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PRECAUTION

PRECAUTIONS

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

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The vehicle may be equipped with a passenger air bag deactivation switch. Because no rear seat exists where a rear-facing child restraint can be placed, the switch is designed to turn off the passenger air bag so that a rear-facing child restraint can be used in the front passenger seat. The switch is located in the center of the instrument panel, near the ashtray. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate for certain types of collision. When the switch is turned to the OFF position, the passenger air bag is disabled and will not inflate. A passenger air bag OFF indicator on the instrument panel lights up when the passenger air bag is switched OFF. The driver air bag always remains enabled and is not affected by the passenger air bag deactivation switch.

WARNING:

 To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.

 Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".

 Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual, SRS wiring harnesses can be identified by vellow and/or orange harnesses or har-

 The vehicle may be equipped with a passenger air bag deactivation switch which can be operated by the customer. When the passenger air bag is switched OFF, the passenger air bag is disabled and will not inflate. When the passenger air bag is switched ON, the passenger air bag is enabled and could inflate for certain types of collision. After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.

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

 When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.

 When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

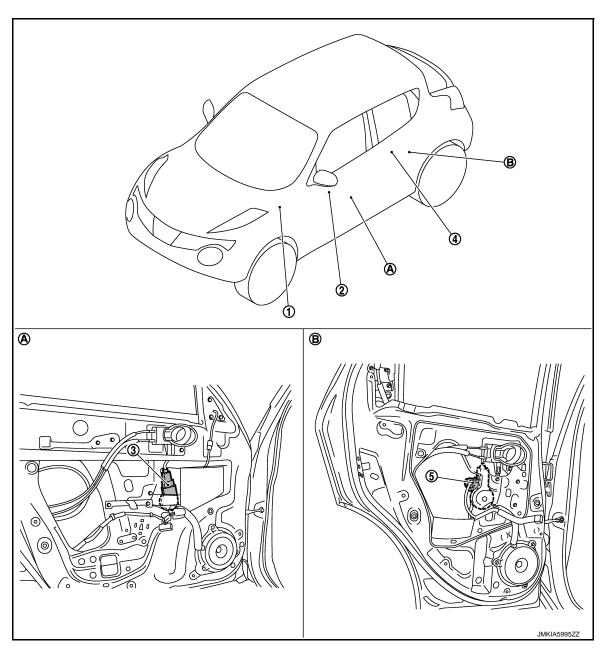
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000006290149



- BCM Refer to BCS-6, "BODY CONTROL **SYSTEM: Component Parts Loca**tion" (with Intelligent Key) or BCS-96. "BODY CONTROL SYSTEM: Component Parts Location" (without Intelligent Key)
- 4. Rear power window switch LH
- Rear power window motor LH 5.

Power window main switch

- View with front door finisher removed B.
- View with rear door finisher removed
- 3. Front power window motor (driver side)

COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component Description

INFOID:0000000006290150

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Component parts	Description
BCM	Supplies power supply to power window switch.
Power window main switch	 Directly controls all power window motor of all doors. Controls anti-pinch operation of power window.
Front power window switch (passenger side)	Controls power window motor of front passenger side door.
Rear power window switch (LH & RH)	Controls power window motor of rear right and left doors.
Front power window motor (driver side)	 Integrates the encoder and power window motor. Starts operating with signals from power window main switch. Transmits front power window motor (driver side) rotation as a pulse signal to power window main switch.
Front power window motor (passenger side)	Starts operating with signals from power window main switch and front power window switch (passenger side).
Rear power window motor (LH & RH)	Starts operating with signals from power window main switch and rear power window switch (LH & RH).
Encoder	Detects condition of the front power window motor (driver side) operation and transmits to power window main switch as pulse signal.

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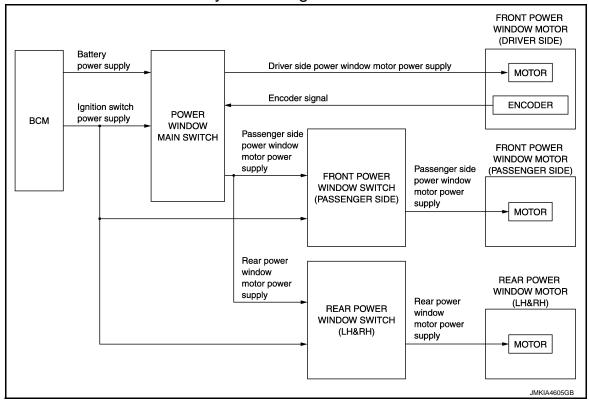
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SYSTEM POWER WINDOW SYSTEM

POWER WINDOW SYSTEM: System Diagram

INFOID:0000000006290151



POWER WINDOW SYSTEM: System Description

INFOID:0000000006290152

- Power window system is activated by power window switch when ignition switch turns ON.
- Power window main switch opens/closes all door glass.
- Front and rear power window switch opens/closes the corresponding door glass.
- AUTO UP/DOWN operation can be performed when power window main switch turns to AUTO.
- Power window lock switch can lock all power windows other than driver seat.
- If door glass receives resistance that is the specified value or more while power window of driver seat is in AUTO-UP operation, power window of driver seat operates in the reverse direction.

