SECTION POWER WINDOW CONTROL SYSTEM

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< PRECAUTION > PRECAUTION

PRF-TENSIONER"

PRECAUTIONS Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT

INFOID:000000013055179

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

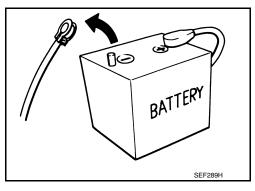
Precautions for Removing Battery Terminal

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When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

D4D engine	: 20 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		
V9X engine	: 4 minutes		
YD25DDTi	: 2 minutes		



NOTE:

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

 After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.
 NOTE:

PRECAUTIONS

< PRECAUTION >

[FRONT WINDOW ANTI-PINCH]

	 Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF. Example of high-load driving Driving for 30 minutes or more at 140 km/h (86 MPH) or more. 	А
•	- Driving for 30 minutes or more on a steep slope. For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch. NOTE:	В
•	If the ignition switch is turned ON with any one of the terminals of main battery and sub battery discon- nected, then DTC may be detected. After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC. NOTE:	С
	The removal of 12V battery may cause a DTC detection error.	D
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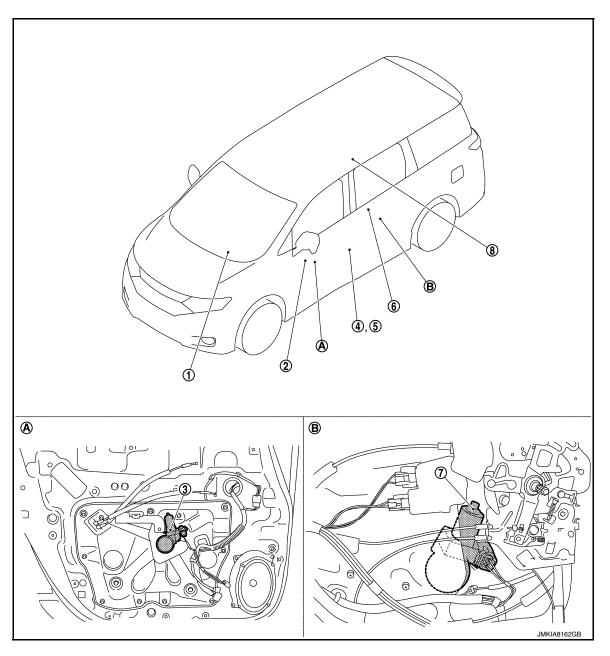
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< SYSTEM DESCRIPTION > SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:000000012409665



A. View with front door finisher removed B. View with sliding door finisher removed

No.	Component	Function
1.	ВСМ	 Supplies power supply to power window switch. Controls retained power. Receives key ID signal from remote keyless entry receiver. Refer to <u>BCS-5. "BODY CONTROL SYSTEM : Component Parts Location"</u> for detailed installation location.
2.	Power window main switch	Refer to PWC-9, "Power Window Main Switch".
3.	Front power window motor (driver side)	Refer to PWC-9, "Front Power Window Motor (Driver Side)".

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

INFOID:000000012409666

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INFOID:000000012409668

INFOID:000000012409669

No.	Component	Function			
4. Front door switch (driver side) Detects door open/close condition and transmits to B <u>"Front Door Switch"</u> .		Detects door open/close condition and transmits to BCM. Refer to <u>DLK-28</u> , <u>"Front Door Switch"</u> .			
5.	Front door lock assembly (driver side) (key cylinder switch)	Transmits operation condition of key cylinder switch to power window main switch. Refer to <u>DLK-28</u> , "Front Door Lock Assembly (Driver Side)".			
6.	Sliding door power window switch LH	Refer to PWC-9, "Sliding Door Power Window Switch".			
7.	Sliding door power window motor LH Refer to PWC-9, "Sliding Door Power Window Motor".				
8.	Remote keyless entry receiver	Receives key ID signal from the Intelligent Key, and then transmits to BCM. Refer to <u>DLK-18, "DOOR LOCK SYSTEM : Component Parts Location"</u> for detailed installation location.			

Power Window Main Switch

- Directly controls all power window motor of all doors.
- Controls anti-pinch operation of power window.

Front Power Window Motor (Driver Side)

- · Integrates the encoder and power window motor.
- Operates with signals from power window main switch.
- Transmits front power window motor (driver side) rotation as a pulse signal to power window main switch.

Sliding Door Power Window Switch

Controls power window motor of sliding door.

Sliding Door Power Window Motor

Operates with signals from power window main switch and sliding door power window switch.

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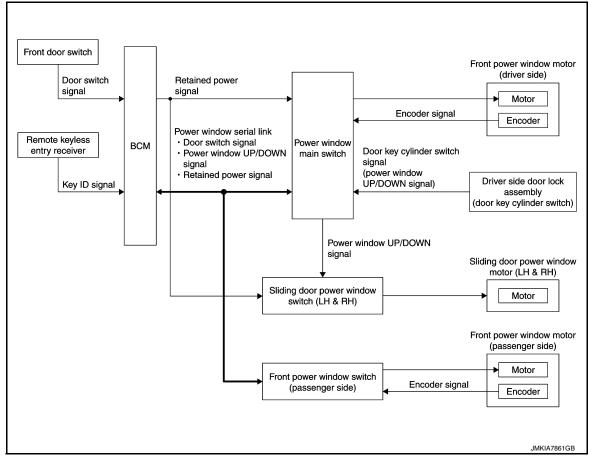
SYSTEM

System Description

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[FRONT WINDOW ANTI-PINCH]

SYSTEM DIAGRAM



DESCRIPTION

- Power window system is activated by power window switch when ignition switch turns ON, or during the retained power operation after ignition switch turns OFF.
- Power window main switch opens/closes all door glass.
- Front and sliding door power window switch opens/closes the corresponding door glass.
- AUTO UP/DOWN operation can be performed when power window main switch or front power window switch (passenger side) turns to AUTO.
- Power window serial link transmits the signals from power window main switch to front power window switch (passenger side).
- · 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 front seat is in AUTO-UP operation, power window of front seat operates in the reverse direction.
- Hold the door key cylinder to the LOCK or UNLOCK direction for 1.5 seconds or more to OPEN or CLOSE front power windows when ignition switch OFF.
- Front power windows open when pressing Intelligent Key unlock button for 3 seconds.

Power Window AUTO-Operation

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

Retained Power Operation

Revision: October 2015

SYSTEM

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

Retained power operation is an additional power supply function that enables power window system to oper- ate during the 45 seconds even when ignition switch is turned OFF.	A
Retained Power Cancel Conditions Front door CLOSE (door switch OFF)→OPEN (door switch ON). When ignition switch is ON. When timer time passes (45 seconds). 	В
Power Window Lock Function Ground circuit inside power window main switch shuts off when power window lock switch is ON. This inhibits each power window switch operation except the power window main switch.	С
 Power Window Serial Link Power window main switch, front power window switch (passenger side), and BCM transmit and receive the signal by power window serial link. Power window serial link transmits the power window main switch operation signals and retained power sig- 	D
nal to power window main switch module and front power window switch (passenger side) module. Anti-Pinch Operation	E
 Pinch foreign matter 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) or for 2 seconds when detected. Encoder continues detecting the movement of power window motor and transmits to power window switch 	F
 as the encoder pulse signal while power window motor is operating. Resistance is applied to the power window motor rotation that changes the frequency of encoder pulse signal if foreign material is trapped in the door glass. Power window switch controls to lower the door glass for 150 mm (5.9 in) after it detects encoder pulse sig- 	G
nal frequency change.	Н
Operation Condition When front door glass AUTO-UP operation is performed (anti-pinch function does not operate just before the door glass closes and is fully closed). NOTE:	I
Depending on environment and driving conditions, if a similar impact or load is applied to the door glass, it may lower.	J
Door Key Cylinder Switch Operation Hold the door key cylinder to the LOCK or UNLOCK direction for 1.5 seconds or more to OPEN or CLOSE front power windows when ignition switch is OFF. In addition, it stops when key position is moved to NEU- TRAL when operating.	PW
 Operation Conditions Ignition switch OFF. Hold door key cylinder to LOCK position for 1.5 seconds or more to perform CLOSE operation of the door glass. 	L
 glass. Hold door key cylinder to UNLOCK position for 1.5 seconds or more to perform OPEN operation of the door glass. 	M
Keyless Power Window Down Operation Front power windows open when the unlock button on Intelligent Key is activated and kept pressed for more than 3 seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.	Ν
 The power window opening stops when the following operations are performed. When the unlock button is kept pressed more than 15 seconds. When the ignition switch is turned ON while the power window opening is operated. 	0
 When the unlock button is released. While retained power operation activate, keyless power window down function cannot be operated. Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to <u>DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>. 	Ρ

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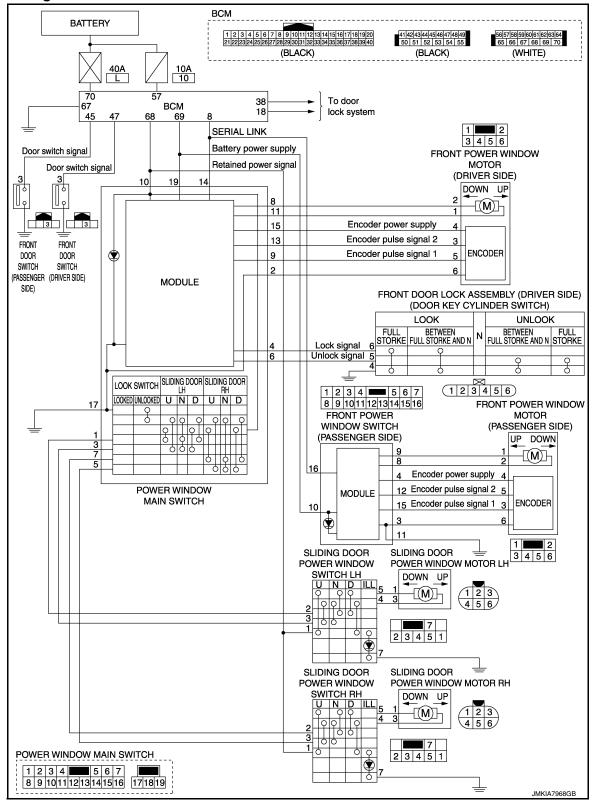
SYSTEM

[FRONT WINDOW ANTI-PINCH]

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< SYSTEM DESCRIPTION >





Fail-safe

INFOID:000000012409672

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.

Revision: October 2015

SYSTEM

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

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 malfunc- tion	When the pulse signal that is detected during glass open/close operation detects the opposite con- dition 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 opera- tion.

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 switch (passenger side) front power window motor (driver side/passenger side).

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DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000012409673

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:**

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

Svotom	Sub avatam calentian item	Diagnosis mode			
System	Sub system selection item	Work Support	Data Monitor	Active Test	
Door lock	DOOR LOCK	×	×	×	
Rear window defogger	REAR DEFOGGER		×	×	
Warning chime	BUZZER		×	×	
Interior room lamp control system	INT LAMP	×	×	×	
Exterior lamp	HEAD LAMP	×	×	×	
Wiper and washer	WIPER	×	×	×	
Turn signal and hazard warning lamps	FLASHER	×	×	×	
Air conditioning control system	AIR CONDITONER		×	× *	
Intelligent Key system Engine start system		×	×	×	
Combination switch	COMB SW		×		
Body control system	BCM	×			
NVIS	IMMU	×	×	×	
Interior room lamp battery saver	BATTERY SAVER	×	×	×	
Back door open	TRUNK		×		
Vehicle security system	THEFT ALM	×	×	×	
RAP system	RETAINED PWR		×		
Signal buffer system	SIGNAL BUFFER		×	×	
TPMS	AIR PRESSURE MONITOR	×	×	×	

NOTE:

*: For models with automatic air conditioning control system, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

CONSULT screen item	Indication/Unit	Description		
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected		
Odo/Trip Meter	km Total mileage (Odometer value) of the moment a particular DTC is detected			_
	SLEEP>LOCK	-	While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (LOCK)]	B
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (OFF)]	С
	LOCK>ACC		While turning power supply position from OFF (LOCK) to ACC	
	ACC>ON		While turning power supply position from ACC to ON	Б
	RUN>ACC		While turning power supply position from RUN to ACC (Except emergency stop operation)	L
	CRANK>RUN		While turning power supply position from CRANK to RUN	E
	RUN>URGENT	Power position status of the moment a particular DTC is detected*	While turning power supply position from RUN to ACC (Emergen- cy stop operation)	
	ACC>OFF		While turning power supply position from ACC to OFF (OFF)	F
Vehicle Condition	OFF>LOCK		While turning power supply position from OFF (OFF) to OFF (LOCK)	
	OFF>ACC		While turning power supply position from OFF (OFF) to ACC	G
	ON>CRANK		While turning power supply position from ON to CRANK	
	OFF>SLEEP		While turning BCM status from normal mode [Power supply posi- tion is OFF (OFF)] to low power consumption mode	ŀ
	LOCK>SLEEP		While turning BCM status from normal mode [Power supply position is OFF (LOCK)] to low power consumption mode	
	LOCK		Power supply position is OFF (LOCK)	
	OFF		Power supply position is OFF (OFF)	
	ACC		Power supply position is ACC	.
	ON		Power supply position is ON	0
	ENGINE RUN	-	Power supply position is RUN	
	CRANKING		Power supply position is CRANK	P٧
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 		L

NOTE:

- *: Refer to the following for details of the power supply position.
- OFF (OFF, LOCK): Ignition switch OFF
- ACC: Ignition switch ACC
- · IGN: Ignition switch ON with engine stopped
- · RUN: Ignition switch ON with engine running
- CRANK: At engine cranking

Power supply position shifts to "OFF (LOCK)" from "OFF (OFF)", when ignition switch is in the OFF position, shift position is in the P position, and any of the following conditions are met.

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

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

RETAIND PWR

RETAIND PWR : CONSULT Function (BCM - RETAINED PWR) (Front Window Anti-

PWC-15

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pinch)

INFOID:000000012409674

DATA MONITOR

NOTE:

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

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

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:000000012409675

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ECU	Reference
	BCS-41, "Reference Value"
ВСМ	BCS-63, "Fail-safe"
	BCS-63, "DTC Inspection Priority Chart"
	BCS-64, "DTC Index"

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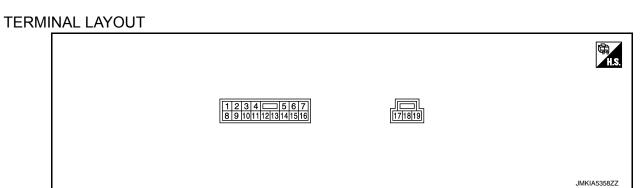
Revision: October 2015

< ECU DIAGNOSIS INFORMATION >

POWER WINDOW MAIN SWITCH

Reference Value

INFOID:000000012409676



PHYSICAL VALUES

	inal No. e color)	Description		Condition	Voltage (V)	
+	-	Signal name	Input/ Output	Condition	voltage (v)	
1 (Y)	Ground	Sliding door power window mo- tor LH UP signal	Output	When sliding door LH switch in power window main switch is in UP operation.	9 – 16	
2 (P)	Ground	Encoder ground	_	_	0 – 1	
3 (BR)	Ground	Sliding door power window mo- tor LH DOWN signal	Output	When sliding door LH switch in power window main switch is in DOWN opera- tion.	9 – 16	
4 (G)	Ground	Door key cylinder switch LOCK signal	Input	Key position (Neutral \rightarrow Locked)	$4-6 \rightarrow 0-1.5$	
5 (SB)	Ground	Sliding door power window mo- tor RH DOWN signal	Output	When sliding door RH switch in power window main switch is in DOWN op- eration.	9 – 16	
6 (GR)	Ground	Door key cylinder switch UNLOCK signal	Input	Key position (Neutral \rightarrow Unlocked)	$4-6 \rightarrow 0-1.5$	
7 (V)	Ground	Sliding door power window mo- tor RH UP signal	Output	When sliding door RH switch in power window main switch is in UP opera- tion.	9 – 16	
8 (L)	Ground	Front power window motor (driver side) UP signal	Output	When front LH switch in power window main switch is in UP operation.	9 – 16	
9 (W)	Ground	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB	

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[FRONT WINDOW ANTI-PINCH]

	inal No. e color)	Description		Condition	Voltage (V)	А
+	-	Signal name	Input/ Output	Condition	voltage (v)	
				Ignition switch ON	9 - 16	В
10				Within 45 seconds after igni- tion switch is turned to OFF.	9 – 16	
(GR)	Ground	Retained power signal	Input	When driver side or passen- ger side door is opened dur- ing retained power operation.	0 – 1	C
11 (Y)	Ground	Front power window motor (driver side) DOWN signal	Output	When front LH switch in power window main switch is in DOWN operation.	9 – 16	E
13 (GR)	Ground	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB	F
14 (R)	Ground	Power window serial link	Input/ Output	Ignition switch ON or power window timer operating.	(V) 15 0 0 10 ms JPMIA0013GB	H
15 (G)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer oper- ates.	9 – 16	PW
17 (B)	Ground	Ground	_	_	0 – 1	
19 (Y)	Ground	Battery power supply	Input	_	9 – 16	L

Fail-safe

INFOID:000000012409677

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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 Ν 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 malfunc- tion	When the pulse signal that is detected during glass open/close operation detects the opposite con- dition 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 opera- tion.

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

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 switch (passenger side) front power window motor (driver side/passenger side).

