

## SECTION **PWC** POWER WINDOW CONTROL SYSTEM

### CONTENTS

<b>BASIC INSPECTION</b> .....	3	<b>REAR POWER WINDOW SWITCH</b> .....	13
<b>DIAGNOSIS AND REPAIR WORKFLOW</b> .....	3	REAR POWER WINDOW SWITCH : Description.....	13
Work Flow .....	3	REAR POWER WINDOW SWITCH : Component	
<b>FUNCTION DIAGNOSIS</b> .....	4	Function Check .....	14
<b>POWER WINDOW SYSTEM</b> .....	4	REAR POWER WINDOW SWITCH : Diagnosis	
System Diagram .....	4	Procedure .....	14
System Description .....	4	REAR POWER WINDOW SWITCH : Component	
Component Parts Location .....	5	Inspection .....	15
Component Description .....	6	<b>POWER WINDOW MOTOR</b> .....	17
<b>DIAGNOSIS SYSTEM (BCM)</b> .....	7	<b>DRIVER SIDE</b> .....	17
<b>COMMON ITEM</b> .....	7	DRIVER SIDE : Description .....	17
COMMON ITEM : CONSULT-III Function (BCM -		DRIVER SIDE : Component Function Check .....	17
COMMON ITEM) .....	7	DRIVER SIDE : Diagnosis Procedure .....	17
<b>RETAINED PWR</b> .....	7	DRIVER SIDE : Component Inspection .....	18
RETAINED PWR : CONSULT-III Function (BCM -		<b>PASSENGER SIDE</b> .....	18
RETAINED PWR) .....	7	PASSENGER SIDE : Description .....	18
<b>COMPONENT DIAGNOSIS</b> .....	8	PASSENGER SIDE : Component Function Check	
<b>POWER SUPPLY AND GROUND CIRCUIT</b> .....	8	.....	18
<b>POWER WINDOW MAIN SWITCH</b> .....	8	PASSENGER SIDE : Diagnosis Procedure .....	18
POWER WINDOW MAIN SWITCH : Description.....	8	PASSENGER SIDE : Component Inspection .....	19
POWER WINDOW MAIN SWITCH : Component		<b>REAR LH</b> .....	20
Function Check .....	8	REAR LH : Description .....	20
POWER WINDOW MAIN SWITCH : Diagnosis		REAR LH : Component Function Check .....	20
Procedure .....	8	REAR LH : Diagnosis Procedure .....	20
POWER WINDOW MAIN SWITCH : Component		REAR LH : Component Inspection .....	21
Inspection .....	11	<b>REAR RH</b> .....	21
<b>FRONT POWER WINDOW SWITCH</b> .....	12	REAR RH : Description .....	21
FRONT POWER WINDOW SWITCH : Descrip-		REAR RH : Component Function Check .....	21
tion .....	12	REAR RH : Diagnosis Procedure .....	22
FRONT POWER WINDOW SWITCH : Compo-		REAR RH : Component Inspection .....	23
nent Function Check .....	12	<b>DOOR SWITCH</b> .....	24
FRONT POWER WINDOW SWITCH : Diagnosis		Description .....	24
Procedure .....	12	Component Function Check .....	24
		Diagnosis Procedure .....	24
		Component Inspection .....	25

<b>POWER WINDOW LOCK SWITCH</b> .....	26	<b>REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE</b> .....	50
Description .....	26	Diagnosis Procedure .....	50
Component Function Check .....	26		
<b>ECU DIAGNOSIS</b> .....	27	<b>AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY (DRIVER SIDE)</b> .....	51
<b>BCM (BODY CONTROL MODULE)</b> .....	27	Diagnosis Procedure .....	51
Reference Value .....	27		
Terminal Layout .....	28	<b>POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY</b> .....	52
Physical Values .....	28	Diagnosis Procedure .....	52
Wiring Diagram .....	34		
<b>POWER WINDOW SYSTEM</b> .....	38	<b>POWER WINDOW LOCK SWITCH DOES NOT FUNCTION</b> .....	53
Terminal Layout .....	38	Diagnosis Procedure .....	53
Physical Values .....	38		
Wiring Diagram .....	39	<b>PRECAUTION</b> .....	54
<b>SYMPTOM DIAGNOSIS</b> .....	46	<b>PRECAUTIONS</b> .....	54
<b>NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH</b> .....	46	Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	54
Diagnosis Procedure .....	46		
<b>DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE</b> .....	47	<b>ON-VEHICLE REPAIR</b> .....	55
Diagnosis Procedure .....	47		
<b>FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE</b> .....	48	<b>POWER WINDOW MAIN SWITCH</b> .....	55
Diagnosis Procedure .....	48	Removal and Installation .....	55
<b>REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE</b> .....	49	<b>FRONT POWER WINDOW SWITCH</b> .....	56
Diagnosis Procedure .....	49	Removal and Installation .....	56
		<b>REAR POWER WINDOW SWITCH</b> .....	57
		Removal and Installation - Rear Door Switch .....	57

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

#### Work Flow

INFOID:000000003083348

#### DETAILED FLOW

#### 1. OBTAIN INFORMATION ABOUT SYMPTOM

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

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"

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

>> GO TO 4

#### 4. IDENTIFY THE 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

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.

Are the malfunctions corrected?

YES >> Inspection End.  
NO >> GO TO 3

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

PWC

# POWER WINDOW SYSTEM

< FUNCTION DIAGNOSIS >

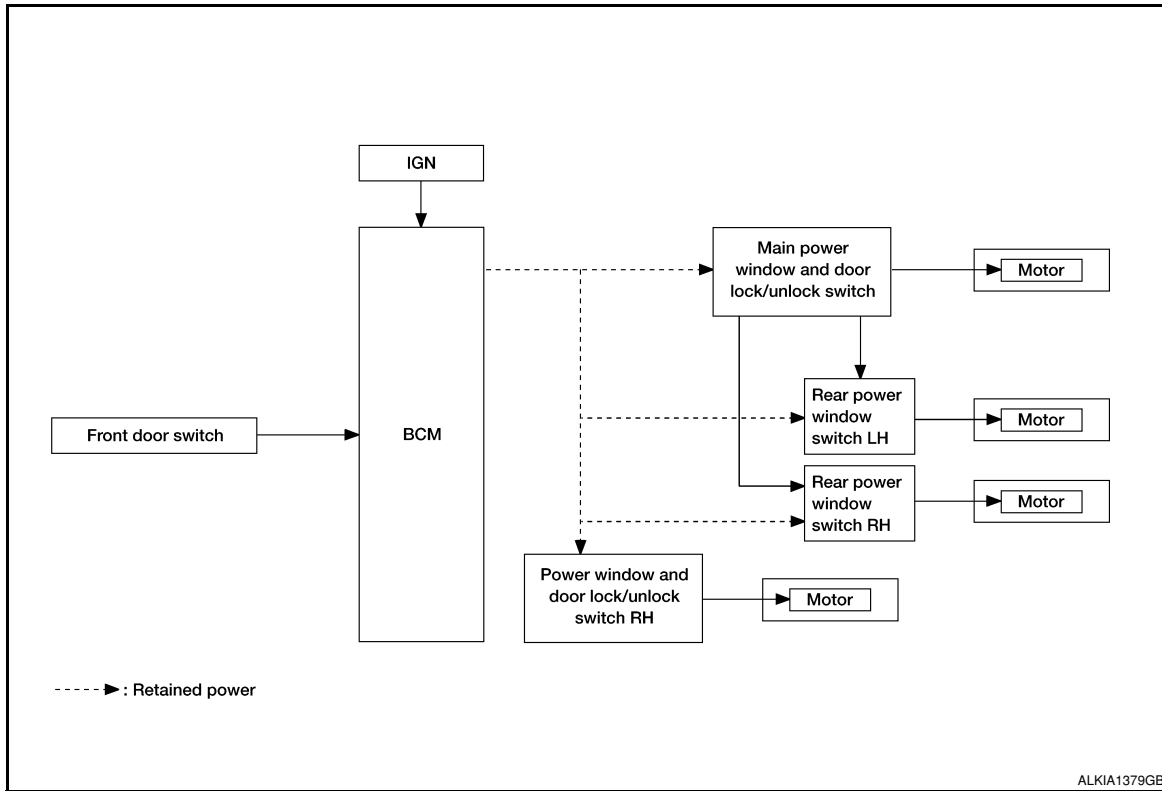
## FUNCTION DIAGNOSIS

### POWER WINDOW SYSTEM

#### System Diagram

INFOID:000000003083349

#### FRONT WINDOW ANTI-PINCH SYSTEM



#### System Description

INFOID:000000003083350

#### MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH INPUT/OUTPUT SIGNAL CHART

Item	Input signal to main power window and door lock/unlock switch	Main power window and door lock/unlock switch function	Actuator
Main power window and door lock/unlock switch	All power window motor UP/DOWN signal	Power window control	Power window motors
Power window and door lock/unlock switch RH	Front power window motor RH UP/DOWN signal		Front power window motor RH
Rear power window switch	Rear power window motor UP/DOWN signal		Rear power window motor
BCM	RAP signal		—

#### POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH INPUT/OUTPUT SIGNAL CHART

# POWER WINDOW SYSTEM

## < FUNCTION DIAGNOSIS >

Item	Input signal to front power window switch	Front power window switch function	Actuator
Power window and door lock/unlock switch RH	Front power window motor RH UP/DOWN signal	Power window control	Front power window motor RH
BCM	RAP signal		

### POWER WINDOW OPERATION

- Power window system is operable during the retained power operation timer after turning ignition switch ON and OFF.
- Main power window and door lock/unlock switch can open/close all windows.
- Power window and door lock unlock switch RH & rear power window switches LH and RH can open/close the corresponding windows.

### POWER WINDOW AUTO DOWNOPERATION (FRONT LH)

- AUTO DOWN operation can be performed when main power window turns to AUTO.

### RETAINED POWER OPERATION

- Retained power operation is an additional power supply function that enables power window system to operate during the 45 seconds even when ignition switch is turned OFF

#### Retained power function cancel conditions

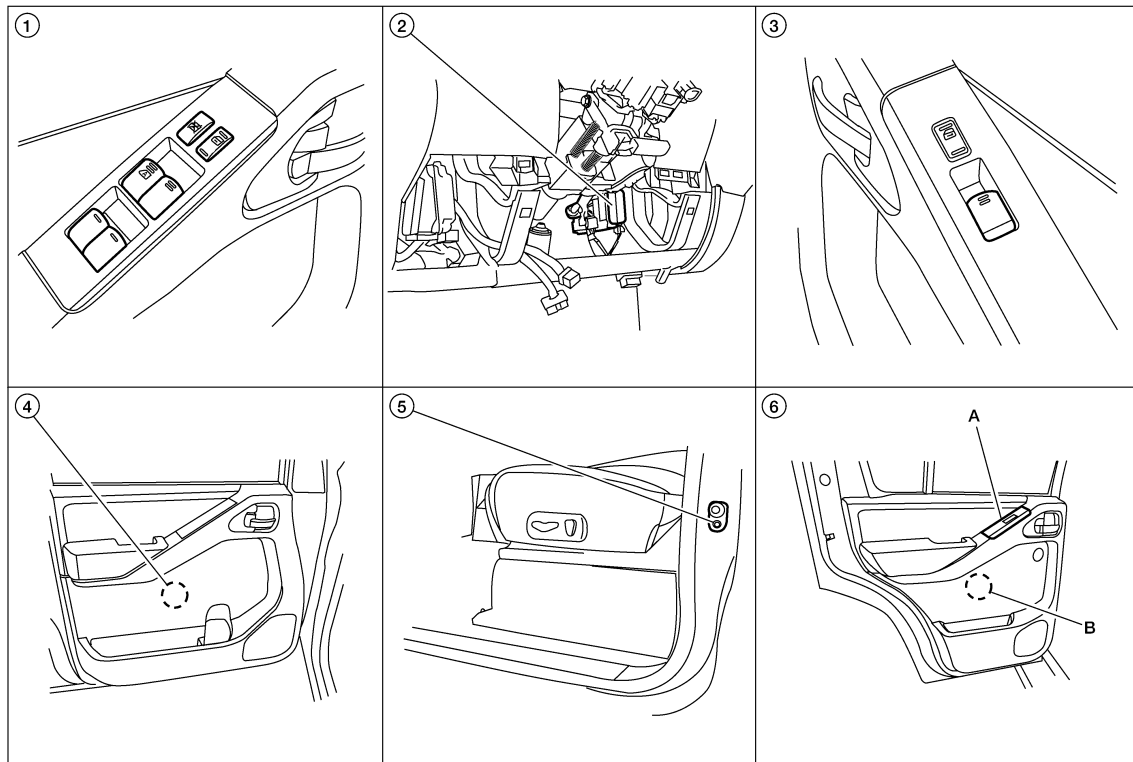
- Front door CLOSE (door switch OFF)→OPEN (door switch ON).
- When ignition switch is ON.
- When timer time passes. (45 seconds)