POWER WINDOW AUTO-OPERATION (FRONT DRIVER SIDE)

- AUTO UP/DOWN operation can be performed when power window main switch 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.

POWER WINDOW LOCK

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.

ANTI-PINCH SYSTEM (FRONT DRIVER SIDE)

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

SYSTEM

< SYSTEM DESCRIPTION >

 Power window main switch controls to lower the window glass for 150 mm (5.9 in) after it detects encoder pulse signal frequency change.

OPERATION CONDITION

When front door glass (driver side) 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.

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.

It changes to condition before initialization and the following functions do not operate when switched to fail-safe control.

- Auto-up operation
- Anti-pinch function

Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window main switch or front power window motor (driver side).

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BCM (BODY CONTROL MODULE)

INFOID:0000000006290141

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

	ECU	Reference
		BCS-41, "Reference Value"
	With Intelligent Key	BCS-64, "Fail-safe"
	With Intelligent Key	BCS-66, "DTC Inspection Priority Chart"
		BCS-67, "DTC Index"
BCM		BCS-125, "Reference Value"
	Without Intelligent Key	BCS-140, "Fail-safe"
		BCS-140, "DTC Inspection Priority Chart"
		BCS-141, "DTC Index"

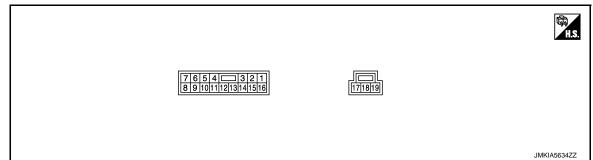
POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

POWER WINDOW MAIN SWITCH

	nal No. color)	Description		Condition	Voltage (V)
+	-	Signal name	Input/ Output	Condition	voltage (v)
1 (B)	Ground	Ground	_	_	0 – 1
2 (SB)	Ground	Front power window motor (passenger side) DOWN signal	Output	When front RH switch in power window main switch is DOWN at operated.	9 – 16
4 (P)	Ground	Encoder pulse signal 2	Input	When front power window motor (driver side) operates.	(V) 6 4 2 0 10 ms
5 (W)	Ground	Encoder pulse signal 1	Input	When front power window motor (driver side) operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
6 (BR)	Ground	Rear power window motor RH DOWN signal	Output	When rear RH switch in power window main switch is DOWN at operated.	9 – 16
7 (LG)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in power window main switch is UP at operated.	9 – 16
8 (BG)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in power window main switch is DOWN at operated.	9 – 16
9 (G)	Ground	Rear power window motor LH UP signal	Output	When rear LH switch in power window main switch is UP at operated.	9 – 16

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POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition	Voltage (V)
+	-	Signal name	Input/ Output	Condition	voltage (v)
10	Ground	Ignition switch power supply	Input	Ignition switch ON	9 – 16
(L)	Giodila	Ignition switch power supply	Input	Other than above	0 – 1
12 (LG)	Ground	Encoder ground	_	_	0 – 1
14 (G)	Ground	Encoder power supply	Output	Ignition switch ON	9 – 16
16 (W)	Ground	Front power window motor (passenger side) UP signal	Output	When front RH switch in power window main switch is UP at operated.	9 – 16
17 (R)	Ground	Front power window motor (driver side) UP signal	Output	When front LH switch in power window main switch is UP at operated.	9 – 16
18 (P)	Ground	Battery power supply	Input Ignition switch OFF		9 – 16
19 (GR)	Ground	Front power window motor (driver side) DOWN signal	Output	When front LH switch in power window main switch is DOWN at operated.	9 – 16

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 error beyond regulation value is detected between the fully closed position and the actual position of the glass.

Error	Error condition			
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.			
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.			
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.			
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.			
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.			

It changes to condition before initialization and the following functions do not operate when switched to failsafe control.

- Auto-up operation
- Anti-pinch function

Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window main switch or front power window motor (driver side).