< ECU DIAGNOSIS INFORMATION >

FRONT POWER WINDOW SWITCH

Reference Value

INFOID:000000012409678

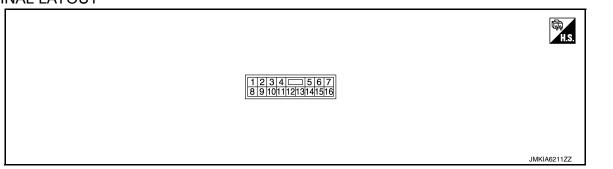
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PHYSICAL VALUES

Terminal No. (wire color)	Description		Condition	Voltage (V)
+ –	Signal name	Input/ Output	Condition	voltage (v)
3 (GR) Ground	Encoder ground	_	—	0 – 1
4 (G) Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates	9 - 16
8 (L) Ground	Front power window motor (passenger side) UP signal	Output	When front power window switch (passenger side) is in UP operation.	9 - 16
9 (LG) Ground	Front power window motor (passenger side) DOWN signal	Output	When front power window switch (passenger side) is in DOWN operation.	9 - 16
10 (V) Ground	Battery power supply	Input	_	9 - 16
11 (B) Ground	Ground	_	_	0 – 1
12 (P) Ground	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms

FRONT POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition	Voltage (V)
+	_	Signal name	Input/ Output	Condition	Voltage (V)
15 (R)	Ground	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 2 0 10 ms JMKIA0070GB
16 (W)	Ground	Power window serial link	Input/ Output	Ignition switch ON or power window timer operating.	(V) 15 10 5 0 10 ms JPMIA0013GB

Fail-safe

INFOID:000000012409679

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 malfunc- tion	When the pulse signal that is detected during glass open/close operation detects the opposite con- dition 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 opera- tion.

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 switch (passenger side) front power window motor (driver side/passenger side).

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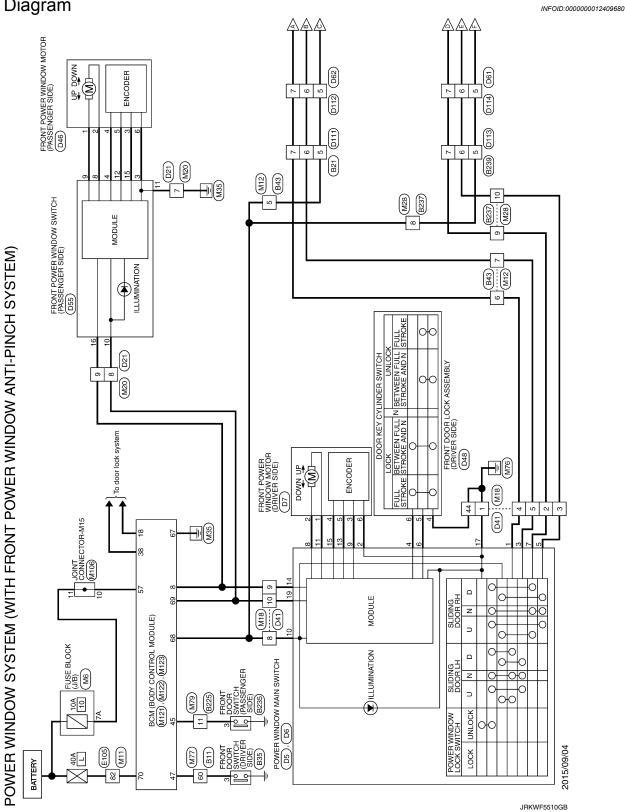
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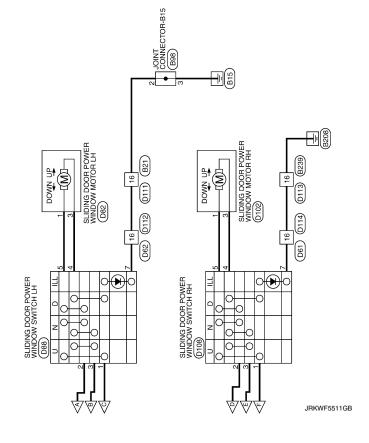
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WIRING DIAGRAM POWER WINDOW SYSTEM

Wiring Diagram



POWER WINDOW SYSTEM

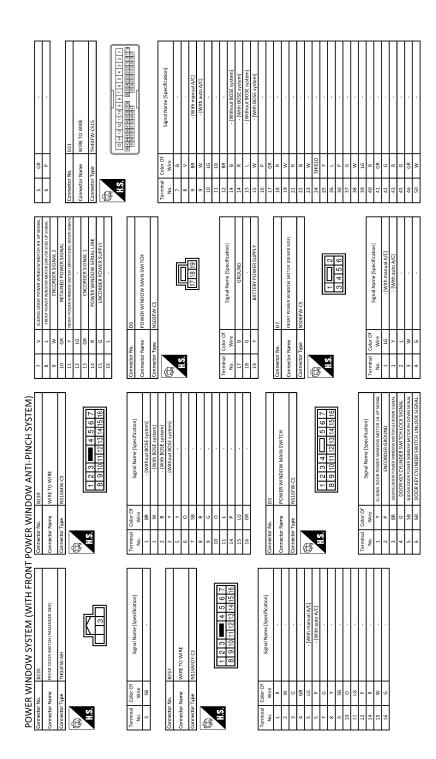


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	Signal Name (Specification)	В
10M CONNECTOR 815 TROMPW-J	Signal Mame [Speci 2025 Wute To Write Падамичан Падамичан Signal Mame [Speci 112231456 1112231456 11122314 11122314 11122314 11122314 1112231 1112231 1112231 1112231 1112231 1112231 1112231 1112231 1112231 1112331	С
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		E
REOUT DOOR SWITCH (ORIVER SIDE) THOREW-NHI	Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	F
<u>و</u>		G
	Terminal Color No. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Н
FKOM POWANII-PINCH SYSTEM) 78 16 79 16 79 16 81 56 82 V 93 C 92 L 92 L	1 2 3 4 5 6 7 Signal Name [specification] - (Minbout 80% system) - (Minbout 80% system) - (Minbout 80% system) 	I
		J
POWEK WII 78 LG 79 GR 81 SB 82 V 82 V 88 V 88 V 88 V 88 V 89 C 90 V 91 LG	Connector Name Connector Name Connector Name Connector Name La M No. We No. We 1 No. We 2 Y 2 Y 1 No. Mo 1 No. Mo	PWC
	Signal Name [Specification]	L
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COVER WINDOW SYSTEM (WITH connector Yana WIR TO WIRE connector Type WIR TO WIRE connector Type HIBOWW S319	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Ν

POWER WINDOW SYSTEM

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[FRONT WINDOW ANTI-PINCH]



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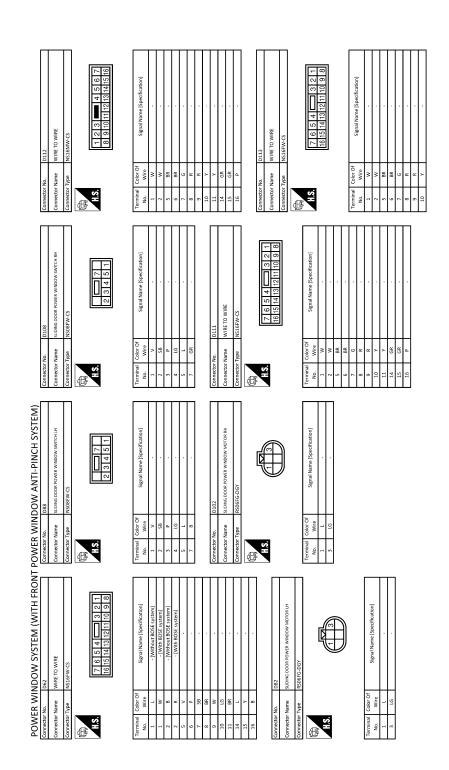
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			- [Without automatic drive positioner]	 [With automatic drive positioner] [Without automatic drive positioner] 	- [With automatic drive positioner]				- [With automatic drive positioner]	- [Without automatic drive positioner]	-	- [Without automatic drive positioner]					,		,			,							,	,				,				,		,																																	
	5	8 8	> -	9 0	. >		<u>،</u> «	- 9	8	N	æ	33 ×			9	×	• >	> a	: 0	0	>	8	2 -	SHIELD	æ	×	8	>	> :	H C	- a	: -	, 9		Y	>	•	ž,	- >	-																																	
	80	9	11 12	12	13	14	51 E	10	37	37	38	69	50 QV	41	42	43	45	47	49	51	52	53	54		61	62	63	64	99	67	21	* C.L	73	74	75	76	12	8/	00 F8	82	8																																
	80 R -	81 L 82 LG -	83 R -	Connector No M6			sctor type		;; ;;	3A 2A 1A	8A 7A6A5A4A]		Terminal Color Of cianol Name (constituentian)	Wire	_	2A G -	32 L	╀	6A R -	+	8A L -		Connector No. M11	5		Connector Type TH70FW-CS10-M3					सेत संदेश संदेश	ф		Terminal Color Of Stand Name [Sameification]	Wire	1 SHIELD -				+																																
H EPONT DOWED WINDOW ANTI DINCH SYSTEM)	Terminal Color Of Signal Name (Specification)		+		H	8 GR -	+	╀			14 L -	+	- ND TC	╀	+		40 P	42 IG .	╈	45 P -	SB	> .	49 L	4g U				56 SHIELD -	4		63 W/L	\top		╞	71 R -	_	73 GR -	+	+	╞	78 0 -																																
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POWER WINDOW SYSTEM

[FRONT WINDOW ANTI-PINCH]

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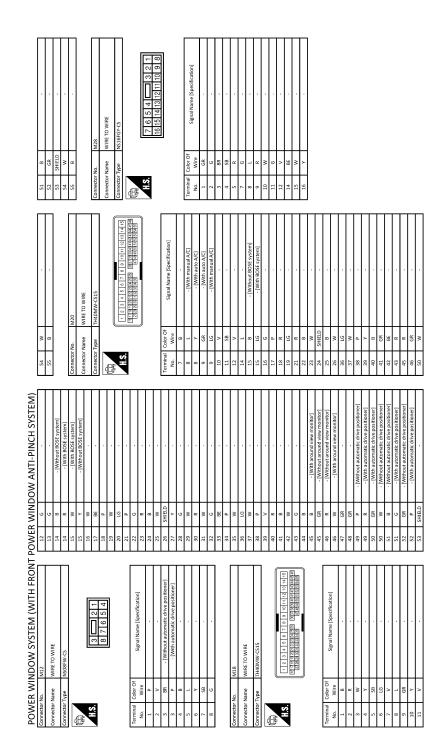
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Connector No. M12.1 Connector Name BCM (BODY CONTROL MODULE) Connector Type H40FE-NH1 Connector Type H40FE-NH1	Tremmal Goldr OF Nuc. Signal Name [Specification] Nuc. With Mither Expecification] Signal Name [Specification] 2 G COMMI SW INPUT 4 3 G COMMI SW INPUT 4 4 B COMMI SW INPUT 4 5 G COMMI SW INPUT 4 6 W COMMI SW INPUT 4 7 F C 8 F COMMI SW INPUT 3 9 F COMMI SW INPUT 3 12 F COMMI SW INPUT 3 13 F COMI SW INPUT 3 14 F COMI SW INPUT 3 15 F COMI SW INPUT 3 16 F COMI SW INPUT 3 17 F MC SW INPUT 4 18 F COMI SW INPUT 4 19 F MC SW INPUT 4 10 F MC SW INPUT 4	
Connector No. M106 Connector Name JoiNT CONNECTOR-M15 Connector Type B320FW	Terminal box Const Of box Signal Manne [Sacofication] Nume 2 B - - 2 B - - 3 L - - - 9 L - - - 1 B - - - 1 Y - - - 1 Y - - - 11 Y Y - - 12 R R - - 13 Y - - - <	
FRONT POWER WINDOW ANTI-PINCH SYSTEM) 77 w 79 w 79 w 82 w 83 L 99 R 90 R		
POWER WINDOW SYSTEM (WITH FRONT connector hanne connector hanne tommetor hype hill time	Terminal Iden of Nuc. Signal Name [Specificatio] Nuc Vuc - 13 W - 14 P - 15 HEID - 16 - - 17 HEID - 18 W - 19 HEID - 10 P - 11 H - 12 HEID - 13 HEID - 14 H - 15 H - 16 - - 17 H - 18 - - 19 - - 10 H - 10 - <td< td=""><td></td></td<>	

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Connector Name Environmente Erado Pietra Andre Frado Pietra Andre Frado Pietra Andre Frado Pietra Andre Andr	1 9	M	CRANK DEO
ector Name ector Type	t >		STOTING MARK
ector Type	65	^	ALL DOOR LOCK OUTPUT
ector Type	99	9	DR DOOR UNLK OUTPUT
	67	8	GROUND
(1) HS, FT 1431451461471481491	89	-	PW PWR SPLY (IGN)
H.S. F. 143 44 45 46 47 48 49	69	٩	PW PWR SPLY (BAT)
1 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0Z	-	BAT
	48 49		

< WIRING DIAGRAM >

43 441 451 461	Signal Name [Specification]	BK DOOR SW	REAR WIPER STOP POSITION	PASS DOOR SW	SL DOOR RH SW	DR DOOR SW	SL DOOR LH SW	LUGGAGE LAMP CONT	SELECT UNLK RELAY CONT	BACK DOOR REQ SW	BK DOOR OPEN	REAR WIPER OUTPUT	SL DOOR LH UNLK CONT
	Color Of Wire	٩	GR	w	R	σ	BE	8	٨	9	BR	R	υ
H.S.	Terminal No.	43	44	45	46	47	48	49	50	51	53	54	55

M123	BCM (BODY CONTROL MODULE)	FEA09FW-FHA6-SA	1 565738596061626364 65 66 67 68 69 70	
Connector No.	Connector Name	Connector Type	围 H.S.	

PWC-32

Signal Name [Specification]	INT ROOM LAMP PWR SPLY	BAT	AIRBAG	PASS DOOR UNLK OUTPUT	TURN SIG LH OUTPUT	TURN SIG RH OUTPUT	STEP LAMP CONT	INT ROOM LAMP CONT
Color Of Wire	٩	7	0	SB	v	9	w	~
Terminal No.	56	57	58	59	60	61	62	63

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2016 Quest

<pre>> DIAGNOSIS AND REPAIR WORK FLC < BASIC INSPECTION > [FR</pre>	OVV ONT WINDOW ANTI-PINCH]
BASIC INSPECTION BASIC INSPECTION	
DIAGNOSIS AND REPAIR WORK FLOW	
Work Flow	INFOID:00000001240968
1.OBTAIN INFORMATION ABOUT SYMPTOM	
Interview the customer to obtain as much malfunction information (conditions function occurred) as possible when the customer brings the vehicle in.	and environment when the mal-
>> 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 oc	cur.
>> GO TO 3.	
${f 3.}$ IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNO	SIS"
Use "Symptom diagnosis" from the symptom inspection result in step 2. Then nosis based on possible causes and symptoms.	identify where to start the diag-
>> GO TO 4.	
4. IDENTIFY MALFUNCTIONING PARTS WITH "DTC/CIRCUIT DIAGNOSIS	
Perform the diagnosis with "DTC/CIRCUIT DIAGNOSIS" of the applicable syst	iem.
>> 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 referring to the symptom inspection result in step 2.	information from the customer
<u>Is the malfunctioning part repaired or replaced?</u> YES >> Trouble diagnosis is completed.	
NO >> GO TO 3.	

DIAGNOSIS AND REPAIR WORK FLOW

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL < BASIC INSPECTION > [FRONT WINDOW ANTI-PINCH]

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMI-NAL

Description

INFOID:000000012409682

When the battery negative terminal is disconnected, the initialization is necessary for normal operation of power window system. Refer to <u>PWC-34</u>, "Work Procedure". **CAUTION**:

- The following specified operations can not be performed under the non-initialized condition.
- Auto-up operation
- Anti-pinch function

Work Procedure

INFOID:000000012409683

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to PWC-36, "Description".

>> GO TO 2.

2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to <u>PWC-37. "Description"</u>.

>> END

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW SWITCH < BASIC INSPECTION > [FRONT WINDOW ANTI-PINCH]

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW SWITCH

Description

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When the power window main switch or front power window switch (passenger side) replaced, the initialization in necessary for normal operation of power window system. Refer to <u>PWC-35</u>, "<u>Work Procedure</u>". **CAUTION:**

- The following specified operations can not be performed under the non-initialized condition.
- Auto-up operation
 Anti-ningh function
- Anti-pinch function

Work Procedure

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to PWC-36. "Description".

>> GO TO 2.

2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to PWC-37, "Description".

>> END

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SYSTEM INITIALIZATION

SYSTEM INITIALIZATION

Description

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If any of the following operations are performed, the initialization is necessary for normal operation of power window system. Refer to <u>PWC-36</u>, "Work Procedure".

- Disconnection and connection of battery cable from negative terminal.
- When power window main switch or front power window switch (passenger side) replaced.
- Electric power supply to power window main switch or front power window switch (passenger side) or power window motor (driver side/passenger 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 or front power window switch (passenger side) harness connector.
- Removal of power window motor (driver side/passenger 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. Close the door.
- 2. Turn ignition switch ON.
- 3. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
- 4. 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.
- 5. Check that AUTO-UP function operates normally.

>> GO TO 2.

2.STEP 2

Check anti-pinch function. Refer to PWC-37, "Description".

>> END

CHECK ANTI-PINCH FUNCTION

CHECK ANTI-PINCH FUNCTION

Description

If any of the following operations are performed, the initialization is necessary for normal operation of antipinch function. Refer to <u>PWC-37</u>, "Work Procedure".

- Disconnection and connection of battery cable from negative terminal.
- When power window main switch or front power window switch (passenger side) replaced.
- Electric power supply to power window main switch or front power window switch (passenger side) or power window motor (driver side/passenger 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 or front power window switch (passenger side) harness connector.
- Removal of power window motor (driver side/passenger 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

- 1. Close the door.
- 2. Fully open the door window.
- 3. Place a piece of wood near fully closed position.
- 4. Close door glass completely with AUTO-UP.
- 5. 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 or front power window switch (passenger side) 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.

>> END

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000012409690

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector.

3. Check voltage between power window main switch harness connector and ground.

1	+) w main switch	(-)	Cor	dition	Voltage (V)
Connector	Terminal				
D5	10	Ground	Ignition switch	ON	9 – 16
D6	19	Ground	Ignition switch	OFF	9 - 10

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK 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.