### POWER WINDOW LOCK

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

## Component Parts Location

INFOID:000000003083351



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# POWER WINDOW SYSTEM

## < FUNCTION DIAGNOSIS >

1. Main power window and door lock/unlock switch D7, D8
2. BCM M18, M19, M20 (view with instrument lower panel LH removed)
3. Power window and door lock/unlock switch RH D105
4. Front power window motor LH D9, RH D104
5. Front door switch LH B8, RH B108
6. A. Rear power window switch LH D203, RH D303  
B. Rear power window motor LH D204, RH D304

## Component Description

INFOID:000000003083352

## FRONT WINDOW ANTI-PINCH SYSTEM

Component	Function
BCM	<ul style="list-style-type: none"> <li>Supplies power supply to power window switch.</li> <li>Controls retained power.</li> </ul>
Main power window and door lock/unlock switch	Directly controls all power window motor of all doors.
Power window and door lock/unlock switch RH	Controls front power window motor RH.
Rear power window switch	Controls rear power window motors LH and RH.
Front power window motor LH	Starts operating with signals from main power window and door lock/unlock switch.
Front power window motor RH	Starts operating with signals from main power window and door lock/unlock switch & power window and door lock/unlock switch RH.
Rear power window motor	Starts operating with signals from main power window and door lock/unlock switch & rear power window switch.
Front door switch LH or RH	Detects door open/close condition and transmits to BCM.

## DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

### DIAGNOSIS SYSTEM (BCM)

#### COMMON ITEM

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

INFOID:000000003083353

#### APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to <a href="#">BCS-49, "DTC Index"</a> .
CAN DIAG SUPPORT MNTR	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	This function is not used even though it is displayed.

#### SYSTEM APPLICATION

BCM can perform the following functions for each system.

##### NOTE:

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

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
BCM	BCM	×		
RAP system	RETAINED PWR		×	

#### RETAINED PWR

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

INFOID:000000003083354

#### Data monitor

PWC

Monitor Item	Description
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch LH.
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch RH.

# POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

## COMPONENT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT

#### POWER WINDOW MAIN SWITCH

##### POWER WINDOW MAIN SWITCH : Description

INFOID:000000003083355

- BCM supplies power.
- It operates each power window motor via corresponding power window switch and makes window move up/down when main power window and door lock/unlock switch is operated.

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

INFOID:000000003083356

##### Main Power Window And Door Lock/Unlock Switch

##### 1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH FUNCTION

Does power window motor operate with main power window and door lock/unlock switch operation?

Is the inspection result normal?

- YES >> Main power window and door lock/unlock switch power supply and ground circuit are OK.  
NO >> Refer to [PWC-8. "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

##### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000003083357

##### Main Power Window And Door Lock/Unlock Switch Power Supply Circuit Check

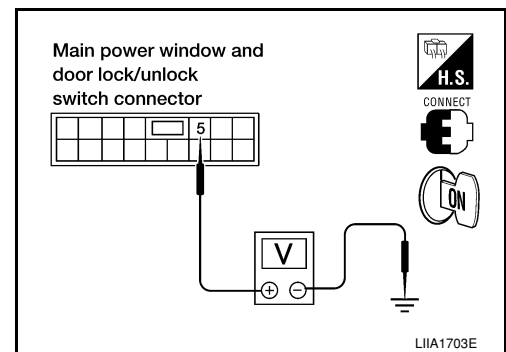
##### 1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector D7 terminal 5 and ground.

**5 - Ground : Battery voltage**

Is the measurement value within the specification?

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



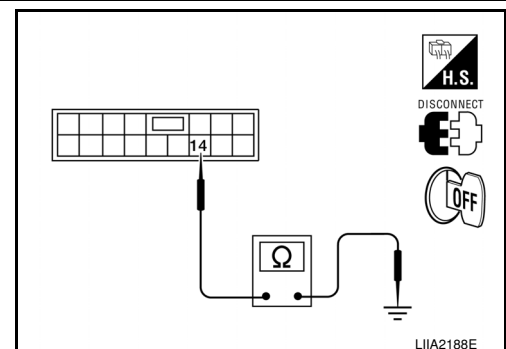
##### 2. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch.
3. Check continuity between main power window and door lock/unlock switch connector D7 terminal 14 and ground.

Connector	Terminals		Continuity
Main power window and door lock/unlock switch: D7	14	Ground	Yes

Is the inspection result normal?

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



##### 3. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH POWER SUPPLY CIRCUIT

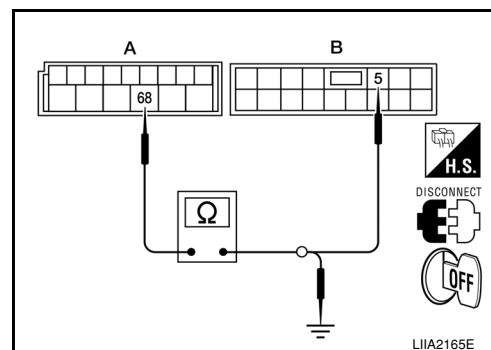


# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Disconnect BCM and main power window and door lock/unlock switch.
3. Check continuity between BCM and main power window and door lock/unlock switch.

A		B		Continuity
Connector	Terminal	Connector	Terminal	
BCM: M20	68	Main power window and door lock/unlock switch: D7	5	Yes



4. Check continuity between BCM and ground.

A		Ground	Continuity
Connector	Terminal		
BCM: M20	68		No

Is the inspection result normal?

- YES >> Replace main power window and door lock/unlock switch. Refer to [PWC-55, "Removal and Installation"](#).
- NO >> Repair or replace harness.

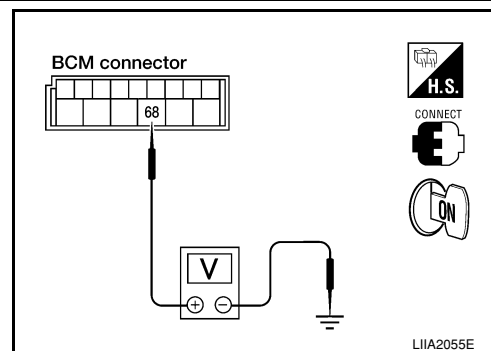
## 4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM.
2. Turn ignition switch ON.
3. Check voltage between BCM connector M20 terminal 68 and ground.

**68 - Ground : Battery voltage**

Is the measurement value within the specification?

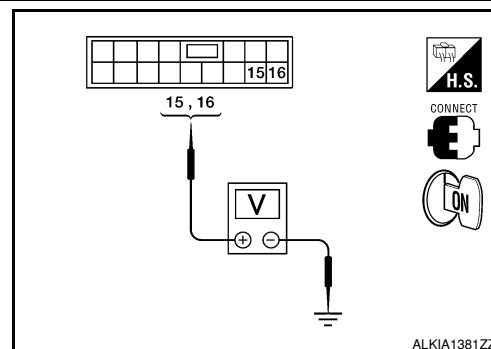
- YES >> Check main power window and door lock/unlock switch output signal (rear power window switch LH) GO TO 5
- YES >> Check main power window and door lock/unlock switch output signal (rear power window switch RH) GO TO 6
- NO >> Replace BCM. Refer to [BCS-52, "Removal and Installation"](#).



## 5. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (REAR POWER WINDOW SWITCH LH)

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector and ground.

Terminal			Window condition	Voltage (V) (Approx.)
(+)		(−)		
Main power window and door lock/unlock switch connector	Terminal			
D7	15	Ground	UP	Battery voltage
			DOWN	0
	16		UP	0
			DOWN	Battery voltage



Is the measurement value within the specification?

- YES >> GO TO 7

# POWER SUPPLY AND GROUND CIRCUIT

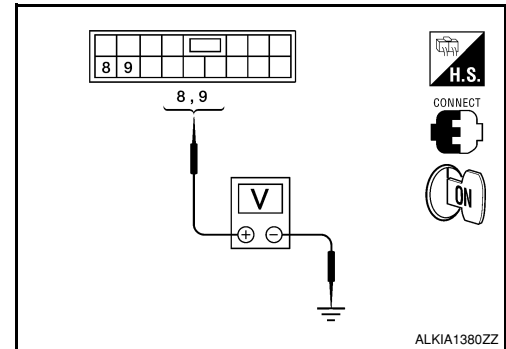
## < COMPONENT DIAGNOSIS >

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55. "Removal and Installation"](#).

### 6. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL (REAR POWER WINDOW SWITCH RH)

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector and ground.

Terminal		Window condition	Voltage (V) (Approx.)
(+)	(-)		
Main power window and door lock/unlock switch connector	Terminal		
D7	8	UP	Battery voltage
		DOWN	0
	9	UP	0
		DOWN	Battery voltage



Is the measurement value within the specification?

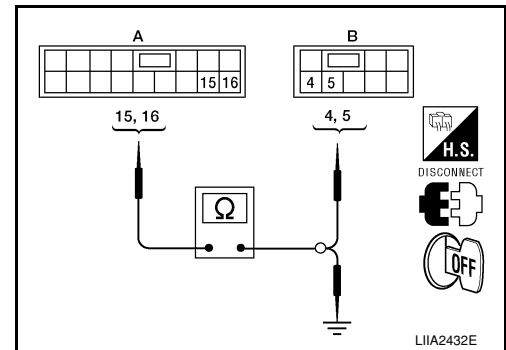
YES >> GO TO 8

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55. "Removal and Installation"](#).

### 7. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH LH)

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH.
3. Check continuity between main power window and door lock/unlock switch connector and rear power window switch LH connector.

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch LH connector	Terminal	Continuity
D7	15	D203	4	Yes
	16		5	



4. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7	15	Ground	No
	16		

Is the inspection result normal?

YES >> GO TO 9

NO >> Repair or replace harness.

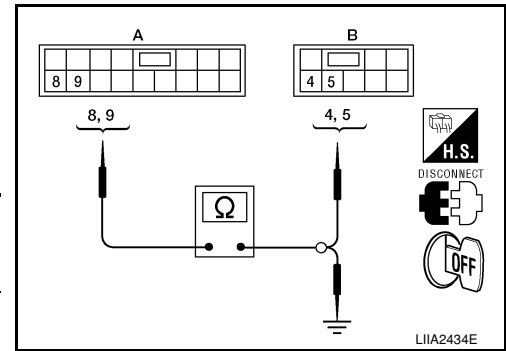
### 8. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH RH)

# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Disconnect rear power window switch RH.
3. Check continuity between main power window and door lock/unlock switch connector and rear power window switch RH connector.

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch RH connector	Terminal	Continuity
D7	8	D303	4	Yes
	9		5	



4. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7	8		No
	9		

Is the inspection result normal?

YES >> GO TO 9

NO >> Repair or replace harness.

## 9. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to [PWC-11. "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37. "Intermittent Incident"](#).

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55. "Removal and Installation"](#).