WIRING DIAGRAM

POWER WINDOW SYSTEM

LHD

LHD: Wiring Diagram

INFOID:0000000006290154

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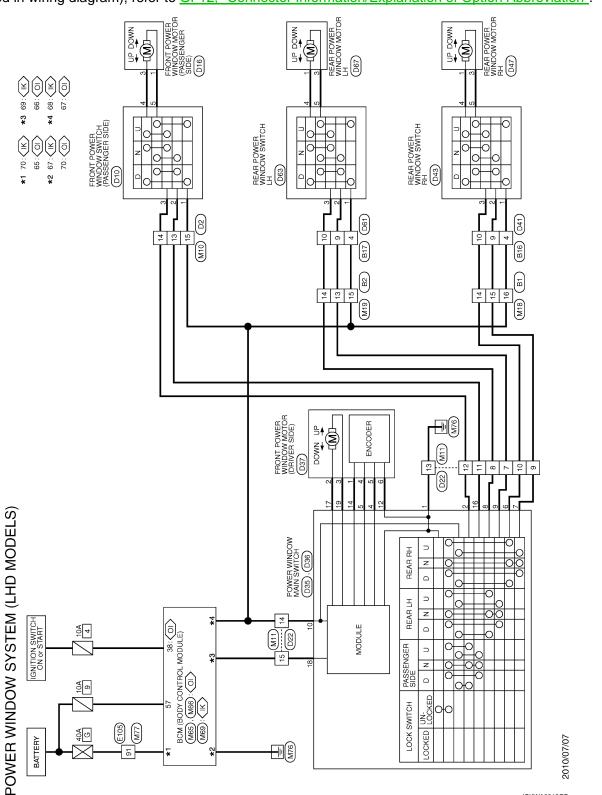
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For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information/Explanation of Option Abbreviation".

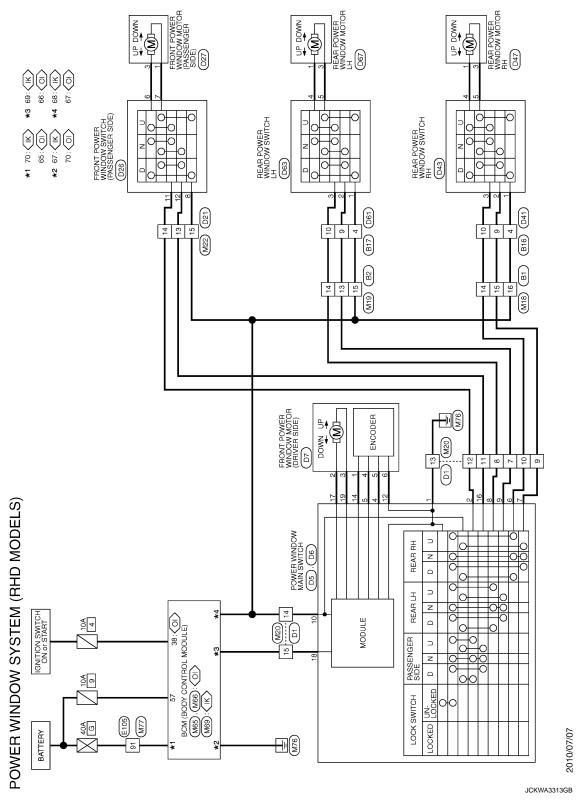


RHD

RHD: Wiring Diagram

INFOID:0000000006290155

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to GI-12. "Connector Information/Explanation of Option Abbreviation".



DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION Α DIAGNOSIS AND REPAIR WORK FLOW WorkFlow INFOID:00000000006290156 **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. D >> GO TO 2. $2.\mathsf{REPRODUCE}$ THE MALFUNCTION INFORMATION Е Check the malfunction on the vehicle that the customer describes. Inspect the relation of the symptoms and the condition when the symptoms occur. F >> 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. Н >> GO TO 4. f 4.IDENTIFY THE MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS" Perform the diagnosis with "Component diagnosis" of the applicable system. >> GO TO 5. J ${f 5}$. REPAIR OR REPLACE THE MALFUNCTIONING PARTS Repair or replace the specified malfunctioning parts. **PWC** >> 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? M YES >> INSPECTION END NO >> GO TO 3. N

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description INFOID:0000000006290157

When the battery negative terminal is disconnected, the initialization is necessary for normal operation of power window system.

CAUTION:

The following specified operations can not be performed under the non-initialized condition.

- Auto-up operation
- Anti-pinch function

Work Procedure

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to PWC-16, "Work Procedure".

>> GO TO 2.

2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to PWC-17, "Work Procedure".

>> END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

< BASIC INSPECTION >	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UN	IT
Description	INFOID:0000000006290159
When the control unit replaced, the initialization in necessary for normal operation of po	wer window system.
CAUTION: The following specified operations can not be performed under the non-initialized • Auto-up operation • Anti-pinch function	I condition.
Work Procedure	INFOID:0000000006290160
1.SYSTEM INITIALIZATION	
Perform system initialization. Refer to PWC-16 , "Work Procedure".	
>> GO TO 2. 2.CHECK ANTI-PINCH FUNCTION	
Check anti-pinch function. Refer to PWC-17, "Work Procedure".	
>> END	

SYSTEM INITIALIZATION

< BASIC INSPECTION >

SYSTEM INITIALIZATION

Description INFOID:0000000006290161

If any of the following operations are performed, the initialization is necessary for normal operation of power window system.

