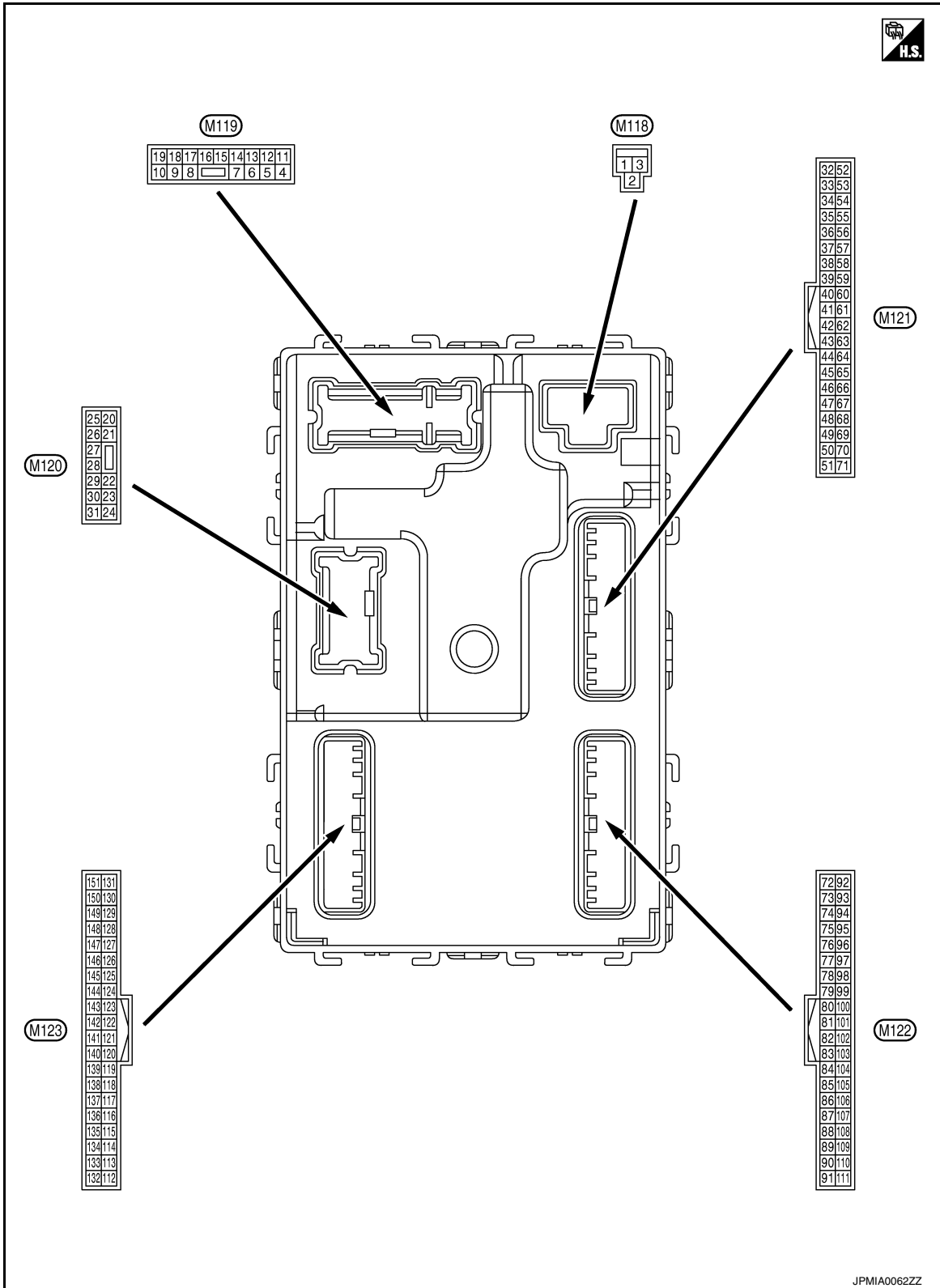
Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done
TP 4	The ID of fourth key is not registered to BCM	Yet
	The ID of fourth key is registered to BCM	Done
TP 3	The ID of third key is not registered to BCM	Yet
	The ID of third key is registered to BCM	Done
TP 2	The ID of second key is not registered to BCM	Yet
	The ID of second key is registered to BCM	Done
TP 1	The ID of first key is not registered to BCM	Yet
	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
	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
	Tire pressure warning alarm is sounding	On



# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

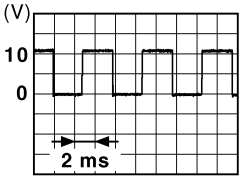
## TERMINAL LAYOUT



## PHYSICAL VALUES

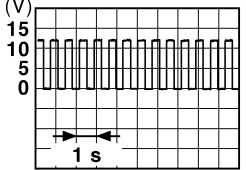
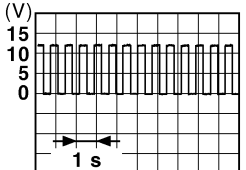
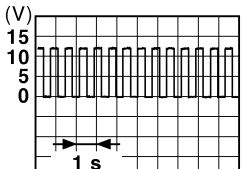
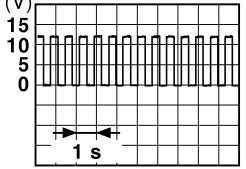
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (LG)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (L)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p><b>NOTE:</b> When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p>
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF or ON	Battery voltage
					ACC	0 V

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

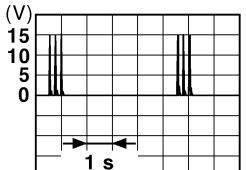
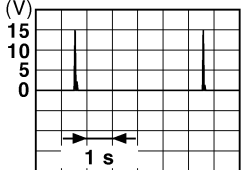
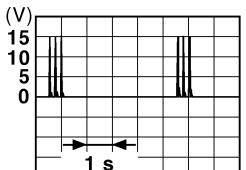
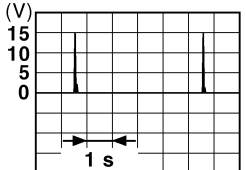
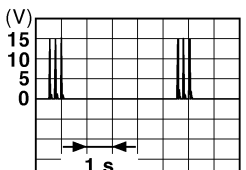
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
17 (W)	Ground	Turn signal RH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF 0 V
				Turn signal switch RH	 <small>PKID0926E</small> 6.5 V
18 (BG)	Ground	Turn signal LH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF 0 V
				Turn signal switch LH	 <small>PKID0926E</small> 6.5 V
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF Battery voltage
				ON	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF 0 V
				Turn signal switch RH	 <small>PKID0926E</small> 6.5 V
23 (G)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated) Battery voltage
				Other than OPEN (Back door opener actuator is not activated)	0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF 0 V
				Turn signal switch LH	 <small>PKID0926E</small> 6.5 V
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped) 0 V
				ON (Operated)	Battery voltage

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
34 (SB)	Ground	Luggage room antenna (-)	Output		
				Ignition switch OFF	When Intelligent Key is not in the passenger compartment  <small>JMKIA0063GB</small>
35 (V)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment  <small>JMKIA0062GB</small>
				Ignition switch OFF	When Intelligent Key is not in the passenger compartment  <small>JMKIA0063GB</small>
38 (B)	Ground	Back door antenna (-)	Output	When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area  <small>JMKIA0062GB</small>
				When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area  <small>JMKIA0063GB</small>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

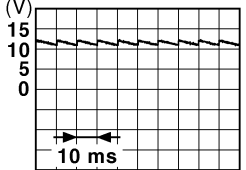
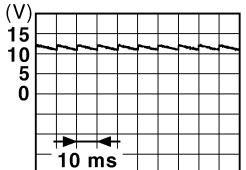
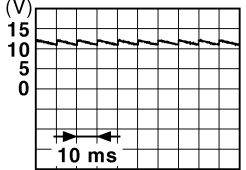
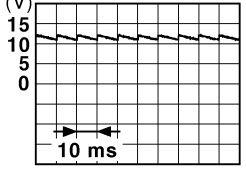
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
39 (W)	Ground	Back door antenna (+)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC
				ON	Battery voltage
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position
				When selector lever is not in P or N position	Battery voltage
60 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button igni- tion switch (push switch)	Pressed
				Not pressed	Battery voltage
61 (W)	Ground	Back door opener re- quest switch	Input	Back door opener request switch	ON (Pressed)
				OFF (Not pressed)	<p style="text-align: right; font-size: small;">JPMIA0016GB</p>
64 (V)	Ground	Intelligent Key warn- ing buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding
				Not sounding	0 V
65 (BG)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position
				Not in stop position	<p style="text-align: right; font-size: small;">JPMIA0016GB</p>
					1.0 V
					0 V

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	 <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)	0 V
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 <small>JPMIA0011GB</small> 11.8 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	 <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	 <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)	0 V

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
72 (R)	Ground	Room antenna 2 (-) (Console)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
73 (G)	Ground	Room antenna 2 (+) (Console)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
74 (SB)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detec- tion area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
75 (GR)	Ground	Passenger door antenna (+)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the passenger door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the driver door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
77 (LG)	Ground	Driver door antenna (+)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the driver door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

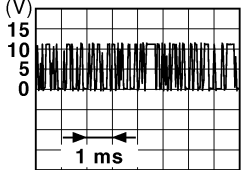
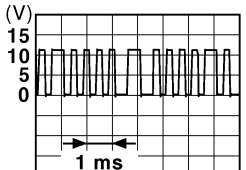

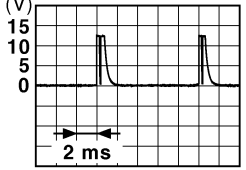

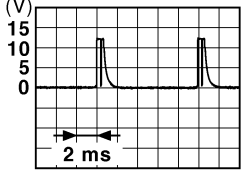
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
78 (Y)	Ground	Room antenna 1 (-) (Instrument panel)	Output	Ignition switch OFF	
				When Intelligent Key is not in the passenger compart- ment	
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	
				When Intelligent Key is not in the passenger compart- ment	
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC
				ON	Battery voltage

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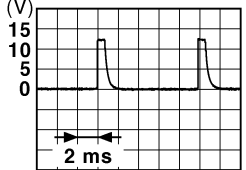
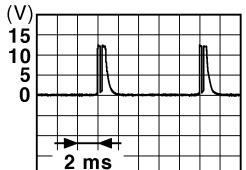

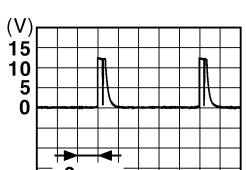

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting	 <p style="text-align: right; font-size: small;">JMKIA0064GB</p>
				When operating either button on the key	 <p style="text-align: right; font-size: small;">JMKIA0065GB</p>
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	<div style="display: flex; flex-direction: column; align-items: center;">  <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="margin-top: 5px;">1.4 V</p> </div>
				Front fog lamp switch ON (Wiper intermittent dial 4)	<div style="display: flex; flex-direction: column; align-items: center;">  <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="margin-top: 5px;">1.3 V</p> </div>
				Rear wiper switch ON (Wiper intermittent dial 4)	<div style="display: flex; flex-direction: column; align-items: center;">  <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="margin-top: 5px;">1.3 V</p> </div>
				Any of the conditions below with all switches OFF	<div style="display: flex; flex-direction: column; align-items: center;"> <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>  <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="margin-top: 5px;">1.3 V</p> </div>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

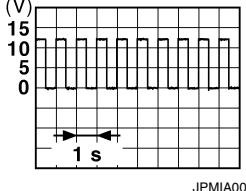
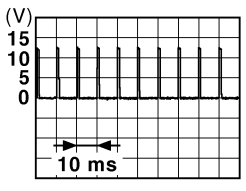
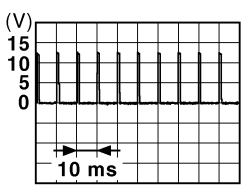
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: right;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	 <p style="text-align: right;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: right;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
					Rear washer switch ON (Wiper intermittent dial 4)	 <p style="text-align: right;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF	 <p style="text-align: right;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>
90 (P)	Ground	CAN-L	Input/ Output	—	—	
91 (L)	Ground	CAN-H	Input/ Output	—	—	

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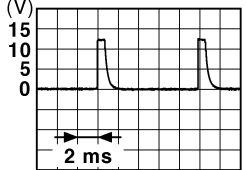
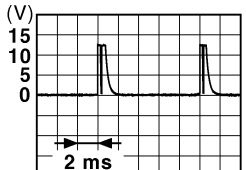

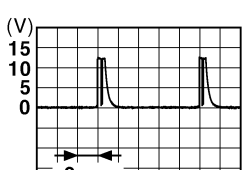

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

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

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

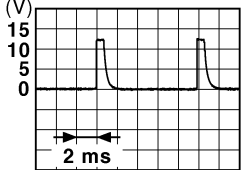
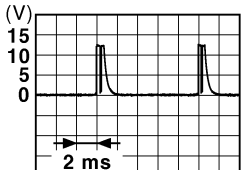
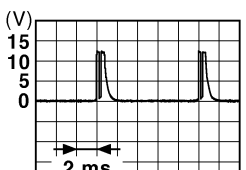
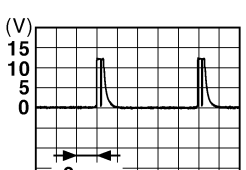
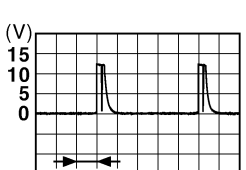
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 <p style="text-align: center;">1.4 V</p>
					Turn signal switch LH	 <p style="text-align: center;">1.3 V</p>
					Turn signal switch RH	 <p style="text-align: center;">1.3 V</p>
					Front wiper switch LO	 <p style="text-align: center;">1.3 V</p>
					Front washer switch ON	 <p style="text-align: center;">1.3 V</p>

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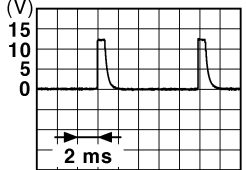
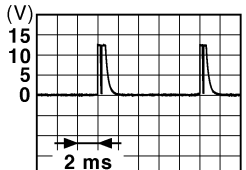

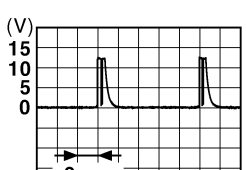

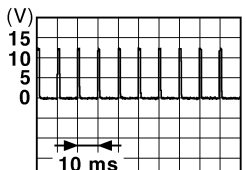
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Rear wiper switch INT (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF	 <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

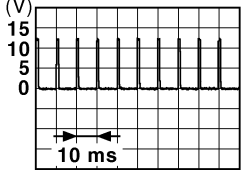
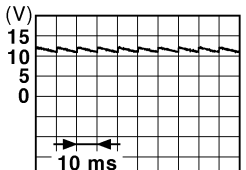
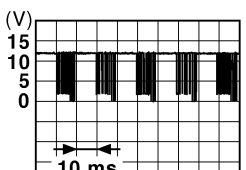
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	 <p style="text-align: center;">1.4 V</p>
					Lighting switch PASS	 <p style="text-align: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

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# BCM (BODY CONTROL MODULE)

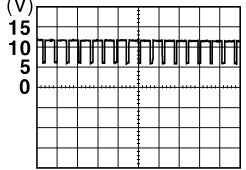
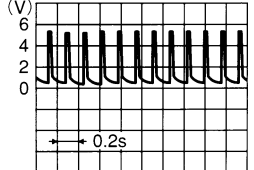

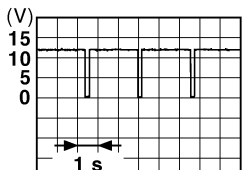
## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (SB)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (P)	Ground	Stop lamp switch 2 (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
		Stop lamp switch 2 (With ICC)		Stop lamp switch OFF (Brake pedal is not de- pressed) and ICC brake hold relay OFF	0 V	
				Stop lamp switch ON (Brake pedal is de- pressed) or ICC brake hold relay ON	Battery voltage	
119 (SB)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (BR)	Ground	Key slot switch	Input	When the key is inserted into key slot		Battery voltage
				When the key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON	 10.2 V	
				Ignition switch OFF or ACC	Battery voltage	