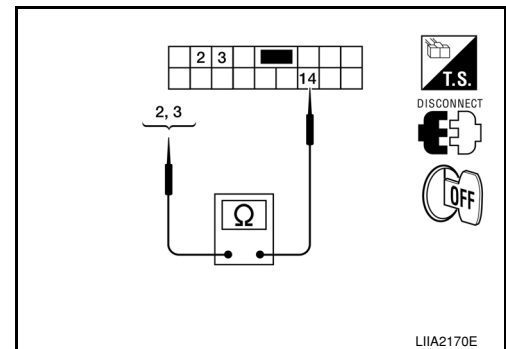
## POWER WINDOW MAIN SWITCH : Component Inspection

INFOID:000000003083358

### 1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

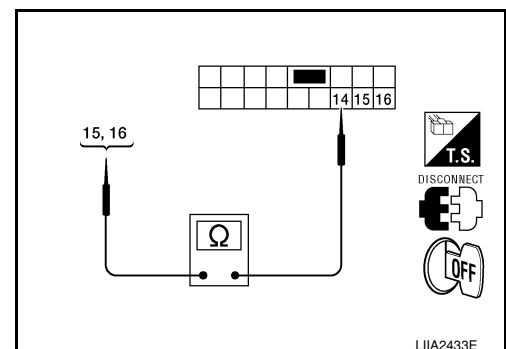
1. Check continuity between main power window and door lock/unlock switch terminals for front window RH.

	Terminals	Condition	Continuity
Main power window and door lock/unlock switch	14	2 Lock switch UNLOCK	Yes
		2 Lock switch LOCK	No
	3	3 Lock switch UNLOCK	Yes
		3 Lock switch LOCK	No



2. Check continuity between main power window and door lock/unlock switch terminals for rear window LH.

	Terminals	Condition	Continuity
Main power window and door lock/unlock switch	15	15 Lock switch UNLOCK	Yes
		15 Lock switch LOCK	No
	16	16 Lock switch UNLOCK	Yes
		16 Lock switch LOCK	No



# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

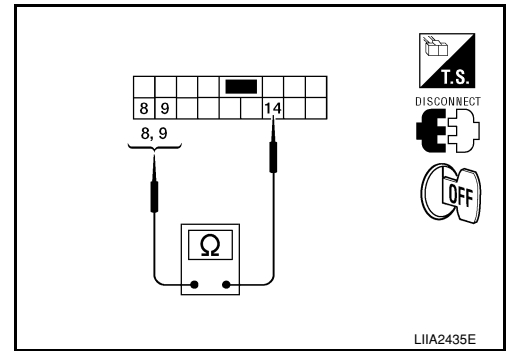
- Check continuity between main power window and door lock/unlock switch terminals for rear window RH.

Main power window and door lock/unlock switch	Terminals		Condition	Continuity
	14	8	Lock switch UNLOCK	Yes
			Lock switch LOCK	No
		9	Lock switch UNLOCK	Yes
			Lock switch LOCK	No

Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55. "Removal and Installation"](#).



## FRONT POWER WINDOW SWITCH

### FRONT POWER WINDOW SWITCH : Description

INFOID:000000003083359

- BCM supplies power.
- Front power window motor RH will be operated if power window and door lock/unlock switch RH is operated.

### FRONT POWER WINDOW SWITCH : Component Function Check

INFOID:000000003083360

#### Power Window And Door Lock/Unlock Switch RH

### 1. CHECK FRONT POWER WINDOW MOTOR RH FUNCTION

Does front power window motor RH operate with power window and door lock/unlock switch RH operation?

Is the inspection result normal?

YES >> Power window and door lock/unlock switch RH power supply and ground circuit are OK.

NO >> Refer to [PWC-12. "FRONT POWER WINDOW SWITCH : Diagnosis Procedure"](#).

### FRONT POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:000000003083361

#### Power Window And Door Lock/Unlock Switch RH Power Supply Circuit Check

### 1. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch ON.
- Check voltage between power window and door lock/unlock switch RH connector and ground.

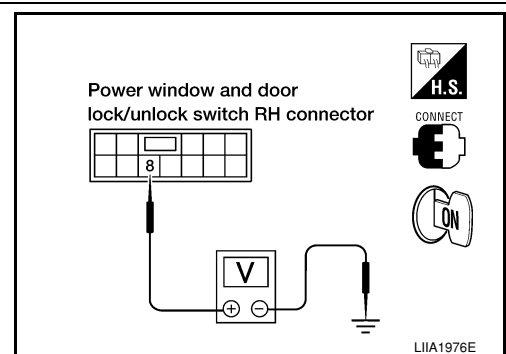
Terminal			Voltage (V) (Approx.)
(+) Terminal		(-)	
Power window and door lock/ unlock switch RH connector	Terminal		
D105	8	Ground	Battery voltage

Is the measurement value within the specification?

YES >> GO TO 3

NO >> GO TO 2

### 2. CHECK HARNESS CONTINUITY



# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Disconnect BCM and power window and door lock/unlock switch RH.
3. Check continuity between BCM connector (A) and power window and door lock/unlock switch RH connector (B).

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M20 (A)	68	D105 (B)	8	Yes

4. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M20 (A)	68		No

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

## 3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Connector	Terminals	Continuity
Power window and door lock/unlock switch RH: D105	11	Yes
	12	Yes

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH.  
Refer to [PWC-56. "Removal and Installation"](#).

NO >> Repair or replace harness.

## 4. CHECK BCM OUTPUT SIGNAL

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

Terminals			Voltage (V) (Approx.)
(+)		(-)	
BCM connector	Terminal		
M20	68	Ground	Battery voltage

Is the measurement value within the specification?

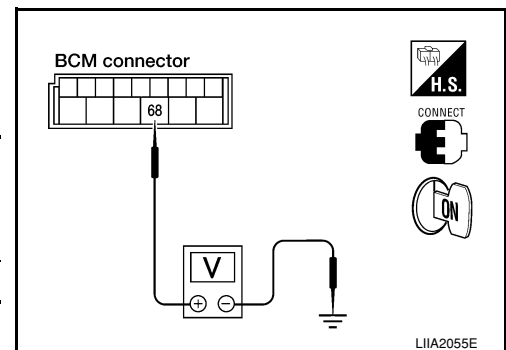
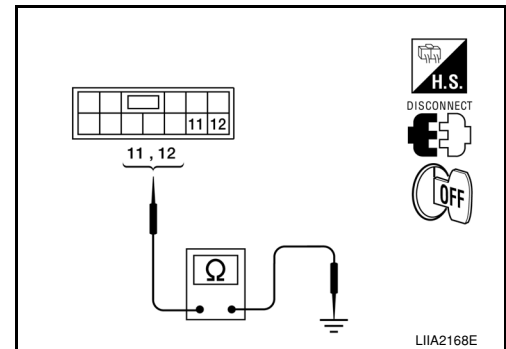
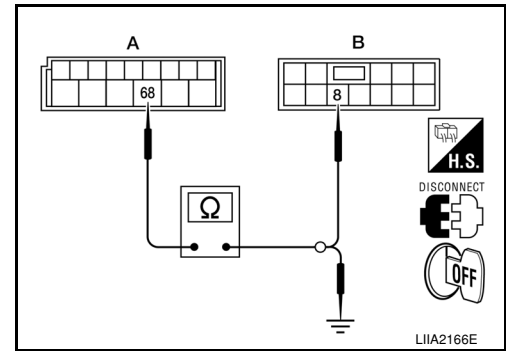
YES >> Replace power window and door lock/unlock switch RH.  
Refer to [PWC-56. "Removal and Installation"](#).

NO >> Replace BCM. Refer to [BCS-52. "Removal and Installation"](#).

## REAR POWER WINDOW SWITCH

### REAR POWER WINDOW SWITCH : Description

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



INFOID:000000003083362

# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

### REAR POWER WINDOW SWITCH : Component Function Check

INFOID:000000003083363

#### Rear Power Window Switch

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

Does rear power window motor operate with rear power window switch operation?

Is the inspection result normal?

YES >> Rear power window switch power supply and ground circuit are OK.

NO >> Refer to [PWC-14, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

### REAR POWER WINDOW SWITCH : Diagnosis Procedure

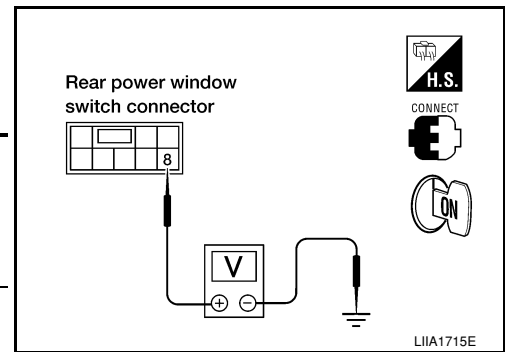
INFOID:000000003083364

#### Rear Power Window Switch Power Supply Circuit Check

#### 1. CHECK POWER SUPPLY CIRCUIT

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

Terminal			Condition	Voltage (V) (Approx.)
(+)	(-)			
Rear power window switch connector	Terminal			
LH	D203	8	Ground	Ignition switch ON Battery voltage
RH	D303			



Is the measurement value within the specification?

YES >> GO TO 2 (Rear power window switch LH)

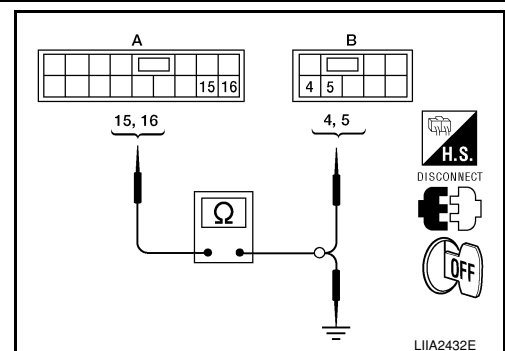
YES >> GO TO 3 (Rear power window switch RH)

NO >> GO TO 4

#### 2. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH LH)

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and rear power window switch LH.
3. Check continuity between main power window and door lock/unlock switch connector (A) and rear power window switch LH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch LH connector	Terminal	Continuity
D7 (A)	15	D203 (B)	4	Yes
	16		5	



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7 (A)	15	Ground	No
	16		

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> Repair or replace harness.

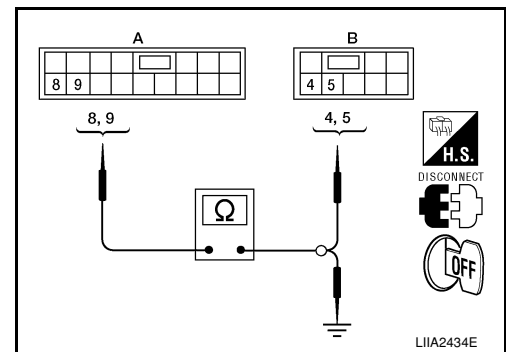
#### 3. CHECK HARNESS CONTINUITY (REAR POWER WINDOW SWITCH RH)

# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and rear power window switch RH.
3. Check continuity between main power window and door lock/unlock switch connector (A) and rear power window switch RH connector (B).

Main power window and door lock/unlock switch connector	Terminal	Rear power window switch RH connector	Terminal	Continuity
D7 (A)	8	D303 (B)	4	Yes
	9		5	



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7 (A)	8	Ground	No
	9		

Is the inspection result normal?

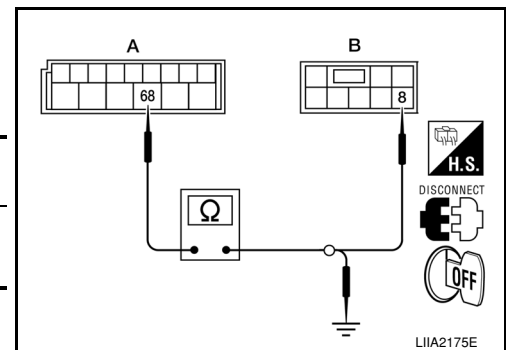
YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> Repair or replace harness.

## 4. CHECK HARNESS CONTINUITY

1. Disconnect BCM and rear power window switch.
2. Check continuity between BCM connector (A) and rear power window switch connector (B).