- Disconnection and connection of battery cable from negative terminal.
- · When power window main switch replaced.
- Electric power supply to power window main switch or power window motor (driver side) is interrupted by blown fuse or disconnection and connection of the negative terminal of battery, etc.
- Disconnection and connection of power window main switch harness connector.
- Removal of power window motor (driver side) from regulator assembly.
- Operation of regulator assembly as an independent unit.
- · Removal and installation of glass.
- · Removal and installation of door glass run.

CAUTION:

The following specified operations can not be performed under the non-initialized condition.

- Auto-up operation
- Anti-pinch function

Work Procedure

1.STEP 1

- 1. Turn ignition switch ON.
- 2. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
- 3. Continue pulling the power window switch UP (AUTO-UP operation). Even after glass stops at fully closed position, keep pulling the switch for 2 seconds or more.
- Check that AUTO-UP function operates normally.

>> GO TO 2.

2.STEP 2

Check anti-pinch function. Refer to PWC-17, "Work Procedure".

>> FND

CHECK ANTI-PINCH FUNCTION

< BASIC INSPECTION >

CHECK ANTI-PINCH FUNCTION

Description INFOID:000000000290163

If any of the following operations are performed, the initialization is necessary for normal operation of antipinch function.

- Disconnection and connection of battery cable from negative terminal.
- When power window main switch replaced.
- Electric power supply to power window main switch or power window motor (driver side) is interrupted by blown fuse or disconnection and connection of the negative terminal of battery, etc.
- Disconnection and connection of power window main switch harness connector.
- Removal of power window motor (driver side) from regulator assembly.
- Operation of regulator assembly as an independent unit.
- · Removal and installation of glass.
- · Removal and installation of door glass run.

Work Procedure

1. CHECK ANTI-PINCH FUNCTION

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

CAUTION:

- Perform initial setting when AUTO-UP operation or anti-pinch function does not operate normally.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- Do not check with hands and other body parts because they may be pinched. Do not get pinched.

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< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000006290165

1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY

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

	(+) wer window main switch (-)		ndition	Voltage (V)		
Connector	Terminal					
D35 (D5)	10	Ground	Ignition switch	ON	9 – 16	
D36 (D6)	18	Giodila	ignition switch	OFF	9 – 10	

(): RHD models

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY CIRCUIT

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

[With Intelligent Key]

В	CM	Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M69	68	D35 (D5)	10	
WIOS	69	D36 (D6)	18	Existed
[Without Intelligent Key]				
В	BCM Power window main switch			
Connector	Terminal	Connector	Terminal	Continuity
M66	67	D35 (D5)	10	Existed
IVIOU	66	D36 (D6)	18	LXISIEU

(): RHD models

4. Check continuity between BCM harness connector and ground.

[With Intelligent Key]

BCM			Continuity	
Connector	Terminal	- Ground	Continuity	
M69	68	Ground	Not eviated	
MO9	69		Not existed	
[Without Intelligent Key]				
В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M66	67		Not existed	
IVIOO	66		INOL EXISTED	

Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace BCM. Refer to <u>BCS-93</u>, "Removal and Installation" (with Intelligent Key) or <u>BCS-161</u>, "Removal and Installation" (without Intelligent Key).

NO >> Repair or replace harness.

3.check power window main switch ground circuit

1. Turn ignition switch OFF.

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

Power window main switch			Continuity
Connector	Connector Terminal		Continuity
D35 (D5)	1		Existed

(): RHD models

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:0000000006290166

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY

- 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.

(+)				
Front power window switch (passenger side)		(-)	Voltage (V)	
Connector	Terminal			
D10 (D26)	1 (8)	Ground	9 – 16	

(): RHD models

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY CIRCUIT

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

[With Intelligent Key]

BC	CM	Front power window switch (passenger side)		Comtinuitue
Connector	Terminal	Connector	Terminal	Continuity
M69	68	D10 (D26)	1 (8)	Existed
Without Intelligent Key]				
ВС	CM	Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
M66	67	D10 (D26)	1 (8)	Existed

(): RHD models

4. Check continuity between BCM harness connector and ground.

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< DTC/CIRCUIT DIAGNOSIS >

[With Intelligent Key]			
BCM Connector Terminal			Continuity
		Ground	
M69	68		Not existed
[Without Intelligent Key]			
BCM			Continuity
Connector Terminal		Ground	Continuity
M66	67		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-93, "Removal and Installation"</u> (with Intelligent Key) or <u>BCS-161, "Removal and Installation"</u> (without Intelligent Key).