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps OFF)	9.5 V
					ON (Tail lamps ON)	<p><b>NOTE:</b> The pulse width of this wave is varied by the illumination bright- ening/dimming level.</p>  <p style="text-align: right; font-size: small;">JPMIA0159GB</p>
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON	0 V	
138 (Y)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
139 (L)	Ground	Tire pressure receiv- er communication	Input/ Output	Ignition switch ON	Standby state	 <p style="text-align: right; font-size: small;">OCC3881D</p>
					When receiving the signal from the transmitter	 <p style="text-align: right; font-size: small;">OCC3880D</p>
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 <p style="text-align: right; font-size: small;">JPMIA0014GB</p>
					11.3 V	
				OFF	Battery voltage	

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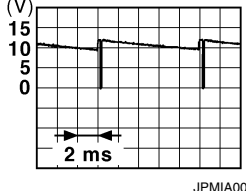
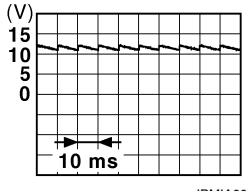
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
142 (BG)	Ground	Combination switch OUTPUT 5	Output	All switches OFF	0 V
				Lighting switch 1ST	
				Lighting switch HI	
				Lighting switch 2ND	
				Turn signal switch RH	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	
				All switches OFF (Wiper intermittent dial 4)	
				Front wiper switch HI (Wiper intermittent dial 4)	
				Rear wiper switch INT (Wiper intermittent dial 4)	
				Any of the conditions below with all switches OFF <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>	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	
				All switches OFF (Wiper intermittent dial 4)	
				Front washer switch ON (Wiper intermittent dial 4)	
				Rear wiper switch ON (Wiper intermittent dial 4)	
				Rear washer switch ON (Wiper intermittent dial 4)	
Any of the conditions below with all switches 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>					
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	
				All switches OFF	
				Front wiper switch INT	
				Front wiper switch LO	
				Lighting switch AUTO	10.7 V

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	
					ON (Door open)	0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

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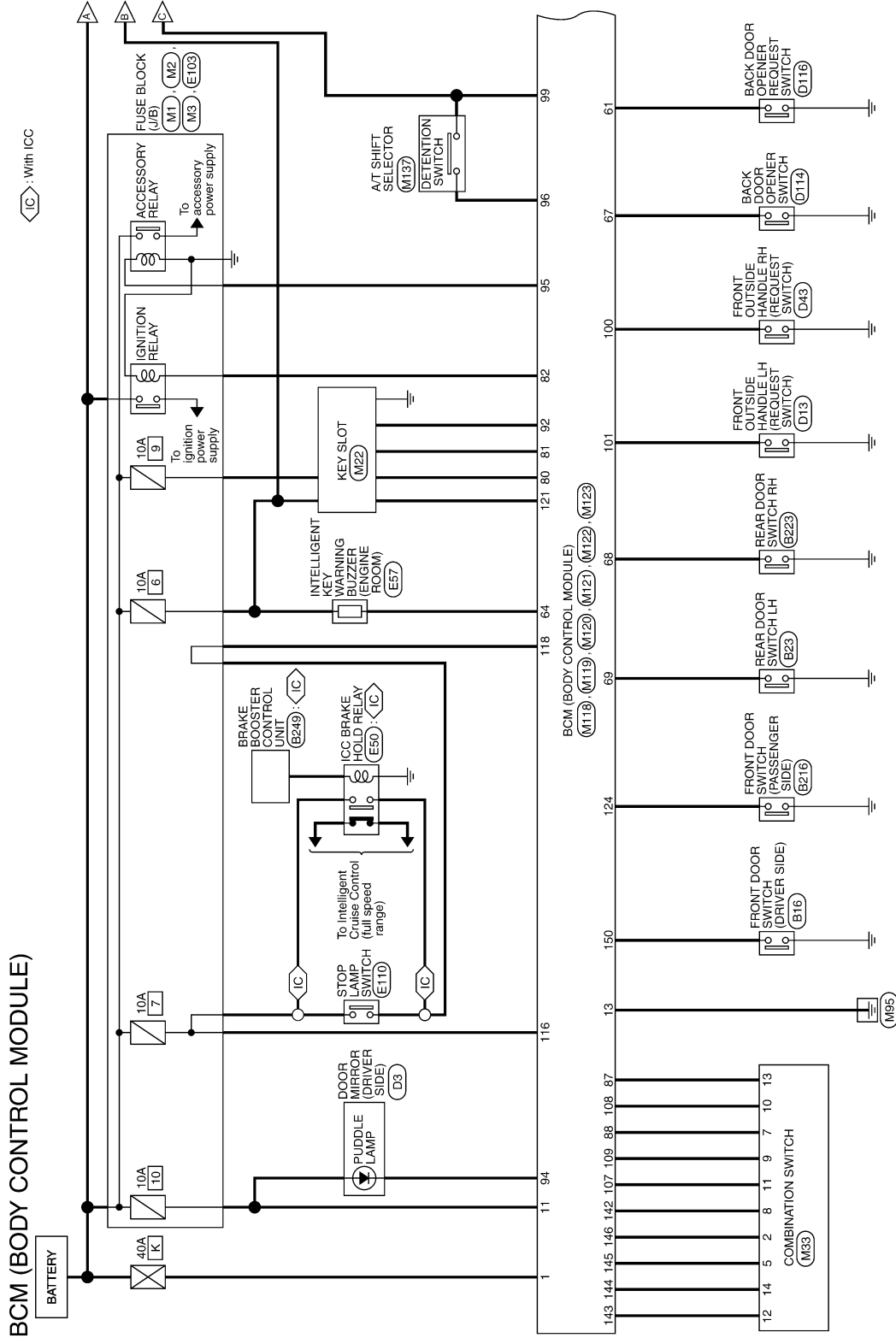
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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## Wiring Diagram - BCM -

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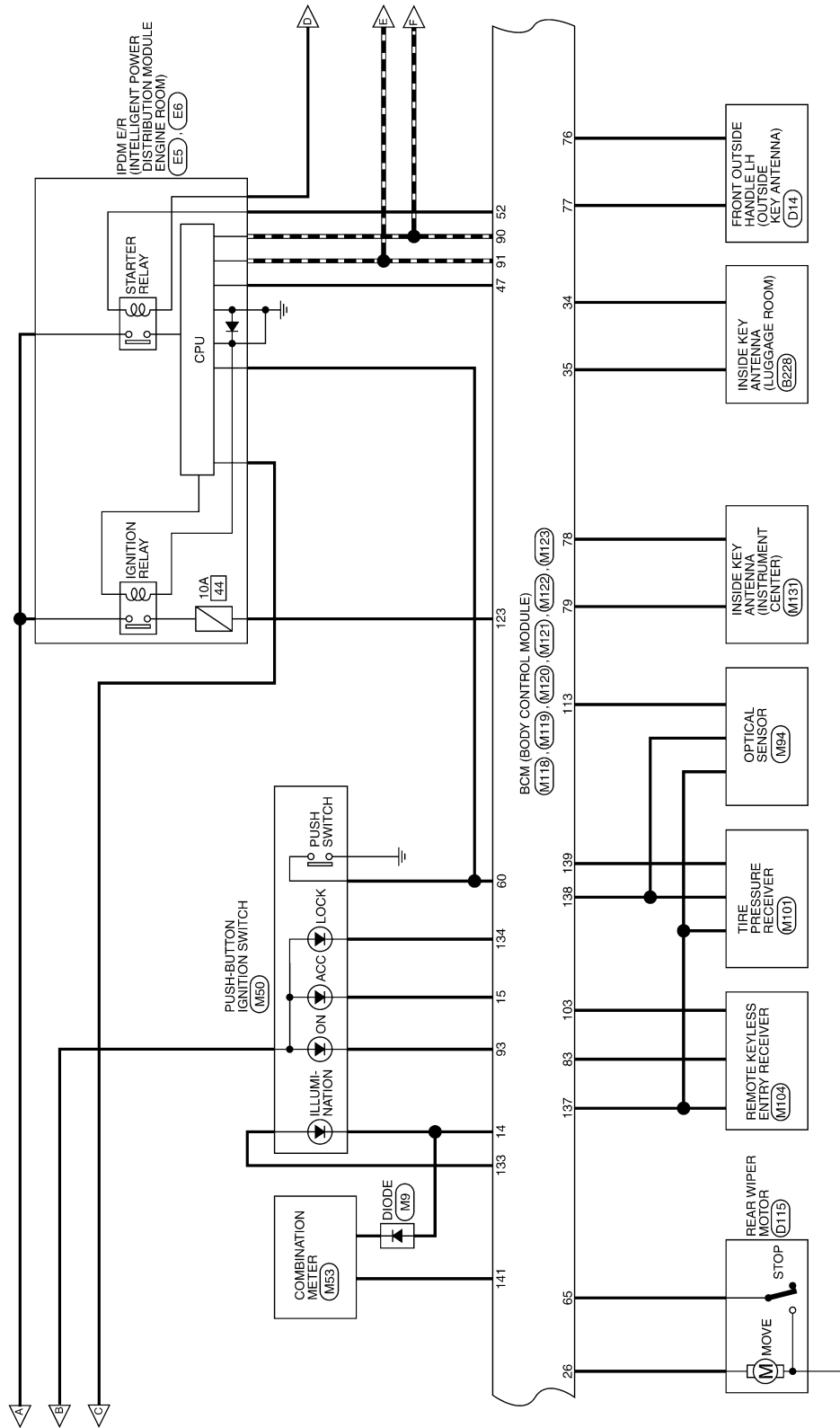


2015/06/22

JRMW13746GB

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



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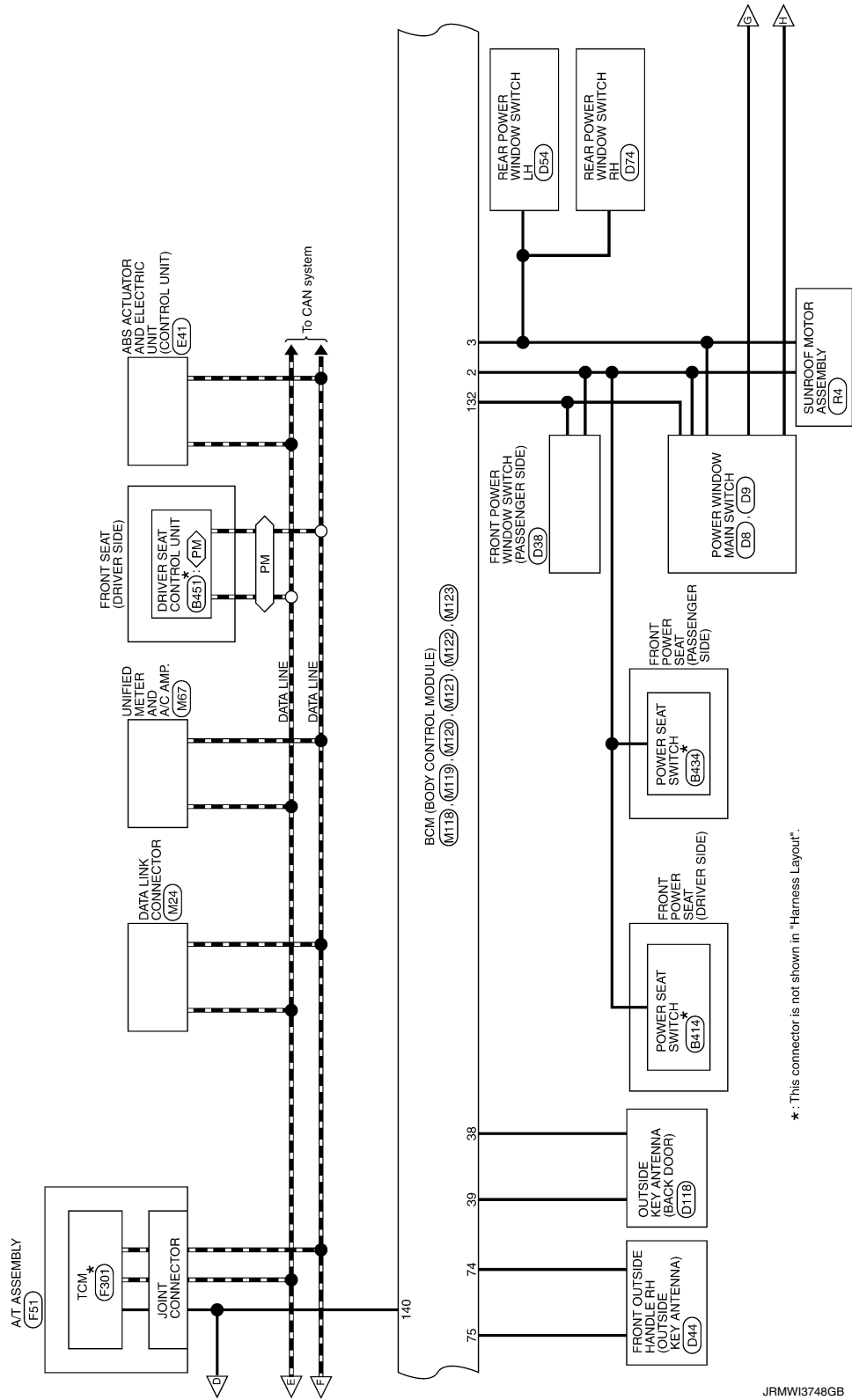
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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