BCM connector	Terminal	Rear power window switch connector	Terminal	Continuity
M20 (A)	68	LH	D203 (B)	Yes
		RH	D303 (B)	



3. Check continuity between BCM connector (A) and ground.

BCM connector	Terminal	Ground	Continuity
M20 (A)	68	Ground	No

Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace harness.

## 5. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Refer to [PWC-15, "REAR POWER WINDOW SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> Replace rear power window switch. Refer to [PWC-57, "Removal and Installation - Rear Door Switch"](#).

## REAR POWER WINDOW SWITCH : Component Inspection

INFOID:000000003083365

## COMPONENT INSPECTION

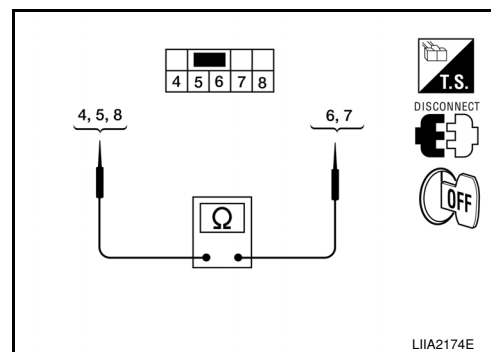
### 1. CHECK REAR POWER WINDOW SWITCH

## POWER SUPPLY AND GROUND CIRCUIT

### < COMPONENT DIAGNOSIS >

Check rear power window switch.

Rear power window switch LH or RH	Terminals		Condition	Continuity
	6	5	DOWN	No
			NEUTRAL or UP	Yes
		8	NEUTRAL or UP	No
			DOWN	Yes
	7	4	UP	No
			NEUTRAL or DOWN	Yes
		8	NEUTRAL or DOWN	No
			UP	Yes



Is the inspection result normal?

YES >> Rear power window switch is OK.

NO >> Replace rear power window switch. Refer to [PWC-57, "Removal and Installation - Rear Door Switch"](#).



# POWER WINDOW MOTOR

## < COMPONENT DIAGNOSIS >

### POWER WINDOW MOTOR DRIVER SIDE

#### DRIVER SIDE : Description

INFOID:000000003083366

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

#### DRIVER SIDE : Component Function Check

INFOID:000000003083367

#### 1. CHECK POWER WINDOW MOTOR CIRCUIT

Does front power window motor LH operate with operating main power window and door lock/unlock switch?  
Is the inspection result normal?

- YES >> Front power window motor LH is OK.  
NO >> Refer to [PWC-17. "DRIVER SIDE : Diagnosis Procedure"](#).

#### DRIVER SIDE : Diagnosis Procedure

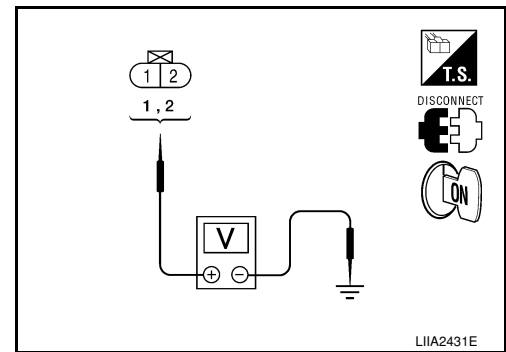
INFOID:000000003083368

##### Front Power Window Motor LH Circuit Check

#### 1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

1. Disconnect front power window motor LH.
2. Turn ignition switch ON.
3. Check voltage between front power window motor LH connector and ground.

Terminal		Main power window and door lock/unlock switch condition	Voltage (V) (Approx.)
(+)	(-)		
Power window motor LH connector	Terminal		
D9	2	UP	Battery voltage
		DOWN	0
	1	UP	0
		DOWN	Battery voltage



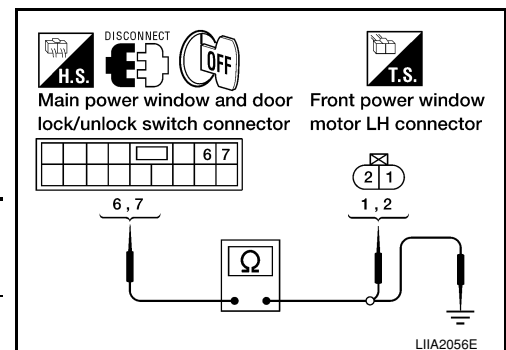
Is the measurement value within the specification?

- YES >> GO TO 2  
NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55. "Removal and Installation"](#).

#### 2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch.
3. Check continuity between main power window and door lock/unlock switch connector and front power window motor connector LH.

Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D7	6	D9	2	Yes
	7		1	



4. Check continuity between main power window and door lock/unlock switch connector (A) and ground.

# POWER WINDOW MOTOR

## < COMPONENT DIAGNOSIS >

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7	6		No
	7		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

### 3. CHECK POWER WINDOW MOTOR

Check front power window motor LH.

Refer to [PWC-18. "DRIVER SIDE : Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37. "Intermittent Incident"](#).

NO >> Replace power window motor LH. Refer to [GW-18. "Rear Door Glass Regulator"](#).

## DRIVER SIDE : Component Inspection

INFOID:000000003083369

### COMPONENT INSPECTION

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

Does motor operate by connecting the battery voltage directly to power window motor?

Terminal		Motor condition
(+)	(-)	
1	2	DOWN
2	1	UP

Is the inspection result normal?

YES >> Front power window motor LH is OK.

NO >> Replace front power window motor LH. Refer to [GW-14. "Front Door Glass Regulator"](#).

## PASSENGER SIDE

### PASSENGER SIDE : Description

INFOID:000000003083370

Door glass moves UP/DOWN by receiving the signal from main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

### PASSENGER SIDE : Component Function Check

INFOID:000000003083371

#### 1. CHECK POWER WINDOW MOTOR CIRCUIT

Does power window motor operate with operating main power window and door lock/unlock switch or power window and door lock/unlock switch RH?

Is the inspection result normal?

YES >> Front power window motor RH is OK.

NO >> Refer to [PWC-18. "PASSENGER SIDE : Diagnosis Procedure"](#).

### PASSENGER SIDE : Diagnosis Procedure

INFOID:000000003083372

Front Power Window Motor RH Circuit Check

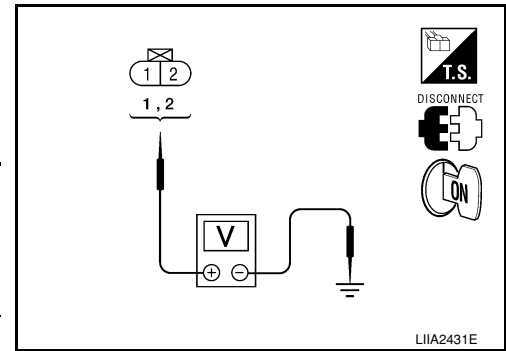
#### 1. CHECK FRONT POWER WINDOW SWITCH RH OUTPUT SIGNAL

# POWER WINDOW MOTOR

## < COMPONENT DIAGNOSIS >

1. Disconnect front power window motor RH.
2. Turn ignition switch ON.
3. Check voltage between front power window motor RH connector and ground.

Terminal		Front power window motor RH condition	Voltage (V) (Approx.)
(+)	(-)		
Front power window motor RH connector	Terminal		
D104	2	UP	Battery voltage
		DOWN	0
	1	UP	0
		DOWN	Battery voltage



Is the measurement value within the specification?

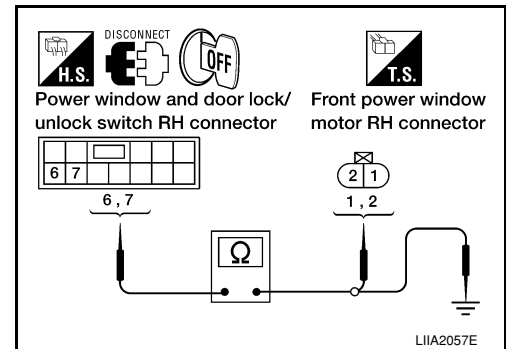
YES >> GO TO 2

NO >> Replace power window and door lock/unlock switch RH. Refer to [PWC-56, "Removal and Installation"](#).

## 2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH.
3. Check continuity between power window and door lock/unlock switch RH connector and front power window motor RH connector.

Power window and door lock/unlock switch RH connector	Terminal	Front power window motor RH connector	Terminal	Continuity
D105	6	D104	1	Yes
	7		2	



4. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH connector	Terminal	Ground	Continuity
D105	6	Ground	No
	7		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

## 3. CHECK FRONT POWER WINDOW MOTOR RH

Check front power window motor RH.

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

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> Replace front power window motor RH. Refer to [GW-14, "Front Door Glass Regulator"](#).

## PASSENGER SIDE : Component Inspection

INFOID:000000003083373

### COMPONENT INSPECTION

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

Does motor operate by connecting the battery voltage directly to front power window motor RH?

# POWER WINDOW MOTOR

## < COMPONENT DIAGNOSIS >

Terminal		Motor condition
(+)	(-)	
1	2	DOWN
2	1	UP

Is the inspection result normal?

YES >> Front power window motor RH is OK.

NO >> Replace front power window motor RH. Refer to [GW-14, "Front Door Glass Regulator"](#).

## REAR LH

### REAR LH : Description

INFOID:000000003083374

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:000000003083375

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

Does rear power window motor LH operate with main power window and door lock/unlock switch or rear power window switch LH?

Is the inspection result normal?

YES >> Rear power window motor LH is OK.

NO >> Refer to [PWC-20, "REAR LH : Diagnosis Procedure"](#)

### REAR LH : Diagnosis Procedure

INFOID:000000003083376

#### Power Window Motor Circuit Check

#### 1. CHECK REAR POWER WINDOW SWITCH OUTPUT SIGNAL

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

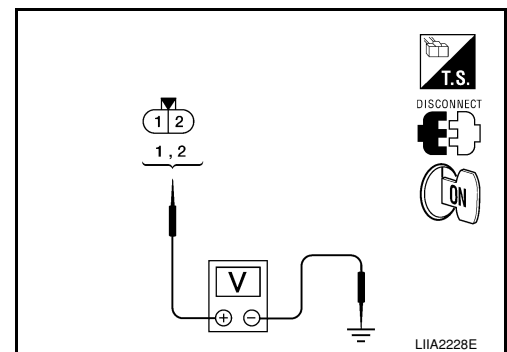
Terminal			Window condition	Voltage (V) (Approx.)
(+)	(-)			
Rear power window motor LH connector	Terminal			
D204	1	Ground	UP	Battery voltage
			DOWN	0
	2		UP	0
			DOWN	Battery voltage

Is the measurement value within the specification?

YES >> GO TO 2

NO >> Check rear power window switch LH. Refer to [PWC-14, "REAR POWER WINDOW SWITCH : Component Function Check"](#).

#### 2. CHECK HARNESS CONTINUITY



# POWER WINDOW MOTOR

## < COMPONENT DIAGNOSIS >

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

Rear power window switch LH connector	Terminal	Rear power window motor LH connector	Terminal	Continuity
D203 (A)	6	D204 (B)	1	Yes
	7		2	

4. Check continuity between rear power window switch LH connector (A) and ground.

Rear power window switch LH connector	Terminal	Ground	Continuity
D203 (A)	6		No
	7		

Is the inspection result normal?

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

## 3. CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.

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

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).  
NO >> Replace rear power window motor LH. Refer to [GW-18, "Rear Door Glass Regulator"](#).

## REAR LH : Component Inspection

INFOID:000000003083377

## COMPONENT INSPECTION

### 1. CHECK REAR POWER WINDOW MOTOR LH

Does motor operate by connecting the battery voltage directly to rear power window motor LH?

PWC

Terminal		Motor condition
(+)	(-)	
2	1	DOWN
1	2	UP

Is the inspection result normal?

- YES >> Rear power window motor LH is OK.  
NO >> Replace rear power window motor LH. Refer to [GW-18, "Rear Door Glass Regulator"](#).