NO >> Repair or replace harness.

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000006290167

1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY

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

(+)				
Rear power window switch			(-)	Voltage (V)
Con	Connector			
LH	D63	1	Ground	9 – 16
RH	D43	· '	Giodila	9 – 10

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.check rear power window switch power supply circuit

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

[With Intelligent Key]

В	BCM Rear power window switch				Continuity
Connector	Terminal	Connector		Terminal	Continuity
M69	68	LH	D63	1	Existed
MOS	08	RH	D43	1	Existed
[Without Intelligent h	(ey]				
В	BCM Rear power window switch				Continuity
Connector	Terminal	Connector		Terminal	Continuity
Mee	M66 67		D63	1	Existed
			D43	I	LAISIEU

4. Check continuity between BCM harness connector and ground.

[With Intelligent Key]

BCM			Continuity	
Connector Terminal		Ground	Continuity	
M69	68		Not existed	

< DTC/CIRCUIT DIAGNOSIS >

[Without Intelligent Key]			
В	CM		Continuity
Connector	Terminal	Ground	Continuity
M66	67		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-93, "Removal and Installation"</u> (with Intelligent Key) or <u>BCS-161, "Removal and Installation"</u> (without Intelligent Key).

NO >> Repair or replace harness.

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FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Component Function Check

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) FUNCTION

Check front power window motor (passenger side) operation with front power window switch (passenger side). Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to PWC-22, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006290169

INFOID:0000000006290168

${\bf 1.} {\sf CHECK} \; {\sf FRONT} \; {\sf POWER} \; {\sf WINDOW} \; {\sf SWITCH} \; ({\sf PASSENGER} \; {\sf SIDE}) \; {\sf INPUT} \; {\sf SIGNAL}$

- 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.

(+)			(-) Condition			
Front power window switch (passenger side)		(-)			Voltage (V)	
Connector	Terminal					
	D10 (D26)	Ground	Power window main switch (passenger side)	NEUTRAL	0 – 1	
D10 (D26)				UP	9 – 16	
D10 (D20)				NEUTRAL	0 – 1	
	3 (11)			DOWN	9 – 16	

(): RHD models

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check front power window switch (passenger side) circuit

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

Front power window s	switch (passenger side)	Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D10 (D26)	2 (12)	D35 (D5)	16	Existed
D10 (D20)	3 (11)	D33 (D3)	2	LXISIEU

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

Front power window switch (passenger side)			Continuity
Connector	Terminal	0	Continuity
D10 (D26)	2 (12)	Ground	Not evieted
	3 (11)	Not exis	Not existed

(): RHD models

Is the inspection result normal?

YES >> Replace power window main switch.

NO >> Repair or replace harness.

3.check front power window switch (passenger side)

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

Check front power window switch (passenger side).

Refer to PWC-23, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front power window switch (passenger side).

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

- 1. Turn ignition OFF.
- 2. Disconnect front power window switch (passenger side) connector.
- 3. Check front power window switch (passenger side) terminals under the following conditions.

[LHD models]

Front power window s	Front power window switch (passenger side) Terminal		Continuity
Ter			Continuity
1	5	UP	
3	4		
2	5	- NEUTRAL	Existed
3	4	NEOTIVAL	LXISted
1	4	DOWN	
2	5	DOWN	

[RHD models]

Front power window	switch (passenger side)	Condition	Continuity	
Te	Terminal		Continuity	
8	7	— UP		
11	6	OF		
11	6	NEUTRAL	Existed	
12	7	NEOTIVAL	Laisted	
8	6	DOWN		
12	7	DOWN		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front power window switch (passenger side).

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REAR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

REAR POWER WINDOW SWITCH

Component Function Check

INFOID:0000000006290171

1. CHECK REAR POWER WINDOW SWITCH FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to PWC-24, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006290172

1. CHECK REAR POWER WINDOW SWITCH INPUT SIGNAL

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

(+) Rear power window switch		(-) Condi		lition	Voltage (V)			
Conr	nector	Terminal						
		0			NEUTRAL	0 - 1		
	Dea	2		Power window main	UP	9 – 16		
LH	D63		3		switch (rear LH side)	(rear LH side)	NEUTRAL	0 - 1
		3	, i	, ,	DOWN	9 – 16		
	D.10		Ground		NEUTRAL	0 - 1		
		2		Power window main	UP	9 – 16		
RH	D43			switch (rear RH side)	NEUTRAL	0 - 1		
	3	3			DOWN	9 – 16		

Is the inspection result normal?

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 rear power window switch harness connector and power window main switch harness connector.