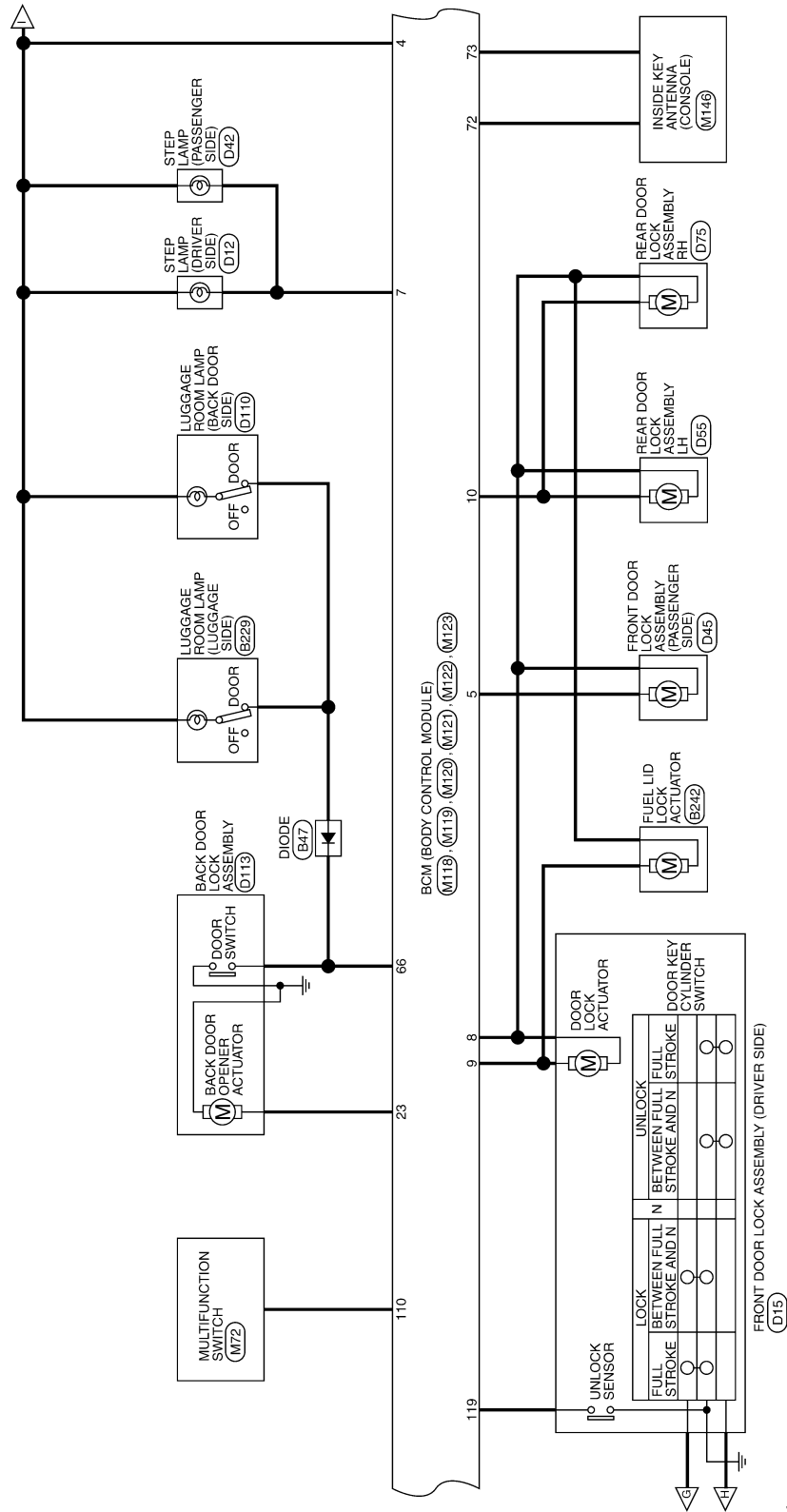
◊: With automatic drive positioner



JRMWI3748GB

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



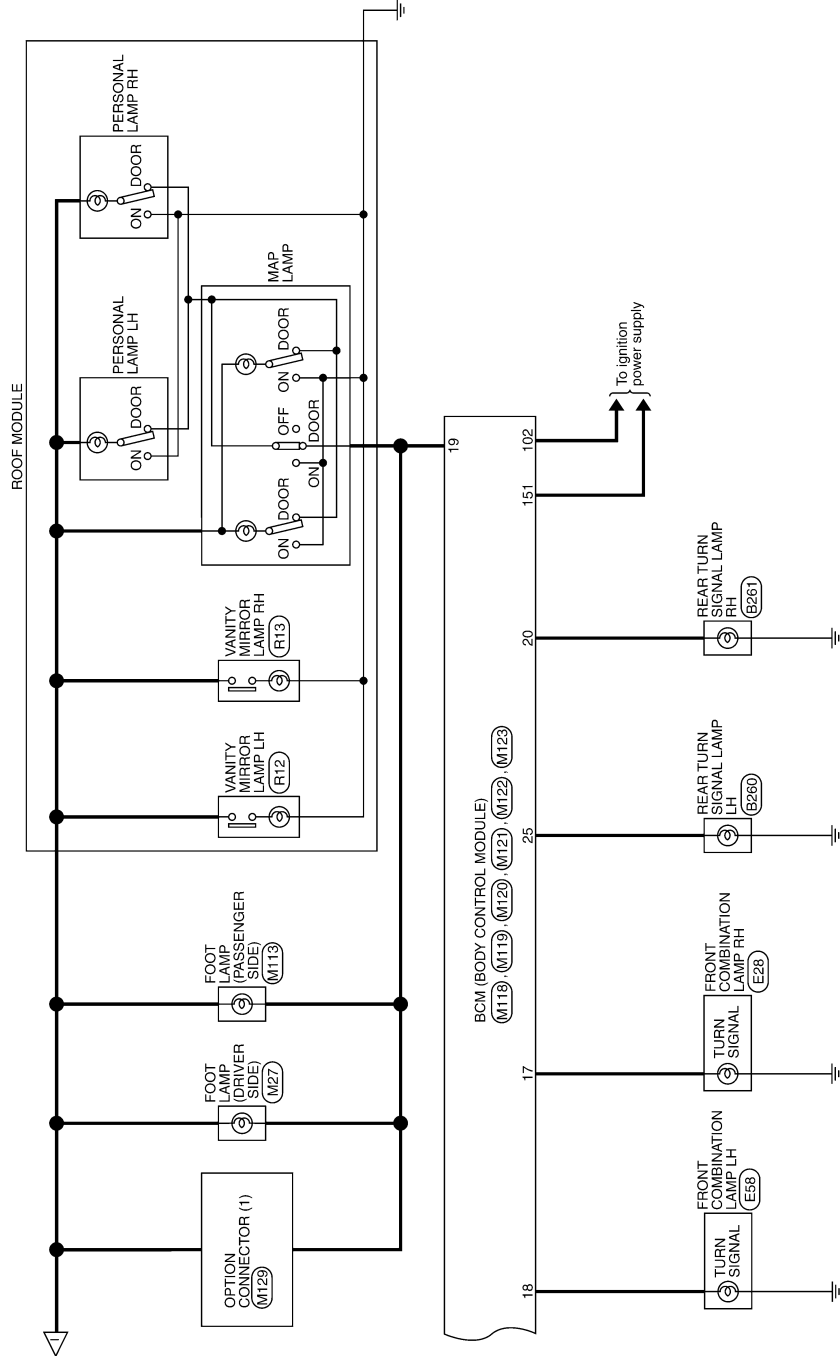
JRMW13749GB

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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



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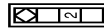


# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

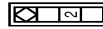
## BCM (BODY CONTROL MODULE)

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



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

Connector No.	B21E
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



Connector No.	B22B
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FCY

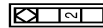


Connector No.	B24Z
Connector Name	FUEL LID LOCK ACTUATOR
Connector Type	M04FW-LC



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

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



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

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



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

Connector No.	B47
Connector Name	DIODE
Connector Type	Z433E-C9900



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

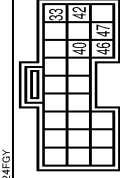
Connector No.	B229
Connector Name	LUGGAGE ROOM LAMP (LUGGAGE SIDE)
Connector Type	TN03FW



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

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

Connector No.	B249
Connector Name	BRAKE BOOSTER CONTROL UNIT
Connector Type	TR24FCY



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

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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Connector No.	B280
Connector Name	REAR TURN SIGNAL LAMP LH
Connector Type	HS0ZFG-W



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

Connector No.	B281
Connector Name	REAR TURN SIGNAL LAMP RH
Connector Type	HS0ZFG-W



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

Connector No.	B414
Connector Name	POWER SEAT SWITCH
Connector Type	NS1DFW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	B	-
3	G/Y	-
4	P	-
5	W	-
6	V	-
7	L/Y	-
8	L	-
9	L/R	-
10	G/W	-

Connector No.	B434
Connector Name	POWER SEAT SWITCH
Connector Type	NS1DFW-CS



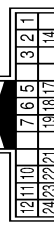
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G/Y	-
4	P	-
5	W	-
6	V	-
7	L/Y	-
8	L	-
9	L/R	-
10	G/W	-

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32HW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	CAN-H
2	-	LIART. (TX/RX)
3	BR	COAT
4	-	PULSE (RECLINER)
5	-	PULSE (TELESCOPI)
6	-	ADDRESS 2
7	-	IND 2
8	-	SLIDE SW (BACKWARD)
9	-	RECLINER SW (BACKWARD)
10	-	FRONT LIFTER SW (DOWNWARD)
11	-	FRONT LIFTER SW (UPWARD)
12	-	POWER SUPPLY (ENCODER)
13	-	PULSE (SLIDE)
14	-	PULSE (FRONT LIFTER)
15	-	PULSE (REAR LIFTER)
20	-	PUL (SECTIL1)
21	-	ADDRESS 1
22	-	IND 1
23	-	SLIDE SW (FORWARD)
24	-	RECLINER SW (FORWARD)
25	-	FRONT LIFTER SW (UPWARD)
26	-	FRONT LIFTER SW (DOWNWARD)
27	-	SET SW
28	-	SET SW

Connector No.	B3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	O	-
3	BR	COAT
5	P	COMP+
6	SB	ON
7	W	-
10	G	-
11	P	-
12	O	-
14	LG	-
17	SHIELD	COMP-
18	LG	GROUND
19	GR	-
22	BR	-
23	V	-
24	V	-

Connector No.	B8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS18FY-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	REAR POWER WINDOW MOTOR LH UP SIGNAL
2	BR	ENCODER GROUND
3	GR	REAR POWER WINDOW MOTOR LH DOWN SIGNAL

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## BCM (BODY CONTROL MODULE)

4	V	DOOR KEY CYLINDER SWITCH LH LOCK SIGNAL
5	O	REAR POWER WINDOW MOTOR RH/DOWN SIGNAL
6	Y	DOOR KEY CYLINDER SWITCH LH UNLOCK SIGNAL
7	BR	REAR POWER WINDOW MOTOR RH/UP SIGNAL
8	L	FRONT POWER WINDOW MOTOR (DRIVER SIDE) UP SIGNAL
9	O	ENCODER PULSE 2
10	Y	RETAINED POWER SIGNAL
11	G	FRONT POWER WINDOW MOTOR (DRIVER SIDE) DOWN SIGNAL
13	P	ENCODER PULSE 1
14	V	POWER WINDOW SERIAL LINK
15	B	ENCODER POWER SUPPLY

Connector No.	D9
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS902FW-GS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	B	GROUND
19	W	BATTERY POWER SUPPLY

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



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

Connector No.	D13
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RM02FL



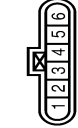
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	—
2	B	—

Connector No.	D14
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RM02MGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	O	—
2	SB	—

Connector No.	D15
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	EA06FY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	—
2	L	—
3	L	—
4	B	—
5	Y	—
6	V	—

Connector No.	D38
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS16PW-GS



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	ENCODER GROUND
4	O	ENCODER POWER SUPPLY
8	W	POWER WINDOW MOTOR UP SIGNAL
9	O	POWER WINDOW MOTOR DOWN SIGNAL
10	W	BATTERY POWER SUPPLY
11	B	ENCODER PULSE 1
12	B	ENCODER PULSE 2
15	O	ENCODER PULSE 1
16	V	POWER WINDOW SERIAL LINK

Connector No.	D42
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	TB02FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	—
2	SB	—

Connector No.	D43
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RM02FL



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	—
2	B	—

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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## BCM (BODY CONTROL MODULE)

Connector No.	D44
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	RK02ZMGY



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

Connector No.	D45
Connector Name	FRONT DOOR LOCK ASSEMBLY PASSENGER SIDE
Connector Type	EB6FEGY-RS



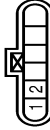
Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	LG	-

Connector No.	D54
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS50BFW-CS



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

Connector No.	D55
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	EB6FEGY-RS



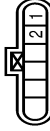
Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-

Connector No.	D74
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS50BFW-CS



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

Connector No.	D75
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	EB6FEGY-RS



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

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



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

Connector No.	D113
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS54FW-CS



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

JRMWI3754GB

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## BCM (BODY CONTROL MODULE)

Connector No.	D114
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	TH02MBR-P



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

Connector No.	D115
Connector Name	REAR WIPER MOTOR
Connector Type	GJ04FW-1V



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

Connector No.	D116
Connector Name	BACK DOOR OPENER REQUEST SWITCH
Connector Type	TH02MBR-P



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

Connector No.	D118
Connector Name	OUTSIDE KEY ANTENNA (BACK DOOR)
Connector Type	RK02FGY



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

Connector No.	E5
Connector Name	POWER INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-CSZ-M-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
4	Y	-
5	L	-
6	R	-
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
38	G	-

Connector No.	E6
Connector Name	POWER INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH08FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-

Connector No.	46
Connector Name	R



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BG	-
6	V	-
7	BR	-
8	P	-

Connector No.	E41
Connector Name	AES ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	BAA42FB-AH24-1H



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	G	GROUND
3	O	LIBV
4	B	GROUND
5	Y	DS FL
6	EG	DP RL
7	BR	DP RR
9	B	DP FR
10	W	DS FR
12	L	VAC

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PWC

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## BCM (BODY CONTROL MODULE)

14	P	CAN-L
15	SHIELD	GROUND
19	P	LIST
25	Y	BUS-L
26	LG	DP FL
27	GR	DS RL
28	G	LZ
29	LG	DS RR
30	SB	BLS
31	R	VDC OFF SW
35	L	CAN-H
43	B	BUS-H

Connector No.	E50
Connector Name	IGCC BRAKE HOLD RELAY
Connector Type	M06FGY-R-JS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-
3	P	-
4	SB	-
6	P	-
7	R	-

Connector No.	E57
Connector Name	INTELLISKEY KEY WARNING BUZZER (ENGINE ROOM)
Connector Type	R002FBR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
3	V	-

Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS5EFB-PR



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	V	-
6	G	-
7	P	-
8	B/G	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
1F	SB	-
2F	W	-
4F	G	-
6F	BR	-
8F	L	-
9F	R	-

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	M04FPL-LC



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

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FC-D3Y



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	BR	BATTERY POWER SUPPLY
3	O	CAN-H
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	LG	CAN-L
9	GR	STARTER RELAY
10	B	GROUND

Connector No.	F301
Connector Name	TCM
Connector Type	SPT0FG



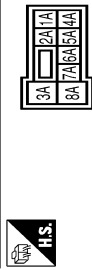
Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY
8	-	CAN-L
9	-	STARTER RELAY
10	-	GROUND

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

### BCM (BODY CONTROL MODULE)

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSJ0FW-M2



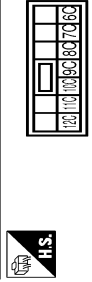
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSJ0FW-CS



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

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSJ2FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	R	-
12C	BG	-
6C	R	-
7C	B	-
8C	G	-
9C	BG	-

Connector No.	M9
Connector Name	DIODE
Connector Type	24335-C9600



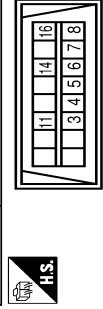
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-

Connector No.	M22
Connector Name	KEY SLOT
Connector Type	TH18FW-NH



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

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	ED18FW



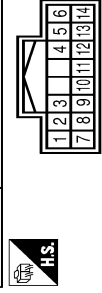
Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	L	-
9	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M27
Connector Name	FOOT LAMP (DRIVER SIDE)
Connector Type	A02FW



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

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



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

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

### BCM (BODY CONTROL MODULE)

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



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	W	-
3	W	-
4	BR	-
5	GR	-
6	Y	-
7	V	-
8	P	-

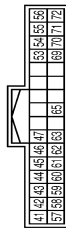
Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH40FPW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
4	B	GROUND
5	B	GROUND
6	P	ALTERNATOR SIGNAL
7	BR	AIR BAG SIGNAL
10	G	SECURITY SIGNAL
15	B	GROUND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	IGNITION SIGNAL

Terminal No.	Color Of Wire	Signal Name [Specification]
22	B	GROUND
24	BR	COMMUNICATION SIGNAL (LGD->AMP)
25	Y	COMMUNICATION SIGNAL (AMP->LGD)
26	R	VEHICLE SPEED SIGNAL (P-PULSE)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	SEAT BELT BRuckle SWITCH SIGNAL (DRIVER SIDE)
30	G	SEAT BELT BRuckle SWITCH SIGNAL (PASSENGER SIDE)
31	L	WASHER LEVEL SWITCH SIGNAL
33	B	ILLUMINATION CONTROL SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	E	TRIP SWITCH SIGNAL
39	B	ILLUMINATION CONTROL SWITCH SIGNAL
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (C)

Connector No.	M67
Connector Name	UNITED METER AND A/C AMP.
Connector Type	TH32FPW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL
46	BG	SUNLOAD SENSOR SIGNAL
47	G	SMALLEST GAS / OUTSIDE DOOR DETECTING SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	-
65	BG	ECV SIGNAL