## REAR RH

### REAR RH : Description

INFOID:000000003083378

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

### REAR RH : Component Function Check

INFOID:000000003083379

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

Does rear power window motor RH operate with operating main power window and door lock/unlock switch or rear power window switch RH?

Is the inspection result normal?

# POWER WINDOW MOTOR

## < COMPONENT DIAGNOSIS >

- YES >> Rear power window motor RH is OK.  
 NO >> Refer to [PWC-22. "REAR RH : Diagnosis Procedure"](#).

## REAR RH : Diagnosis Procedure

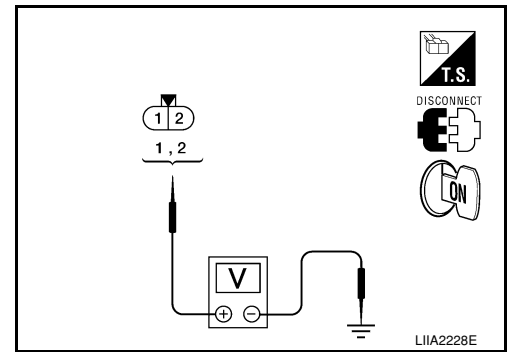
INFOID:000000003083380

### Rear Power Window Motor RH Circuit Check

#### 1. CHECK REAR POWER WINDOW SWITCH RH OUTPUT SIGNAL

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

Terminal		Rear power window switch RH condition	Voltage (V) (Approx.)
(+)	(-)		
Rear power window motor RH connector	Terminal		
D304	1	UP	Battery voltage
		DOWN	0
	2	UP	0
		DOWN	Battery voltage



Is the measurement value within the specification?

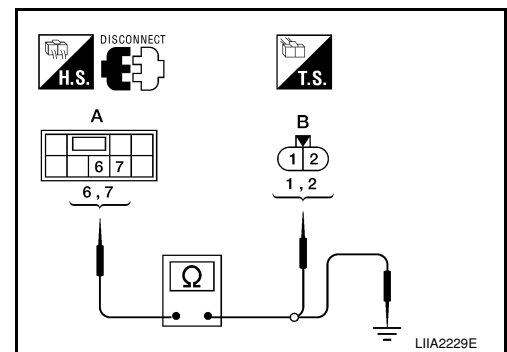
- YES >> GO TO 2  
 NO >> Check rear power window switch RH. Refer to [PWC-14. "REAR POWER WINDOW SWITCH : Component Function Check"](#).

#### 2. CHECK HARNESS CONTINUITY

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

Rear power window switch RH connector	Terminal	Rear power window motor RH connector	Terminal	Continuity
D303 (A)	6	D304 (B)	1	Yes
	7		2	

4. Check continuity between rear power window switch RH connector (A) and ground.



Rear power window switch RH connector	Terminal	Ground	Continuity
D303 (A)	6	Ground	No
	7		

Is the inspection result normal?

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

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

Check rear power window motor RH.  
 Refer to [PWC-23. "REAR RH : Component Inspection"](#).

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-37. "Intermittent Incident"](#).  
 NO >> Replace rear power window motor RH. Refer to [GW-18. "Rear Door Glass Regulator"](#).

# POWER WINDOW MOTOR

## < COMPONENT DIAGNOSIS >

### REAR RH : Component Inspection

INFOID:000000003083381

#### COMPONENT INSPECTION

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

Does motor operate by connecting the battery voltage directly to rear power window motor RH?

Terminal		Motor condition
(+)	(-)	
2	1	DOWN
1	2	UP

Is the inspection result normal?

YES >> Rear power window motor RH is OK.

NO >> Replace rear power window motor RH. Refer to [GW-18, "Rear Door Glass Regulator"](#).

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

PWC

# DOOR SWITCH

< COMPONENT DIAGNOSIS >

## DOOR SWITCH

### Description

INFOID:000000003083388

Detects door open/close condition and transmits the signal to BCM.

### Component Function Check

INFOID:000000003083389

#### 1. CHECK FRONT DOOR SWITCH INPUT SIGNAL

Check ("DOOR SW-DR" and "DOOR SW-AS") in "DATA MONITOR" mode with CONSULT-III. Refer to [PWC-7. "RETAINED PWR : CONSULT-III Function \(BCM - RETAINED PWR\)"](#).

Monitor item	Condition	
DOOR SW-DR	OPEN	: ON
	CLOSE	: OFF
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

YES >> Front door switch circuit is OK.

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

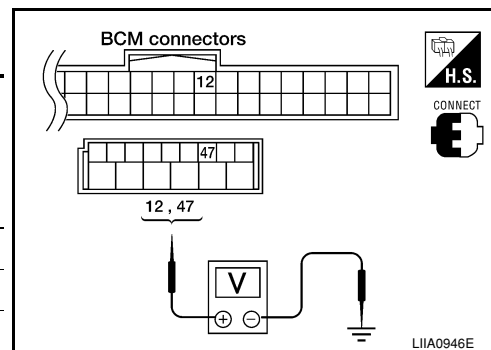
### Diagnosis Procedure

INFOID:000000003083390

#### 1. CHECK FRONT DOOR SWITCH

Check voltage between BCM connector and ground.

Terminals		Door condition	Voltage (V) (Approx.)
(+)	(-)		
BCM connector	Terminal		
M18	12	Front door RH	OPEN 0
			CLOSE Battery voltage
M19	47	Front door LH	OPEN 0
			CLOSE Battery voltage



Is the measurement value within the specification?

YES >> Replace BCM. Refer to [BCS-52. "Removal and Installation"](#).

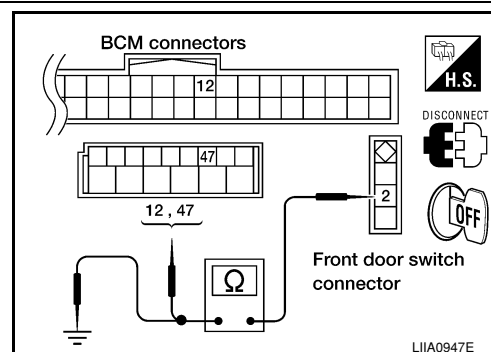
NO >> GO TO 2

#### 2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and front door switch.
3. Check continuity between BCM connector and front door switch connector.

BCM connector	Terminal	Front door switch connector	Terminal	Continuity
M18	12	RH: B108	2	Yes
M19	47	LH: B8		

4. Check continuity between front door switch connector and ground.





# DOOR SWITCH

## < COMPONENT DIAGNOSIS >

Front door switch connector	Terminal	Ground	Continuity
B8 (LH)	2		No
B108 (RH)			

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness.

### 3. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector and ground.

Terminal		Voltage (V) (Approx.)
(+)	(-)	
BCM connector	Terminal	Battery voltage
M18	12	
M19	47	

Is the measurement value within the specification?

YES >> GO TO 4

NO >> Replace BCM. Refer to [BCS-52, "Removal and Installation"](#).

### 4. CHECK FRONT DOOR SWITCH

Check front door switch.

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

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> Replace front door switch.

## Component Inspection

INFOID:000000003083391

### 1. CHECK FRONT DOOR SWITCH

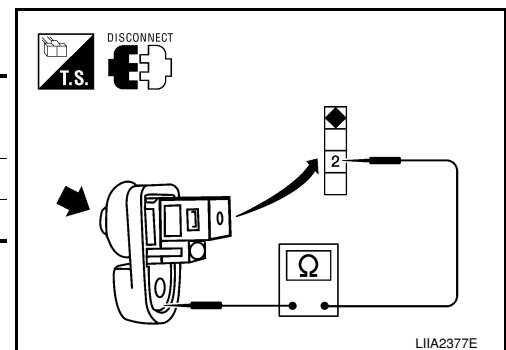
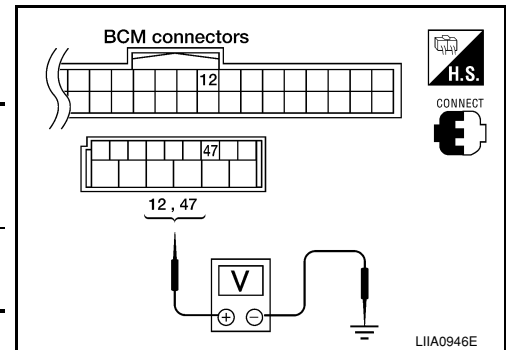
Check front door switches.

Terminal		Door switch	Continuity
Door switches			
2	Ground part of door switch	Pressed	No
		Released	Yes

Is the inspection result normal?

YES >> Front door switch is OK.

NO >> Replace front door switch.



# POWER WINDOW LOCK SWITCH

< COMPONENT DIAGNOSIS >

---

## POWER WINDOW LOCK SWITCH

### Description

INFOID:000000003083402

Ground circuit of main power window and door lock/unlock switch shuts off if power window lock switch of main power window and door lock/unlock switch is operated. This inhibits all operation, except for the main switch.

### Component Function Check

INFOID:000000003083403

#### 1. CHECK POWER WINDOW LOCK SIGNAL

---

Exchanges for a normal main power window and door lock/unlock switch, and operation is checked.

Does power window lock operate?

- YES >> Replace main power window and door lock/unlock switch. Refer to [PWC-55. "Removal and Installation"](#).
- NO >> Check condition of harness and connector.

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000003083404

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
DOOR SW-DR	Front door LH closed	OFF
	Front door LH opened	ON
DOOR SW-AS	Front door RH closed	OFF
	Front door RH opened	ON

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

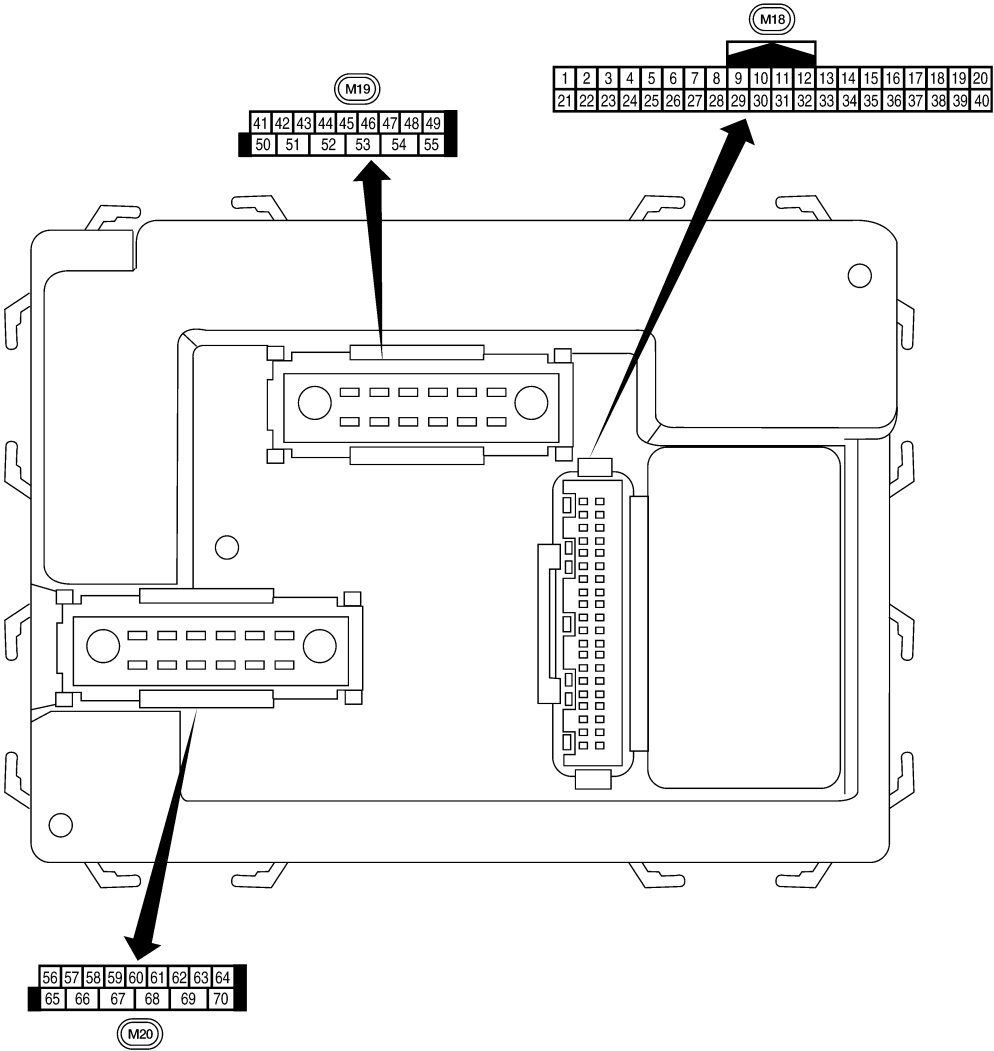
PWC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal Layout