R	Rear power window switch			Power window main switch	
Con	Connector		Connector Terminal		Continuity
LH	LII Doo			9	
LH	D63	3	D35 (D5)	8	Existed
RH	D43	2		7	Existed
КП	D43	3		6	

(): RHD models

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

REAR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

	Rear power window switch			Continuity
Conr	Connector			Continuity
LH	D63	2	Ground	
LΠ	D03	3	Giouna	Not existed
DU	D42	2		Not existed
КП	RH D43	3		

Is the inspection result normal?

YES >> Replace power window main switch.

NO >> Repair or replace harness.

3.check rear power window switch

Check rear power window switch.

Refer to PWC-25, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace rear power window switch.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK REAR POWER WINDOW SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect rear power window switch connector.
- 3. Check rear power window switch terminals under the following conditions.

Rear power v	vindow switch	Condition	Continuity
Terr	ninal	Containon	Community
1	5	UP	
3	4		
2	5	NEUTRAL	Existed
4	3	NEOTIVAL	Existed
1	4	DOWN	
2	5	DOWN	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear power window switch.

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< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE: Component Function Check

INFOID:0000000006290174

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 >> INSPECTION END

NO >> Refer to PWC-26, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000006290175

${f 1.}$ CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE) 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.

(+)		_	.		Voltage (V)
Front power window motor (driver side)		(-)	Cond	Condition	
Connector	Terminal				
	2	- Ground	Power window main switch (driver side)	NEUTRAL	0 – 1
D37 (D7)	2			UP	9 – 16
D37 (D1)	2			NEUTRAL	0 - 1
	3			DOWN	9 - 16

(): RHD models

Is the inspection result normal?

YES >> Replace front power window motor (driver side).

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

Front power window	w motor (driver side)	Power windo	Power window main switch		
Connector	Terminal	Connector	Terminal	Continuity	
D37 (D7)	2	D35 (D5)	17	Existed	
	3	D33 (D3)	19	LAISIEU	

4. Check continuity between front power window motor (driver side) harness connector and ground.

Front power window	w motor (driver side)		Continuity
Connector	Terminal	Ground	Continuity
D37 (D7)	2	Giodila	Not existed
	3		Not existed

(): RHD models

Is the inspection result normal?

YES >> Replace power window main switch.

NO >> Repair or replace harness.

PASSENGER SIDE

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE: Component Function Check

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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 >> INSPECTION END

NO >> Refer to PWC-27, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000006290177

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

(+)			Condition		
Front power window motor (passenger side)		(-)			Voltage (V)
Connector	Terminal				
	1	- Ground	Front power window switch (passenger side)	NEUTRAL	0 - 1
D16 (D27)				UP	9 – 16
D16 (D21)	2			NEUTRAL	0 – 1
	3			DOWN	9 – 16

(): RHD models

Is the inspection result normal?

YES >> Replace front power window motor (passenger side).

NO >> GO TO 2.

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

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

Front power window r	Front power window motor (passenger side)		Front power window switch (passenger side)		
Connector	Terminal	Connector	Terminal	Continuity	
D16 (D27)		D10 (D26)	5 (7)	Existed	
D10 (D21)	3	D10 (D20)	4 (6)	LXISIEU	

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

Front power window r	notor (passenger side)		Continuity
Connector	Terminal	Ground	Continuity
D16 (D27)	1	Ground	Not existed
D16 (D27)	3		Not existed

(): RHD models

Is the inspection result normal?

YES >> Replace front power window switch (passenger side).

NO >> Repair or replace harness.

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REAR LH: Component Function Check

INFOID:0000000006290178

${f 1}$.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 >> INSPECTION END

NO >> Refer to PWC-28, "REAR LH: Diagnosis Procedure".

REAR LH: Diagnosis Procedure

INFOID:0000000006290179

1. CHECK REAR POWER WINDOW MOTOR LH 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)
		`,			
	1		Rear power win- dow switch LH	NEUTRAL	0 - 1
DCZ	ı	Ground		DOWN	9 – 16
D67	2			NEUTRAL	0 - 1
	3			UP	9 – 16

Is the inspection result normal?

YES >> Replace rear power window motor LH.

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.
- Check continuity between rear power window motor LH harness connector and rear power window switch LH harness connector.

Rear power w	indow motor LH	Rear power window switch LH		Continuity
Connector	Terminal	Connector Terminal		Continuity
	1	D63	4	Existed
Dot	3	D03	5	LXISIGU

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

Rear power window motor LH			Continuity	
Connector Terminal		Ground	Continuity	
	1	Ground	Not existed	
507	3		Not existed	

Is the inspection result normal?

YES >> Replace rear power window switch LH.

NO >> Repair or replace harness.

REAR RH

REAR RH: Component Function Check

INFOID:0000000006290180

1. CHECK REAR POWER WINDOW MOTOR RH OPERATION

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to PWC-29, "REAR RH : Diagnosis Procedure".