68	L	A/C CLAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CAN-L



Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FPW-NH



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

Connector No.	M84
Connector Name	OPTICAL SENSOR
Connector Type	TK09FW



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

Connector No.	M101
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	GROUND
2	L	SIGNAL
4	Y	BATTERY

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



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	GROUND
2	Y	SIGNAL OUTPUT
4	LG	BATTERY



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

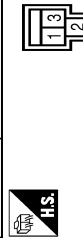
### BCM (BODY CONTROL MODULE)

Connector No.	M118
Connector Name	FOOT LAMP (PASSENGER SIDE)
Connector Type	A02FW



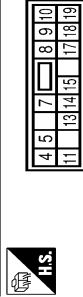
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	BR	-

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



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

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



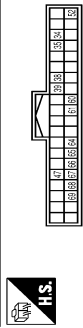
Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

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



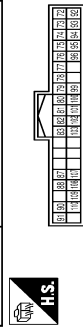
Terminal No.	Color Of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
23	G	BACK DOOR OPEN OUTPUT
25	G	TURN SIGNAL LH (REAR)
26	G	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FCV-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANT-
35	V	LUGGAGE ROOM ANT+
38	B	BACK DOOR ANT-
39	W	BACK DOOR ANT+
47	Y	IGN RELAY (PDM F/R) CONT
52	SB	STARTER RELAY CONT
60	BR	PUSH SW
61	W	BACK DOOR OPENER REQUEST SW
64	V	I-KEY WARN BUZZER (ENG ROOM)
65	BG	REAR WIPER STOP POSITION
66	R	BACK DOOR SW
67	GR	BACK DOOR OPENER SW
68	BR	REAR RH DOOR SW
69	R	REAR LH DOOR SW

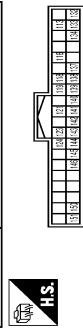
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+

Terminal No.	Color Of Wire	Signal Name [Specification]
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	MATS ANT AMP
81	W	MATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMA
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	IGN IND
94	B	Puddle Lamp CONT
95	BR	TRUNK LAMP CONT
96	GR	A, T SHIFT SELECTOR POWERS SUPPLY
99	GR	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FC-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
114	SB	STOP LAMP SW 1
118	SB	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMA
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND

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
# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)	
137	BQ RECEIVER SENSOR GND
138	Y RECEIVER SENSOR POWER SUPPLY
139	L TIRE PRESSURE RECEIVER COMM
140	GR SHIFT N/P
141	G SECURITY IND LAMP GND
142	BG COMBI SW OUTPUT 5
143	P COMBI SW OUTPUT 1
144	G COMBI SW OUTPUT 2
145	L COMBI SW OUTPUT 3
146	SB COMBI SW OUTPUT 4
150	LG DRIVER DOOR SW
151	G REAR WINDOW DEFOGGER RELAY CONT


Connector No.	M129
Connector Name	OPTION CONNECTOR (1)
Connector Type	TR408MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
3	G	
6	R	

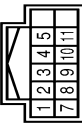
  

Connector No.	M131
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FEY

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


Connector No.	M137
Connector Name	A/T SHIFT SELECTOR
Connector Type	TH12FW-NH

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

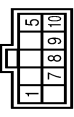
  

Connector No.	M146
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FEY

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


Connector No.	R4
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA10FGY

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	SUNROOF CLOSE SWITCH (BITD) SIGNAL
5	P	SUNROOF OPEN SWITCH (BITD) SIGNAL
7	BR	SUNROOF POWER SUPPLY
8	L	VEHICLE SPEED SENSOR (2PULSE)
9	Y	RAF SIGNAL
10	G	GROUND


  

Connector No.	R12
Connector Name	VANITY MIRROR LAMP LH
Connector Type	MCA02FW

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

Connector No.	R13
Connector Name	VANITY MIRROR LAMP RH
Connector Type	MCA02FW

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

## Fail-safe

### FAIL-SAFE CONTROL BY DTC

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

JRMW13760GB

INFOID:000000012829233

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

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

### REAR WIPER MOTOR PROTECTION

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

#### Condition of cancellation

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

### DTC Inspection Priority Chart

INFOID:000000012829234

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> <li>• U1000: CAN COMM CIRCUIT</li> <li>• U1010: CONTROL UNIT (CAN)</li> </ul>
3	<ul style="list-style-type: none"> <li>• B2190: NATS ANTENNA AMP</li> <li>• B2191: DIFFERENCE OF KEY</li> <li>• B2192: ID DISCORD BCM-ECM</li> <li>• B2193: CHAIN OF BCM-ECM</li> <li>• B2195: ANTI SCANNING</li> </ul>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

Priority	DTC
4	<ul style="list-style-type: none"> <li>• B2553: IGNITION RELAY</li> <li>• B2555: STOP LAMP</li> <li>• B2556: PUSH-BTN IGN SW</li> <li>• B2557: VEHICLE SPEED</li> <li>• B2560: STARTER CONT RELAY</li> <li>• B2601: SHIFT POSITION</li> <li>• B2602: SHIFT POSITION</li> <li>• B2603: SHIFT POSI STATUS</li> <li>• B2604: PNP SW</li> <li>• B2605: PNP SW</li> <li>• B2608: STARTER RELAY</li> <li>• B260A: IGNITION RELAY</li> <li>• B260F: ENG STATE SIG LOST</li> <li>• B2614: ACC RELAY CIRC</li> <li>• B2615: BLOWER RELAY CIRC</li> <li>• B2616: IGN RELAY CIRC</li> <li>• B2617: STARTER RELAY CIRC</li> <li>• B2618: BCM</li> <li>• B261A: PUSH-BTN IGN SW</li> <li>• B261E: VEHICLE TYPE</li> <li>• B26EA: KEY REGISTRATION</li> <li>• C1729: VHCL SPEED SIG ERR</li> <li>• U0415: VEHICLE SPEED SIG</li> </ul>
5	<ul style="list-style-type: none"> <li>• C1704: LOW PRESSURE FL</li> <li>• C1705: LOW PRESSURE FR</li> <li>• C1706: LOW PRESSURE RR</li> <li>• C1707: LOW PRESSURE RL</li> <li>• C1708: [NO DATA] FL</li> <li>• C1709: [NO DATA] FR</li> <li>• C1710: [NO DATA] RR</li> <li>• C1711: [NO DATA] RL</li> <li>• C1716: [PRESSDATA ERR] FL</li> <li>• C1717: [PRESSDATA ERR] FR</li> <li>• C1718: [PRESSDATA ERR] RR</li> <li>• C1719: [PRESSDATA ERR] RL</li> <li>• C1734: CONTROL UNIT</li> </ul>
6	<ul style="list-style-type: none"> <li>• B2621: INSIDE ANTENNA</li> <li>• B2622: INSIDE ANTENNA</li> <li>• B2623: INSIDE ANTENNA</li> </ul>

## DTC Index

INFOID:0000000012829235

### NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [BCS-18. "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. Further testing may be required.	—	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	—	<a href="#">BCS-41</a>
U1010: CONTROL UNIT (CAN)	—	—	—	—	<a href="#">BCS-42</a>
U0415: VEHICLE SPEED SIG	—	—	—	—	<a href="#">BCS-43</a>
B2190: NATS ANTENNA AMP	×	—	—	—	<a href="#">SEC-40</a>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B2191: DIFFERENCE OF KEY	×	—	—	—	<a href="#">SEC-43</a>
B2192: ID DISCORD BCM-ECM	×	—	—	—	<a href="#">SEC-44</a>
B2193: CHAIN OF BCM-ECM	×	—	—	—	<a href="#">SEC-45</a>
B2195: ANTI SCANNING	×	—	—	—	<a href="#">SEC-46</a>
B2553: IGNITION RELAY	—	×	—	—	<a href="#">PCS-52</a>
B2555: STOP LAMP	—	×	—	—	<a href="#">SEC-47</a>
B2556: PUSH-BTN IGN SW	—	×	×	—	<a href="#">SEC-49</a>
B2557: VEHICLE SPEED	×	×	×	—	<a href="#">SEC-51</a>
B2560: STARTER CONT RELAY	×	×	×	—	<a href="#">SEC-52</a>
B2562: LOW VOLTAGE	—	×	—	—	<a href="#">BCS-44</a>
B2601: SHIFT POSITION	×	×	×	—	<a href="#">SEC-53</a>
B2602: SHIFT POSITION	×	×	×	—	<a href="#">SEC-56</a>
B2603: SHIFT POSI STATUS	×	×	×	—	<a href="#">SEC-59</a>
B2604: PNP SW	×	×	×	—	<a href="#">SEC-62</a>
B2605: PNP SW	×	×	×	—	<a href="#">SEC-64</a>
B2608: STARTER RELAY	×	×	×	—	<a href="#">SEC-66</a>
B260A: IGNITION RELAY	×	×	×	—	<a href="#">PCS-54</a>
B260F: ENG STATE SIG LOST	×	×	×	—	<a href="#">SEC-68</a>
B2614: ACC RELAY CIRC	—	×	×	—	<a href="#">PCS-56</a>
B2615: BLOWER RELAY CIRC	—	×	×	—	<a href="#">PCS-59</a>
B2616: IGN RELAY CIRC	—	×	×	—	<a href="#">PCS-62</a>
B2617: STARTER RELAY CIRC	×	×	×	—	<a href="#">SEC-71</a>
B2618: BCM	×	×	×	—	<a href="#">PCS-65</a>
B261A: PUSH-BTN IGN SW	—	×	×	—	<a href="#">SEC-73</a>
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	<a href="#">SEC-76</a>
B2621: INSIDE ANTENNA	—	×	—	—	<a href="#">DLK-58</a>
B2622: INSIDE ANTENNA	—	×	—	—	<a href="#">DLK-60</a>
B2623: INSIDE ANTENNA	—	×	—	—	<a href="#">DLK-62</a>
B26E1: ENG STATE NO RES	×	×	×	—	<a href="#">SEC-69</a>
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	<a href="#">SEC-70</a>
C1704: LOW PRESSURE FL	—	—	—	×	<a href="#">WT-25</a>
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	<a href="#">WT-27</a>
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	

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PWC

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## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1716: [PRESSDATA ERR] FL	—	—	—	×	<a href="#">WT-30</a>
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	<a href="#">WT-32</a>
C1734: CONTROL UNIT	—	—	—	×	<a href="#">WT-34</a>

# POWER WINDOW MAIN SWITCH

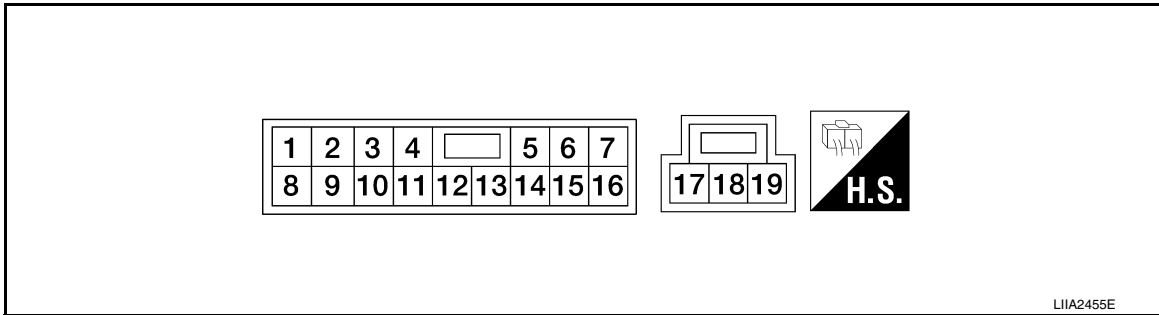
< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW MAIN SWITCH

Reference Value

INFOID:000000012172960

### TERMINAL LAYOUT



### PHYSICAL VALUES

### POWER WINDOW MAIN SWITCH

Terminal No. (Wire color)		Description		Condition	Voltage [V] (Approx.)
+	-	Signal name	Input/ Output		
1 (W)	Ground	Rear power window motor LH UP signal	Output	When rear LH switch in power window main switch is UP at operated	Battery voltage
2 (BR)	Ground	Encoder ground	—	—	0
3 (GR)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in power window main switch is DOWN at operated	Battery voltage
4 (V)	Ground	Door key cylinder switch LH LOCK signal	Input	Key position (Neutral → Locked)	5 → 0
5 (O)	Ground	Rear power window motor RH DOWN signal	Output	When rear RH switch in power window main switch is DOWN at operated	Battery voltage
6 (Y)	Ground	Door key cylinder switch LH UNLOCK signal	Input	Key position (Neutral → Unlocked)	5 → 0
7 (BR)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in power window main switch is UP at operated	Battery voltage
8 (L)	Ground	Front power window motor (driver side) UP signal	Output	When front LH switch in power window main switch is UP at operated	Battery voltage
9 (O)	Ground	Encoder pulse signal 2	Input	When front power window motor (driver side) operates	

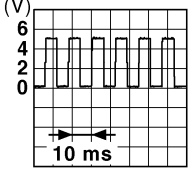
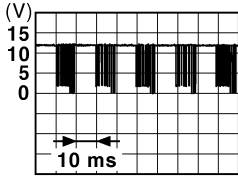
JMKIA0070GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M  
N  
O  
P

PWC

# POWER WINDOW MAIN SWITCH

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Voltage [V] (Approx.)
+	-	Signal name	Input/ Output		
10 (Y)	Ground	Retained power signal	Input	Ignition switch ON	Battery voltage
				Within 45 seconds after ignition switch is turned to OFF	Battery voltage
				When driver side or passenger side door is opened during retained power operation	0
11 (G)	Ground	Front power window motor (driver side) DOWN signal	Output	When front LH switch in power window main switch is DOWN at operated	Battery voltage
13 (P)	Ground	Encoder pulse signal 1	Input	When front power window motor (driver side) operates.	 <p style="text-align: right; font-size: small;">JMKIA0070GB</p>
14 (V)	Ground	Power window serial link	Input/ Output	Ignition switch ON or power window timer operating	 <p style="text-align: right; font-size: small;">JPMIA0013GB</p>
15 (B)	Ground	Encoder power supply	Output	Ignition switch ON	Battery voltage
17 (B)	Ground	Ground	—	—	0
19 (W)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage



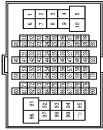


# POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

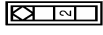
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	B	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	L	- [Without NAVI]
30	SHIELD	- [With neutral view monitor]
31	SHIELD	- [Without second view monitor]
32	P	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [With Blind Spot Warning]
33	SB	-
34	L	-
35	P	-

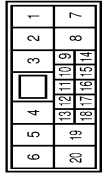
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
60	L	-
62	L	-
63	SHIELD	-
64	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	GR	-
77	R	-
78	P	-
79	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
88	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	Y	-
98	W	-
99	GR	-

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



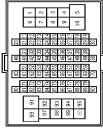
Terminal No.	Color Of Wire	Signal Name [Specification]
2	V	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	NH16FW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	- [Without BOSE system]
2	Y	- [With BOSE system]
4	Y	-
5	BR	-
6	G	-
7	B	-
8	G	- [With BOSE system]
8	Y	- [Without BOSE system]
9	GR	-
20	W	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	GR	-
4	BG	-
7	LG	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
19	P	-
26	BR	-
28	L	-
28	Y	-
29	Y	-
30	GR	-
31	R	-
32	BR	-
33	G	-
51	R	-
55	G	-
56	R	-
57	W	-
58	B	-
59	SHIELD	-
60	LG	-
61	BR	-
62	BR	-
63	P	-
84	L	-
65	G	-
66	P	-
67	L	-
68	SHIELD	-
69	V	-

# POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

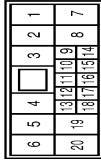
Terminal No.	Color Of Wire	Signal Name [Specification]
70	Y	
71	SB	
72	W	
73	BR	
74	Y	
80	SB	
81	SB	
82	LG	
83	P	
84	R	
85	L	
86	BG	
87	B	
88	V	
89	R	
92	R	
94	R	
95	SB	
96	G	
97	G	
98	R	
99	P	
100	L	

Connector No.	BE216
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03PW



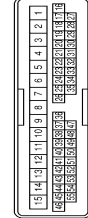
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	

Connector No.	BE218
Connector Name	WIRE TO WIRE
Connector Type	NH1CFW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	
2	LG	
3	V	
4	LG	
5	G	
6	G	
7	B	
8	P	
9	R	
10	R	
11	R	
12	R	
13	R	
14	R	
15	R	
16	R	
17	R	
18	R	
19	R	
20	W	

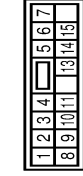
Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	T146PW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	
2	B	
3	W	
4	W	
5	L	
6	G	
7	GR	
8	W	
9	O	
10	BR	
11	P	
12	LG	

Terminal No.	Color Of Wire	Signal Name [Specification]
12	B	
14	V	
15	W	
16	SB	
17	LG	
18	SHIELD	
19	P	
20	W	
21	O	
22	P	
23	BR	
24	V	
25	GR	
26	W	
27	BR	
28	V	
29	LG	
30	G	
31	W	
32	G	
33	L	
34	SB	
35	R	
36	LG	
37	R	
38	P	
39	O	
40	BR	
41	GR	
42	GR	
43	O	
44	GR	
44	W	
45	G	
45	Y	
46	G	
46	V	
47	R	
47	R	
48	G	
48	G	
49	GR	
50	SHIELD	
51	B	
52	B	
53	SB	
54	O	
55	Y	

Connector No.	B8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	REAR POWER WINDOW MOTOR LH UP SIGNAL
2	BR	ENCODER GROUND
3	GR	REAR POWER WINDOW MOTOR LH DOWN SIGNAL
4	V	DOOR KEY CYLINDER SWITCH LH LOCK SIGNAL
5	O	REAR POWER WINDOW MOTOR RH DOWN SIGNAL
6	Y	DOOR KEY CYLINDER SWITCH LH UNLOCK SIGNAL
7	BR	REAR POWER WINDOW MOTOR RH UP SIGNAL
8	L	FRONT POWER WINDOW MOTOR DRIVER SIDE UP SIGNAL
9	O	ENCODER PULSE 2
10	Y	RETAINED POWER SIGNAL
11	G	FRONT POWER WINDOW MOTOR DRIVER SIDE DOWN SIGNAL
13	P	ENCODER PULSE 1
14	V	POWER WINDOW SERIAL LINK
15	B	ENCODER POWER SUPPLY

Connector No.	B9
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS03FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	B	GROUND
19	W	BATTERY POWER SUPPLY

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M  
N  
O  
P

PWC

# POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

Connector No.	D10
Connector Name	FRONT POWER WINDOW MOTOR (DRIVER SIDE)
Connector Type	NS08FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	L	-
3	O	-
4	B	-
5	P	-
6	BR	-

Connector No.	D15
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	EG08FG+RS



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

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH4QFW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
7	RE	-
8	BR	-
9	V	-
12	P	-
13	LG	-
14	B	-
15	W	-
16	BR	-
17	B	-
18	R	-
19	B	-
20	G	- [With around view monitor]
20	G	- [Without around view monitor]
21	BR	- [With around view monitor]
21	SHIELD	- [With around view monitor]
22	V	-
23	P	-
24	W	-
25	SB	-
26	R	-
27	G	-
33	O	-
34	GR	-
35	G	-
36	R	-
37	G	-
43	V	-
44	P	-
45	W	-
46	W	-
47	SHIELD	-
52	G	-
53	GR	-
54	O	-
55	L	-

Connector No.	D38
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	ENCODER GROUND
4	G	ENCODER POWER SUPPLY
8	W	POWER WINDOW MOTOR UP SIGNAL
9	G	POWER WINDOW MOTOR DOWN SIGNAL
10	W	BATTERY POWER SUPPLY
11	B	GROUND
12	R	ENCODER PULSE 1
15	O	ENCODER PULSE 2
16	V	POWER WINDOW SERIAL LINK

Connector No.	D48
Connector Name	FRONT POWER WINDOW MOTOR (PASSENGER SIDE)
Connector Type	NS08FW-CS



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

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	NH10MW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	- [Without BOSE system]
2	Y	- [With BOSE system]
4	Y	-
5	V	-
6	G	-
7	B	-
8	G	- [With BOSE system]
8	Y	- [Without BOSE system]
19	G	-
20	V	-

Connector No.	B52
Connector Name	REAR POWER WINDOW MOTOR LH
Connector Type	RS08FG



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

# POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

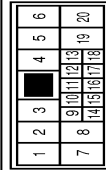
## POWER WINDOW SYSTEM

Connector No.	D34
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS308FW-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	NS110MM-CS10



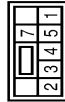
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
4	W	-
5	V	-
6	G	-
8	B	-
8	Y	- [With BOSE system] - [Without BOSE system]
18	G	-
20	V	-

Connector No.	D72
Connector Name	REAR POWER WINDOW MOTOR RH
Connector Type	RS08FEG



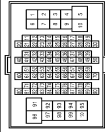
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
3	P	-

Connector No.	D74
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS308FW-CS



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

Connector No.	E108
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	R	-
15	W	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
29	BG	-
32	B	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	G	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	- [With ICC] - [Without ICC]
74	BR	- [With ICC] - [Without ICC]
75	G	- [With ICC] - [Without ICC]
76	W	- [With ICC] - [Without ICC]
76	V	- [Without ICC]
77	P	-
77	R	- [With ICC] - [Without ICC]
78	BR	- [With ICC] - [Without ICC]
78	L	- [With ICC] - [Without ICC]
79	L	-
79	Y	- [With ICC] - [Without ICC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
85	B	-
86	P	-
87	V	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

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# POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

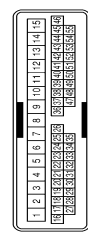
95	LG	-
96	SB	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (A/B)
Connector Type	NS36PW-M2



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

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-C515



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

## POWER WINDOW SYSTEM

5	L	-
6	R	-
7	R	-
8	W	-
9	G	-
10	L	-
11	G	-
12	V	-
13	B	-
14	Y	-
15	W	-
16	R	-
17	R	-
18	SHIELD	-
19	G	-
20	L	-
21	LG	-
22	L	-
23	G	-
24	Y	-
25	GR	-
26	R	-
27	W	-
28	V	-
29	Y	-
30	Y	-
31	R	-
32	BR	-
33	SB	-
34	Y	-
35	P	-
36	LG	-
37	BR	-
38	P	-
39	BG	-
40	SB	-
41	L	-
42	R	-
43	BR	-
44	V	-
45	G	-
46	SB	-
47	R	-
48	G	-
49	P	-
50	SHIELD	-
51	B	-
52	R	-
53	V	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-C515-TM4



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

33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	BG	-
39	BR	-
41	W	-
42	BG	-
43	BG	-
45	W	-
49	L	-
50	B	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
67	SHIELD	-
68	Y	-
69	Y	-
70	GR	-
71	LG	-
72	Y	-
73	SB	-
74	BR	-
74	L	- [Without ICC]
75	G	-
76	GR	- [Without ICC]
76	W	- [With ICC]
77	P	- [Without ICC]
77	P	- [With ICC]
78	R	-
78	L	- [Without ICC]
78	R	- [With ICC]
79	V	-
79	V	- [Without ICC]
79	V	- [With ICC]
80	SB	-
81	SB	-
82	SB	-
83	V	-
84	G	-
85	L	-
86	P	-
87	W	-

JRKWF3804GB



# POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

100 SB - (WHL BOSE system)

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



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

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M016PW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	G	L/L DOOR FUEL ID LOCK OUTPUT
9	G	L/L DOOR FUEL ID LOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (L/USE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	T140FB-NH



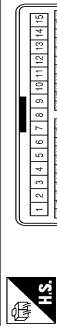
Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	NATS ANT AMP
81	W	NATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	R	REFUELLER ENTRY RECEIVER COMM
84	BR	REFUELLER ENTRY RECEIVER COMM
85	Y	COMBI SW INPUT 3
86	Y	CAN-L
87	P	CAN-H
88	L	KEY SLOT ILL CONT
89	LG	ON IND
90	V	PUDDLE LAMP CONT
91	Y	ACC RELAY CONT
92	BG	A/T SHIFT SELECTOR POWER SUPPLY
93	GR	SHIFT P
94	R	PASSENGER DOOR REQUEST SW
95	G	DRIVER DOOR REQUEST SW
96	BG	BLOWER FAN MOTOR RELAY CONT
97	BG	KEYLESS ENTRY RECEIVER POWER SUPPLY
98	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
99	G	COMBI SW INPUT 4
100	R	COMBI SW INPUT 2
101	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	T140FC-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
114	SB	STOP LAMP SW 1
115	P	STOP LAMP SW 2
116	Y	DR DOOR UNLOCK SENSOR
117	SB	KEY SLOT SW
118	BR	IGN F/B
119	W	PASSENGER DOOR SW
120	LG	POWER WINDOW SW COMM
121	BR	PUSH-BUTTON IGNITION SW ILL POWER
122	GR	LOCK IND
123	BG	RECEIVER SENSOR GND
124	R	RECEIVER SENSOR POWER SUPPLY
125	L	THE PRESSURE SELECTOR COMM
126	Y	SECURITY ILL LAMP CONT
127	G	COMBI SW OUTPUT 5
128	BG	COMBI SW OUTPUT 1
129	G	COMBI SW OUTPUT 2
130	L	COMBI SW OUTPUT 3
131	SB	COMBI SW OUTPUT 4
132	LG	DRIVER DOOR SW
133	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	T140MW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
9	Y	-
12	L	-
13	V	-
14	B	-
15	W	-
16	BR	-
17	B	-
18	R	-
19	B	-
20	W	- [With around view monitor]
21	W	- [With around view monitor]
22	SB	- [With around view monitor]
23	GR	-
24	G	-
25	Y	-
26	R	-
27	W	-
30	W	-
33	BR	-
34	V	-
35	G	-
36	Y	-
37	BR	-
38	Y	-
43	Y	-
44	Y	-
45	R	-
46	W	-
47	SHIELD	-
52	R	-
53	G	-
54	W	-
55	BG	-



# POWER WINDOW MAIN SWITCH



< ECU DIAGNOSIS INFORMATION >

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**POWER WINDOW SYSTEM**

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC

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


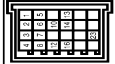
Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC

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

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

Connector No.	M097
Connector Name	JOINT CONNECTOR-M09
Connector Type	MH24FG-J

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	BG	-
3	B	-
4	L	-
5	R	-
6	BG	-
7	B	-
8	L	-
10	B	-
12	L	-
13	BR	-
14	BG	-
16	G	-
23	B	-

## Fail-safe

### FAIL-SAFE CONTROL

Switches to fail-safe control when malfunction is detected in encoder signal that detects up/down speed and direction of door glass. Switches to fail-safe control when a signal that is out of the specified value is detected between the fully closed position and the actual position of the glass.

JRKWF3807GB

INFOID:000000012172962

# POWER WINDOW MAIN SWITCH

## < ECU DIAGNOSIS INFORMATION >

Malfunction	Malfunction condition
Pulse sensor malfunction	When one pulse signal that is the specified value or more is detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Both pulse sensors malfunction	When both pulse signals are not detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Pulse direction malfunction	When a pulse signal indicating that window is moving in the opposite direction against the power window motor is detected for the specified value or more, while door glass is being operated UP or DOWN.
Glass recognition position malfunction 1	When the actual door glass position that is out of specified value is detected compared to the door glass fully closed position memorized in module, while door glass is being operated UP or DOWN.
Glass recognition position malfunction 2	When pulse count that is out of the door glass full stroke value or more is detected, while door glass is being operated UP or DOWN.

If fail-safe control, the system changes to a non-initialized condition and the following function do not operate.

- Auto-up operation
- Anti-pinch function
- Door key cylinder switch power window function

When fail-safe control is activated, perform initialization procedure to recover. If a malfunction is detected in power window switch or more, fail-safe control is activated again.

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

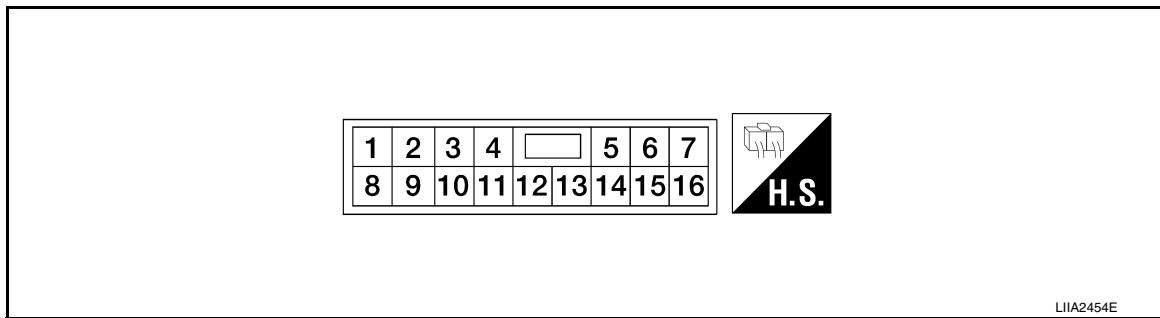
< ECU DIAGNOSIS INFORMATION >

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Reference Value

INFOID:000000012172963

### TERMINAL LAYOUT



### PHYSICAL VALUES

#### FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Terminal No.		Description		Condition	Voltage [V] (Approx.)
+	-	Signal name	Input/ Output		
3 (L)	Ground	Encoder ground	—	—	0
4 (G)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates	Battery voltage
8 (W)	Ground	Power window motor UP signal	Output	When power window motor is UP at operated.	Battery voltage
9 (G)	Ground	Power window motor DOWN signal	Output	When power window motor is DOWN at operated.	Battery voltage
10 (W)	Ground	Battery power supply	Input	—	Battery voltage
11 (B)	Ground	Ground	—	—	0
12 (R)	Ground	Encoder pulse signal 1	Input	When power window motor operates.	