В	СМ	Power windo	w main switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	68	D5	10	Existed
WI125	69	D6	19	Existed

4. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	68	Ground	Not existed
W123	69		NUL EXISTED

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-99. "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

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

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
D6	17		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

POWER SUPPLY AND GROUND CIRCUIT [FRONT WINDOW ANTI-PINCH]

< DTC/CIRCUIT DIAGNOSIS >

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

Check voltage betw	n OFF. ower window switch (veen front power wind			s connector and gr	ound.
	(+)				
	ndow switch (passenger si		(-)	Voltage (V)	I
Connector	Termin	al			
D55	10		Ground	9 – 16	
the inspection result ES >> GO TO 3. IO >> GO TO 2. .CHECK POWER SU					
ness connector.	etween BCM harness	Front pov (pas	ver window switch senger side)	v switch (passenger	
Connector	Terminal	Connector	Terminal		
M123	69	D55	10	Existe	d
Check continuity be	etween BCM harness	s connector and gr	ound.		
	BCM				
Connector	Termin	al	Ground	Continuity	
M123	69			Not existed	I
O >> Repair or r CHECK GROUND (CM. Refer to <u>BCS-99</u> eplace harness.			connector and grou	ind.
Front power wit	ndow switch (passenger si	ide)		Continuity	
Connector	Termin	al	Ground		
D55	11			Existed	
	<u>normal?</u> ON END eplace harness.				

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

	(+)			
Slic	ling door power window sv	vitch	(-)	Voltage (V)
Con	nector	Terminal		
LH	D88	1	Ground	9 – 16
RH	D108	1	Ground	9 - 10

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

B	СМ	Slidin	g door power window	switch	Continuity
Connector	Terminal	Conr	nector	Terminal	Continuity
M123	68	LH	D88	1	Existed
11123	00	RH	D108	1	LAISIEU

4. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	68	*	Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-99, "Removal and Installation"</u>.

NO >> Repair or replace harness.

< DTC/CIRC SLIDING		SNOSIS >	B DOOR PO	WER WINDOW		DOW ANTI-PINCH]
Compone	ent Funct	ion Check				INFOID:000000012409693
1. снеск	FUNCTIO	N				
			otor operation w	vith sliding door powe	er window switch	l.
Is the inspec	• ·		·	C		
	INSPECTI Refer to P		nosis Procedure	. "		
				<u>.</u> .		
Diagnosis	Floceu	ure				INFOID:000000012409694
1.CHECK	SLIDING D	OOR POWE	R WINDOW SW	ITCH INPUT SIGNA	\L	
	ition switcl					
	iect sliding		vindow switch co	onnector.		
			door power wind	ow switch harness o	connector and gro	ound.
	(+)					
Sliding d	loor power wi	ndow switch	(-)	Cond	ition	Voltage (V)
Con	nector	Terminal				
		2			NEUTRAL	0 - 1
LH	D88	2		Power window main switch	UP	9 - 16
211	200	3		(sliding door LH side)	NEUTRAL	0 – 1
			Ground		DOWN	9 - 16
		2		Power window main	NEUTRAL	0 - 1
RH	D108			switch	NEUTRAL	0 - 1
		3		(sliding door RH side)	DOWN	9 – 16
Is the inspec	ction result	normal?			20111	
YES >>	GO TO 3.	<u></u>				
-	GO TO 2.					•
Z.CHECK	SLIDING D	OOR POWE	R WINDOW SW	ITCH CIRCUIT		
	nition switcl nect power		switch connecto	or.		
3. Check of	continuity b	etween slidin			s connector and	power window main
switch h	arness col	nnector.				
	Sliding do	oor power windo	w switch	Power windo	w main switch	Continuitu
	Connect	or	Terminal	Connector	Terminal	- Continuity
LF	1	D88	2		1	
			3	D5	3	Existed
Rŀ	4	D108	2		7	_
			3	ndow switch harnes	5	

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

С

SLIDING DOOR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Slic	ling door power window sv	vitch		Continuity
Con	nector	Terminal	-	Continuity
LH	D88	2	Ground	
LII	Doo	3	Ground	Not existed
RH	D108	2	-	NOT EXISTED
КП	0010	3	1	

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-70, "Removal and Installation".

NO >> Repair or replace harness.

 $\mathbf{3}$.check sliding door power window switch

Check sliding door power window switch.

Refer to PWC-42, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> Replace sliding door power window switch. Refer to PWC-71, "Removal and Installation".

Component Inspection

INFOID:000000012409695

1. CHECK SLIDING DOOR POWER WINDOW SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect sliding door power window switch connector.

3. Check sliding door power window switch terminals under the following conditions.

	wer window switch	Condition	Continuity
1	5		
3	4	UP	
2	5		
3	4	NEUTRAL	Existed
1	4	DOWN	
2	5		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace sliding door power window switch. Refer to <u>PWC-71, "Removal and Installation"</u>.

< DTC/CIRCUIT DIA	1910919 >				INDOW ANTI-PINCH]
POWER WIND	OW MOTOR				
DRIVER SIDE					
DRIVER SIDE :	Component Fu	nction Che	ck		INFOID:000000012409696
	N				
Check front power wi		side) operatio	on with power windo	ow main swite	ch.
<u>s the inspection resu</u> YES >> INSPEC ⁻					
	<u>PWC-43, "DRIVER</u>	<u>SIDE : Diagn</u>	osis Procedure".		
DRIVER SIDE :	Diagnosis Proc	edure			INFOID:000000012409697
	-				
CHECK FRONT F		MOTOR (DRI	VER SIDE) INPUT	SIGNAL	
. Turn ignition swit . Disconnect front	ch OFF. power window mot	or (driver side) connector		
5. Turn ignition swit	ch ON.	·			
Check voltage be	etween front power	window moto	r (driver side) harne	ess connector	and ground.
(+)				
Front power window	v motor (driver side)	(-)	Cond	ition	Voltage (V)
Connector	Terminal				
	1			NEUTRAL	0 - 1
			Power window main		a (a
D7		Ground	Power window main switch		9 - 16
D7	2	Ground		NEUTRAL	0 - 1
	2	Ground	switch	-	
s the inspection resu YES >> Replace	2 It normal? front power windov		switch	NEUTRAL	0 - 1 9 - 16
s the inspection resu YES >> Replace NO >> GO TO 2	2 It normal? front power windov	v motor (driver	switch (driver side) r side). Refer to <u>GW</u>	NEUTRAL UP /-29, "Remov	0 - 1 9 - 16
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F	2 It normal? front power windov	v motor (driver	switch (driver side) r side). Refer to <u>GW</u>	NEUTRAL UP /-29, "Remov	0 - 1 9 - 16
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F . Turn ignition swit	2 It normal? front power windov POWER WINDOW ch OFF.	v motor (driver MOTOR (DRI	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCU	NEUTRAL UP /-29, "Remov	0 - 1 9 - 16
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F . Turn ignition swit . Disconnect powe . Check continuity	2 front power windov OWER WINDOW ch OFF. er window main swi between front pow	v motor (driver MOTOR (DRI ^N tch connector.	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCU	NEUTRAL UP /-29, "Remov	0 - 1 9 - 16
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F . Turn ignition swit	2 front power windov OWER WINDOW ch OFF. er window main swi between front pow	v motor (driver MOTOR (DRI ^N tch connector.	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCU	NEUTRAL UP /-29, "Remov	0 – 1 9 – 16 al and Installation".
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F . Turn ignition swit Disconnect powe . Check continuity main switch harn	2 front power windov OWER WINDOW ch OFF. er window main swi between front pow	v motor (driver MOTOR (DRI ^N tch connector.	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCU	NEUTRAL UP /-29, "Remov T arness conne	0 – 1 9 – 16 al and Installation". ctor and power window
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F . Turn ignition swit Disconnect powe Check continuity main switch harn	2 It normal? front power windov OWER WINDOW ch OFF. cr window main swi between front pow ess connector.	v motor (driver MOTOR (DRI tch connector. ver window mo	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCUI otor (driver side) ha	NEUTRAL UP /-29, "Remov T arness conne	0 – 1 9 – 16 al and Installation".
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F . Turn ignition swit Disconnect powe . Check continuity main switch harn Front power wind Connector	2 It normal? front power windov OWER WINDOW ch OFF. er window main swi between front pow ess connector.	v motor (driver MOTOR (DRIV tch connector. ver window mo	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCUI otor (driver side) ha Power window main su	NEUTRAL UP /-29, "Remov T arness conne	0 – 1 9 – 16 al and Installation". ctor and power window Continuity
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F . Turn ignition swit Disconnect powe Check continuity main switch harn Front power wind Connector D7	2 It normal? front power window cower window cower window main swi between front pow ess connector. dow motor (driver side) Terminal 1 2	v motor (driver MOTOR (DRIV tch connector. ver window mo	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCUI otor (driver side) ha Power window main su nector	NEUTRAL UP /-29, "Remov T arness conne witch Terminal 11 8	0 – 1 9 – 16 al and Installation". ctor and power window Continuity Existed
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F Disconnect powe Check continuity main switch harn Front power wind Connector	2 It normal? front power window cower window cower window main swi between front pow ess connector. dow motor (driver side) Terminal 1 2	v motor (driver MOTOR (DRIV tch connector. ver window mo	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCUI otor (driver side) ha Power window main su	NEUTRAL UP /-29, "Remov T arness conne witch Terminal 11 8	0 – 1 9 – 16 al and Installation". ctor and power window Continuity Existed
s the inspection resu YES >> Replace NO >> GO TO 2 CHECK FRONT F 1. Turn ignition swit 2. Disconnect power 3. Check continuity main switch harn Front power wind Connector D7 4. Check continuity	2 It normal? front power window cower window cower window main swi between front pow ess connector. dow motor (driver side) Terminal 1 2	v motor (driver MOTOR (DRI tch connector. ver window mo	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCUI otor (driver side) ha Power window main su nector	NEUTRAL UP /-29, "Remov T arness conne witch Terminal 11 8	0 – 1 9 – 16 al and Installation". ctor and power window Continuity Existed tor and ground.
s the inspection result YES >> Replace NO >> GO TO 2 2.CHECK FRONT F 1. Turn ignition swit 2. Disconnect power 3. Check continuity main switch harn Front power wind Connector D7 4. Check continuity	2 It normal? front power window POWER WINDOW Ch OFF. rr window main swi between front pow ess connector. dow motor (driver side) Terminal 1 2 between front pow er window motor (driver	v motor (driver MOTOR (DRI tch connector. ver window mo	switch (driver side) r side). Refer to GW VER SIDE) CIRCUI otor (driver side) ha Power window main su nector D5 btor (driver side) har	NEUTRAL UP /-29, "Remov T arness conne witch Terminal 11 8	0 – 1 9 – 16 al and Installation". ctor and power window Continuity Existed
Is the inspection result YES >> Replace NO >> GO TO 2 2.CHECK FRONT F 1. Turn ignition switt 2. Disconnect power 3. Check continuity main switch harm Front power wind Connector D7 4. Check continuity Front power	2 It normal? front power window POWER WINDOW Ch OFF. rr window main swi between front pow ess connector. dow motor (driver side) Terminal 1 2 between front pow er window motor (driver	v motor (driver MOTOR (DRIV tch connector. ver window mo cor ver window mo	switch (driver side) r side). Refer to <u>GW</u> VER SIDE) CIRCUI otor (driver side) ha Power window main su nector	NEUTRAL UP /-29, "Remov T arness conne witch Terminal 11 8	0 – 1 9 – 16 al and Installation". ctor and power window Continuity Existed tor and ground.

NO >> Repair or replace harness. PASSENGER SIDE

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE : Component Function Check

1. CHECK FUNCTION

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 <u>PWC-44</u>, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000012409699

INFOID:000000012409698

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.

	(+)				
Front power window	motor (passenger side)	(-)	Condit	tion	Voltage (V)
Connector	Terminal				
	1			NEUTRAL	0 – 1
D46		Cround	Front power window	DOWN	9 – 16
D46	2	Ground	switch (passenger side)	NEUTRAL	0 - 1
	2			UP	9 – 16

Is the inspection result normal?

YES >> Replace front power window motor (passenger side). Refer to <u>GW-29, "Removal and Installation"</u>. NO >> GO TO 2.

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

- 1. 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	motor (passenger side)	Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D46	1	D55	9	Existed
D40	2	035	8	LAISIEU

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
D46	1	Ground	Not existed
D40	2		NOT EXISTED

Is the inspection result normal?

- YES >> Replace front power window switch (passenger side). Refer to <u>PWC-70, "Removal and Installa-</u> tion".
- NO >> Repair or replace harness.

SLIDING DOOR LH

	R LH : Compo	nent Function	on Check		INFOID:0000000124097
.CHECK FUNCTI	ON				
indow switch LH.		otor LH operati	on with power wind	ow main switch	or sliding door powe
		NG DOOR LH	: Diagnosis Procedu	<u>ure"</u> .	
LIDING DOOF	R LH : Diagno	sis Procedu	re		INFOID:0000000124097
.CHECK SLIDING	G DOOR POWER	WINDOW MO	TOR LH INPUT SIG	SNAL	
. Turn ignition sw	ing door power wi ⁄itch ON.		I connector. ow motor LH harnes	ss connector an	d ground.
	+)				
	r window motor LH	(-)	Con	dition	Voltage (V)
Connector	Terminal 1			NEUTRAL	0 – 1
D82	D82 Ground Sliding door power	UP	9 – 16		
	3		window switch LH	NEUTRAL DOWN	0 - 1 9 - 16
	2.	er window mot			
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit	2. G DOOR POWER vitch OFF. ing door power wi	WINDOW MO ndow switch Lł door power wir	TOR LH CIRCUIT	ness connector	and sliding door powe
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conne	WINDOW MO ndow switch Ll door power win ctor.	TOR LH CIRCUIT H connector. ndow motor LH harr		
CHECK SLIDING. Turn ignition sw Disconnect slid Check continuit window switch	2. G DOOR POWER vitch OFF. ing door power wi y between sliding	WINDOW MO ndow switch LH door power win ector.	TOR LH CIRCUIT		and sliding door powe
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conne power window motor L Termina 1	WINDOW MO ndow switch LH door power win ector.	TOR LH CIRCUIT H connector. ndow motor LH harr	v switch LH Terminal 5	
CHECK SLIDING	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conne power window motor L Termina 1 3	WINDOW MO ndow switch LH door power win ector.	TOR LH CIRCUIT H connector. ndow motor LH harr iding door power window onnector	v switch LH Terminal 5 4	Existed
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch Sliding door p Connector D82 Check continuit	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conner power window motor L Termina 1 3 y between sliding	WINDOW MO ndow switch LH door power win ector.	TOR LH CIRCUIT H connector. ndow motor LH harr iding door power window onnector	v switch LH Terminal 5 4	Continuity Existed and ground.
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch Sliding door p Connector D82 Check continuit	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conne wwer window motor L Termina 1 3 y between sliding door power window m	WINDOW MO ndow switch LH door power win ector.	TOR LH CIRCUIT I connector. ndow motor LH harr iding door power window onnector D88 ndow motor LH harr	v switch LH Terminal 5 4	Continuity Existed
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch l Sliding door p Connector D82 Check continuit Sliding	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conne wwer window motor L Termina 1 3 y between sliding door power window m	WINDOW MO ndow switch LH door power win ector. H SI C C door power win	TOR LH CIRCUIT H connector. ndow motor LH harr iding door power window onnector	v switch LH Terminal 5 4	Continuity Existed and ground.
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch i Sliding door p Connector D82 Check continuit Sliding Connector	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conner power window motor L Termina 1 3 ry between sliding door power window m	WINDOW MO ndow switch LH door power win ector. H SI C door power win notor LH Terminal 1	TOR LH CIRCUIT I connector. ndow motor LH harr iding door power window onnector D88 ndow motor LH harr	v switch LH Terminal 5 4	Continuity Existed and ground. Continuity
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch I Sliding door p Connector D82 Check continuit Sliding Connector D82 the inspection res YES >> Replace	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conner- power window motor L Termina 1 3 y between sliding door power window motor f door power window motor sult normal? e sliding door power or replace harnes	WINDOW MO ndow switch LH door power win ector. H SI C door power win notor LH Terminal 1 3 er window swit	TOR LH CIRCUIT I connector. ndow motor LH harr iding door power window onnector D88 ndow motor LH harr	v switch LH Terminal 5 4 ness connector	Continuity Existed and ground. Continuity Not existed
CHECK SLIDING Turn ignition sw Disconnect slid Check continuit window switch I Sliding door p Connector D82 Check continuit Sliding Connector D82 the inspection res YES >> Replace NO >> Repair	2. G DOOR POWER vitch OFF. ing door power wi y between sliding LH harness conner power window motor L Termina 1 3 y between sliding door power window m f sult normal? e sliding door power or replace harnes R RH	WINDOW MO ndow switch LH door power win ector. H SI C door power win notor LH Terminal 1 3 er window swit s.	TOR LH CIRCUIT	v switch LH Terminal 5 4 ness connector	Continuity Existed and ground. Continuity Not existed

'C

< DTC/CIRCUIT DIAGNOSIS >

Check sliding door power window motor RH operation with power window main switch or sliding door power window switch RH.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>PWC-46</u>, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:000000012409703

1. CHECK SLIDING DOOR POWER WINDOW MOTOR RH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect sliding door power window motor RH connector.

- 3. Turn ignition switch ON.
- 4. Check voltage between sliding door power window motor RH harness connector and ground.

(+) Sliding door power window motor RH			Condition		Voltage (V)
		(-)			
Connector	Terminal				
	1			NEUTRAL	0 - 1
D102	.1	Ground	Sliding door power	UP	9 – 16
0102	3	Giouria	window switch RH	NEUTRAL	0 - 1
	5			DOWN	9 – 16

Is the inspection result normal?

YES >> Replace sliding door power window motor RH.

NO >> GO TO 2.

2. CHECK SLIDING DOOR POWER WINDOW MOTOR RH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect sliding door power window switch RH connector.

3. Check continuity between sliding door power window motor RH harness connector and sliding door power window switch RH harness connector.

Sliding door powe	er window motor RH	Sliding door power window switch RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D102	1	D108	5	Existed
D102	3		4	LAISteu

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

Sliding door power	window motor RH		Continuity
Connector	Terminal	Ground	Continuity
D102	1	Ground	Not existed
	3		NOT EXISTED

Is the inspection result normal?

