

# **CONTENTS**

PRECAUTION4	Ν
PRECAUTIONS	F
PREPARATION5	V
PREPARATION	F
SYSTEM DESCRIPTION6	E
COMPONENT PARTS	[
Main Power Window and Door Lock/Unlock Switch	E
SYSTEM         8           System Description         8           Fail-safe         10	(
DIAGNOSIS SYSTEM (BCM)11	
COMMON ITEM11  COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)11	\$
RETAINED PWR	(
ECU DIAGNOSIS INFORMATION14	[
BCM (BODY CONTROL MODULE)14	F
List of ECLI Reference 14	

MAIN POWER WINDOW AND DOOR LOCK/ UNLOCK SWITCH15 Reference Value15
POWER WINDOW AND DOOR LOCK/UN-LOCK SWITCH RH
WIRING DIAGRAM19
POWER WINDOW SYSTEM19 Wiring Diagram19
BASIC INSPECTION26
DIAGNOSIS AND REPAIR WORKFLOW26 Work Flow26
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT
SYSTEM INITIALIZATION         30           Description         30           Work Procedure         30
CHECK ANTI-PINCH FUNCTION         31           Description         31           Work Procedure         31
DTC/CIRCUIT DIAGNOSIS32
POWER SUPPLY AND GROUND CIRCUIT32
BCM

 $\mathsf{D}$ 

Е

F

Н

J

**PWC** 

Ν

0

POWER WINDOW MAIN SWITCH	
POWER WINDOW MAIN SWITCH : Diagnosis Procedure	FRONT POWER WINDOW SWITCH : Descrip 32 tion51
	FRONT POWER WINDOW SWITCH : Compo-
FRONT POWER WINDOW SWITCH (PASSEN-	nent Function Check
GER SIDE)	FRONT POWER WINDOW SWITCH : Diagnosis
FRONT POWER WINDOW SWITCH (PASSEN-	Procedure52
GER SIDE) : Diagnosis Procedure	SYMPTOM DIAGNOSIS54
REAR POWER WINDOW SWITCH	. 34
REAR POWER WINDOW SWITCH : Diagnosis	POWER WINDOWS DO NOT OPERATE
Procedure	WITH ONER WINDOW MAIN OWN ON HILLING
POWER WINDOW MOTOR	36 Diagnosis Procedure54
DDIVED CIDE	DRIVER SIDE POWER WINDOW ALONE
DRIVER SIDE DRIVER SIDE : Component Function Check	
DRIVER SIDE : Diagnosis Procedure	
-	
PASSENGER SIDEPASSENGER SIDE : Component Function Check	DOW DOES NOT OPERATE 56
•	. 37
PASSENGER SIDE : Diagnosis Procedure	
REAR LH	
REAR LH: Component Function Check	. 38 ERATED : Diagnosis Procedure56
REAR LH : Diagnosis Procedure	. 38 WHEN FRONT POWER WINDOW SWITCH (PAS-
REAR RH	•
REAR RH : Component Function Check	•
REAR RH : Diagnosis Procedure	. 39 (PASSENGER SIDE) IS OPERATED : Diagnosis
ENCODER	Procedure56
ENCODER	WHEN BOTH POWER WINDOW MAIN SWITCH
DRIVER SIDE	· 41 AND FRONT POWER WINDOW SWITCH ARE
DRIVER SIDE : Component Function Check	0. 2.0 (. 2.5
DRIVER SIDE : Diagnosis Procedure	
PASSENGER SIDE	AND FRONT POWER WINDOW SWITCH ARE
PASSENGER SIDE : Component Function Check	OPERATED : Diagnosis Procedure56
	· 43 REAR LH SIDE POWER WINDOW ALONE
PASSENGER SIDE : Diagnosis Procedure	. 43 DOES NOT OPERATE 57
DOOR SWITCH	46 WHEN POWER WINDOW MAIN SWITCH IS OP-
Component Function Check	· 46 ERATED57
Diagnosis Procedure	· 46 WHEN POWER WINDOW MAIN SWITCH IS OP-
Component Inspection	. 47 ERATED : Diagnosis Procedure57
DOOR KEY CYLINDER SWITCH	· 48 WHEN REAR POWER WINDOW SWITCH LH IS
Component Function Check	
Diagnosis Procedure	. 48 WHEN REAR POWER WINDOW SWITCH LH IS
Component Inspection	. 49 OPERATED : Diagnosis Procedure57
POWER WINDOW SERIAL LINK	50 WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE
POWER WINDOW MAIN SWITCH	. <sup>50</sup> OPERATED 57
POWER WINDOW MAIN SWITCH: Description	. 50 WHEN BOTH POWER WINDOW MAIN SWITCH
POWER WINDOW MAIN SWITCH : Component	AND REAR POWER WINDOW SWITCH I HARE
Function Check POWER WINDOW MAIN SWITCH : Diagnosis	. 50 OPERATED : Diagnosis Procedure57
Procedure	. 50 REAR RH SIDE POWER WINDOW ALONE
	DOES NOT OPERATE 58