INFOID:000000003261006




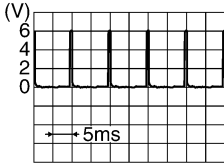

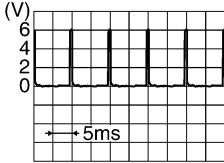
Physical Values

LIA2443E

INFOID:000000003261007

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
1	BR	Ignition keyhole illumination	Output	OFF	Door is locked (SW OFF)	Battery voltage
					Door is unlocked (SW ON)	0V
2	P	Combination switch input 5	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
3	SB	Combination switch input 4	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
4	V	Combination switch input 3	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
5	L	Combination switch input 2	Input	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
6	R	Combination switch input 1				
7	GR	Front door lock assembly LH (key cylinder switch) and back door key cylinder switch (unlock)	Input	OFF	ON (open, 2nd turn)	Momentary 1.5V
					OFF (closed)	0V
8	SB	Front door lock assembly LH (key cylinder switch) and back door key cylinder switch (lock)	Input	OFF	ON (open)	Momentary 1.5V
					OFF (closed)	0V
9	Y	Rear window defogger switch	Input	ON	Rear window defogger switch ON	0V
					Rear window defogger switch OFF	5V
11	G/B	Ignition switch (ACC or ON)	Input	ACC or ON	Ignition switch ACC or ON	Battery voltage
12	LG	Front door switch RH	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage

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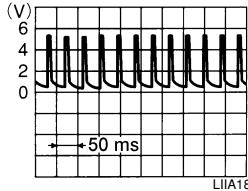
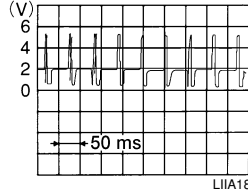
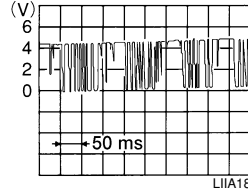
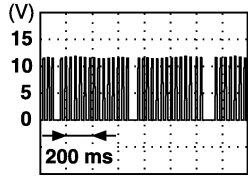
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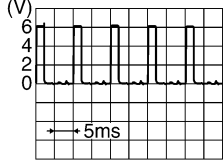
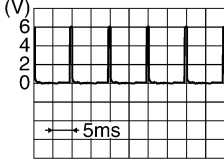
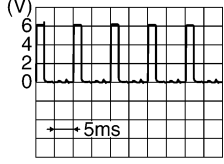
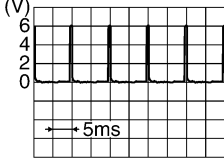
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
13	L	Rear door switch RH	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
15	W	Tire pressure warning check connector	Input	OFF	—	5V
18	BR	Remote keyless entry receiver and optical sensor (ground)	Output	OFF	—	0V
19	V	Remote keyless entry receiver (power supply)	Output	OFF	Ignition switch OFF	
20	G	Remote keyless entry receiver (signal)	Input	OFF	Stand-by (keyfob buttons released)	
					When remote keyless entry receiver receives signal from keyfob (keyfob buttons pressed)	
21	GR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF → ON)	Just after turning ignition switch ON: Pointer of tester should move for approx. 1 second, then return to battery voltage.
22	V	BUS	—	—	Ignition switch ON or power window timer operates	
23	G	Security indicator lamp	Output	OFF	Goes OFF → illuminates (Every 2.4 seconds)	Battery voltage → 0V
25	BR	NATS antenna amp.	Input	OFF → ON	Ignition switch (OFF → ON)	Just after turning ignition switch ON: Pointer of tester should move for approx. 1 second, then return to battery voltage.
27	W	Compressor ON signal	Input	ON	A/C switch OFF	5V
					A/C switch ON	0V
28	R	Front blower monitor	Input	ON	Front blower motor OFF	Battery voltage
					Front blower motor ON	0V

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
29	G	Hazard switch	Input	OFF	ON	0V
					OFF	5V
32	O	Combination switch output 5	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
33	GR	Combination switch output 4	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
34	G	Combination switch output 3	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5291E
35	BR	Combination switch output 2	Output	ON	Lighting, turn, wiper OFF Wiper dial position 4	 SKIA5292E
36	LG	Combination switch output 1				
37	B	Key switch and key lock solenoid	Input	OFF	Key inserted	Battery voltage
					Key inserted	0V
38	W/R	Ignition switch (ON)	Input	ON	—	Battery voltage
39	L	CAN-H	—	—	—	—
40	P	CAN-L	—	—	—	—
43	Y	Back door switch	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
44	O	Rear wiper auto stop switch	Input	ON	Rise up position (rear wiper arm on stopper)	0V
					A Position (full clockwise stop position)	Battery voltage
					Forward sweep (counterclockwise direction)	Fluctuating
					B Position (full counterclockwise stop position)	0V
					Reverse sweep (clockwise direction)	Fluctuating

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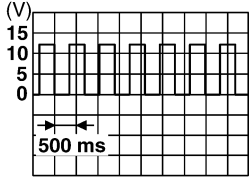
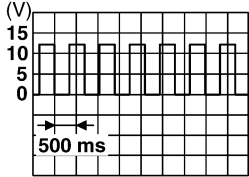
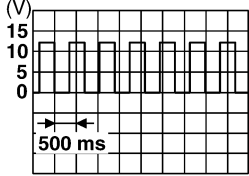
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# BCM (BODY CONTROL MODULE)

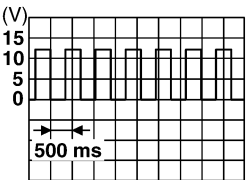
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Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
45	V	Lock switch	Input	OFF	ON (lock)	0V
					OFF	Battery voltage
46	LG	Unlock switch	Input	OFF	ON (unlock)	0V
					OFF	Battery voltage
47	GR	Front door switch LH	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
48	P	Rear door switch LH	Input	OFF	ON (open)	0V
					OFF (closed)	Battery voltage
49	L	Cargo lamp	Output	OFF	Any door open (ON)	0V
					All doors closed (OFF)	Battery voltage
51	G	Trailer turn signal (right)	Output	ON	Turn right ON	 SKIA3009J
52	V	Trailer turn signal (left)	Output	ON	Turn left ON	 SKIA3009J
55	W	Rear wiper output circuit 1	Output	ON	OFF	0
					ON	Battery voltage
56	V	Battery saver output	Output	OFF	30 minutes after ignition switch is turned OFF	0V
				ON	—	Battery voltage
57	R/Y	Battery power supply	Input	OFF	—	Battery voltage
58	W	Optical sensor	Input	ON	When optical sensor is illuminated	3.1V or more
					When optical sensor is not illuminated	0.6V or less
59	GR	Front door lock assembly LH actuator (unlock)	Output	OFF	OFF (neutral)	0V
					ON (unlock)	Battery voltage
60	LG	Turn signal (left)	Output	ON	Turn left ON	 SKIA3009J



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal	Wire color	Signal name	Signal input/output	Measuring condition		Reference value or waveform (Approx.)
				Ignition switch	Operation or condition	
61	G	Turn signal (right)	Output	ON	Turn right ON	 SKIA3009J
63	BR	Interior room/map lamp	Output	OFF	Any door switch	ON (open) 0V OFF (closed) Battery voltage
					Any door switch	ON (open) 0V OFF (closed) Battery voltage
65	V	All door lock actuators (lock)	Output	OFF	OFF (neutral)	0V
					ON (lock)	Battery voltage
66	L	Front door lock actuator RH, rear door lock actuators LH/RH and back door lock actuator (unlock)	Output	OFF	OFF (neutral)	0V
					ON (unlock)	Battery voltage
67	B	Ground	Input	ON	—	0V
68	O	Power window power supply (RAP)	Output	—	Ignition switch ON	Battery voltage
					Within 45 seconds after ignition switch OFF	Battery voltage
					More than 45 seconds after ignition switch OFF	0V
					When front door LH or RH is open or power window timer operates	0V
70	W	Battery power supply	Input	OFF	—	Battery voltage

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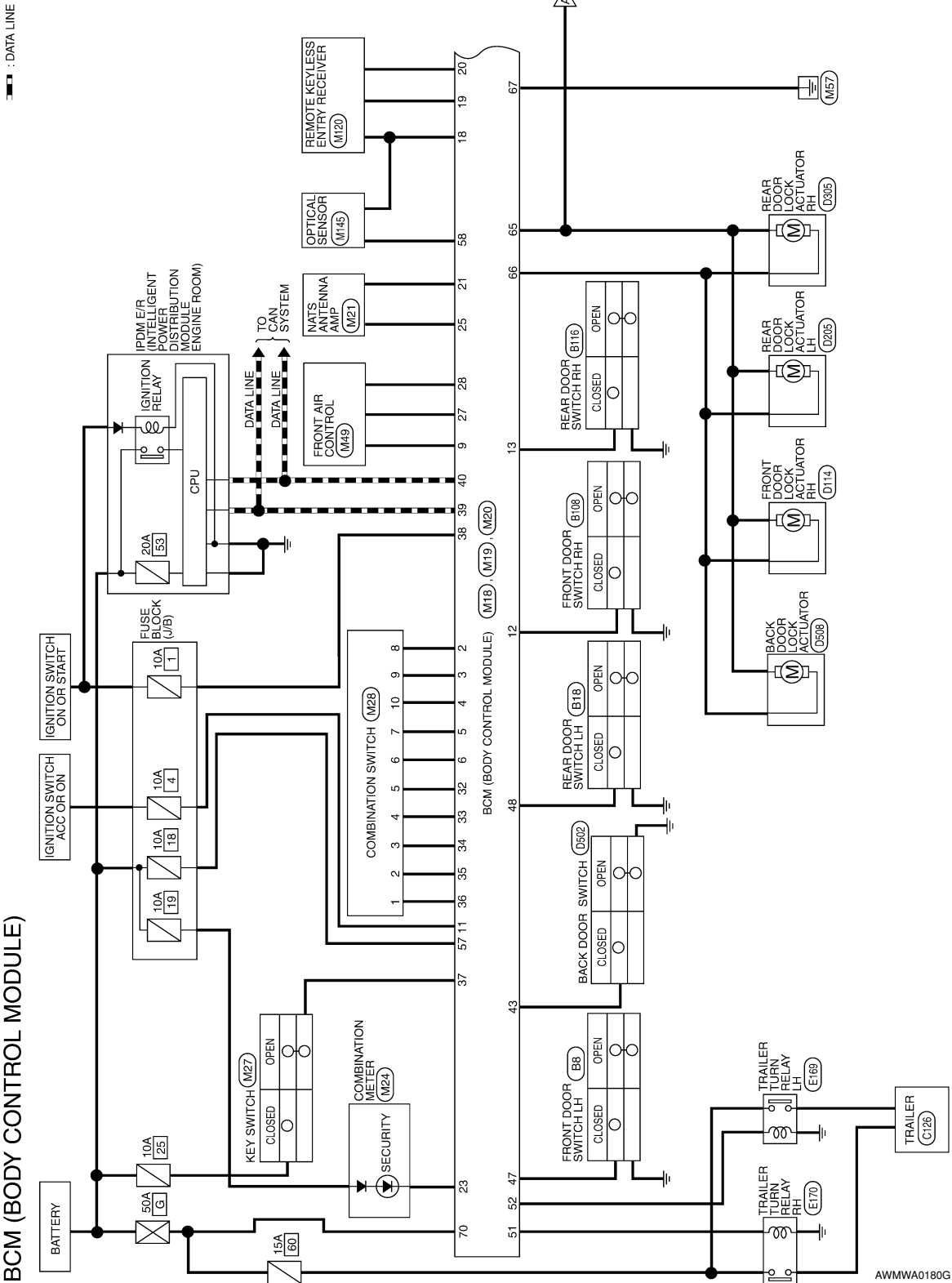
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# BCM (BODY CONTROL MODULE)