YES >> Replace sliding door power window switch RH. Refer to PWC-71, "Removal and Installation".

NO >> Repair or replace harness.

< DTC/CIRCUIT DIAGNOSIS > ENCODER CIRCUIT А DRIVER SIDE **DRIVER SIDE : Component Function Check** INFOID 000000012409704 В 1.CHECK FUNCTION 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? >> INSPECTION END YES D >> Refer to PWC-47, "DRIVER SIDE : Diagnosis Procedure". NO DRIVER SIDE : Diagnosis Procedure INEOID-000000012409705 Е 1.CHECK ENCODER PULSE SIGNAL 1. Turn ignition switch ON. 2. Check signal between power window main switch harness connector and ground using an oscilloscope. (+) Signal Power window main switch (-) (Reference value) Connector Terminal 9 D5 Ground Refer to the following signal Н 13 (V) 6 (V) Encoder signal 1 Encoder signal 1 2 (V (V 4 Encoder signal 2 Encoder signal 2 Window LIP Window DOWN PWC (Encoder signal 2 starts 1/4 pulses earlier) (Encoder signal 1 starts 1/4 pulses earlier) JMKIA5210GB Is the inspection result normal? YES >> Replace power window main switch. Refer to PWC-70, "Removal and Installation". NO >> GO TO 2. 2. CHECK ENCODER SIGNAL CIRCUIT M 1. Turn ignition switch OFF. 2. Disconnect power window main switch connector and front power window motor (driver side) connector. 3. Check continuity between power window main switch harness connector and front power window motor Ν (driver side) harness connector. Front power window motor (driver side) Power window main switch Continuity Connector Terminal Connector Terminal 3 9 Existed D5 D7 13 5 Ρ Check continuity between power window main switch harness connector and ground. 4 Power window main switch Continuity Connector Terminal Ground 9 D5 Not existed

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[FRONT WINDOW ANTI-PINCH]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCODER POWER SUPPLY

1. Connect power window main switch connector.

2. Turn ignition switch ON.

3. Check voltage between front power window motor (driver side) harness connector and ground.

((+)		
Front power window	Front power window motor (driver side)		Voltage (V)
Connector	Terminal		
D7	4	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK ENCODER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector.

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

Power windo	Power window main switch		Front power window motor (driver side)	
Connector	Terminal	Connector Terminal		Continuity
D5	15	D7	4	Existed

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

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
D5	15		Not existed

Is the inspection result normal?

YES >> Replace power window main switch. Refer to <u>PWC-70, "Removal and Installation"</u>.

NO >> Repair or replace harness.

5. CHECK ENCODER GROUND CIRCUIT 1

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector.

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

Power window main switch		Front power window motor (driver side)		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
D5	2	D7	6	Existed	

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

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
D5	2		Not existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

Ó.CHECK ENCODER GROUND CIRCUIT 2

[FRONT WINDOW ANTI-PINCH]

Connect power window main switch connector. 1. 2. Check continuity between power window main switch harness connector and ground. А Power window main switch Continuity Connector Terminal Ground В D5 2 Existed Is the inspection result normal? YES >> Replace front power window motor (driver side). Refer to <u>GW-29, "Removal and Installation"</u>. NO >> Replace power window main switch. Refer to PWC-70, "Removal and Installation". PASSENGER SIDE D PASSENGER SIDE : Component Function Check INFOID:000000012409706 **1.**CHECK FUNCTION Е Check that front passenger side door glass perform AUTO UP/DOWN operation normally when front power window switch (passenger side) is operated. Is the inspection result normal? YES >> INSPECTION END >> Refer to PWC-49, "PASSENGER SIDE : Diagnosis Procedure". NO PASSENGER SIDE : Diagnosis Procedure INFOID:0000000012409707 .CHECK ENCODER PULSE SIGNAL Н Turn ignition switch ON. 1. 2. Check signal between front power window switch (passenger side) harness connector and ground using an oscilloscope. (+) Signal Front power window switch (passenger side) (-) (Reference value) Connector Terminal 12 D55 Ground Refer to the following signal PWC 15 (V) (V Encoder signal 1 Encoder signal 1 \$ (۷ (۷ M Encoder signal 2 Encoder signal 2 0 ms -10 ms Window UP Window DOWN (Encoder signal 2 starts 1/4 pulses earlier) (Encoder signal 1 starts 1/4 pulses earlier) Ν JMKIA5210GE Is the inspection result normal? YES >> Replace front power window switch (passenger side). Refer to <u>PWC-70, "Removal and Installa-</u> tion". NO >> GO TO 2. 2. CHECK ENCODER SIGNAL CIRCUIT Ρ 1. Turn ignition switch OFF. 2. Disconnect front power window switch (passenger side) connector and front power window motor (passenger side) connector. Check continuity between front power window switch (passenger side) harness connector and front power 3. window motor (passenger side) harness connector.

< DTC/CIRCUIT DIAGNOSIS >

< DTC/CIRCUIT DIAGNOSIS >

Front power window s	witch (passenger side)	Front power window motor (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D55	12	D46	5	Existed
D35	15	D40	3	LAISIEU

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

Front power window s	Front power window switch (passenger side)		Continuity
Connector	Terminal	Ground	Continuity
D55	12	Ground	Not existed
000	15		NUL EXISIEU

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCODER POWER SUPPLY

1. Connect front power window switch (passenger side) connector.

2. Turn ignition switch ON.

3. Check voltage between front power window motor (passenger side) harness connector and ground.

(+)			
Front power window r	Front power window motor (passenger side)		Voltage (V)
Connector	Connector Terminal		
D46	4	Ground	9 - 16

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK ENCODER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

Front power window s	witch (passenger side)	Front power window motor (passenger side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
D55	4	D46	4	Existed	

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

Front power window s	Front power window switch (passenger side)		Continuity
Connector	Terminal	Ground	Continuity
D55	4		Not existed

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to <u>PWC-70, "Removal and Installa-</u> tion".

NO >> Repair or replace harness.

5. CHECK ENCODER GROUND CIRCUIT 1

1. Turn ignition switch OFF.

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

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

Front power window s	witch (passenger side)	Front power window	motor (passenger side) Continuity
Connector	Terminal	Connector	Terminal	Continuity
D55	3	D46	6	Existed
Check continuity be	etween front power wi	indow switch (passe	enger side) harness	connector and ground
Front power win	dow switch (passenger sid	de)		Continuity
Connector	Termina	al	Ground	Containing
D55 ne inspection result r	3			Not existed
CHECK ENCODER	eplace harness. GROUND CIRCUIT 2 er window switch (pas etween front power wi	senger side) conne		connector and ground
Front power win	dow switch (passenger sid	de)		Continuity
Connector	Termina	al	Ground	Continuity
	nt power window mot			Existed Removal and Installat 70, "Removal and Inst
e inspection result r S >> Replace fro) >> Replace fro	normal? nt power window mot			Removal and Installat
e inspection result r S >> Replace fro) >> Replace fro	normal? nt power window mot			Removal and Installat
e inspection result r S >> Replace fro >> Replace fro	normal? nt power window mot			Removal and Installat
e inspection result r S >> Replace fro >> Replace fro	normal? nt power window mot			Removal and Installa
inspection result r >> Replace fro >> Replace fro	normal? nt power window mot			Removal and Installat

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DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:000000012409708

[FRONT WINDOW ANTI-PINCH]

1.CHECK FUNCTION

- 1. Select "DOOR LOCK" of "BCM" using CONSULT.
- 2. Select "KEY CYL LK-SW", "KEY CYL UN-SW" in "DATA MONITOR" mode.
- 3. Check that the function operates normally according to the following conditions.

Monitor item		Condition	
KEY CYL LK-SW	Lock	: ON	
REFORER-SW	Neutral / Unlock	: OFF	
KEY CYL UN-SW	Unlock	: ON	
REFORE ON-SW	Neutral / Lock	: OFF	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>PWC-52</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000012409709

1. CHECK DOOR KEY CYLINDER SWITCH SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly (driver side) (key cylinder switch) connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between front door lock assembly (driver side) (key cylinder switch) harness connector and ground.

(+)		
Front door lock assembly (dr	ver side) (key cylinder switch)	(-)	Voltage (V)
Connector	Terminal		
D48	5	Ground	4 - 6
040	6	Ground	4 - 0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR KEY CYLINDER SWITCH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector.

3. Check continuity between power window main switch harness connector and front door lock assembly (driver side) (key cylinder switch) harness connector.

Power window main s	Power window main switch		Front door lock assembly (driver side) (key cylinder switch)	
Connector	Terminal	Connector Terminal		
D5	4	D48	6	Existed
05	6	- D40	5	Existed

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

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

_	Power wind			Continuity
-	Connector	Terminal	Ground	Continuity
	D5	4	Ground	Not existed
	5	6		Not existed
s t	he inspection result norma	<u>al?</u>		
		vindow main switch. Refer	to PWC-70, "Removal ar	nd Installation".
N∘ 2				
		INDER SWITCH GROUND	DCIRCUIT	
1. 2.	Turn ignition switch OFF Check continuity betwee		y (driver side) (key cylinc	ler switch) harness connect
	and ground.			
-	Front door lock assembly (d	lriver side) (key cylinder switch)		Continuity
	Connector	Terminal	Ground	Continuity
_	D48	4		Existed
۲e	fer to <u>PWC-53, "Compone</u> he inspection result norma	al?	"Intermittent Incident"	
YI N' Co				
	O >> Replace front do	or lock assembly (driver si ON		
YI N CO CO 1.	O >> Replace front do omponent Inspection OMPONENT INSPECTION CHECK DOOR KEY CYL Turn ignition switch OFF Disconnect front door loo	or lock assembly (driver si ON INDER SWITCH ck assembly (driver side) (l	de) (key cylinder switch). key cylinder switch) conn	INFOID:000000012409
YI N CO CO 1.	O >> Replace front do pmponent Inspection PMPONENT INSPECTION CHECK DOOR KEY CYL Turn ignition switch OFF Disconnect front door lock Check front door lock as	or lock assembly (driver si ON INDER SWITCH ck assembly (driver side) (l	de) (key cylinder switch). key cylinder switch) conn ylinder switch) terminals u	INFOID:000000012409 ector. under the following condition
YI N CO CO 1.	O >> Replace front do mponent Inspection MPONENT INSPECTION CHECK DOOR KEY CYL Turn ignition switch OFF Disconnect front door lock Check front door lock assembly (dri	or lock assembly (driver si DN INDER SWITCH ck assembly (driver side) (H sembly (driver side) (key cy	de) (key cylinder switch). key cylinder switch) conn	INFOID:000000012409
YI N CO CO 1.	O >> Replace front do pmponent Inspection PMPONENT INSPECTION CHECK DOOR KEY CYL Turn ignition switch OFF Disconnect front door lock Check front door lock assembly (dri Term	or lock assembly (driver si ON INDER SWITCH ck assembly (driver side) (I sembly (driver side) (key cy ver side) (key cylinder switch)	de) (key cylinder switch). key cylinder switch) conn ylinder switch) terminals u	ector. under the following condition
	O >> Replace front do mponent Inspection MPONENT INSPECTION CHECK DOOR KEY CYL Turn ignition switch OFF Disconnect front door lock Check front door lock assembly (dri	or lock assembly (driver si ON INDER SWITCH ck assembly (driver side) (I sembly (driver side) (key cy ver side) (key cylinder switch)	de) (key cylinder switch). key cylinder switch) conn ylinder switch) terminals u Key position	ector. under the following condition

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side) (key cylinder switch).

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Neutral / Unlock

Not existed

POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW SERIAL LINK POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000012409711

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.

2. Check signal between power window main switch harness connector and ground using an oscilloscope.

(+) Power window Connector	main switch Terminal	()	Signal (Reference value)
D5	14	Ground	(V) 15 10 5 0 10 ms JPMIA0013GB

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 2.

2.CHECK POWER WINDOW SERIAL LINK SIGNAL

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector.

3. Turn ignition switch ON.

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

	(+)		
Power windo	Power window main switch		Voltage (V)
Connector	Connector Terminal		
D5	14	Ground	9 – 16

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-70, "Removal and Installation".

NO >> GO TO 3.

3. CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect BCM connector.

3. Check continuity between BCM harness connector and power window main switch harness connector.

BCM		Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M121	8	D5	14	Existed

4. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M121	8		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-99, "Removal and Installation"</u>.

POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness. FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:000000012409712 В

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[FRONT WINDOW ANTI-PINCH]

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.

2. Check signal between front power window switch (passenger side) harness connector and ground using an oscilloscope.

(+)				D
Front power window sw	tch (passenger side)	()	Signal (Reference value)	
Connector	Terminal			E
D55	16	Ground	(V) 15 10 5 0 10 ms JPMIA0013GB	F

Is the inspection result normal?

Н YES >> Replace front power window switch (passenger side). Refer to PWC-70, "Removal and Installation". N 2.

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector and front power window switch (passenger side) connector.

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

					PWC
Power window	w main switch	Front power window s	witch (passenger side)	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
D5	14	D55	16	Existed	

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

Power window	main switch		Continuity	IVI
Connector	Terminal	Ground	Continuity	
D5	14	-	Not existed	N

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-70, "Removal and Installation".

NO >> Repair or replace harness.

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NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

Diagnosis Procedure

INFOID-000000012409713

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit. Refer to BCS-92, "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. Refer to PWC-38, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 $\mathbf{3}$.check power window main switch serial link circuit

Check power window main switch serial link circuit. Refer to PWC-54, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".
- >> GO TO 1. NO

DRIVER SIDE POWER WINDOW DOES NOT OPERATE AGNOSIS > [FRONT WINDOW ANTI-PINCH]

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

		А
Diagnosis Procedure	INFOID:000000012409714	
1. CHECK DRIVER SIDE POWER WINDOW MOTOR		В
Check front power window motor (driver side). Refer to PWC-43, "DRIVER SIDE : Component Function Check".		
Is the inspection result normal?		С
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		
NO >> Repair or replace the malfunctioning parts. 2.REPLACE POWER WINDOW MAIN SWITCH		D
Replace power window main switch. Refer to PWC-70, "Removal and Installation".		
Is the inspection result normal?		Е
YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".		
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FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE < SYMPTOM DIAGNOSIS > (FRONT WINDOW ANTI-PINCH)
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) POWER SUPPLY AND GROUND CIR- CUIT
Check front power window switch (passenger side) power supply and ground circuit. Refer to <u>PWC-39. "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u> 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 <u>PWC-44, "PASSENGER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.
NO >> Repair or replace the malfunctioning parts. 3. CONFIRM THE OPERATION
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . 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.REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Replace front power window switch (passenger side). Refer to PWC-70, "Removal and Installation"

>> INSPECTION END WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012409717

 $1. {\sf check front power window switch (passenger side) serial link circuit}$

Check front power window switch (passenger side) serial link circuit. Refer to <u>PWC-55. "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

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 <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

Revision: October 2015

PWC-58

< SYMPTOM DIAGNOSIS > [FRONT WINDOW ANTI-PINCH] SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDOW	-
WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDOW	
SWITCHES ARE OPERATED	
WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDOW	В
SWITCHES ARE OPERATED : Diagnosis Procedure	8
1. CHECK SLIDING DOOR POWER WINDOW SWITCH LH	С
Check sliding door power window switch LH.	_
Refer to <u>PWC-41, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	D
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	E
2. CHECK SLIDING DOOR POWER WINDOW MOTOR LH	_
Check sliding door power window motor LH. Refer to <u>PWC-45, "SLIDING DOOR LH : Component Function Check"</u> .	F
Is the inspection result normal?	
YES >> GO TO 3.	(.
NO >> Repair or replace the malfunctioning parts.	Ċ
3.CONFIRM THE OPERATION	_
Confirm the operation again.	ŀ
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	
NO >> GO TO 1.	
WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED	
WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED : Diagnosis	J
Procedure	9
1. CHECK SLIDING DOOR POWER WINDOW SWITCH LH POWER SUPPLY AND GROUND CIRCUIT	P٧
Check sliding door power window switch LH power supply and ground circuit.	-
Refer to <u>PWC-39, "SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure"</u> . Is the inspection result normal?	L
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	
2. CHECK SLIDING DOOR POWER WINDOW SWITCH LH	N
Check sliding door power window switch LH. Refer to PWC-41, "Component Function Check".	-
Is the inspection result normal?	Г
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3. CONFIRM THE OPERATION	С
	-
	F
Confirm the operation again.	
Is the result normal?	

SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [FRONT WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012409720

1. CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH. Refer to <u>PWC-41. "Component Function Check"</u>.

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 <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS > [FRONT WINDOW ANTI-PINCH]	
SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE	
WHEN POWER WINDOW MAIN AND SLIDING DOOR RH POWER WINDOW	Α
SWITCHES ARE OPERATED	
WHEN POWER WINDOW MAIN AND SLIDING DOOR RH POWER WINDOW	E
SWITCHES ARE OPERATED : Diagnosis Procedure	
1. CHECK SLIDING DOOR POWER WINDOW SWITCH RH	С
Check sliding door power window switch RH.	
Refer to PWC-41, "Component Function Check".	D
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	E
2. CHECK SLIDING DOOR POWER WINDOW MOTOR RH	
Check sliding door power window motor RH.	
Refer to PWC-45, "SLIDING DOOR RH : Component Function Check".	F
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	(
3. CONFIRM THE OPERATION	
Confirm the operation again.	ŀ
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41. "Intermittent Incident"</u> .	
NO >> GO TO 1. WHEN SLIDING DOOR RH POWER WINDOW SWITCH IS OPERATED	
WHEN SLIDING DOOR RH POWER WINDOW SWITCH IS OPERATED : Diagnosis	J
Procedure	_
1. CHECK SLIDING DOOR POWER WINDOW SWITCH RH POWER SUPPLY AND GROUND CIRCUIT	P٧
Check sliding door power window switch RH power supply and ground circuit. Refer to <u>PWC-39</u> , "SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure".	
Is the inspection result normal?	L
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	N
2. CHECK SLIDING DOOR POWER WINDOW SWITCH RH	IV
Check sliding door power window switch RH. Refer to <u>PWC-41, "Component Function Check"</u> .	Ν
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CONFIRM THE OPERATION	C
Confirm the operation again. <u>Is the result normal?</u>	F
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	
NO >> GO TO 1.	
WHEN POWER WINDOW MAIN SWITCH IS OPERATED	

SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [FRONT WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012409723

1. CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH. Refer to <u>PWC-41</u>, "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 <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMAL-

<pre> LY < SYMPTOM DIAGNOSIS > [FRONT WINDOW ANTI-PINCH </pre>]
AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NOR	-
MALLY	A
DRIVER SIDE	
DRIVER SIDE : Diagnosis Procedure	24 B
1.PERFORM INITIALIZATION PROCEDURE	С
Initialization procedure is executed and operation is confirmed. Refer to <u>PWC-36, "Description"</u> .	
Is the inspection result normal?	D
YES >> INSPECTION END NO >> GO TO 2.	
2.check encoder circuit (driver side)	E
Check encoder circuit (driver side). Refer to PWC-47, "DRIVER SIDE : Component Function Check".	_
Is the inspection result normal?	F
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CONFIRM THE OPERATION	0
Confirm the operation again.	G
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	F
NO >> GO TO 1. PASSENGER SIDE	
PASSENGER SIDE : Diagnosis Procedure	I
	25
1.PERFORM INITIALIZATION PROCEDURE	J
Initialization procedure is executed and operation is confirmed. Refer to <u>PWC-36, "Description"</u> .	
Is the inspection result normal?	PV
YES >> INSPECTION END	
NO $>>$ GO TO 2. 2 CHECK ENCODED CIDCUIT (DASSENCED CIDE)	I
2.CHECK ENCODER CIRCUIT (PASSENGER SIDE) Check encoder circuit (passenger side). Refer to PWC-49, "PASSENGER SIDE : Component Functio	
Check".	_
Is the inspection result normal?	N
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CONFIRM THE OPERATION	Ν
Confirm the operation again.	_
Is the result normal?	С
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	
NO >> GO TO 1.	Ρ

ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (FRONT SIDE) < SYMPTOM DIAGNOSIS > [FRONT WINDOW ANTI-PINCH]

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

	ER SIDE : Diagnosis Procedure	INFOID:000000012409726
1. сн	ECK POWER WINDOW AUTO OPERATION	
Check	AUTO operation when anti-pinch function does not operate.	
<u>Is the i</u>	nspection result normal?	
YES NO		
2 .co	NFIRM THE OPERATION	
Confirm	n the operation again.	
<u>Is the r</u>	esult normal?	
YES NO	>> GO TO 1.	
PASC	SENGER SIDE	
PASS	SENGER SIDE : Diagnosis Procedure	INFOID:000000012409727
	SENGER SIDE : Diagnosis Procedure ECK POWER WINDOW AUTO OPERATION	INFOID:000000012409727
1. сн	·	INFOID:000000012409727
1. CH	ECK POWER WINDOW AUTO OPERATION	INFOID:000000012409727
1. CH	ECK POWER WINDOW AUTO OPERATION AUTO operation when anti-pinch function does not operate. <u>nspection result normal?</u> >> GO TO 2.	INFOID:000000012409727
1.CHI Check Is the i YES NO	ECK POWER WINDOW AUTO OPERATION AUTO operation when anti-pinch function does not operate. <u>nspection result normal?</u> >> GO TO 2. >> Refer to <u>PWC-63, "PASSENGER SIDE : Diagnosis Procedure"</u> .	INFOID:000000012409727
1.CHI Check Is the i YES NO	ECK POWER WINDOW AUTO OPERATION AUTO operation when anti-pinch function does not operate. <u>nspection result normal?</u> >> GO TO 2.	INFOID:000000012409727
1.CHI Check Is the i YES NO 2.CO	ECK POWER WINDOW AUTO OPERATION AUTO operation when anti-pinch function does not operate. <u>nspection result normal?</u> >> GO TO 2. >> Refer to <u>PWC-63, "PASSENGER SIDE : Diagnosis Procedure"</u> .	INFOID:000000012409727
1.CHI Check Is the i YES NO 2.CO	ECK POWER WINDOW AUTO OPERATION AUTO operation when anti-pinch function does not operate. <u>nspection result normal?</u> >> GO TO 2. >> Refer to <u>PWC-63, "PASSENGER SIDE : Diagnosis Procedure"</u> . NFIRM THE OPERATION	INFOID:000000012409727

POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NOR-MALLY

< SYMPTOM DIAGNOSIS >	[FRONT WINDOW ANTI-PINCH]
POWER WINDOW RETAINED F	POWER FUNCTION DOES NOT OPERATE
NORMALLY	

Diagnosis Procedure	INFOID:000000012409728
1.CHECK FRONT DOOR SWITCH	D
Check front door switch. Refer to DLK-247, "Component Function Check".	C
Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	D
Confirm the operation again. Is the result normal?	E
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	F
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DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS [FRONT WINDOW ANTI-PINCH]

< SYMPTOM DIAGNOSIS >

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WIN-DOWS

Diagnosis Procedure

INFOID:000000012409729

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed. Refer to PWC-36, "Description".

Is the inspection result normal?

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

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

Check driver side door lock assembly (door key cylinder switch). Refer to PWC-52, "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-41, "Intermittent Incident".

NO >> GO TO 1.

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE [FRONT WINDOW ANTI-PINCH] < SYMPTOM DIAGNOSIS > **KEYLESS POWER WINDOW DOWN DOES NOT OPERATE** А **Diagnosis** Procedure INFOID:000000012409730 CHECK REMOTE KEYLESS ENTRY FUNCTION В Check remote keyless entry function. Does door lock/unlock with Intelligent key button? YES >> GO TO 2. NO >> Refer to DLK-44, "REMOTE KEYLESS ENTRY FUNCTION : System Description". 2.CHECK POWER WINDOW OPERATION D Check power window operation. Does power window up/down with power window main switch? Е YES >> GO TO 3. NO >> Refer to PWC-56, "Diagnosis Procedure". ${f 3}.$ CHECK "PW DOWN SET" SETTING IN "WORK SUPPORT" F Check "PW DOWN SET" setting in "WORK SUPPORT". Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 4. NO >> Set "PW DOWN SET" setting in "WORK SUPPORT". **4**.CONFIRM THE OPERATION Н Confirm the operation again. Is the result normal? >> Check intermittent incident. Refer to GI-41, "Intermittent Incident". YES NO >> GO TO 1.

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POWER WINDOW LOCK SWITCH DOES NOT FUNCTION DIAGNOSIS > [FRONT WINDOW ANTI-PINCH]

< SYMPTOM DIAGNOSIS >

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:000000012409731

1.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch. Refer to PWC-70, "Removal and Installation".

>> INSPECTION END

<pre>POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLU < SYMPTOM DIAGNOSIS > [FRONT WIN]</pre>	JMINATE DOW ANTI-PINCH]
POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLU DRIVER SIDE	JMINATE
DRIVER SIDE : Diagnosis Procedure	INFOID:000000012409732
1.REPLACE POWER WINDOW MAIN SWITCH	
Replace power window main switch. Refer to <u>PWC-70, "Removal and Installation"</u> .	
>> INSPECTION END PASSENGER SIDE	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000012409733
1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	
Replace front power window switch (passenger side). Refer to <u>PWC-70, "Removal and Installation"</u> .	
>> INSPECTION END SLIDING DOOR LH	
SLIDING DOOR LH : Diagnosis Procedure	INFOID:000000012409734
1. REPLACE SLIDING DOOR POWER WINDOW SWITCH LH	
Replace sliding door power window switch LH. Refer to <u>PWC-71, "Removal and Installation"</u> .	
>> INSPECTION END SLIDING DOOR RH	
SLIDING DOOR RH : Diagnosis Procedure	INFOID:000000012409735
1. REPLACE SLIDING DOOR POWER WINDOW SWITCH RH	
Replace sliding door power window switch RH. Refer to <u>PWC-71, "Removal and Installation"</u> .	
>> INSPECTION END	

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INFOID:000000012409736

REMOVAL AND INSTALLATION POWER WINDOW MAIN SWITCH

Removal and Installation

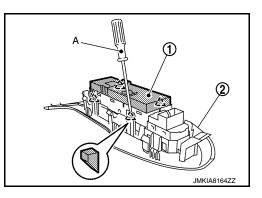
REMOVAL

- 1. Remove the power window main switch finisher. Refer to <u>INT-14, "Removal and Installation"</u>.
- 2. Remove power window main switch (1) from power window main switch finisher (2) using a remover tool (A).

∠____: Pawl

NOTE:

The same procedure is also performed for front power window switch (passenger side).



INSTALLATION

Note the following, and then install in the reverse order of removal. **NOTE:**

If power window main switch or front power window (passenger side) is replaced or is removed, it is necessary to perform the initialization procedure.

Refer to <u>PWC-36</u>, "Description".

SLIDING DOOR POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

SLIDING DOOR POWER WINDOW SWITCH

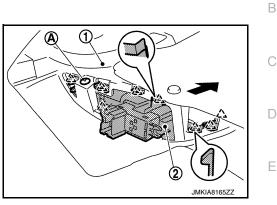
Removal and Installation

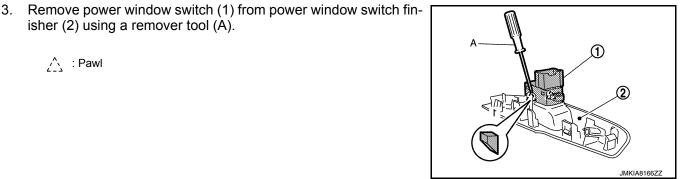
REMOVAL

- Remove sliding door finisher. Refer to INT-17, "Removal and 1. Installation".
- 2. Remove screw (A), disconnect pawls from sliding door finisher (1), and then remove power window switch finisher (2).

2 : Pawl

2 : Pawl





INSTALLATION Install in the reverse order of removal.

isher (2) using a remover tool (A).

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[FRONT WINDOW ANTI-PINCH]

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INFOID:000000012409737

< PRECAUTION > 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. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

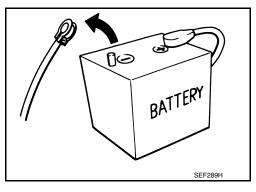
Precautions for Removing Battery Terminal

INFOID:000000013055088

When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

D4D engine	: 20 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		
V9X engine	: 4 minutes		
YD25DDTi	: 2 minutes		



NOTE:

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

 After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.
 NOTE:

< PRECAUTION >

PRECAUTIONS

[DRIVER SIDE WINDOW ANTI-PINCH]

 Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF. Example of high-load driving Driving for 30 minutes or more at 140 km/h (86 MPH) or more. 	А
- Driving for 30 minutes or more on a steep slope.	
 For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turn the ignition switch. NOTE: 	ning ON B
If the ignition switch is turned ON with any one of the terminals of main battery and sub battery nected, then DTC may be detected.	discon- C
 After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC. NOTE: 	
The removal of 12V battery may cause a DTC detection error.	D
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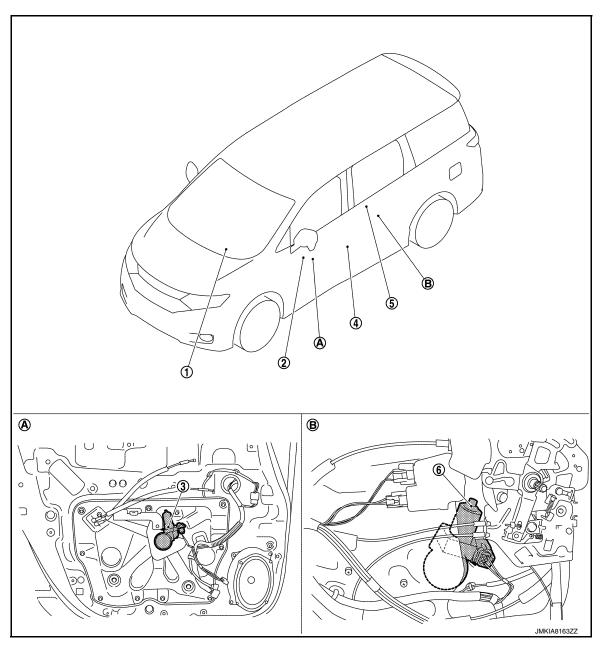
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SYSTEM DESCRIPTION COMPONENT PARTS

Component Parts Location

INFOID:000000012409740



A. View with front door finisher removed B. View with sliding door finisher removed

No.	Component parts	Description		
1.	ВСМ	 Supplies power supply to power window switch. Controls retained power. Refer to <u>BCS-5. "BODY CONTROL SYSTEM : Component Parts Location"</u> for detailed installation location. 		
2.	Power window main switch	Refer to PWC-75, "Power Window Main Switch".		
3.	Front power window motor (driver side)	Refer to PWC-75, "Front Power Window Motor (Driver Side)".		
4.	Front door switch (driver side)	Detects door open/close condition and transmits to BCM. Refer to <u>DLK-28.</u> <u>"Front Door Switch"</u> .		

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COMPONENT PARTS

[DRIVER SIDE WINDOW ANTI-PINCH]

No.	Component parts	Description
5.	Sliding door power window switch LH	Refer to PWC-75, "Sliding Door Power Window Switch".
6.	Sliding door power window motor LH	Refer to PWC-75, "Sliding Door Power Window Motor".
Power	r Window Main Switch	INFOID:000000012409741
	tly controls all power window motor of ols anti-pinch operation of power winc	
ront	Power Window Motor (Driver	Side) INFOID:0000000012409742
Opera	rates the encoder and power window r ates with signals from power window r mits front power window motor (driver	
Sliding	g Door Power Window Switch	INFOID:000000012409743
Control	s power window motor of sliding door.	
Sliding	g Door Power Window Motor	INFOID:000000012409744
Operate	es with signals from power window ma	ain switch and sliding door power window switch.

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< SYSTEM DESCRIPTION >

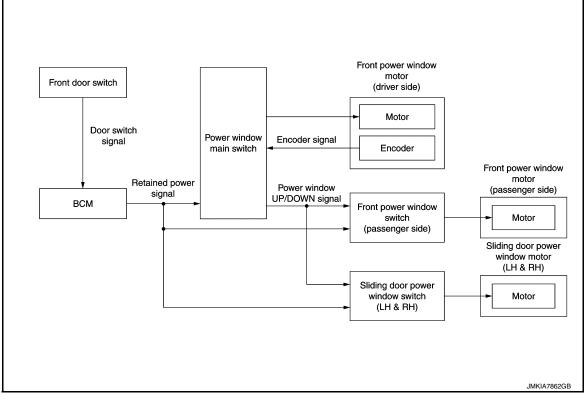
< SYSTEM DESCRIPTION >

SYSTEM

System Description

INFOID:000000012409745

SYSTEM DIAGRAM



DESCRIPTION

- Power window system is activated by power window switch when ignition switch turns ON, or during the retained power operation after ignition switch turns OFF.
- Power window main switch opens/closes all door glass.
- Front and sliding door 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

- · 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.

Retained Power Operation

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

Retained Power Cancel Conditions

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

Power Window Lock Function

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

SYSTEM

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

Anti-Pinch System

- 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.
- Power window main switch controls to lower the window glass for 150 mm (5.9 in) after it detects encoder C 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.

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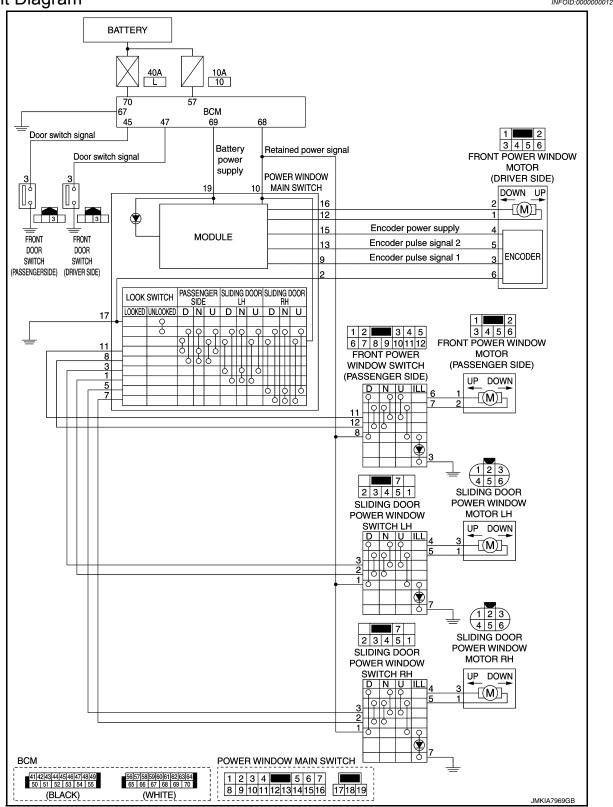
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[DRIVER SIDE WINDOW ANTI-PINCH]

Circuit Diagram





Fail-safe

INFOID:000000012409747

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.

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SYSTEM

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

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 malfunc- tion	When the pulse signal that is detected during glass open/close operation detects the opposite con- dition 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 opera- tion.

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).

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DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000012409748

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description			
Work Support	Changes the setting for each system function.			
Self Diagnostic Result Displays the diagnosis results judged by BCM.				
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.			
Data Monitor	The BCM input/output signals are displayed.			
Active Test	The signals used to activate each device are forcibly supplied from BCM.			
Ecu Identification	The BCM part number is displayed.			
Configuration	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.			

SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:**

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

Svotom	Sub avatam calentian item	Diagnosis mode			
System	Sub system selection item	Work Support	Data Monitor	Active Test	
Door lock	DOOR LOCK	×	×	×	
Rear window defogger	REAR DEFOGGER		×	×	
Warning chime	BUZZER		×	×	
Interior room lamp control system	INT LAMP	×	×	×	
Exterior lamp	HEAD LAMP	×	×	×	
Wiper and washer	WIPER	×	×	×	
Turn signal and hazard warning lamps	FLASHER	×	×	×	
Air conditioning control system	AIR CONDITONER		×	× *	
Intelligent Key systemEngine start system	INTELLIGENT KEY	×	×	×	
Combination switch	COMB SW		×		
Body control system	BCM	×			
NVIS	IMMU	×	×	×	
Interior room lamp battery saver	BATTERY SAVER	×	×	×	
Back door open	TRUNK		×		
Vehicle security system	THEFT ALM	×	×	×	
RAP system	RETAINED PWR		×		
Signal buffer system	SIGNAL BUFFER		×	×	
TPMS	TPMS AIR PRESSURE MONITOR		×	×	

NOTE:

*: For models with automatic air conditioning control system, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

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

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

[DRIVER SIDE WINDOW ANTI-PINCH]

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the mo	ment a particular DTC is detected
Odo/Trip Meter	eter km Total mileage (Odometer value) of the moment a particular DTC is detected		r value) of the moment a particular DTC is detected
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (LOCK)]
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (OFF)]
	LOCK>ACC		While turning power supply position from OFF (LOCK) to ACC
	ACC>ON		While turning power supply position from ACC to ON
	RUN>ACC		While turning power supply position from RUN to ACC (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from CRANK to RUN
	RUN>URGENT	Power position status of the moment a particular DTC is detected*	While turning power supply position from RUN to ACC (Emergency stop operation)
	ACC>OFF		While turning power supply position from ACC to OFF (OFF)
Vehicle Condition	OFF>LOCK		While turning power supply position from OFF (OFF) to OFF (LOCK)
	OFF>ACC		While turning power supply position from OFF (OFF) to ACC
	ON>CRANK		While turning power supply position from ON to CRANK
	OFF>SLEEP		While turning BCM status from normal mode [Power supply posi- tion is OFF (OFF)] to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode [Power supply position is OFF (LOCK)] to low power consumption mode
	LOCK		Power supply position is OFF (LOCK)
	OFF		Power supply position is OFF (OFF)
	ACC		Power supply position is ACC
	ON		Power supply position is ON
	ENGINE RUN		Power supply position is RUN
	CRANKING		Power supply position is CRANK
IGN Counter	0 - 39	 The number is 0 wher The number increases whenever ignition swit 	t ignition switch is turned ON after DTC is detected a malfunction is detected now. s like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition ch OFF \rightarrow ON. 9 39 until the self-diagnosis results are erased if it is over 39.

- *: Refer to the following for details of the power supply position.
- · OFF (OFF, LOCK): Ignition switch OFF
- · ACC: Ignition switch ACC
- · IGN: Ignition switch ON with engine stopped
- · RUN: Ignition switch ON with engine running
- · CRANK: At engine cranking

Power supply position shifts to "OFF (LOCK)" from "OFF (OFF)", when ignition switch is in the OFF position, shift position is in the P position, and any of the following conditions are met.

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

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

RETAIND PWR

RETAIND PWR : CONSULT Function (BCM - RETAINED PWR) (Driver Side Window

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Anti-pinch)

DIAGNOSIS SYSTEM (BCM)

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DATA MONITOR

NOTE:

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

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

BCM (BODY CONTROL MODULE) ATION > [DRIVER SIDE WINDOW ANTI-PINCH]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

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ECU		Reference	
		BCS-41, "Reference Value"	
ВСМ	-	BCS-63, "Fail-safe"	
BCIVI	-	BCS-63, "DTC Inspection Priority Chart"	D
	-	BCS-64, "DTC Index"	

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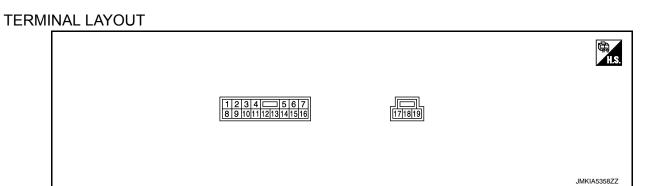
Revision: October 2015

< ECU DIAGNOSIS INFORMATION >

POWER WINDOW MAIN SWITCH

Reference Value

INFOID:000000012409751



PHYSICAL VALUES

	nal No. e color)	Description		Condition	Voltage (V)
+	-	Signal name	Input/ Output	Condition	voltage (v)
1 (Y)	Ground	Sliding door power window motor LH UP signal	Output	When sliding door LH switch in power window main switch is in UP operation.	9 – 16
2 (P)	Ground	Encoder ground	_	_	0 – 1
3 (BR)	Ground	Sliding door power window motor LH DOWN signal	Output	When sliding door LH switch in power window main switch is in DOWN opera- tion.	9 – 16
5 (SB)	Ground	Sliding door power window motor RH DOWN signal	Output	When sliding door RH switch in power window main switch is in DOWN op- eration.	9 – 16
7 (V)	Ground	Sliding door power window motor RH UP signal	Output	When sliding door RH switch in power window main switch is in UP opera- tion.	9 – 16
8 (L)	Ground	Front power window motor (passenger side) UP signal	Output	When front RH switch in power window main switch is in UP operation.	9 – 16
9 (W)	Ground	Encoder pulse signal 2	Input	When front power window motor (driver side) operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
				Ignition switch ON	9 - 16
10				Within 45 seconds after igni- tion switch is turned to OFF.	9 - 16
(GR)	Ground	Retained power signal	Input	When driver side or passen- ger side door is opened dur- ing retained power operation.	0 – 1

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POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[DRIVER SIDE WINDOW ANTI-PINCH]

	nal No. color)	Description		Condition	Voltage (V)	А
+	-	Signal name	Input/ Output	Condition	voltage (v)	
11 (Y)	Ground	Front power window motor (passenger side) DOWN signal	Output	When front RH switch in power window main switch is in DOWN operation.	9 - 16	В
12 (LG)	Ground	Front power window motor (driver side) DOWN signal	Output	When front LH switch in power window main switch is in DOWN operation.	9 – 16	С
13 (GR)	Ground	Encoder pulse signal 1	Input	When front power window motor (driver side) operates.	(V) 6 4 2 0 10 ms JMKIA0070GB	D E
15 (G)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operat- ing.	9 – 16	G
16 (L)	Ground	Front power window motor (driver side) UP signal	Output	When front LH switch in power window main switch is in UP operation.	9 – 16	
17 (B)	Ground	Ground	_	_	0 – 1	Н
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	9 – 16	

Fail-safe

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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 malfunc- tion	When the pulse signal that is detected during glass open/close operation detects the opposite con- dition 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 opera- tion.

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

• Auto-up operation

Anti-pinch function

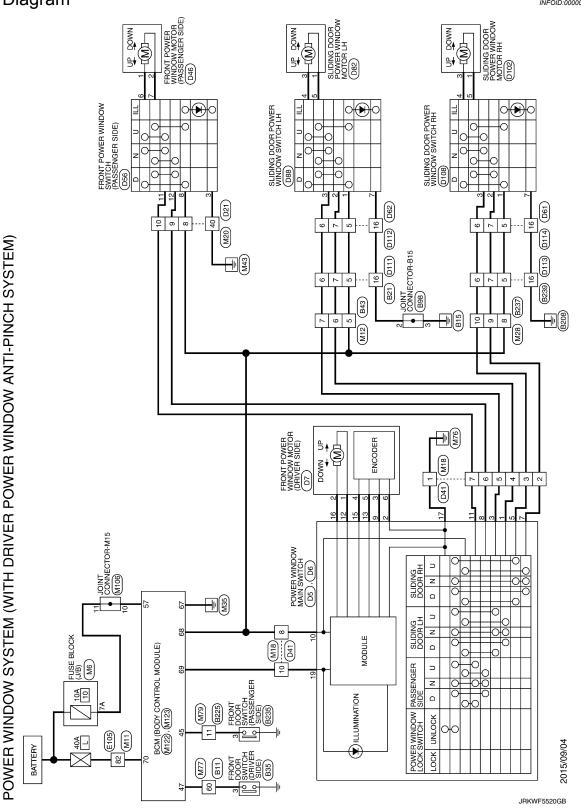
Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window main switch or front power window motor (driver side).

[DRIVER SIDE WINDOW ANTI-PINCH]

WIRING DIAGRAM POWER WINDOW SYSTEM

Wiring Diagram

INFOID:000000012409753



Connector No. 1985 Connector Name JOINT CONNECTOR-B15 Connector Type TK04FW-1	Terrinal Gato OI Signal Name (Specification) No. Wree Signal Name (Specification) No. B - A B - A No. Signal Name (Specification) A No. No. A No. Signal Name (Specification) A No. Signal Name (Specification) A B - A B - A B - B - - B - - B - - B - - B - - B - - B - - B - - B - - B - - B - - B - - B - - B - -	
Connector No. 835 Connector Name FRONT DOOR SWITCH (DRIVER SIDE) Connector Type Innortew-HM	Terminal Galor Of No. Signal Name [Specification] No. Wire No. Signal Name [Specification] Consector Name No. Mile No. Mile No. No. Mile No. Mile No. No. Mile No. Mile No. No. Mile No. Mile No. No. No. Mile No. No. Signal Name [Specification] No. No. No. Signal Name [Specification] No. No. No. Signal Name [Specification]	
POWER WINDOW SYSTEM (WITH DRIVER POWER WINDOW ANTI-PINCH SYSTEM) <u>connector Nume</u> <u>connector Nume</u> <u>internot mane</u> <u>internot mane <u>internot mane</u> <u>internot mane</u> <u>internot mane</u> <u>internot mane</u> <u>internot mane</u> <u>internot mane</u> <u>internot mane <u>internot mane</u> <u>internot mane</u> <u>internot mane</u> <u>internot mane <u>internot mane</u> <u>internot mane</u> <u>internot mane</u> <u>internot mane</u> <u>internot</u></u></u></u>	Contractor Vico R21 Contractor Viame MRE TO WIRE Contractor Viame MRE TO WIRE Contractor Viame MRE TO WIRE Contractor Viame NEI To Winter ISpecification I Bin Nei Number ISPEcification	
POWER WINDOW SYSTEM (WITH DRIVE connector Name connector Name write TO write connector Type mediane	Terminal Cabir Cri Signal Name [Secretication] No. Wire Signal Name [Secretication] 110 G R - 121 G R - 131 L - 132 L - 231 L - 331 SH RD - 333 SH RD - 333 R RD - 334 R RD - 335 L - 33 R RD - 334 R RD - 335 L - 336 L - 337 L - 338 R RD	

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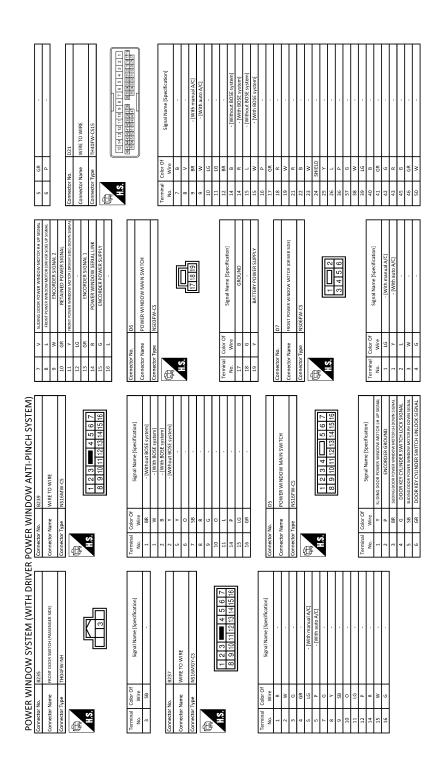
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POWER WINDOW SYSTEM [DRIVER SIDE WINDOW ANTI-PINCH]



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Terminity Color Of Number of Signal Name [Specification] 1 1 1 - (Withhout BOSE system) 2 1 1 1 - (Withhout BOSE system) 2 1 1 1 - (With BOSE system) 2 1 1 1 - (With BOSE system) 2 1 1 1 1 1 2 1 1 1 1 1 1 2 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th></th>	
Terminal no. Control to target Signal Name [specification] no. to target to target to target <	
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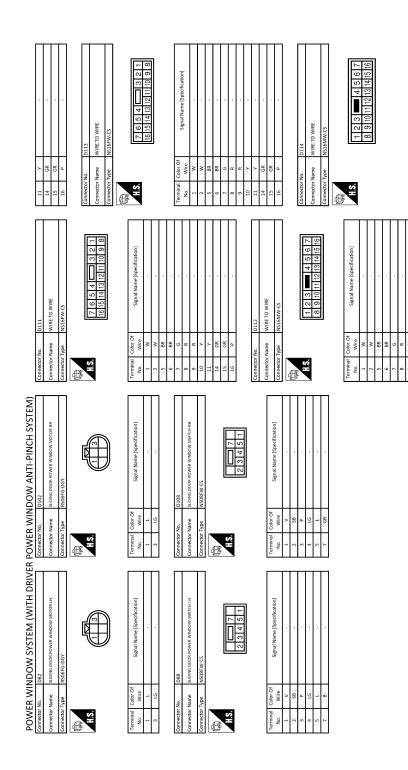
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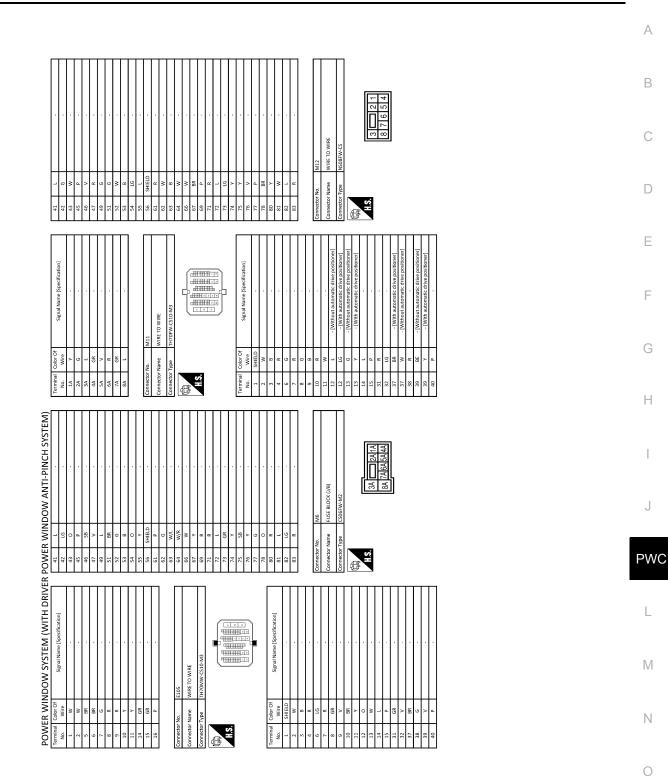
POWER WINDOW SYSTEM

[DRIVER SIDE WINDOW ANTI-PINCH]



JRKWF5524GB

POWER WINDOW SYSTEM [DRIVER SIDE WINDOW ANTI-PINCH]



JRKWF5525GB

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	55 8 -		Connector No. M28	Connector Name WIRE TO WIRE		Connector Type NS16FGY-CS	£		HS. 7654 3211	14 13 12 11 10				le		1 GR -	2 G .	3 BR -	4 SB -	5 R -	7 G .	8 L -	9 R -	10 W .	11 6 -		14 BE -	15 W -	16 Y -			Connector No. M77	Connector Name VIRE TO WIRE	,	Connector Type TH80FW-CS19	C) 		nal C	Wire	+	+	13 W -
	M20	WIRE TO WIRE	TH40MW-CS15				16 17 18 12 2221 22 2224 23 28 33 33 33 44 41 42 43 44 45 48				(signal name [specification]		- [With manual A/C]	- [With auto A/C]	- [With auto A/C]	- [With manual A/C]					 [Without BOSE system] 	- [With BOSE system]																			-						
		Connector Name	Connector Type			HS.					Ferminal Color Of	No. Wire	7 B	8 L	+		9 LG	10 V	11 SB	12 V	14 L	15 B	15 LG	16 G	17 P		19 LG	21 R	2 B	23 W	24 SHIELD	+	26 W	36 LG	-	38 38	+		+	42 BE	43 R		46 GR	50 W	51 B		2	54 W
	Con	Con	Con		F						Ter																																					
(WITH DRIVER POWER WINDOW ANTI-PINCH SYSTEM																						 [With around view monitor] 	 [Without around view monitor] 	 [Without around view monitor] 	 [With around view monitor] 			 [Without automatic drive positioner] 	- [With automatic drive positioner]	 [With automatic drive positioner] 	 [Without automatic drive positioner 	 [Without automatic drive positioner] 	 [With automatic drive positioner] 	 [Without automatic drive positioner] 	- [With automatic drive positioner]													
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R POWE	22	24	25	26	27	28	67	6 F	; ;;	8	34	35	36	37	38	39	40	41	42	43	44	45	45	46	46	47	48	49	49	50	50	51	51	52	52	3	54	55										
POWER WINDOW SYSTEM (WITH DRIVE	Signal Name [Specification]			- [Without automatic drive positioner]	- [With automatic drive positioner]							M18	WIRE TO WIRE		TH40MW-CS15			1 2 3 4 5 6 7 8 9 1011 1213 1415	118	27 22 23 23 33 31 32 53 54 55 51 52 53 54 55				Cinnal Nama [Cnarification]	olitical realized objection and its														 [Without BOSE system] 	- [With BOSE system]	- [With BOSE system]	- [Without BOSE system]						
ER WIN	Terminal Color Of No Wire	4	>	BR	۹.		- ,	- 9	3 6	,						_	e e				IJ			Color Of	Wire	в	R	w	٨	SB	ΓC	>	۲	GR	>	>	6	σ	•	æ	N	~	w	BE	٩	×	гe	٩
POW	Terminal	1	2	m	e.	4 1	n 4	0	. «	'n		Connector No.	Connector Name		Connector Type	ģ	F		2					Terminal	No.	1	2	3	4	5	9	~	••	6	10	11	12	13	14	14	15	15	16	17	18	19	20	21

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< WIRING DIAGRAM >

[DRIVER SIDE WINDOW ANTI-PINCH]

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000012409754

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2. 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. Then identify where to start the diagnosis based on possible causes and symptoms.