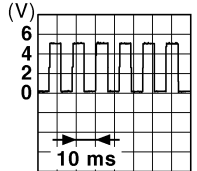
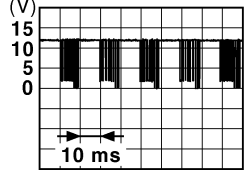
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PWC

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

## < ECU DIAGNOSIS INFORMATION >

Terminal No.		Description		Condition	Voltage [V] (Approx.)
+	-	Signal name	Input/ Output		
15 (O)	Ground	Encoder pulse signal 2	Input	When power window motor operates.	 <p style="text-align: right; font-size: small;">JMkia0070GB</p>
16 (V)	Ground	Power window serial link	Input/ Output	Ignition switch ON or power window timer operating.	 <p style="text-align: right; font-size: small;">JPMIA0013GB</p>

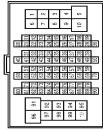


# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

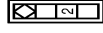
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	B	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	BR	- [Without NAVI]
30	SHIELD	- [With neutral view monitor]
31	SHIELD	- [Without second view monitor]
32	P	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [With Blind Spot Warning]
33	SB	-
34	L	-
35	P	-

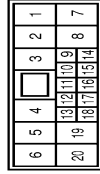
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
60	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	GR	-
77	R	-
78	P	-
79	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
88	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	Y	-
98	W	-
99	GR	-

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



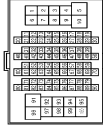
Terminal No.	Color Of Wire	Signal Name [Specification]
2	V	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	NH16FW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	- [Without BOSE system]
2	Y	- [With BOSE system]
4	Y	-
5	BR	-
6	G	-
7	B	-
8	G	- [With BOSE system]
8	Y	- [Without BOSE system]
9	GR	-
20	W	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	GR	-
4	BG	-
7	LG	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
19	P	-
26	BR	-
28	Y	-
29	Y	-
30	GR	-
31	R	-
32	BR	-
33	G	-
51	R	-
55	G	-
56	R	-
57	W	-
58	B	-
59	SHIELD	-
60	LG	-
61	BR	-
62	BR	-
63	P	-
84	L	-
65	G	-
66	P	-
67	L	-
68	SHIELD	-
69	V	-

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

## < ECU DIAGNOSIS INFORMATION >

### POWER WINDOW SYSTEM

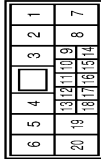
Terminal No.	Color Of Wire	Signal Name [Specification]
70	Y	
71	SB	
72	W	
73	BR	
75	Y	
80	Y	
81	SB	
82	LG	
83	P	
84	R	
85	L	
86	BG	
87	B	
88	V	
89	R	
92	R	
94	R	
95	SB	
96	G	
97	G	
98	R	
99	P	
100	L	

Connector No.	BE216
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03PW



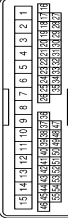
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	

Connector No.	BE218
Connector Name	WIRE TO WIRE
Connector Type	NH1CFW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	
2	LG	
4	V	
5	G	
6	G	
7	B	
8	P	
19	R	
20	W	

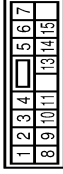
Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	T146PW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	
2	B	
3	W	
4	W	
5	L	
6	G	
7	GR	
8	W	
9	O	
10	BR	
11	P	
12	LG	

Terminal No.	Color Of Wire	Signal Name [Specification]
12	B	
14	Y	
15	W	
17	SB	
16	LG	
18	SHIELD	
19	P	
20	W	
21	O	
22	P	
23	BR	
24	V	
25	GR	
26	W	
27	BR	
28	V	
29	LG	
30	G	
31	W	
32	G	
33	L	
34	SB	
35	R	
36	LG	
37	R	
38	P	
39	O	
40	BR	
41	W	
42	GR	
43	BR	
44	GR	
44	W	
45	G	
45	Y	
46	G	
46	V	
47	R	
47	R	
48	G	
48	G	
49	GR	
50	SHIELD	
51	W	
52	B	
53	SB	
54	O	
55	Y	

Connector No.	B8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	REAR POWER WINDOW MOTOR LH UP SIGNAL
2	BR	EMCOOPER GROUND
3	GR	REAR POWER WINDOW MOTOR LH DOWN SIGNAL
4	V	DOOR KEY CYLINDER SWITCH LH LOCK SIGNAL
5	O	REAR POWER WINDOW MOTOR RH DOWN SIGNAL
6	Y	DOOR KEY CYLINDER SWITCH LH UNLOCK SIGNAL
7	BR	REAR POWER WINDOW MOTOR RH UP SIGNAL
8	L	FRONT POWER WINDOW MOTOR DRIVER SIDE UP SIGNAL
9	O	ENCODER PULSE 2
10	Y	RETAINED POWER SIGNAL
11	G	FRONT POWER WINDOW MOTOR DRIVER SIDE DOWN SIGNAL
13	P	ENCODER PULSE 1
14	V	POWER WINDOW SERIAL LINK
15	B	EMCOOPER POWER SUPPLY

Connector No.	B8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS03FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	B	GROUND
19	W	BATTERY POWER SUPPLY

A  
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J  
K  
L  
M  
N  
O  
P

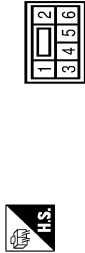
PWC

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

Connector No.	D10
Connector Name	FRONT POWER WINDOW MOTOR (DRIVER SIDE)
Connector Type	NS08FW-CS



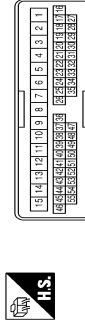
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	L	-
3	O	-
4	B	-
5	P	-
6	BR	-

Connector No.	D15
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	EG08FG+RS



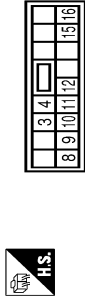
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	P	-
3	L	-
4	B	-
6	V	-

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH4QFW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
7	R	-
8	BR	-
9	V	-
12	P	-
13	LG	-
14	B	-
15	W	-
16	BR	-
17	B	-
18	R	-
19	B	-
20	G	- [With around view monitor]
20	G	- [Without around view monitor]
21	BR	- [With around view monitor]
21	SHIELD	- [With around view monitor]
22	V	-
23	P	-
24	W	-
25	SB	-
26	R	-
27	G	-
33	O	-
34	GR	-
35	G	-
36	R	-
37	G	-
42	V	-
44	P	-
45	P	-
46	W	-
47	SHIELD	-
52	G	-
53	GR	-
54	O	-
55	L	-

Connector No.	D38
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	ENCODER GROUND
4	G	ENCODER POWER SUPPLY
8	W	POWER WINDOW MOTOR UP SIGNAL
9	G	POWER WINDOW MOTOR DOWN SIGNAL
10	W	BATTERY POWER SUPPLY
11	B	GROUND
12	R	ENCODER PULSE 1
15	O	ENCODER PULSE 2
16	V	POWER WINDOW SERIAL LINK

Connector No.	D48
Connector Name	FRONT POWER WINDOW MOTOR (PASSENGER SIDE)
Connector Type	NS08FW-CS



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

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	NH10MW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	- [Without BOSE system]
2	Y	- [With BOSE system]
4	Y	-
5	V	-
6	G	-
7	B	-
8	G	- [Without BOSE system]
8	Y	- [With BOSE system]
19	G	-
20	V	-

Connector No.	B52
Connector Name	REAR POWER WINDOW MOTOR LH
Connector Type	RS08FG



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



# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< ECU DIAGNOSIS INFORMATION >

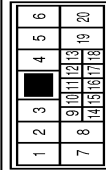
## POWER WINDOW SYSTEM

Connector No.	D34
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS38FW-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	NS11DMM-CS10



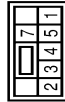
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
4	W	-
5	V	-
6	G	-
8	B	-
8	Y	- [With BOSE system] - [Without BOSE system]
18	G	-
20	V	-

Connector No.	D72
Connector Name	REAR POWER WINDOW MOTOR RH
Connector Type	RS28FEG



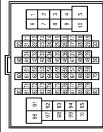
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
3	P	-

Connector No.	D74
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS38FW-CS



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

Connector No.	E108
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	R	-
15	W	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
30	BG	-
32	B	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	G	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
74	L	- [With ICC] - [Without ICC]
75	G	- [With ICC] - [Without ICC]
76	W	- [With ICC] - [Without ICC]
76	V	- [Without ICC]
77	P	-
77	R	- [With ICC] - [Without ICC]
78	BR	- [With ICC] - [Without ICC]
78	L	- [With ICC] - [Without ICC]
79	L	-
79	Y	- [With ICC] - [Without ICC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
86	P	-
87	V	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

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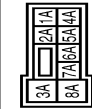
# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW SYSTEM

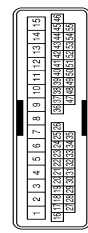
95	LG	-
96	SB	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (1/B)
Connector Type	NS36PW-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	- [With NAVI]
2A	G	- [Without NAVI]
3A	L	- [With NAVI]
4A	Y	- [Without NAVI]
5A	Y	- [With NAVI]
7A	R	- [Without NAVI]
8A	L	- [With NAVI]

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-C515

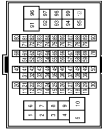


Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	BR	-
4	P	-

5	L	-
6	R	-
7	R	-
8	W	-
9	G	-
10	L	-
11	G	-
12	V	-
13	B	-
14	Y	-
15	W	-
16	R	-
17	R	-
18	SHIELD	-
19	G	-
20	L	-
21	LG	-
22	L	-
23	G	-
24	Y	-
25	GR	-
26	R	-
27	W	-
28	V	-
29	Y	-
30	Y	-
31	R	-
32	BR	-
33	SB	-
34	Y	-
35	P	-
36	LG	-
37	BR	-
38	P	-
39	BG	-
40	SB	-
41	L	-
42	R	-
43	BR	-
44	V	-
45	G	-
46	SB	- [With automatic drive restorer] - [Without automatic drive restorer]
47	R	-
48	G	-
49	P	-
50	SHIELD	-
51	B	-
52	R	-
53	V	-

54	LG	-
55	SB	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-C515-TM4



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

33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	BG	-
39	BR	-
40	W	-
41	W	-
42	BG	-
43	BG	-
44	W	-
45	W	-
46	L	-
47	L	-
48	BR	-
49	Y	-
50	BR	-
51	Y	-
52	G	-
53	W	-
54	L	-
55	L	-
56	L	-
57	G	-
58	W	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
67	SHIELD	-
68	Y	-
69	R	-
70	GR	-
71	LG	-
72	Y	-
73	SB	-
74	BR	- [With ICC] - [Without ICC]
75	L	- [With ICC] - [Without ICC]
76	G	- [With ICC] - [Without ICC]
77	W	- [With ICC] - [Without ICC]
78	P	- [With ICC] - [Without ICC]
79	R	- [With ICC] - [Without ICC]
80	L	- [With ICC] - [Without ICC]
81	SB	- [With ICC] - [Without ICC]
82	SB	- [With ICC] - [Without ICC]
83	V	- [With ICC] - [Without ICC]
84	G	- [With ICC] - [Without ICC]
85	L	- [With ICC] - [Without ICC]
86	P	- [With ICC] - [Without ICC]
87	W	- [With ICC] - [Without ICC]

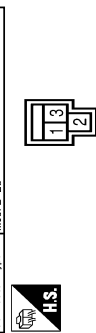


# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

## < ECU DIAGNOSIS INFORMATION >

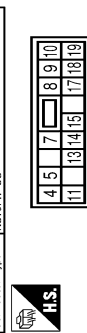
### POWER WINDOW SYSTEM

100	SB	- [WHL. BOSE system]
Connector No.	M118	BCM (BODY CONTROL MODULE)
Connector Name	M03FB-LC	
Connector Type		



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

Connector No.	M119	BCM (BODY CONTROL MODULE)
Connector Name	NS16PW-CS	
Connector Type		



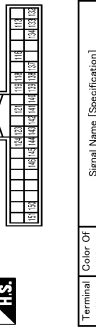
Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	G	L/L DOOR FUEL ID LOCK OUTPUT
9	G	DRIVER DOOR UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (L/USE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M122	BCM (BODY CONTROL MODULE)
Connector Name	TH4GFB-NH	
Connector Type		



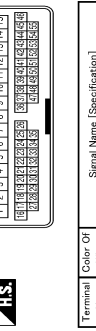
Terminal No.	Color of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1 -
79	BR	ROOM ANT1 +
80	GR	NATS ANT AMP
81	W	NATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	R	REFUELLER ENTRY RECEIVER COMM
84	BR	SECURITY INDOOR SELECTOR COMM
85	Y	COMBI SW INPUT 3
86	Y	CAN-L
87	P	CAN-H
88	L	KEY SLOT ILL CONT
89	LG	ON IND
90	V	PUDDLE LAMP CONT
91	Y	ACC RELAY CONT
92	BG	A/T SHIFT SELECTOR POWER SUPPLY
93	GR	SHIFT P
94	R	PASSENGER DOOR REQUEST SW
95	G	DRIVER DOOR REQUEST SW
96	GR	BLOWER FAN MOTOR RELAY CONT
98	BG	KEYLESS ENTRY RECEIVER POWER SUPPLY
99	LG	KEYLESS ENTRY RECEIVER COMM
100	R	COMBI SW INPUT 4
101	Y	COMBI SW INPUT 2
102	G	HAZARD SW
103	LG	HAZARD SW
104	Y	HAZARD SW
106	R	HAZARD SW
108	Y	HAZARD SW
109	Y	HAZARD SW
110	G	HAZARD SW

Connector No.	M123	BCM (BODY CONTROL MODULE)
Connector Name	TH4GFC-NH	
Connector Type		



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
114	SB	STOP LAMP SW 1
115	P	STOP LAMP SW 2
116	Y	DR DOOR UNLOCK SENSOR
117	SB	KEY SLOT SW
118	BR	IGN F/B
119	W	PASSENGER DOOR SW
120	LG	POWER WINDOW SW COMM
121	BR	PUSH-BUTTON IGNITION SW ILL POWER
122	W	LOCK IND
123	GR	RECEIVER SENSOR GND
124	BG	RECEIVER SENSOR POWER SUPPLY
125	Y	THE PRESSURE SELECTOR COMM
126	L	SHIFT P
127	Y	SECURITY INDOOR LAMP CONT
128	G	COMBI SW OUTPUT 5
129	BG	COMBI SW OUTPUT 1
130	P	COMBI SW OUTPUT 2
131	G	COMBI SW OUTPUT 3
132	L	COMBI SW OUTPUT 4
133	SB	COMBI SW OUTPUT 1
134	G	COMBI SW OUTPUT 2
135	L	COMBI SW OUTPUT 3
136	SB	COMBI SW OUTPUT 4
137	LG	REAR WINDOW DEFROGGER RELAY CONT
138	W	
139	W	
140	W	
141	G	
142	BG	
143	GR	
144	G	
145	L	
146	SB	
147	LG	
148	Y	
149	G	
150	LG	
151	G	

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

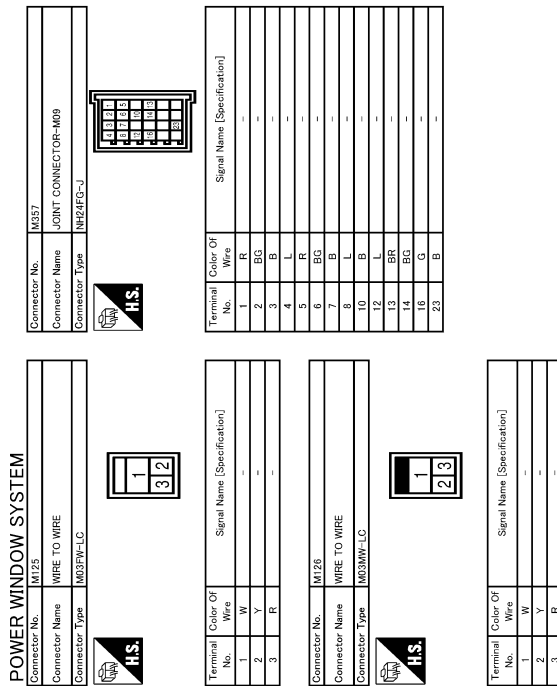


Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	
8	LG	
9	Y	
12	L	
13	V	
14	B	
15	W	
16	BR	
17	B	
18	R	
19	B	
20	W	- [With around view monitor]
21	W	- [With around view monitor]
22	SHIELD	- [With around view monitor]
23	SB	
24	GR	
25	G	
26	Y	
27	R	
28	W	
30	W	
33	BR	
34	V	
35	G	
36	Y	
37	BR	
38	Y	
39	BR	
40	Y	
41	Y	
42	Y	
43	Y	
44	Y	
45	R	
46	W	
47	SHIELD	
52	R	
53	G	
54	W	
55	BG	

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< ECU DIAGNOSIS INFORMATION >

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PWC

## Fail-safe

### FAIL-SAFE CONTROL

Switches to fail-safe control when malfunction is detected in encoder signal that detects up/down speed and direction of door glass. Switches to fail-safe control when a signal that is out of the specified value is detected between the fully closed position and the actual position of the glass.