REAR RH: Diagnosis Procedure

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1. CHECK REAR POWER WINDOW MOTOR RH INPUT SIGNAL

- 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)
Rear power window motor RH		(-)			
Connector	Terminal				
	1 D47	Ground	Rear power window switch RH	NEUTRAL	0 - 1
D47				DOWN	9 – 16
D41	2	Giodila		NEUTRAL	0 - 1
	3			UP	9 – 16

Is the inspection result normal?

YES >> Replace rear power window motor RH.

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 motor RH harness connector and rear power window switch RH harness connector.

Rear power wi	ndow motor RH	Rear power window switch RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D47	1	D43	4	Existed
D41	3		5	LXISIEU

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

Rear power window motor RH			Continuity
Connector	Terminal	Ground	Continuity
D47	1	Ground	Not existed
	3	-	NOT EXISTED

Is the inspection result normal?

YES >> Replace rear power window switch RH.

NO >> Repair or replace harness.

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PWC-29

ENCODER CIRCUIT

Component Function Check

INFOID:0000000006290182

1. CHECK ENCODER OPERATION

Check that front driver side door glass perform AUTO UP/DOWN operation normally when power window main switch is operated.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to PWC-30, "Diagnosis Procedure".

Diagnosis Procedure

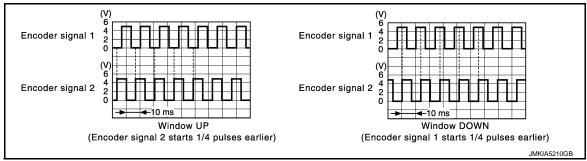
INFOID:0000000006290183

1. CHECK ENCODER PULSE SIGNAL

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

(+) Power window main switch		(-)	Signal (Reference value)
Connector	Terminal		(1.0.0.0.00 10.00)
D35 (D5)	4	Ground	Refer to the following signal
D33 (D3)	5	Giouna	Refer to the following signal

(): RHD models



Is the inspection result normal?

YES >> Replace power window main switch.

NO >> GO TO 2.

2. CHECK ENCODER SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- 2. 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 wind	ow main switch	Front power window motor (driver side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
D35 (D5)	4	D37 (D7)	5	Existed
D35 (D5)	5	D37 (D7)	4	Existed

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D35 (D5)	4	Ground	Not existed
D33 (D3)	5		NOT EXISTED

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(): RHD models

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCODER POWER SUPPLY

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

Front power window	(+) Front power window motor (driver side)		Voltage (V)
Connector	Terminal		
D37 (D7)	1	Ground	9 – 16

(): RHD models

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK ENCODER POWER SUPPLY CIRCUIT

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

Power windo	Power window main switch		Front power window motor (driver side)	
Connector	Terminal	Connector Terminal		Continuity
D35 (D5)	14	D37 (D7)	1	Existed

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

Power window main switch			Continuity	
Connector Terminal		Ground	Continuity	
D35 (D5)	14		Not existed	

(): RHD models

Is the inspection result normal?

YES >> Replace power window main switch.

NO >> Repair or replace harness.

CHECK ENCODER GROUND CIRCUIT 1

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

Power windo	Power window main switch		Front power window motor (driver side)	
Connector	Terminal	Connector Terminal		Continuity
D35 (D5)	12	D37 (D7)	6	Existed

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D35 (D5)	12		Not existed

(): RHD models

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ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6. CHECK ENCODER GROUND CIRCUIT 2

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D35 (D5)	12		Existed

(): RHD models

Is the inspection result normal?

YES >> Replace front power window motor (driver side).

NO >> Replace power window main switch.

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH Diagnosis Procedure

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit. Refer to the following.

- With Intelligent Key: Refer to <u>BCS-87</u>, "<u>Diagnosis Procedure</u>".
- Without Intelligent Key: Refer to BCS-155, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window main switch power supply and ground circuit.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

${f 3.}$ CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

Refer to PWC-18, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

NO >> GO TO 1.

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DRIVER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000006290185

1. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE)

Check front power window motor (driver side).

Refer to PWC-26, "DRIVER 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.

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE 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 1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Check front power window switch (passenger side). Refer to PWC-22, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE)
Check front power window motor (passenger side). Refer to PWC-27 , "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. WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED:
Diagnosis Procedure 1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY AND GROUND CIRCUIT Check front power window switch (passenger side) power supply and ground circuit. Refer to PWC-19, "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 FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Check front power window switch (passenger side). Refer to PWC-22, "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. WHEN POWER WINDOW MAIN SWITCH IS OPERATED

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED: Diagnosis Procedure

INFOID:0000000006290188

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).