>> GO TO 4.

4. IDENTIFY MALFUNCTIONING PARTS WITH "DTC/CIRCUIT DIAGNOSIS"

Perform the diagnosis with "DTC/CIRCUIT 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.

Is the malfunctioning part repaired or replaced?

YES >> Trouble diagnosis is completed.

NO >> GO TO 3.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >	[DRIVER SIDE WINDOW ANTI-PINCH]	
ADDITIONAL SERVICE WHEN REMOVING	BATTERY NEGATIVE TERMI-	Ą
Description	INFOID:000000012409755	В
 When the battery negative terminal is disconnected, the initial power window system. Refer to <u>PWC-95, "Work Procedure"</u>. CAUTION: The following specified operations can not be performed u Auto-up operation Anti-pinch function 		С
Work Procedure	INFOID:000000012409756	
1. SYSTEM INITIALIZATION	E	E
Perform system initialization. Refer to <u>PWC-97, "Description"</u> .		
>> GO TO 2. 2. CHECK ANTI-PINCH FUNCTION	F	F

Check anti-pinch function. Refer to <u>PWC-98. "Description"</u>.

>> END

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ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW MAIN SWITCH [DRIVER SIDE WINDOW ANTI-PINCH]

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW MAIN SWITCH

Description

INFOID:000000012409757

When the power window main switch replaced, the initialization in necessary for normal operation of power window system. Refer to PWC-96, "Description". **CAUTION:**

- The following specified operations can not be performed under the non-initialized condition.
- Auto-up operation
- Anti-pinch function

Work Procedure

INFOID:000000012409758

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to PWC-97, "Description".

>> GO TO 2.

2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to PWC-98, "Description".

>> END

SYSTEM INITIALIZATION

SYSTEM INITIALIZATION

Description

Description INFOID:000000012409759	
If any of the following operations are performed, the initialization is necessary for normal operation of power window system. Refer to <u>PWC-97</u> , "Work Procedure".	В
 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.	С
 Disconnection and connection of power window main switch harness connector. Removal of power window motor (driver side) from regulator assembly. 	D
Operation of regulator assembly as an independent unit.	D
 Removal and installation of glass. Removal and installation of door glass run. 	
CAUTION:	E
The following specified operations can not be performed under the non-initialized condition. Auto-up operation 	
Auto-up operation Auto-up operation Auto-up operation	F
Work Procedure	
1 .STEP 1	G
1. Close the door.	
 Turn ignition switch ON. Operate power window switch to fully open the window. (This operation is unnecessary if the window is 	Н
already fully open)	
4. 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. 5. Check that AUTO-UP function operates normally.	
>> GO TO 2.	J
2. STEP 2	
Check anti-pinch function. Refer to PWC-98, "Description".	PW
>> END	
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CHECK ANTI-PINCH FUNCTION

Description

INFOID:000000012409761

[DRIVER SIDE WINDOW ANTI-PINCH]

If any of the following operations are performed, the initialization is necessary for normal operation of antipinch function. Refer to <u>PWC-98</u>, <u>"Work Procedure"</u>.

- 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

INFOID:000000012409762

1. CHECK ANTI-PINCH FUNCTION

- 1. Close the door.
- 2. Fully open the door window.
- 3. Place a piece of wood near fully closed position.
- 4. Close door glass completely with AUTO-UP.
- 5. 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.

>> END

< DTC/CIRCUIT DIA	-	OWER SUP	PLY AN	ID GROL	-	_	(INDOW ANTI-PINCH]
DTC/CIRCU			SIS		•		
POWER SUPF	PLY AN		ND CIF	RCUIT			
POWER WINDC	W MA	IN SWITCH	I : Diagr	nosis Pro	cedu	re	INFOID:000000012409763
1.CHECK POWER			- 0				
 Turn ignition swit Disconnect powe Check voltage be 	er windov			h harness o	connec	tor and groun	d.
(+)							
Power window	main swite	ch	(-)		Cor	dition	Voltage (V)
Connector	Termi	inal					
D5	10	G	Ground	Ignition swi	itch	ON OFF	9 - 16
Is the inspection result YES >> GO TO 3 NO >> GO TO 2 2.CHECK POWER 3 1. Turn ignition switt 2. Disconnect BCM 3. Check continuity	SUPPLY Ch OFF. connect	CIRCUIT	connecto	r and powe	er wind	ow main switc	h harness connector.
	BCM			Power windo			
Connector		Terminal	Con	nector		Terminal	- Continuity
M123		68 69		D5 D6		10 19	– Existed
4. Check continuity	betweer	n BCM harness	connecto	r and grour	nd.		F
	BCI	M					
Connector		Termina	al		Ground		Continuity
M123	_	68		_	Giouna		Not existed
Is the inspection resu	ilt norma	69					
-	BCM. Re replace CIRCU ch OFF.	efer to <u>BCS-99</u> harness. IT					und.
Pow	ver window	main switch					Continuitu
Connector		Termina	al		Ground		Continuity
D6		17					Existed
Is the inspection result YES >> INSPEC NO >> Repair of FRONT POWER	TION EN	ID harness.	CH (PA	SSENG	BER S	SIDE)	

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

INFOID:000000012409764

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

1.CHECK POWER SUPPLY

- 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.

(+)		
Front power window s	witch (passenger side)	(-) Voltage (V)	Voltage (V)
Connector	Terminal		
D56	8	Ground	9 - 16

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK 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.

В	СМ	Front power window s	witch (passenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	68	D56	8	Existed

4. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	68		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-99</u>, "Removal and Installation".

NO >> Repair or replace harness.

SLIDING DOOR POWER WINDOW SWITCH

SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:000000012409765

1.CHECK POWER SUPPLY

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

	(+)			
Slid	ling door power window sw	witch	(-)	Voltage (V)
Conr	nector	Terminal		
LH	D88	1	Ground	9 – 16
RH	D108		Ground	3 - 10

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

2.CHECK POWER SUPPLY CIRCUIT

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

-	Continuity	switch	g door power window	Slidin	СМ	B
С	Continuity	Terminal	nector	Coni	Terminal	Connector
-	Existed	1	D88	LH	68	M123
D	LAISted		D108	RH	00	101125

4. Check continuity between BCM harness connector and ground.

-	B	CM		Continuity	E
_	Connector Terminal	Ground	Continuity		
_	M123	68		Not existed	
1 - 4	le e la care e effere a consult a care	-10			F

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-99, "Removal and Installation"</u>.

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

INFOID:000000012409766

[DRIVER SIDE WINDOW ANTI-PINCH]

1. CHECK 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-102, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000012409767

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

(+) Front power window switch (passenger side)					
		(-)	Condition		Voltage (V)
Connector	Terminal				
	11	- Ground	Power window main switch (passenger side)	NEUTRAL	0 - 1
DEG				DOWN	9 - 16
D56	12			NEUTRAL	0 - 1
	12			UP	9 – 16

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.
- 2. Disconnect power window main switch connector.
- 3. 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 windo	Power window main switch	
Connector	Terminal	Connector	Terminal	Continuity
D56	11	D5	11	Existed
D00	12		8	LXISLEO

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

Front power window s	witch (passenger side)		Continuity
Connector	Terminal	Ground	Continuity
D56	11	Ground	Not existed
500	12		NOT EXISTED

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to PWC-126, "Removal and Installation".
- NO >> Repair or replace harness.

3.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side). Refer to <u>PWC-103</u>, "Component Inspection".

Is the inspection result normal?

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Replace front power window switch (passenger side). Refer to PWC-126, "Removal and Installa-А tion".

Component Inspection

INFOID:0000000012409768

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

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

Continuity	Condition	itch (passenger side)	Front power window swit
Continuity	Condition	nal	Termin
	UP	7	8
		6	11
Existed	NEUTRAL	6	11
Existed	- NEUTRAL	7	12
	DOWN	6	8
	DOWN	7	12

Is the inspection result normal?

- YES >> INSPECTION END
- >> Replace front power window switch (passenger side). Refer to PWC-126, "Removal and Installa-NO tion".

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Revision: October 2015

[DRIVER SIDE WINDOW ANTI-PINCH]

В

SLIDING DOOR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SLIDING DOOR POWER WINDOW SWITCH

Component Function Check

1. CHECK FUNCTION

Check sliding door power window motor operation with sliding door power window switch.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>PWC-104</u>, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK SLIDING DOOR POWER WINDOW SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect sliding door power window switch connector.
- 3. Turn ignition switch ON.

4. Check voltage between sliding door power window switch harness connector and ground.

(+) Sliding door power window switch		(-) Conditi		ition	Voltage (V)	
Conr	nector	Terminal				
		2		Power window main switch	NEUTRAL	0 - 1
LH	D88	2				UP
LU	Doo	3	(sliding door LH side)	NEUTRAL	0 - 1	
		3	Ground		DOWN	9 – 16
		2	Power window main		NEUTRAL	0 - 1
	D100	2		UP	9 – 16	
RH	D108 switch (sliding door RI	(sliding door RH side)	NEUTRAL	0 - 1		
		3		(9 - 16

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check sliding door power window switch circuit

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector.

3. Check continuity between sliding door power window switch harness connector and power window main switch harness connector.

Slidin	Sliding door power window switch			Power window main switch		
Conr	Connector		Connector	Terminal	Continuity	
LH	D88	2		1		
LII	Doo	3	DE	3	Existed	
RH	LL	2	D5	7	Existed	
КП	D108	3		5		

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

[DRIVER SIDE WINDOW ANTI-PINCH]

INFOID:000000012409769

INFOID:000000012409770

SLIDING DOOR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			
LH D88 Ground RH D108 2 3 3 Sthe inspection result normal? YES >> Replace power window main switch. Refer to PWC-126, "Removal and Installation". NO >> Repair or replace harness.			
RH D108 2 2 3 Not exister 3 3 100 3 3 100			
RH D108 2 3 3 YES >> Replace power window main switch. Refer to <u>PWC-126</u> , " <u>Removal and Installation</u> ". NO >> Repair or replace harness.			
3 3 5 5 5 5 5 6 6 6 7 7 7 8 7 8 7 8 8 7 8 8 7 8 7 8 7 8 8 8 8 8 8 8 9 <td< th=""></td<>			
LH D88 2 RH D108 3 s the inspection result normal? YES >> Replace power window main switch. Refer to PWC-126, "Removal and Installation".			
NO >> Repair or replace harness.			
CHECK SLIDING DOOR POWER WINDOW SWITCH			
•			
.CHECK SLIDING DOOR POWER WINDOW SWITCH			
. Disconnect sliding door power window switch connector.			
Sliding door power window switch			
Condition			
Terminal			
Terminal 1 5			
Terminal Image: Constraint of the second secon			
Terminal UP 1 5 3 4 2 5			
Terminal UP 1 5 3 4 2 5 NEUTRAL Existed			
Terminal UP 1 5 3 4 2 5 3 4 1 4			

< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MOTOR DRIVER SIDE

DRIVER SIDE : Component Function Check

1. CHECK FUNCTION

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

YES >> INSPECTION END

NO >> Refer to <u>PWC-106</u>, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:000000012409773

INFOID:000000012409772

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.

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

Is the inspection result normal?

YES >> Replace front power window motor (driver side). Refer to <u>GW-29, "Removal and Installation"</u>. NO >> GO TO 2.

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

1. Turn ignition switch OFF.

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

Front power window motor (driver side)		Power windo	Power window main switch	
Connector	Terminal	Connector	Terminal	Continuity
D7	1	D5	12	Existed
זט	2	- 05	16	EXISTED

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

Front power windo	w motor (driver side)		Continuity
Connector	Terminal	Ground	Continuity
D7	1	Ground	Not existed
DI	2	-	Not existed

Is the inspection result normal?

YES >> Replace power window main switch. Refer to <u>PWC-126, "Removal and Installation"</u>.

NO >> Repair or replace harness.

PASSENGER SIDE

POWER WINDOW MOTOR [DRIVER SIDE WINDOW ANTI-PINCH] < DTC/CIRCUIT DIAGNOSIS > **PASSENGER SIDE : Component Function Check** INFOID:000000012409774 А **1.** CHECK FUNCTION Check front power window motor (passenger side) operation with power window main switch or front power В window switch (passenger side). Is the inspection result normal? YES >> INSPECTION END >> Refer to PWC-107, "PASSENGER SIDE : Diagnosis Procedure". NO PASSENGER SIDE : Diagnosis Procedure INFOID:000000012409775 D 1.CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE) INPUT SIGNAL 1. Turn ignition switch OFF. Disconnect front power window motor (passenger side) connector. 2. Ε Turn ignition switch ON. 3. Check voltage between front power window motor (passenger side) harness connector and ground. 4. (+) Front power window motor (passenger side) Condition Voltage (V) (-) Connector Terminal NEUTRAL 0 - 1 1 Front power window DOWN 9 - 16 D46 Ground switch Н NEUTRAL 0 - 1(passenger side) 2 UP 9 - 16 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. 1. Disconnect front power window switch (passenger side) connector. 2. PWC Check continuity between front power window motor (passenger side) harness connector and front power 3. window switch (passenger side) harness connector. Front power window motor (passenger side) Front power window switch (passenger side) L Continuity Connector Connector Terminal Terminal 1 6 D56 D46 Existed Μ 2 7 Check continuity between front power window motor (passenger side) harness connector and ground.

Front power window	motor (passenger side)		Continuity	Ν
Connector	Terminal	Ground	Continuity	
D46	1		Not existed	C
D40	2	_	NOL EXISTED	

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to <u>PWC-126, "Removal and Installa-</u> <u>tion"</u>.

NO >> Repair or replace harness.

SLIDING DOOR LH

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING DOOR LH : Component Function Check

1.CHECK FUNCTION

Check sliding door power window motor LH operation with power window main switch or sliding door power window switch LH.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>PWC-108, "SLIDING DOOR LH : Diagnosis Procedure"</u>.

SLIDING DOOR LH : Diagnosis Procedure

INFOID:000000012409777

INFOID:000000012409776

1. CHECK SLIDING DOOR POWER WINDOW MOTOR LH INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (V)
Sliding door power window motor LH					
Connector	Terminal				
D82	1	Ground	Sliding door power window switch LH	NEUTRAL	0 – 1
				UP	9 – 16
	3			NEUTRAL	0 - 1
				DOWN	9 – 16

Is the inspection result normal?

YES >> Replace sliding door power window motor LH.

NO >> GO TO 2.

2. CHECK SLIDING DOOR POWER WINDOW MOTOR LH CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect sliding door power window switch LH connector.
- Check continuity between sliding door power window motor LH harness connector and sliding door power window switch LH harness connector.

Sliding door power window motor LH		Sliding door powe	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
D82	1	D88	5	Existed	
	3	Doo	4		

4. Check continuity between sliding door power window motor LH harness connector and ground.

Sliding door powe	r window motor LH	Ground	Continuity
Connector	Terminal		Continuity
D82	1	1	
	3		Not existed

Is the inspection result normal?

YES >> Replace sliding door power window switch LH. Refer to <u>PWC-127</u>, "<u>Removal and Installation</u>". NO >> Repair or replace harness.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

1. CHECK FUNCTION

INFOID:000000012409778

POWER WINDOW MOTOR

[DRIVER SIDE WINDOW ANTI-PINCH]

< DTC/CIRCUIT DIAGNOSIS >

Check sliding door power window motor RH operation with power window main switch or sliding door power window switch RH.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>PWC-109</u>, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

1. CHECK SLIDING DOOR POWER WINDOW MOTOR RH INPUT SIGNAL

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

(+)						E
power window mo	otor RH	(-)	Condi	tion	Voltage (V)	
or Term	ninal					E
1				NEUTRAL	0 - 1	ſ
D102		Ground Sliding door power window switch RH	Sliding door power	UP	9 - 16	-
	W		window switch RH	NEUTRAL	0 - 1	(
				DOWN	9 - 16	

Is the inspection result normal?

YES >> Replace sliding door power window motor RH.

NO >> GO TO 2.

2. CHECK SLIDING DOOR POWER WINDOW MOTOR RH CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect sliding door power window switch RH connector.
- Check continuity between sliding door power window motor RH harness connector and sliding door power window switch RH harness connector.

Sliding door powe	er window motor RH	Sliding door power window switch RH				Continuity	PWC
Connector	Terminal	Connector	Terminal	Continuity	FVVC		
D102	1	- D108	5	Existed			
D102	3	D106	4	Existed	L		

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

Sliding door power window motor RH			Continuity	M
Connector	Terminal	Ground	Continuity	
D102	1	Ground	Not existed	NI
0102	3		Not existed	IN

Is the inspection result normal?

YES >> Replace sliding door power window switch RH. Refer to <u>PWC-127</u>, "Removal and Installation".

NO >> Repair or replace harness.

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INFOID:000000012409779

< DTC/CIRCUIT DIAGNOSIS >

ENCODER CIRCUIT

Component Function Check

INFOID:000000012409780

INFOID:000000012409781

[DRIVER SIDE WINDOW ANTI-PINCH]

1.CHECK FUNCTION

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

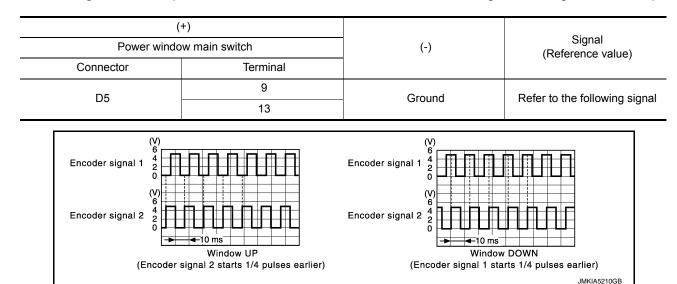
Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Refer to PWC-110, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK ENCODER PULSE SIGNAL

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



Is the inspection result normal?

YES >> Replace power window main switch. Refer to <u>PWC-126, "Removal and Installation"</u>. 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 windo	w main switch	Front power window motor (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D5	9	D7	3	Existed
5	13	Di	5	LXISLEU

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
 D5	9	Ground	Not existed
55	13		Not existed

Is the inspection result normal?