JRKWF3807GB

INFOID:000000012172965

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

### < ECU DIAGNOSIS INFORMATION >

Malfunction	Malfunction condition
Pulse sensor malfunction	When one pulse signal that is the specified value or more is detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Both pulse sensors malfunction	When both pulse signals are not detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Pulse direction malfunction	When a pulse signal indicating that window is moving in the opposite direction against the power window motor is detected for the specified value or more, while door glass is being operated UP or DOWN.
Glass recognition position malfunction 1	When the actual door glass position that is out of specified value is detected compared to the door glass fully closed position memorized in module, while door glass is being operated UP or DOWN.
Glass recognition position malfunction 2	When pulse count that is out of the door glass full stroke value or more is detected, while door glass is being operated UP or DOWN.

If fail-safe control, the system changes to a non-initialized condition and the following function do not operate.

- Auto-up operation
- Anti-pinch function
- Door key cylinder switch power window function

When fail-safe control is activated, perform initialization procedure to recover. If a malfunction is detected in power window switch or more, fail-safe control is activated again.

# POWER WINDOW CONTROL SYSTEM

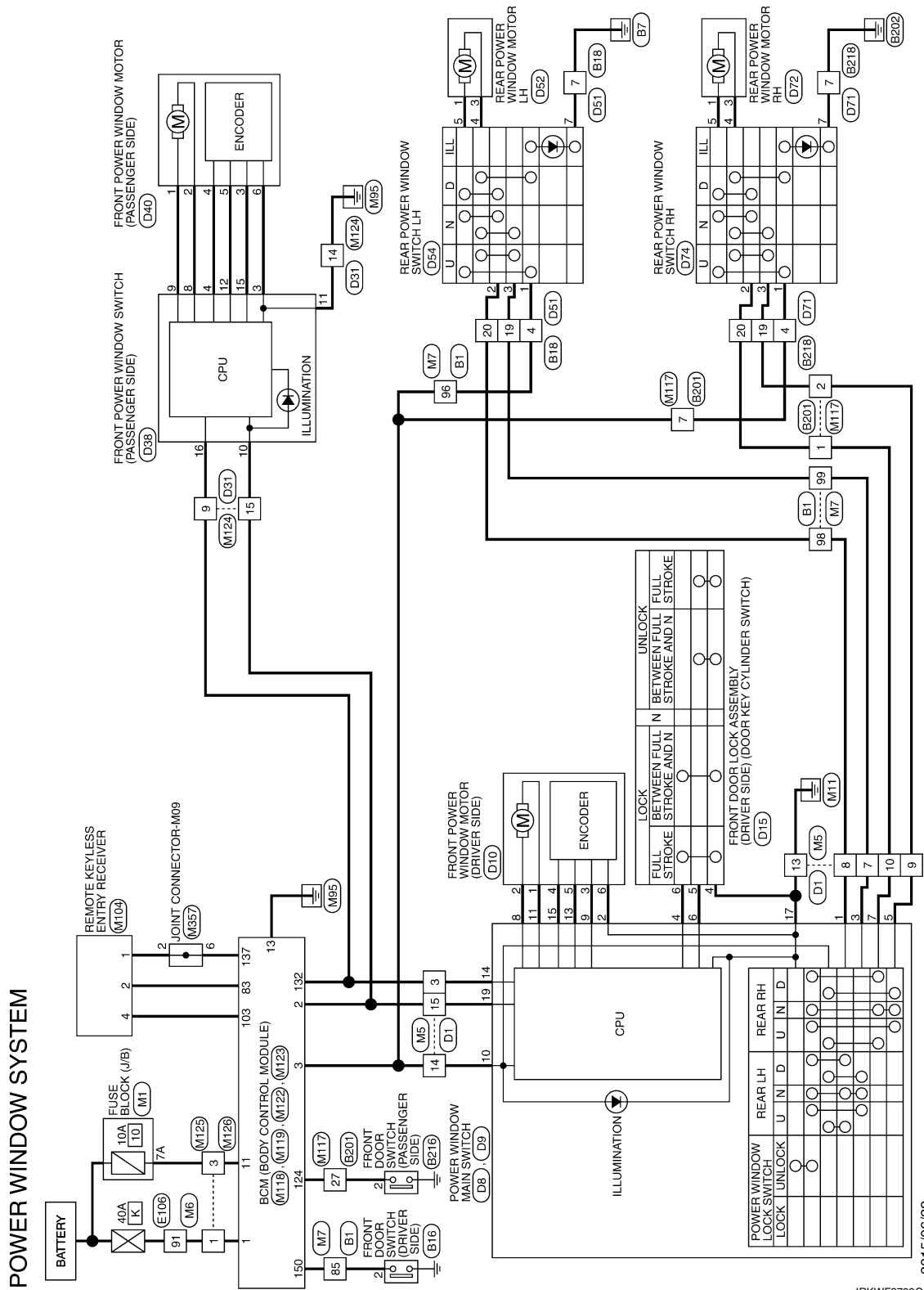
< WIRING DIAGRAM >

## WIRING DIAGRAM

### POWER WINDOW CONTROL SYSTEM

Wiring Diagram

INFOID:0000000012821320



2015/06/22

JRKWF3799GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

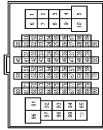
PWC

# POWER WINDOW CONTROL SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

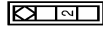
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
4	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	GR	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	BR	- [Without NAVI]
30	SHIELD	- [With neutral view monitor]
31	SHIELD	- [Without neutral view monitor]
32	P	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [With Blind Spot Warning]
33	SB	-
34	L	-
35	P	-

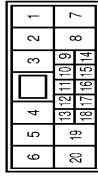
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
60	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	GR	-
77	R	-
78	P	-
79	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
88	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	Y	-
98	W	-
99	GR	-

Connector No.	B18
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



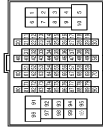
Terminal No.	Color Of Wire	Signal Name [Specification]
2	V	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	NH16FW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	- [Without BOSE system]
2	Y	- [With BOSE system]
4	Y	-
5	BR	-
6	G	-
7	B	-
8	G	- [With BOSE system]
8	Y	- [Without BOSE system]
9	GR	-
20	W	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	GR	-
4	BG	-
7	LG	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
19	P	-
26	BR	-
28	Y	-
29	Y	-
30	GR	-
31	R	-
32	BR	-
33	G	-
51	R	-
55	G	-
56	R	-
57	W	-
58	B	-
59	SHIELD	-
60	LG	-
61	BR	-
62	BR	-
63	P	-
84	L	-
65	G	-
66	P	-
67	L	-
68	SHIELD	-
69	V	-



# POWER WINDOW CONTROL SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

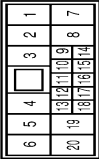
Terminal No.	Color Of Wire	Signal Name [Specification]
70	Y	
71	SB	
72	W	
73	BR	
74	Y	
80	SB	
81	SB	
82	LG	
83	P	
84	R	
85	L	
86	BG	
87	B	
88	V	
89	R	
90	R	
91	R	
92	R	
93	R	
94	R	
95	SB	
96	G	
97	G	
98	R	
99	P	
100	L	

Connector No.	BE216
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03PW



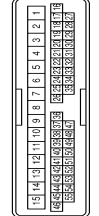
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	

Connector No.	BE218
Connector Name	WIRE TO WIRE
Connector Type	NH1CFW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	
2	LG	
3	V	
4	LG	
5	G	
6	G	
7	B	
8	P	
9	R	
10	R	
11	R	
12	W	

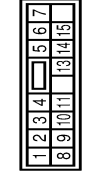
Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	T146PW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	
2	B	
3	W	
4	W	
5	L	
6	G	
7	GR	
8	W	
9	O	
10	BR	
11	P	
12	LG	

Terminal No.	Color Of Wire	Signal Name [Specification]
12	B	
14	V	
15	W	
16	SB	
17	LG	
18	SHIELD	
19	P	
20	W	
21	O	
22	P	
23	BR	
24	V	
25	GR	
26	W	
27	BR	
28	V	
29	LG	
30	G	
31	W	
32	G	
33	L	
34	SB	
35	R	
36	LG	
37	R	
38	P	
39	O	
40	BR	
41	GR	
42	GR	
43	O	
44	GR	
44	W	
45	G	
45	Y	
46	G	
46	V	
47	R	
47	R	
48	G	
48	G	
49	SHIELD	
50	GR	
51	B	
52	B	
53	SB	
54	O	
55	Y	

Connector No.	B8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	REAR POWER WINDOW MOTOR LH UP SIGNAL
2	BR	ENCODER GROUND
3	GR	REAR POWER WINDOW MOTOR LH DOWN SIGNAL
4	V	DOOR KEY CYLINDER SWITCH LH LOCK SIGNAL
5	O	REAR POWER WINDOW MOTOR RH DOWN SIGNAL
6	Y	DOOR KEY CYLINDER SWITCH LH UNLOCK SIGNAL
7	BR	REAR POWER WINDOW MOTOR RH UP SIGNAL
8	L	FRONT POWER WINDOW MOTOR DRIVER SIDE UP SIGNAL
9	O	ENCODER PULSE 2
10	Y	RETAINED POWER SIGNAL
11	G	FRONT POWER WINDOW MOTOR DRIVER SIDE DOWN SIGNAL
13	P	ENCODER PULSE 1
14	V	POWER WINDOW SERIAL LINK
15	B	ENCODER POWER SUPPLY

Connector No.	B9
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS03FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	B	GROUND
19	W	BATTERY POWER SUPPLY

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M  
N  
O  
P



# POWER WINDOW CONTROL SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

Connector No.	D10
Connector Name	FRONT POWER WINDOW MOTOR (DRIVER SIDE)
Connector Type	NS08FW-CS



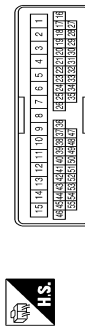
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	L	-
3	O	-
4	B	-
5	P	-
6	BR	-

Connector No.	D15
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	EG08FG+RS



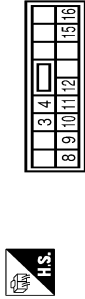
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	P	-
3	L	-
4	Y	-
6	V	-

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH4QFW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
7	RE	-
8	BR	-
9	V	-
12	P	-
13	LG	-
14	B	-
15	W	-
16	BR	-
17	B	-
18	R	-
19	B	-
20	G	- [With around view monitor]
20	G	- [Without around view monitor]
21	BR	- [With around view monitor]
21	SHIELD	- [With around view monitor]
22	V	-
23	P	-
24	W	-
25	SB	-
26	R	-
27	G	-
33	O	-
34	GR	-
35	G	-
36	R	-
37	G	-
43	V	-
44	P	-
45	W	-
46	W	-
47	SHIELD	-
52	G	-
53	GR	-
54	O	-
55	L	-

Connector No.	D38
Connector Name	FRONT POWER WINDOW SWITCH (PASSenger SIDE)
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	ENCODER GROUND
4	G	ENCODER POWER SUPPLY
8	W	POWER WINDOW MOTOR UP SIGNAL
9	G	POWER WINDOW MOTOR DOWN SIGNAL
10	W	BATTERY POWER SUPPLY
11	B	GROUND
12	R	ENCODER PULSE 1
15	O	ENCODER PULSE 2
16	V	POWER WINDOW SERIAL LINK

Connector No.	D48
Connector Name	FRONT POWER WINDOW MOTOR (PASSenger SIDE)
Connector Type	NS08FW-CS



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

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	NH10MW-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	- [Without BOSE system]
2	Y	- [With BOSE system]
4	Y	-
5	V	-
6	G	-
7	B	-
8	G	- [With BOSE system]
8	Y	- [Without BOSE system]
19	G	-
20	V	-

Connector No.	B52
Connector Name	REAR POWER WINDOW MOTOR LH
Connector Type	RS08FG



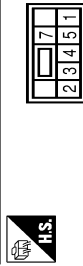
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
3	L	-

# POWER WINDOW CONTROL SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

Connector No.	D34
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS38FW-CS



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

Connector No.	D71
Connector Name	WIRE TO WIRE
Connector Type	NS10MM-CS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
4	W	-
5	V	-
6	G	-
8	B	-
8	Y	- [With BOSE system] - [Without BOSE system]
18	G	-
20	V	-

Connector No.	D72
Connector Name	REAR POWER WINDOW MOTOR RH
Connector Type	RS08FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
3	P	-

Connector No.	D74
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS38FW-CS



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

Connector No.	E108
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	R	-
15	W	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
30	BG	-
32	B	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	G	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
74	L	- [With ICC] - [Without ICC]
75	G	- [With ICC] - [Without ICC]
76	W	- [With ICC] - [Without ICC]
76	V	- [With ICC] - [Without ICC]
77	P	-
77	R	- [With ICC] - [Without ICC]
78	BR	- [With ICC] - [Without ICC]
78	L	- [With ICC] - [Without ICC]
79	L	-
79	Y	- [With ICC] - [Without ICC]
80	SB	-
81	R	-
82	BR	-
83	BG	-
84	G	-
86	P	-
87	V	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

A  
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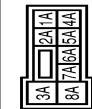
# POWER WINDOW CONTROL SYSTEM

< WIRING DIAGRAM >

**POWER WINDOW SYSTEM**

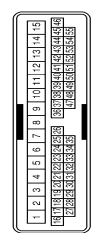
95	LG	-
96	SB	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (A/B)
Connector Type	NS36PW-M2



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

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



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

5	L	-
6	R	-
7	R	-
8	W	-
9	G	-
10	L	-
11	G	-
12	V	-
13	B	-
14	Y	-
15	W	-
16	R	-
17	R	-
18	SHIELD	-
19	G	-
20	L	-
21	LG	-
22	L	-
23	G	-
24	Y	-
25	GR	-
26	R	-
27	W	-
28	V	-
29	Y	-
30	Y	-
31	R	-
32	BR	-
33	SB	-
34	Y	-
35	P	-
36	LG	-
37	BR	-
38	P	-
39	BG	-
40	SB	-
41	L	-
42	R	-
43	BR	-
44	V	-
45	G	-
46	SB	-
47	R	-
48	G	-
49	P	-
50	SHIELD	-
51	B	-
52	R	-
53	V	-

54	LG	-
55	SB	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



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

33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	BG	-
39	BR	-
40	W	-
41	W	-
42	BG	-
43	BG	-
44	W	-
45	W	-
46	L	-
47	L	-
48	BR	-
49	Y	-
50	Y	-
51	G	-
52	W	-
53	L	-
54	L	-
55	L	-
56	L	-
57	G	-
58	W	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
67	SHIELD	-
68	R	-
69	Y	-
70	GR	-
71	LG	-
72	Y	-
73	SB	-
74	BR	-
75	G	-
76	GR	-
77	P	-
78	R	-
79	L	-
80	SB	-
81	SB	-
82	SB	-
83	V	-
84	G	-
85	L	-
86	P	-
87	W	-

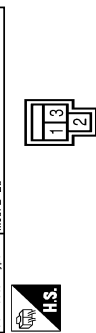


# POWER WINDOW CONTROL SYSTEM

< WIRING DIAGRAM >

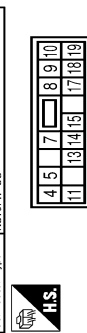
## POWER WINDOW SYSTEM

100	SB	— (With BOSE system)
Connector No.	M118	BCM (BODY CONTROL MODULE)
Connector Name	BCM (BODY CONTROL MODULE)	
Connector Type	M03FB-LC	



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

Connector No.	M119	BCM (BODY CONTROL MODULE)
Connector Name	BCM (BODY CONTROL MODULE)	
Connector Type	M03FB-CS	



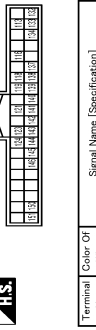
Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	G	L/L DOOR FUEL ID LOCK OUTPUT
9	G	DRIVER DOOR UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (L/USE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M122	BCM (BODY CONTROL MODULE)
Connector Name	BCM (BODY CONTROL MODULE)	
Connector Type	TH4GFB-NH	