Refer to PWC-22, "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 LH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > REAR LH SIDE POWER WINDOW DOES NOT OPERATE Α WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED В WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED: Diagnosis Procedure INFOID:0000000006290189 1. CHECK REAR POWER WINDOW SWITCH LH Check rear power window switch LH. Refer to PWC-24, "Component Function Check". D Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. Е 2.CHECK REAR POWER WINDOW MOTOR LH Check rear power window motor LH. F Refer to PWC-28, "REAR LH: Component Function Check". Is the inspection result normal? >> GO TO 3. YES NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Н Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". >> GO TO 1. NO WHEN REAR POWER WINDOW SWITCH LH IS OPERATED WHEN REAR POWER WINDOW SWITCH LH IS OPERATED: Diagnosis Procedure INFOID:0000000006290190 ${f 1}$.CHECK REAR POWER WINDOW SWITCH LH POWER SUPPLY AND GROUND CIRCUIT **PWC** Check rear power window switch LH power supply and ground circuit. Refer to PWC-20, "REAR POWER WINDOW SWITCH: Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2 .CHECK REAR POWER WINDOW SWITCH LH M Check rear power window switch LH. Refer to PWC-24, "Component Function Check". N Is the inspection result normal? YFS >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? Р YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". >> GO TO 1. WHEN POWER WINDOW MAIN SWITCH IS OPERATED

REAR LH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED: Diagnosis Procedure

INFOID:0000000006290191

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.

Refer to PWC-24, "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 DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > REAR RH SIDE POWER WINDOW DOES NOT OPERATE Α WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH RH ARE OPERATED В WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH RH ARE OPERATED: Diagnosis Procedure INFOID:0000000006290192 1. CHECK REAR POWER WINDOW SWITCH RH Check rear power window switch RH. Refer to PWC-24, "Component Function Check". D Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. Е 2.check rear power window motor RH Check rear power window motor RH. F Refer to PWC-28, "REAR RH: Component Function Check". Is the inspection result normal? >> GO TO 3. YES 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". >> GO TO 1. NO WHEN REAR POWER WINDOW SWITCH RH IS OPERATED WHEN REAR POWER WINDOW SWITCH RH IS OPERATED: Diagnosis Procedure INFOID:0000000006290193 ${f 1}$.CHECK REAR POWER WINDOW SWITCH RH POWER SUPPLY AND GROUND CIRCUIT **PWC** Check rear power winodw switch RH power supply and ground circuit. Refer to PWC-20, "REAR POWER WINDOW SWITCH: Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2 .CHECK REAR POWER WINDOW SWITCH RH M Check rear power window switch RH. Refer to PWC-24, "Component Function Check". N Is the inspection result normal? YFS >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? Р YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". >> GO TO 1. WHEN POWER WINDOW MAIN SWITCH IS OPERATED

REAR RH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED: Diagnosis Procedure

INFOID:0000000006290194

1. CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.

Refer to PWC-24, "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.

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMAL-LY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >	
AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NOR-MALLY (DRIVER SIDE)	А
Diagnosis Procedure	В
1.PERFORM INITIALIZATION PROCEDURE	
Initialization procedure is executed and operation is confirmed. Refer to PWC-16 , "Work Procedure".	С
Is the inspection result normal? YES >> INSPECTION END NO >> GO TO 2. 2.CHECK ENCODER CIRCUIT	D
Check encoder circuit. Refer to PWC-30, "Component Function Check".	Е
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	F
3.CONFIRM THE OPERATION	G
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". NO >> GO TO 1.	Н
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ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

< SYMPTOM DIAGNOSIS >

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)

Diagnosis Procedure

INFOID:0000000006290196

1. CHECK POWER WINDOW AUTO OPERATION

Check AUTO operation when anti-pinch function does not operate.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to PWC-41, "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.

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION < SYMPTOM DIAGNOSIS > POWER WINDOW LOCK SWITCH DOES NOT FUNCTION Α Diagnosis Procedure INFOID:0000000006290197 1. REPLACE POWER WINDOW MAIN SWITCH В Replace power window main switch. С >> Refer to PWC-44, "Removal and Installation". D Е F G Н L

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POWER WINDOW MAIN SWITCH

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

POWER WINDOW MAIN SWITCH

Removal and Installation

REMOVAL

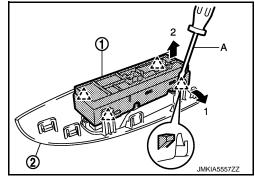
- 1. Remove power window main switch finisher. Refer to INT-13, "Removal and Installation".
- 2. Remove power window main switch (1) from power window main switch finisher (2) using flat-head screw driver (A).



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).



INFOID:0000000006290198

INSTALLATION

Install in the reverse order of removal.

NOTE:

If power window main switch is replaced or is removed, it is necessary to perform the initialization procedure. Refer to <u>PWC-16</u>, "Work <u>Procedure</u>".