ENCODER CIRCUIT

IDRIVER SIDE WINDOW ANTI-PINCH1

	DSIS >			DE WINDOW ANTI-PIN
ES >> GO TO 3.				
NO >> Repair or repl				
CHECK ENCODER PO				
Connect power windo Turn ignition switch O		inector.		
		dow motor (di	iver side) harness con	nector and ground.
	(+)			
Front nower win	dow motor (driver side)	(-)	Voltage (V)
Connector	Termina		()	voliage (v)
D7	4		Ground	9 – 16
the inspection result no	mal?			
YES >> GO TO 5.	<u></u>			
NO >> GO TO 4.				
.CHECK ENCODER PO	WER SUPPLY CI	RCUIT		
Turn ignition switch O				
Disconnect power wir			n harnoss connector a	nd front power window m
Check continuity betw (driver side) harness (Thamess connector a	
·				
Power window n		-	ver window motor (driver sid	Continuity
Connector	Terminal	Connec		
D5	15	D7	4	Existed
Check continuity betw	een power window	v main switch	harness connector an	d ground.
	dann an aire ann itale			
Power wir	dow main switch			
Power wir Connector	Termin	al	Ground	Continuity
		al	Ground	Continuity Not existed
Connector D5	Termina 15	al	Ground	
Connector D5 the inspection result no YES >> Replace powe	Termina 15 mal? er window main sw		Ground PWC-126, "Removal a	Not existed
Connector D5 the inspection result no (ES >> Replace powe NO >> Repair or repl	Termina 15 <u>mal?</u> er window main sw ace harness.	itch. Refer to		Not existed
Connector D5 the inspection result no YES >> Replace powe NO >> Repair or repl CHECK ENCODER GR	Termina 15 mal? er window main sw ace harness. ROUND CIRCUIT	itch. Refer to		Not existed
Connector D5 the inspection result no YES >> Replace powe NO >> Repair or repl CHECK ENCODER GF Turn ignition switch O	Termina 15 27 27 27 27 27 27 27 27 27 27 27 27 27	ritch. Refer to		Not existed
Connector D5 the inspection result no (ES >> Replace powe NO >> Repair or repl .CHECK ENCODER GF Turn ignition switch O Disconnect power wir	Termina 15 rmal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch o	ritch. Refer to 1 connector.	PWC-126, "Removal a	Not existed
Connector D5 the inspection result no (ES >> Replace powe NO >> Repair or repl .CHECK ENCODER GF Turn ignition switch O Disconnect power wir	Termina 15 rmal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch o veen power window	ritch. Refer to 1 connector.	PWC-126, "Removal a	Not existed
Connector D5 the inspection result no YES >> Replace powe NO >> Repair or repl CHECK ENCODER GF Turn ignition switch O Disconnect power wir Check continuity betw (driver side) harness of	Termina 15 mal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch o veen power window connector.	vitch. Refer to 1 connector. w main switc	<u>PWC-126, "Removal a</u> n harness connector a	Not existed and Installation". Ind front power window m
Connector D5 the inspection result no YES >> Replace powe NO >> Repair or repl CHECK ENCODER GF Turn ignition switch O Disconnect power wir Check continuity betw (driver side) harness of Power window n	Termina 15 rmal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch of connector.	vitch. Refer to 1 connector. w main switch	PWC-126. "Removal a	Not existed and Installation". Ind front power window m
Connector D5 the inspection result no (ES >> Replace power NO >> Repair or repl .CHECK ENCODER GF Turn ignition switch O Disconnect power wir Check continuity betw (driver side) harness of	Termina 15 mal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch o veen power window connector.	vitch. Refer to 1 connector. w main switc	PWC-126. "Removal a	Not existed
Connector D5 the inspection result no (FS) >> Replace power NO >> Repair or replace OO Disconnect power window no Check continuity between on the connector Power window no D5 D5	Termina 15 rmal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch of veen power window connector.	vitch. Refer to 1 connector. w main switch Front pow Connector	PWC-126, "Removal and the second seco	Not existed and Installation". Ind front power window m e) Continuity Existed
Connector D5 the inspection result no (ES >> Replace power YO >> Repair or repleted CHECK ENCODER GF Turn ignition switch O Disconnect power wire Check continuity betw (driver side) harness of Power window m Connector D5	Termina 15 rmal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch of veen power window connector.	vitch. Refer to 1 connector. w main switch Front pow Connector	PWC-126, "Removal and harness connector a ver window motor (driver sid	Not existed and Installation". Ind front power window m e) Continuity Existed
Connector D5 the inspection result no (ES >> Replace power NO >> Repair or replace .CHECK ENCODER GF Turn ignition switch O Disconnect power wire Check continuity betwy (driver side) harness of Power window n Connector D5 Check continuity betwy	Termina 15 rmal? er window main sw ace harness. ROUND CIRCUIT FF. dow main switch of veen power window connector.	vitch. Refer to 1 connector. w main switch Front pow Connector	PWC-126, "Removal and the second seco	Not existed and Installation". Ind front power window m e) Continuity Existed Id ground.
Connector D5 the inspection result no (ES >> Replace power NO >> Repair or replace .CHECK ENCODER GF Turn ignition switch O Disconnect power wire Check continuity betwy (driver side) harness of Power window n Connector D5 Check continuity betwy	Termina 15 Termal? er window main swi ace harness. ROUND CIRCUIT FF. dow main switch of veen power window connector. main switch Terminal 2 reen power window	vitch. Refer to 1 connector. w main switc Front pow Connec D7 v main switch	PWC-126, "Removal and the second seco	Not existed and Installation". Ind front power window m e) Continuity Existed

1. Connect power window main switch connector.

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Power window main switch			Continuity	
Connector	Terminal	Ground	Continuity	
D5	2		Existed	

Is the inspection result normal?

>> Replace front power window motor (driver side). Refer to <u>GW-29, "Removal and Installation"</u>. >> Replace power window main switch. Refer to <u>PWC-126, "Removal and Installation"</u>. YES

NO

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH < SYMPTOM DIAGNOSIS > [DRIVER SIDE WINDOW ANTI-PINCH]	
SYMPTOM DIAGNOSIS	٨
NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH	AB
Diagnosis Procedure	D
1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT	С
Check BCM power supply and ground circuit. Refer to <u>BCS-92, "Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2.	D
NO >> Repair or replace the malfunctioning parts. 2.CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY AND GROUND CIRCUIT	Е
Check power window main switch power supply and ground circuit. Refer to <u>PWC-99</u> , " <u>POWER WINDOW MAIN SWITCH</u> : <u>Diagnosis Procedure</u> ". <u>Is the inspection result normal?</u>	F
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CONFIRM THE OPERATION	G
Confirm the operation again.	Н
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	
NO $>>$ GO TO 1.	I

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DRIVER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000012409783

[DRIVER SIDE WINDOW ANTI-PINCH]

1.CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE)

Check front power window motor (driver side). Refer to <u>PWC-106</u>, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch. Refer to <u>PWC-126, "Removal and Installation"</u>.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS > [DRIVER SIDE WINDOW ANTI-PINCH]
FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE	-
WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOV	VA
SWITCH ARE OPERATED	
WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW	В
SWITCH ARE OPERATED : Diagnosis Procedure	84
1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	С
Check front power window switch (passenger side). Refer to <u>PWC-102, "Component Function Check"</u> .	_
Is the inspection result normal?	D
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	E
2. CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE)	
Check front power window motor (passenger side). Refer to PWC-107, "PASSENGER SIDE : Component Function Check".	F
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	G
3.CONFIRM THE OPERATION	
Confirm the operation again.	Н
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	
WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATEI)
WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED :	
Diagnosis Procedure	J
1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY AND GROUND CIF	- PWC
CUIT	
Check front power window switch (passenger side) power supply and ground circuit. Refer to <u>PWC-100, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure"</u> .	L
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	M
2.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	_
Check front power window switch (passenger side).	N
Check front power window switch (passenger side). Refer to <u>PWC-102, "Component Function Check"</u> .	N
Check front power window switch (passenger side). Refer to <u>PWC-102, "Component Function Check"</u> . Is the inspection result normal?	N
Check front power window switch (passenger side). Refer to <u>PWC-102, "Component Function Check"</u> . Is the inspection result normal?	N
Check front power window switch (passenger side). Refer to <u>PWC-102, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.	N O
Check front power window switch (passenger side). Refer to <u>PWC-102</u> , " <u>Component Function Check</u> ". <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	N 0 P
Check front power window switch (passenger side). Refer to PWC-102. "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?	0
Check front power window switch (passenger side). Refer to PWC-102. "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-41. "Intermittent Incident".	0
Check front power window switch (passenger side). Refer to PWC-102. "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?	0

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE [DRIVER SIDE WINDOW ANTI-PINCH] < SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012409786

1.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side). Refer to PWC-102, "Component Function Check". Is the inspection result normal?

YES >> GO TO 2.

>> Repair or replace the malfunctioning parts. NO

2.confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO

>> GO TO 1.

SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS > [DRIVER SIDE WINDOW A	NTI-PINCH]
SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE	
WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER	WINDOW
SWITCHES ARE OPERATED	
WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDO	OW
	NFOID:000000012409787
1. CHECK SLIDING DOOR POWER WINDOW SWITCH LH	(
Check sliding door power window switch LH. Refer to <u>PWC-104, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2. CHECK SLIDING DOOR POWER WINDOW MOTOR LH	
Check sliding door power window motor LH.	
Refer to PWC-108, "SLIDING DOOR LH : Component Function Check".	I
<u>Is the inspection result normal?</u> YES >> GO TO 3.	
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 <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	
WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED	1
WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED : D	Diagnosis
Procedure	NFOID:0000000012409788
4	
1. CHECK SLIDING DOOR POWER WINDOW SWITCH LH POWER SUPPLY AND GROUND (CIRCUIT P
Check sliding door power window switch LH power supply and ground circuit. Refer to PWC-100, "SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure".	
Is the inspection result normal?	I
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.CHECK SLIDING DOOR POWER WINDOW SWITCH LH	ľ
Check sliding door power window switch LH. Refer to <u>PWC-104</u> , " <u>Component Function Check</u> ".	
Is the inspection result normal?	I
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
	(
3.CONFIRM THE OPERATION	
3.CONFIRM THE OPERATION Confirm the operation again.	
3.CONFIRM THE OPERATION	
3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?	

SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012409789

1. CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH. Refer to <u>PWC-104</u>, "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 <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

SLIDING DOOR RH POWER WINDOW [
< SYMPTOM DIAGNOSIS >	[DRIVER SIDE WINDOW ANTI-PINCH]
SLIDING DOOR RH POWER WINDOW DOES	
WHEN POWER WINDOW MAIN AND SLIDING	DOOR RH POWER WINDOW
SWITCHES ARE OPERATED	
WHEN POWER WINDOW MAIN AND SLIDING DO	OR RH POWER WINDOW
SWITCHES ARE OPERATED : Diagnosis Procedure	e INFCID:000000012409790
1. CHECK SLIDING DOOR POWER WINDOW SWITCH RH	С
Check sliding door power window switch RH. Refer to PWC-104, "Component Function Check".	_
Is the inspection result normal?	D
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	E
2. CHECK SLIDING DOOR POWER WINDOW MOTOR RH	
Check sliding door power window motor RH. Refer to <u>PWC-108</u> , "SLIDING DOOR RH : Component Function Ch	Peck" F
Is the inspection result normal?	
YES >> GO TO 3.	G
NO >> Repair or replace the malfunctioning parts.	
3.CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the result normal?</u>	Н
YES >> Check intermittent incident. Refer to <u>GI-41</u> , "Intermitter	nt Incident".
NO >> GO TO 1.	
WHEN SLIDING DOOR RH POWER WINDOW S	WITCH IS OPERATED
WHEN SLIDING DOOR RH POWER WINDOW SW	ITCH IS OPERATED : Diagnosis J
Procedure	INFOID:000000012409791
1. CHECK SLIDING DOOR POWER WINDOW SWITCH RH POW	ER SUPPLY AND GROUND CIRCUIT
Check sliding door power window switch RH power supply and gro Refer to PWC-100, "SLIDING DOOR POWER WINDOW SWITCH	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	M
2. CHECK SLIDING DOOR POWER WINDOW SWITCH RH	
Check sliding door power window switch RH. Refer to <u>PWC-104</u> , " <u>Component Function Check</u> ".	
Is the inspection result normal?	Ν
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	0
3.CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the result normal?</u>	P
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermitter</u>	nt Incident".
NO >> GO TO 1.	
WHEN POWER WINDOW MAIN SWITCH IS OPE	RAIED

SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE M DIAGNOSIS > [DRIVER SIDE WINDOW ANTI-PINCH]

< SYMPTOM DIAGNOSIS > [I

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000012409792

1. CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH. Refer to <u>PWC-104</u>, "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 <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMAL-

	LY (DRIVER SIDE)	
< SYMPTOM DIAGNOSIS >	[DRIVER SIDE WINDOW ANTI-PIN	ICH]
AUTO OPERATION DO MALLY (DRIVER SIDE)	ES NOT OPERATE BUT MANUAL OPERATE NO	OR-
Diagnosis Procedure	INFOID:0000000	012409793 B
1. PERFORM INITIALIZATION PF	ROCEDURE	D
Initialization procedure is executed Refer to <u>PWC-97</u> , "Description".	and operation is confirmed.	С
Is the inspection result normal? YES >> INSPECTION END NO >> GO TO 2. 2.CHECK ENCODER CIRCUIT		D
Check encoder circuit. Refer to <u>PWC-110, "Component Fi</u>	unction Check".	E
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the r 3. CONFIRM THE OPERATION	nalfunctioning parts.	F
		G
Confirm the operation again.		
Is the result normal?		
YES >> Check intermittent inci NO >> GO TO 1.	dent. Refer to GI-41, "Intermittent Incident".	Н

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ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE) < SYMPTOM DIAGNOSIS > [DRIVER SIDE WINDOW ANTI-PINCH]

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

Diagnosis Procedure

INFOID:000000012409794

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 <u>PWC-121, "Diagnosis Procedure"</u>.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >	[DRIVER SIDE WINDOW ANTI-PINCH]	
POWER WINDOW RETAINED POWER	OPERATION DOES NOT OPER-	Λ
ATE PROPERLY		A
Diagnosis Procedure	INFOID:000000012409795	R
1.CHECK FRONT DOOR SWITCH		
Check front door switch.		C

	o <u>DLK-247, "Component Function Check"</u> .	С
<u>Is the i</u>	nspection result normal?	
YES	>> GO TO 2.	D
NO	>> Repair or replace the malfunctioning parts.	D
2 .co	NFIRM THE OPERATION	
Confirm	n the operation again.	Ε
<u>Is the r</u>	esult normal?	
YES	>> Check intermittent incident. Refer to GI-41, "Intermittent Incident".	
NO	>> GO TO 1.	F

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POWER WINDOW LOCK SWITCH DOES NOT FUNCTION < SYMPTOM DIAGNOSIS > [DRIVER SIDE WINDOW ANTI-PINCH]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:000000012409796

1.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to PWC-126, "Removal and Installation".

POWER WINDOW SWITCH ILLUMINATION DOES NOT < SYMPTOM DIAGNOSIS > [DRIVER SIDE	ILLUMINATE WINDOW ANTI-PINCH]
POWER WINDOW SWITCH ILLUMINATION DOES NOT DRIVER SIDE	-
DRIVER SIDE : Diagnosis Procedure	INFOID:000000012409797
1.REPLACE POWER WINDOW MAIN SWITCH	
Replace power window main switch. Refer to <u>PWC-126, "Removal and Installation"</u> .	
>> INSPECTION END PASSENGER SIDE	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000012409798
1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	
Replace front power window switch (passenger side). Refer to <u>PWC-126</u> , "Removal and Installation".	
>> INSPECTION END SLIDING DOOR LH	
SLIDING DOOR LH : Diagnosis Procedure	INFOID:000000012409799
1.REPLACE SLIDING DOOR POWER WINDOW SWITCH LH	
Replace sliding door power window switch LH. Refer to <u>PWC-127, "Removal and Installation"</u> .	
>> INSPECTION END SLIDING DOOR RH	
SLIDING DOOR RH : Diagnosis Procedure	INFOID:000000012409800
1. REPLACE SLIDING DOOR POWER WINDOW SWITCH RH	
Replace sliding door power window switch RH. Refer to <u>PWC-127, "Removal and Installation"</u> .	
>> INSPECTION END	

[DRIVER SIDE WINDOW ANTI-PINCH]

REMOVAL AND INSTALLATION POWER WINDOW MAIN SWITCH

Removal and Installation

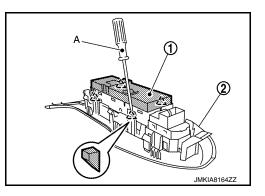
REMOVAL

- 1. Remove the power window main switch finisher. Refer to <u>INT-14, "Removal and Installation"</u>.
- 2. Remove power window main switch (1) from power window main switch finisher (2) using a remover tool (A).

2 : Pawl

NOTE:

The same procedure is also performed for front power window switch (passenger side).



INFOID:000000012409801

INSTALLATION

Note the following, and then 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-97</u>, "<u>Description</u>".

SLIDING DOOR POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

[DRIVER SIDE WINDOW ANTI-PINCH]

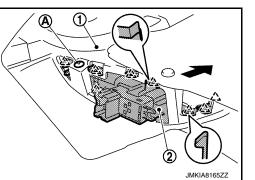
SLIDING DOOR POWER WINDOW SWITCH

Removal and Installation

REMOVAL

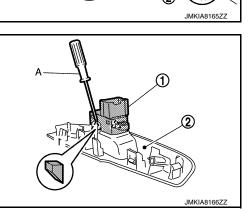
- 1. Remove sliding door finisher. Refer to <u>INT-17</u>, "Removal and <u>Installation"</u>.
- Remove screw (A), disconnect pawls from sliding door finisher (1), and then remove power window switch finisher (2).

2 : Pawl



3. Remove power window switch (1) from power window switch finisher (2) using a remover tool (A).

کے : Pawl



INSTALLATION Install in the reverse order of removal.

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