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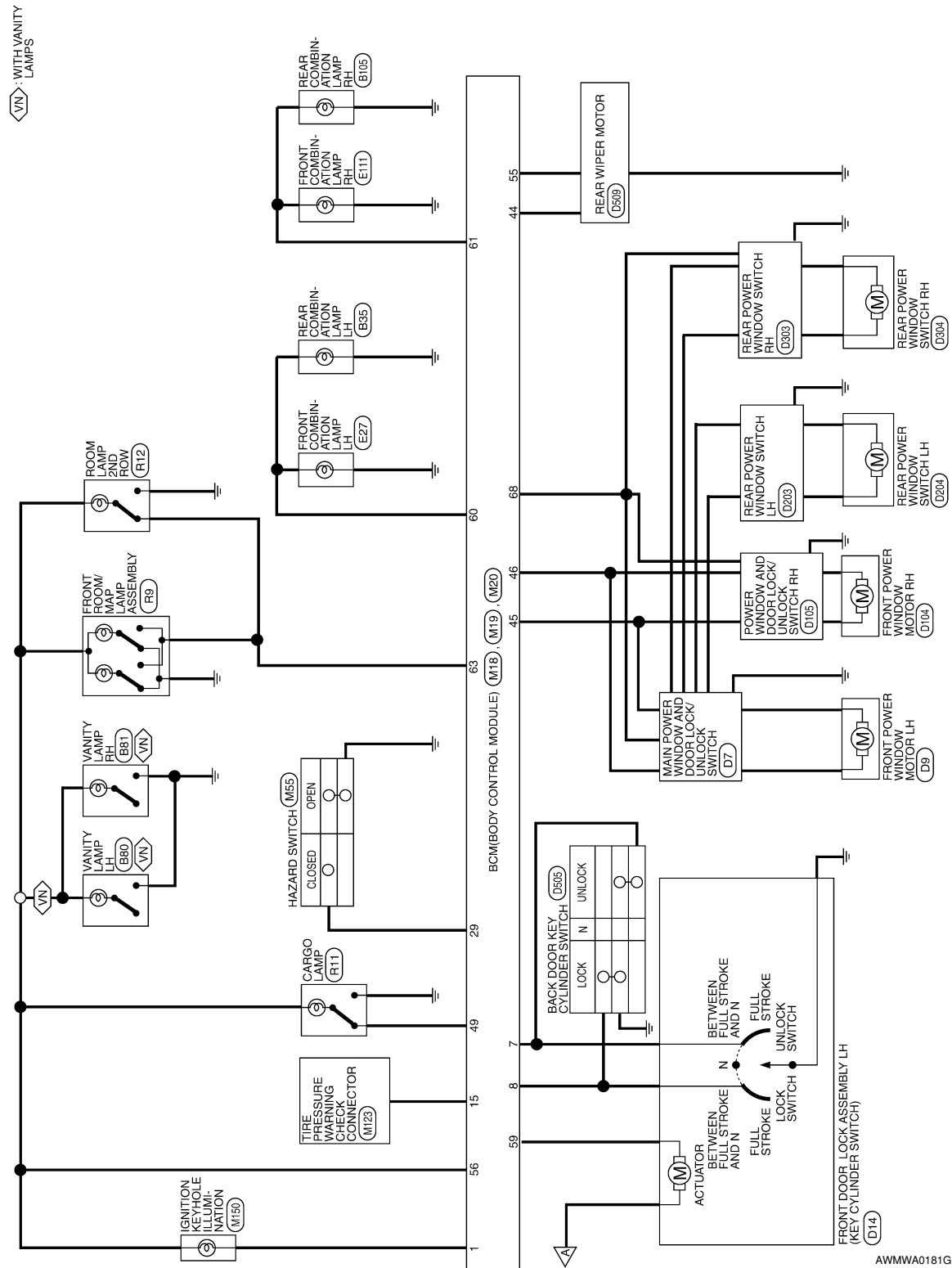
## Wiring Diagram

INFOID:000000003261008



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >



AWMWA0181G

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## BCM (BODY CONTROL MODULE) CONNECTORS

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	BR	KEY RING OUTPUT
2	P	COMBI SW INPUT 5 (LOW SIDE)
3	SB	COMBI SW INPUT 3 (LOW SIDE)
4	V	COMBI SW INPUT 4 (LOW SIDE)
5	L	COMBI SW INPUT 2 (LOW SIDE)
6	R	COMBI SW INPUT 1 (LOW SIDE)

Terminal No.	Color of Wire	Signal Name
7	GR	KEY CYLINDER UNLOCK SW
8	SB	KEY CYLINDER LOCK SW
9	Y	DEFOGGER SW
10	-	-
11	G/B	ACC. SW
12	LG	DOOR SW (AS)
13	L	DOOR SW (RR)
14	-	-
15	W	TPMS MODE TRIGGER SW
16	-	-
17	-	-
18	BR	KEYLESS & AUTO LIGHT SENSOR GND
19	V	KEYLESS TUNER POWER SUPPLY OUTPUT
20	G	KEYLESS TUNER SIGNAL
21	GR	IMMOBILISER ATNENNA SIG (CLOCK)

Terminal No.	Color of Wire	Signal Name
22	-	-
23	G	SECURITY INDICATOR OUTPUT
24	-	-
25	BR	IMMOBILISER ATNENNA SIG (TX,RX)
26	-	-
27	W	AIRCON SW
28	R	BLOWER FAN SW
29	G	HAZARD SW
30	-	-
31	-	-
32	O	COMBI SW OUTPUT 5 (PULL UP SIDE)
33	GR	COMBI SW OUTPUT 4 (PULL UP SIDE)
34	G	COMBI SW OUTPUT 3 (PULL UP SIDE)
35	BR	COMBI SW OUTPUT 2 (PULL UP SIDE)
36	LG	COMBI SW OUTPUT 1 (PULL UP SIDE)
37	B	KEY SW
38	W/R	IGN SW
39	L	CAN-H
40	P	CAN-L

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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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



41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name
41	-	-
42	-	-
43	Y	BACK DOOR SW
44	O	REAR WIPER AUTO STOP SW1

Terminal No.	Color of Wire	Signal Name
45	V	CDL LOCK SW
46	LG	CDL UNLOCK SW
47	GR	DOOR SW (DR)
48	P	DOOR SW (RL)
49	L	LUGGARGO LAMP OUTPUT
50	-	-
51	G	TRAILER FLASHER OUTPUT (RIGHT)
52	V	TRAILER FLASHER OUTPUT (LEFT)
53	-	-
54	-	-
55	W	REAR WIPER MOTOR OUTPUT 1

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
56	V	BATTERY SAVER OUTPUT
57	R/Y	BAT (FUSE)
58	-	-
59	GR	DOOR UNLOCK OUTPUT (DR)
60	LG	FLASHER OUTPUT (LEFT)

Terminal No.	Color of Wire	Signal Name
61	G	FLASHER OUTPUT (RIGHT)
62	-	-
63	BR	ROOM LAMP OUTPUT
64	-	-
65	V	DOOR LOCK OUTPUT (ALL)
66	L	DOOR UNLOCK OUTPUT (OTHER)
67	B	GND (POWER)
68	O	POWER WINDOW POWER SUPPLY OUT (LINKED TO RAP)
69	-	-
70	W	BAT (F/L)

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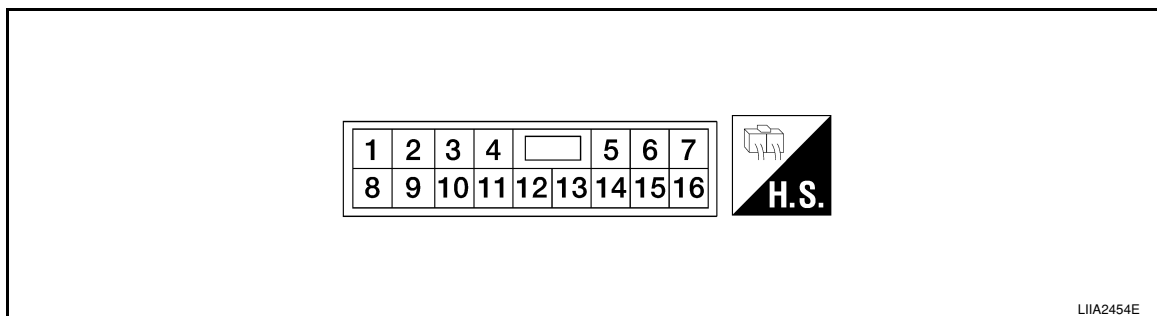
# POWER WINDOW SYSTEM

< ECU DIAGNOSIS >

## POWER WINDOW SYSTEM

### Terminal Layout

INFOID:000000003289056



### Physical Values

INFOID:000000003289057

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
2	G/Y	Front power window motor RH DOWN signal	When power window motor is operated DOWN	Battery voltage
3	L/W	Front power window motor RH UP signal	When power window motor is operated UP	Battery voltage
5	W/R	RAP signal	When ignition switch ON	Battery voltage
			Within 45 seconds after ignition switch is turned to OFF	Battery voltage
			More than 45 seconds after ignition switch is turned to OFF	0
			When front door LH or RH open or power window timer operates	0
6	G/R	Front power window motor LH UP signal	When power window motor is operated UP	Battery voltage
7	G/W	Front power window motor LH DOWN signal	When power window motor is operated DOWN	Battery voltage
8	G/B	Rear power window RH UP signal	When rear RH switch in main power window and door lock/unlock switch is operated UP	Battery voltage
9	R	Rear power window RH DOWN signal	When rear RH switch in main power window and door lock/unlock switch is operated DOWN	Battery voltage
14	B	Ground	—	0
15	R/B	Rear power window LH UP signal	When rear LH switch in main power window and door lock/unlock switch is operated UP	Battery voltage
16	R/Y	Rear power window LH DOWN signal	When rear LH switch in main power window and door lock/unlock switch is operated DOWN	Battery voltage

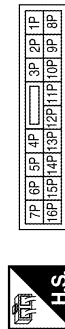


# POWER WINDOW SYSTEM

< ECU DIAGNOSIS >

## POWER WINDOW SYSTEM CONNECTORS

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



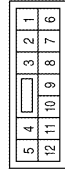
Terminal No.	Color of Wire	Signal Name
4P	G/B	—
15P	W/R	—

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE



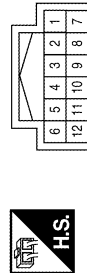
Terminal No.	Color of Wire	Signal Name
6	W	—

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	BROWN



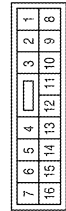
Terminal No.	Color of Wire	Signal Name
1	SB	—
4	P	—
5	Y	—
9	B	—
10	O	—
11	R	—
12	LG	—

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



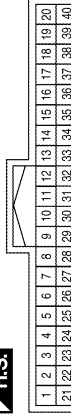
Terminal No.	Color of Wire	Signal Name
7	LG	—

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	Y	—
15	W	—
16	P	—

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
11	G/B	ACC_SW
12	LG	DOOR SW (AS)
38	W/R	IGN SW

AWKIA0490GB



# POWER WINDOW SYSTEM

< ECU DIAGNOSIS >

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

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			



Terminal No.	Color of Wire	Signal Name
47	GR	DOOR SW (DR)