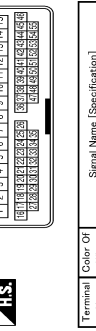
Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1 -
79	BR	ROOM ANT1 +
80	GR	NATS ANT AMP
81	W	NATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	R	REFUELLER ENTRY RECEIVER COMM
84	BR	SECURITY INDOOR LAMP CONT
85	Y	COMBI SW INPUT 3
86	Y	CAN-L
87	P	CAN-H
88	L	KEY SLOT ILL CONT
89	LG	ON IND
90	V	PUDDLE LAMP CONT
91	G	ACC RELAY CONT
92	BG	A/T SHIFT SELECTOR POWER SUPPLY
93	GR	SHIFT P
94	R	PASSENGER DOOR REQUEST SW
95	R	DRIVER DOOR REQUEST SW
96	G	BLOWER FAN MOTOR RELAY CONT
97	BG	KEYLESS ENTRY RECEIVER POWER SUPPLY
98	LG	KEYLESS ENTRY RECEIVER COMM
99	G	COMBI SW INPUT 4
100	R	COMBI SW INPUT 2
101	G	HAZARD SW

Connector No.	M123	BCM (BODY CONTROL MODULE)
Connector Name	BCM (BODY CONTROL MODULE)	
Connector Type	TH4GFC-NH	



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
114	SB	STOP LAMP SW 1
115	P	STOP LAMP SW 2
116	Y	DR DOOR UNLOCK SENSOR
117	SB	KEY SLOT SW
118	BR	IGN F/B
119	W	PASSENGER DOOR SW
120	LG	POWER WINDOW SW COMM
121	BR	PUSH-BUTTON IGNITION SW ILL POWER
122	GR	LOCK IND
123	BG	RECEIVER/SENSOR GND
124	R	RECEIVER/SENSOR POWER SUPPLY
125	L	THE PRESSURE SELECTOR COMM
126	Y	SECURITY INDOOR LAMP CONT
127	Y	COMBI SW OUTPUT 1
128	G	COMBI SW OUTPUT 2
129	L	COMBI SW OUTPUT 3
130	SB	COMBI SW OUTPUT 4
131	LG	DRIVER DOOR SW
132	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M124	WIRE TO WIRE
Connector Name	TH40MM-CS15	



Terminal No.	Color Of Wire	Signal Name [Specification]
7	Y	—
8	LG	—
9	Y	—
12	L	—
13	V	—
14	B	—
15	W	—
16	BR	—
17	B	—
18	R	—
19	B	— (With around view monitor)
20	W	— (With around view monitor)
21	SHIELD	— (With around view monitor)
22	SB	—
23	GR	—
24	G	—
25	Y	—
26	R	—
27	W	—
30	W	—
33	BR	—
34	V	—
35	G	—
36	Y	—
37	BR	—
38	Y	—
43	Y	—
44	Y	—
45	R	—
46	W	—
47	SHIELD	—
52	R	—
53	G	—
54	W	—
55	BG	—

# POWER WINDOW CONTROL SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



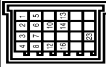
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC



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

Connector No.	M097
Connector Name	JOINT CONNECTOR-M09
Connector Type	MH24FG-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	BG	-
3	B	-
4	L	-
5	R	-
6	BG	-
7	B	-
8	L	-
10	B	-
12	L	-
13	BR	-
14	BG	-
16	G	-
23	B	-

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JRKWF3807GB

# POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

< SYMPTOM DIAGNOSIS >

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## SYMPTOM DIAGNOSIS

POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

Diagnosis Procedure

INFOID:0000000012172966

### 1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

---

Check BCM power supply and ground circuit.  
Refer to [PWC-14, "BCM : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Repair or replace the malfunctioning parts.

### 2. CONFIRM THE OPERATION

---

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).
- NO >> GO TO 1.



# DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

### Diagnosis Procedure

INFOID:000000012172967

#### 1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window switch power supply and ground circuit.

Refer to [PWC-14, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. CHECK DRIVER SIDE POWER WINDOW MOTOR

Check driver side power window motor.

Refer to [PWC-20, "DRIVER SIDE : Component Function Check"](#).

Is the measurement value within the specification?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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# FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012172968

### 1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) SERIAL LINK CIRCUIT

Check front power window switch (passenger side) serial link circuit.

Refer to [PWC-33. "FRONT POWER WINDOW SWITCH \(PASSENGER SIDE\) : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

## WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED

WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED :  
Diagnosis Procedure

INFOID:000000012172969

### 1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Replace front power window switch (passenger side).

Refer to [PWC-127. "Removal and Installation"](#)

>> INSPECTION END

## WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED

WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW  
SWITCH ARE OPERATED : Diagnosis Procedure

INFOID:000000012172970

### 1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY AND GROUND CIR- CUIT

Check front power window switch (passenger side) power supply and ground circuit.

Refer to [PWC-15. "FRONT POWER WINDOW SWITCH \(PASSENGER SIDE\) : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

### 2. CHECK PASSENGER SIDE POWER WINDOW MOTOR CIRCUIT

Check passenger side power window motor circuit.

Refer to [PWC-21. "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

### 3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

## REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

### REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012172971

#### 1. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

### WHEN REAR POWER WINDOW SWITCH LH IS OPERATED

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED : Diagnosis Procedure

INFOID:000000012172972

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

Check rear power window switch power supply and ground circuit.

Refer to [PWC-16, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. REPLACE REAR POWER WINDOW SWITCH LH

Replace rear power window switch LH.

Refer to [PWC-127, "Removal and Installation"](#).

>> INSPECTION END

### WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED

WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW  
SWITCH LH ARE OPERATED : Diagnosis Procedure

INFOID:000000012172973

#### 1. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

Refer to [PWC-23, "REAR LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

## REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

### REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012172974

#### 1. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

### WHEN REAR POWER WINDOW SWITCH RH IS OPERATED

WHEN REAR POWER WINDOW SWITCH RH IS OPERATED : Diagnosis Procedure

INFOID:000000012172975

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

Check rear power window switch power supply and ground circuit.

Refer to [PWC-16. "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. REPLACE REAR POWER WINDOW SWITCH RH

Replace rear power window switch RH.

Refer to [PWC-127. "Removal and Installation"](#).

>> INSPECTION END

### WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH RH ARE OPERATED

WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW  
SWITCH RH ARE OPERATED : Diagnosis Procedure

INFOID:000000012172976

#### 1. CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to [PWC-24. "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

# ANTI-PINCH FUNCTION DOES NOT OPERATE NORMALLY

< SYMPTOM DIAGNOSIS >

## ANTI-PINCH FUNCTION DOES NOT OPERATE NORMALLY

### DRIVER SIDE

#### DRIVER SIDE : Diagnosis Procedure

INFOID:000000012172977

#### 1.CHECK POWER WINDOW AUTO OPERATION

Check power window auto operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [PWC-118. "DRIVER SIDE : Diagnosis Procedure"](#).

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

### PASSENGER SIDE

#### PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012172978

#### 1.CHECK POWER WINDOW AUTO OPERATION

Check power window auto operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [PWC-118. "PASSENGER SIDE : Diagnosis Procedure"](#).

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

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# AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY

< SYMPTOM DIAGNOSIS >

## AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY DRIVER SIDE

### DRIVER SIDE : Diagnosis Procedure

INFOID:000000012172979

#### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-5, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).

Is the inspection result normal?

YES >> INSPECTION END  
NO >> GO TO 2.

#### 2.CHECK ENCODER (DRIVER SIDE) CIRCUIT

Check encoder (driver side) circuit.

Refer to [PWC-27, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.  
NO >> Repair or replace the malfunctioning parts.

#### 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).  
NO >> GO TO 1.

## PASSENGER SIDE

### PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012172980

#### 1.PERFORM INITIALIZAITON PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-5, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).

Is the inspection result normal?

YES >> INSPECTION END  
NO >> GO TO 2.

#### 2.CHECK ENCODER (PASSENGER SIDE) CIRCUIT

Check encoder (passenger side) circuit.

Refer to [PWC-29, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.  
NO >> Repair or replace the malfunctioning parts.

#### 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).  
NO >> GO TO 1.

# POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

< SYMPTOM DIAGNOSIS >

## POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

### Diagnosis Procedure

INFOID:000000012172981

#### 1. CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-65, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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# KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS >

---

## KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

### Diagnosis Procedure

INFOID:000000012172982

#### 1. PERFORM INITIALIZATION PROCEDURE

---

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-5, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

#### 2. CHECK DRIVER SIDE DOOR LOCK ASSEMBLY (DOOR KEY CYLINDER SWITCH)

---

Check driver side door lock assembly (door key cylinder switch).

Refer to [DLK-78, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3. CONFIRM THE OPERATION

---

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.



# KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

### Description

INFOID:000000012172983

Power window down does not operate when pressing unlock button on Intelligent Key.

### Diagnosis Procedure

INFOID:000000012172984

#### 1. CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.

NO >> Refer to [DLK-191, "Description"](#).

#### 2. CHECK POWER WINDOW OPERATION

Check power window operation.

Does power window operate up/down using power window main switch?

YES >> GO TO 3.

NO >> Refer to [PWC-112, "Diagnosis Procedure"](#).

#### 3. CHECK "PW DOWN SET" SETTING IN "WORK SUPPORT"

Check "PW DOWN SET" setting in "WORK SUPPORT".

Refer to [DLK-51, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "PW DOWN SET" setting in "WORK SUPPORT".

#### 4. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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## POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

---

### POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

#### Diagnosis Procedure

INFOID:000000012172985

#### 1. REPLACE POWER WINDOW MAIN SWITCH

---

Replace power window main switch.

>> Refer to [PWC-127. "Removal and Installation"](#).

# POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

## POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012172986

### 1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.  
Refer to [PWC-127, "Removal and Installation"](#).

>> INSPECTION END

## PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012172987

### 1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Replace front power window switch (passenger side).  
Refer to [PWC-127, "Removal and Installation"](#).

>> INSPECTION END

## REAR LH

REAR LH : Diagnosis Procedure

INFOID:0000000012172988

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

Check rear power window switch power supply and ground circuit.  
Refer to [PWC-16, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

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

### 2. REPLACE REAR POWER WINDOW SWITCH LH

Replace rear power window switch LH.  
Refer to [PWC-127, "Removal and Installation"](#).

>> INSPECTION END

## REAR RH

REAR RH : Diagnosis Procedure

INFOID:0000000012172989

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

Check rear power window switch power supply and ground circuit.  
Refer to [PWC-16, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

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

### 2. REPLACE REAR POWER WINDOW SWITCH RH

Replace rear power window switch RH.  
Refer to [PWC-127, "Removal and Installation"](#).

>> INSPECTION END

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# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

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

INFOID:000000012172990

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

#### **WARNING:**

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

#### **WARNING:**

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery or batteries, and wait at least 3 minutes before performing any service.

#### Precautions for Removing Battery Terminal

INFOID:000000012172991

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

#### **NOTE:**

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

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

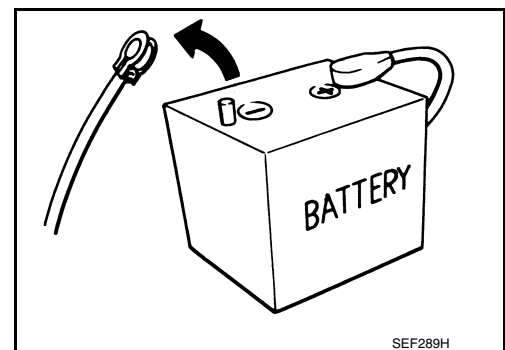
#### **NOTE:**

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

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

#### **NOTE:**

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



#### Precautions For Xenon Headlamp Service

INFOID:000000012172992

#### **WARNING:**

Comply with the following warnings to prevent any serious accident.

# PRECAUTIONS

## < PRECAUTION >

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts. A
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.) B
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot. C

### **CAUTION:**

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

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

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# PREPARATION

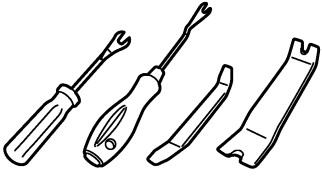
< PREPARATION >

## PREPARATION

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#### Commercial Service Tools

INFOID:000000012172993

Tool name	Description
Remover tool  JMKIA3050ZZ	Remove the clip, pawl and metal clip

# POWER WINDOW MAIN SWITCH

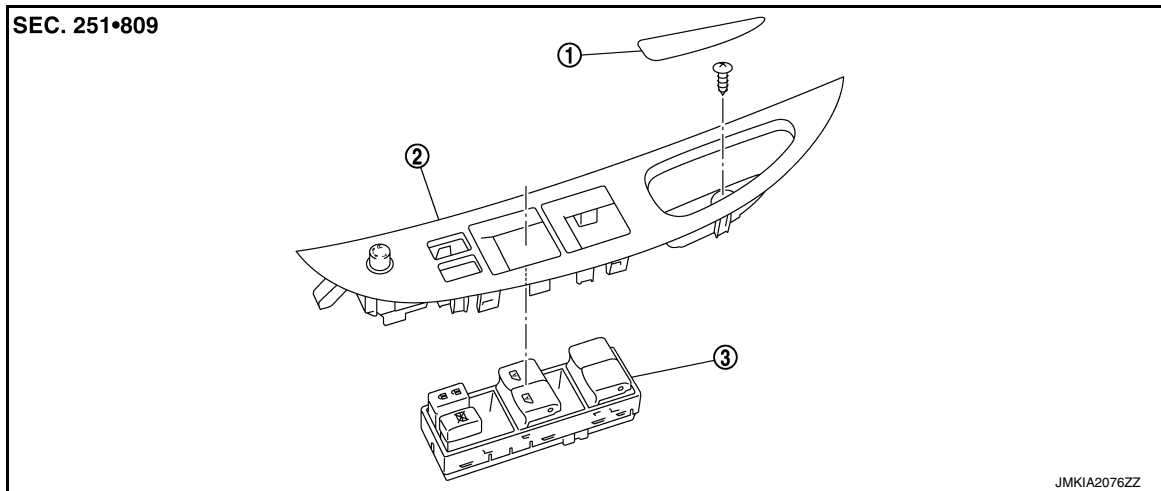
< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### POWER WINDOW MAIN SWITCH

Exploded View

INFOID:000000012172994



1. Pull handle cover
2. Power window main switch finisher
3. Power window main switch

#### NOTE:

The same procedure is also performed for front power window switch (passenger side) and rear power switch (LH & RH).

Refer to removal and installation procedure. Refer to [PWC-127. "Removal and Installation"](#).

### Removal and Installation

INFOID:000000012172995

#### REMOVAL

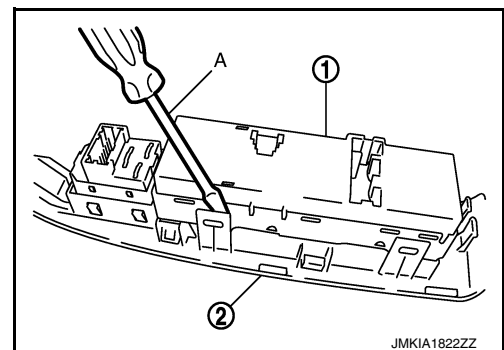
1. Remove the power window main switch finisher (2). Refer to [GW-20. "Exploded View"](#) and [GW-20. "Removal and Installation"](#).
2. Power window main switch (1) is removed from power window main switch finisher (2) using remover tool (A).

#### CAUTION:

**Do not fold the pawl of power window main switch finisher.**

#### NOTE:

The same procedure is also performed for front power window switch (passenger side) and rear power window switch (LH & RH).



#### INSTALLATION

Note the following items, and then install in the reverse order of removal.

#### NOTE:

Power window main switch is exchanged or is detached it is necessary to do the initialization procedure.

Refer to [PWC-5. "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).