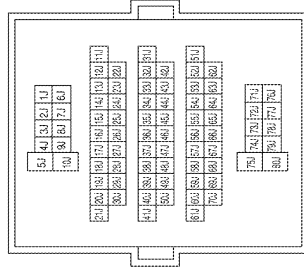
Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

55	57	58	59	60	61	62	63	64
65	66	67	68	69	70			



Terminal No.	Color of Wire	Signal Name
67	B	GND (POWER)
68	O	POWER WINDOW POWER SUPPLY (LINKED TORAP)
70	W	BAT (F/L)

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
10J	W	-
61J	GR	-
75J	R	-
80J	LG	-

Connector No.	M75
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
5	W	-
8	P	-
9	SB	-

Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Color	WHITE

1	2	3
4	5	6



Terminal No.	Color of Wire	Signal Name
6	W	-

Connector No.	B6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
6	W	-
7	R	-
8	LG	-

AWKIA0491GB

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# POWER WINDOW SYSTEM

< ECU DIAGNOSIS >

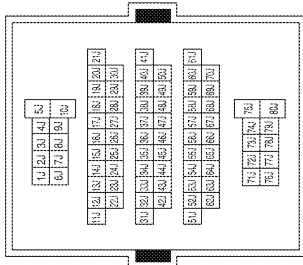
Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



1	2	3
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Terminal No.	Color of Wire	Signal Name
2	GR	--

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
10J	W	--
61J	GR	--
75J	R	--
80J	LG	--

Connector No.	B106
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
6	W	--
7	Y	--
8	P	--

Connector No.	B108
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3
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Terminal No.	Color of Wire	Signal Name
2	LG	--

Connector No.	B162
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
7	LG	--

Connector No.	B163
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21

Terminal No.	Color of Wire	Signal Name
7	Y	--
15	W	--
16	P	--

AWKIA0492GB

# POWER WINDOW SYSTEM

< ECU DIAGNOSIS >

Terminal No.	Color of Wire	Signal Name
14	B	—
15	R/B	—
16	R/Y	—

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
2	G/Y	—
3	L/W	—
5	W/R	—
6	G/R	—
7	G/W	—
8	G/B	—
9	R	—

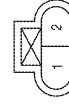
Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	BROWN

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



Terminal No.	Color of Wire	Signal Name
1	G/Y	—
4	R	—
5	G/B	—
6	L/W	—
9	B	—
10	W/R	—
11	R/B	—
12	R/Y	—

Connector No.	D104
Connector Name	FRONT POWER WINDOW MOTOR RH
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	G	—
2	L	—

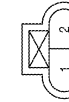
Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

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



Terminal No.	Color of Wire	Signal Name
5	W/R	—
8	L/W	—
9	G/Y	—

Connector No.	D9
Connector Name	FRONT POWER WINDOW MOTOR LH
Connector Color	BROWN



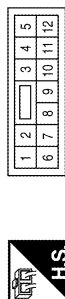
Terminal No.	Color of Wire	Signal Name
1	G/W	—
2	G/R	—

AWKIA0493GB

# POWER WINDOW SYSTEM

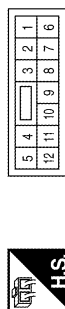
< ECU DIAGNOSIS >

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE



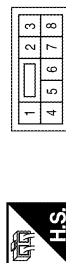
Terminal No.	Color of Wire	Signal Name
6	G	--
7	L	--
8	W/R	--
11	G/Y	--
12	L/W	--

Connector No.	D201
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	W	--
7	LG	--
8	R	--

Connector No.	D203
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Color	WHITE



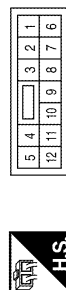
Terminal No.	Color of Wire	Signal Name
4	LG	--
5	R	--
6	Y	--
7	L	--
8	W	--

Connector No.	D204
Connector Name	REAR POWER WINDOW MOTOR LH
Connector Color	BLACK



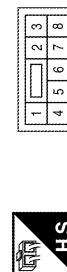
Terminal No.	Color of Wire	Signal Name
1	Y	--
2	L	--

Connector No.	D301
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6	W	--
7	Y	--
8	B	--

Connector No.	D303
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	Y	--
5	R	--
6	Y	--
7	L	--
8	W	--

AWKIA0494GB

POWER WINDOW SYSTEM

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Connector No.	D304
Connector Name	REAR POWER WINDOW MOTOR RH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	Y	--
2	L	--

AWKIA0495GB

# NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

< SYMPTOM DIAGNOSIS >

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## SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

### Diagnosis Procedure

INFOID:000000003083411

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

---

Check BCM power supply and ground circuit.

Refer to [BCS-30, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

#### 2. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

---

Check main power window switch.

Refer to [PWC-11, "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 3

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-55, "Removal and Installation"](#).

#### 3. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH POWER SUPPLY AND GROUND CIRCUIT

---

Check power window switch main power supply and ground circuit.

Refer to [PWC-8, "POWER WINDOW MAIN SWITCH : Component Function Check"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

# DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

### Diagnosis Procedure

INFOID:000000003083412

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

Check front power window motor LH.

Refer to [PWC-17, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

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# FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## FRONT PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

### Diagnosis Procedure

INFOID:000000003083413

#### 1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Check power window and door lock/unlock switch RH.

Refer to [PWC-12, "FRONT POWER WINDOW SWITCH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

#### 2. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to [PWC-11, "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 3

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-11, "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

#### 3. CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check front power window motor RH circuit.

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).



# REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

### Diagnosis Procedure

INFOID:000000003083414

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

Check rear power window switch LH.

Refer to [PWC-14, "REAR POWER WINDOW SWITCH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

#### 2. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Check main power window and door lock/unlock switch.

Refer to [PWC-11, "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 3

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-11, "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

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

Check rear power window motor LH.

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

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# REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

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### Diagnosis Procedure

INFOID:000000003083415

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

---

Check rear power window switch RH.

Refer to [PWC-14, "REAR POWER WINDOW SWITCH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace the malfunctioning parts.

#### 2. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

---

Check main power window and door lock/unlock switch.

Refer to [PWC-11, "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 3

NO >> Replace main power window and door lock/unlock switch. Refer to [PWC-11, "POWER WINDOW MAIN SWITCH : Component Inspection"](#).

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

---

Check rear power window motor RH.

Refer to [PWC-21, "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

# AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY (DRIVER SIDE)

Diagnosis Procedure

INFOID:0000000003083418

## 1. REPLACE MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Replace main power window and door lock/unlock switch and check operation. Refer to [PWC-55, "Removal and Installation"](#).

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

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# POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

## POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

### Diagnosis Procedure

INFOID:000000003083420

#### 1. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to [PWC-24, "Component Function Check"](#).

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

# POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

## POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

### Diagnosis Procedure

INFOID:000000003083423

#### 1. REPLACE MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Replace main power window and door lock/unlock switch and check operation.  
Refer to [PWC-55, "Removal and Installation"](#).

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-37, "Intermittent Incident"](#).

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## PRECAUTIONS

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### PRECAUTION

#### PRECAUTIONS

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

INFOID:000000003083424

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

##### **WARNING:**

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

# POWER WINDOW MAIN SWITCH

< ON-VEHICLE REPAIR >

## ON-VEHICLE REPAIR

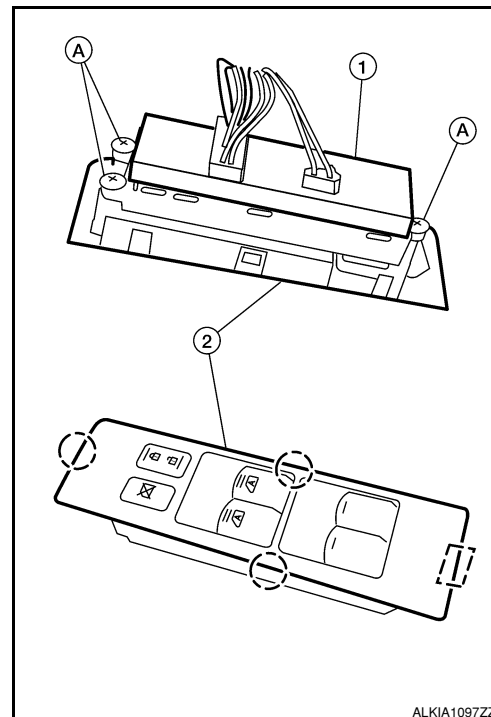
### POWER WINDOW MAIN SWITCH

#### Removal and Installation

INFOID:000000003083425

#### REMOVAL

1. Remove the power window main switch finisher (2) from the front door finisher LH. Refer to [INT-10. "Removal and Installation"](#).
2. Remove the three screws (A) from the power window main switch (1), then separate from the finisher (2).



#### INSTALLATION

Installation is in the reverse order of removal.

PWC

# FRONT POWER WINDOW SWITCH

< ON-VEHICLE REPAIR >

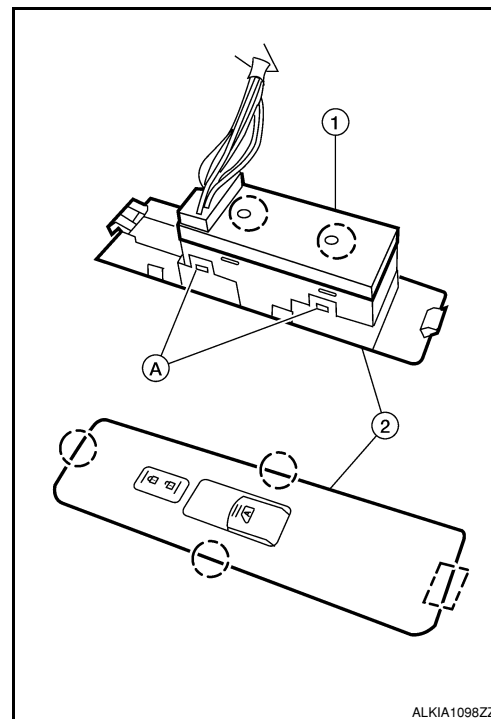
## FRONT POWER WINDOW SWITCH

### Removal and Installation

INFOID:000000003083426

#### REMOVAL

1. Remove the front power window switch finisher (2) from the front door finisher RH. Refer to [INT-10, "Removal and Installation"](#).
2. Release the four tabs (A), two on each side, then separate the front power window switch (1) from the finisher (2).



#### INSTALLATION

Installation is in the reverse order of removal.



# REAR POWER WINDOW SWITCH

< ON-VEHICLE REPAIR >

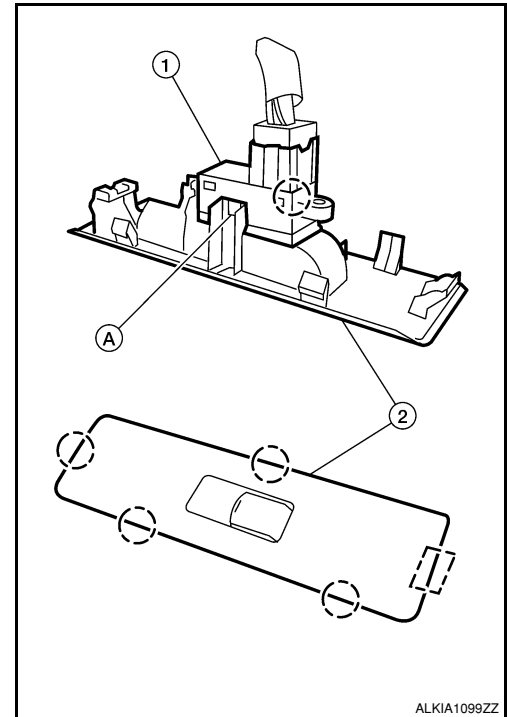
## REAR POWER WINDOW SWITCH

### Removal and Installation - Rear Door Switch

INFOID:000000003083427

#### REMOVAL

1. Remove the rear power window switch finisher (2) from the rear door finisher. Refer to [INT-10, "Removal and Installation"](#).
2. Release the two tabs (A), one on either side, then separate the rear power window switch (1) from the finisher (2).



#### INSTALLATION

Installation is in the reverse order of removal.

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