WHEN POWER WINDOW MAIN SWITCH IS OP- ERATED	KEYLES NOT OF Diagno
WHEN REAR POWER WINDOW SWITCH RH IS OPERATED	NOT FU Diagno
WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH RH ARE OPERATED	DRIVER DRIVE PASSEN PASSEN
AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY59	REAR L
DRIVER SIDE	REAR R REAR
PASSENGER SIDE	PERIO
ANTI-PINCH FUNCTION DOES NOT OPER-ATE60 Diagnosis Procedure60	Basic I
POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMAL- LY61	MAIN P UNLOC Remov
Diagnosis Procedure	POWER LOCK S Remov
Diagnosis Procedure62	REAR F

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE Diagnosis Procedure	. <b>.63</b>
POWER WINDOW LOCK SWITCH DOES	
NOT FUNCTION	
POWER WINDOW SWITCH DOES NOT IL- LUMINATE	65
DRIVER SIDE DRIVER SIDE : Diagnosis Procedure	
PASSENGER SIDE : Diagnosis Procedure	
REAR LHREAR LH : Diagnosis Procedure	
REAR RHREAR RH : Diagnosis Procedure	
PERIODIC MAINTENANCE	.66
PRE-INSPECTION FOR DIAGNOSTICBasic Inspection	
REMOVAL AND INSTALLATION	.67
MAIN POWER WINDOW AND DOOR LOCK/	
Removal and Installation	
POWER WINDOW AND DOOR LOCK/UN-LOCK SWITCH RH	. 68
Removal and Installation	
REAR POWER WINDOW SWITCH	

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#### **PRECAUTIONS**

#### < 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. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

#### **WARNING:**

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

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

#### **WARNING:**

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

Precaution for Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.
- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

#### **PREPARATION**

## < PREPARATION >

# **PREPARATION**

# **PREPARATION**

# Special Service Tool

INFOID:0000000012183515

The actual shape	of the tools may	differ from those	illustrated here.

Tool number (TechMate No.) Tool name		Description
— (J-46534) Trim Tool Set	AWJIA0483ZZ	Removing trim components

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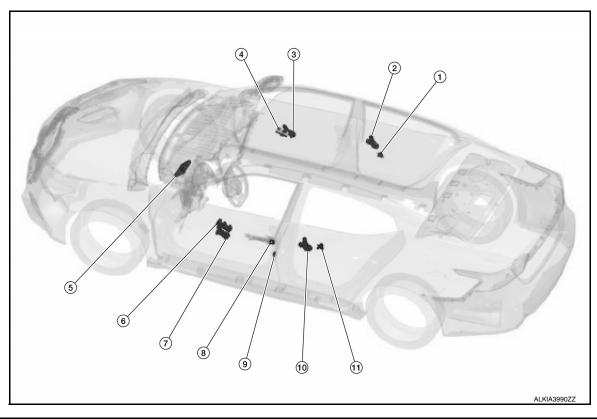
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# SYSTEM DESCRIPTION

# **COMPONENT PARTS**

# Component Parts Location

INFOID:0000000012183439



No.	Part	Function		
1.	Rear power window switch RH Refer to PWC-7, "Rear Power Window Switch".			
2.	Rear power window motor RH	Refer to PWC-7, "Power Window Motor".		
3.	Front power window motor RH	Refer to PWC-7, "Power Window Motor".		
4.	Power window and door lock/unlock switch RH	Refer to PWC-7, "Power Window and Door Lock/Unlock Switch RH".		
5.	ВСМ	Supplies power to the window switches.     Controls retained power.     Refer to BCS-5, "BODY CONTROL SYSTEM: Component Parts Location" for detailed installation location.		
6.	Main power window and door lock/unlock switch	Refer to PWC-7, "Main Power Window and Door Lock/Unlock Switch".		
7.	Front power window motor LH	Refer to PWC-7, "Power Window Motor".		
8.	Front door lock assembly LH (key cylinder switch)	Transmits operation condition of door key cylinder switch to main power window and door lock/unlock switch.		
9.	Front door switch LH	<ul> <li>Detects door open/close condition and transmits to BCM.</li> <li>Refer to <u>DLK-17</u>, "Front <u>Door Switch"</u>.</li> </ul>		
10.	Rear power window motor LH	Refer to PWC-7, "Power Window Motor".		
11.	Rear power window switch LH	Refer to PWC-7, "Rear Power Window Switch".		

#### **COMPONENT PARTS**

#### < SYSTEM DESCRIPTION >

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

- Main power window and door lock/unlock switch controls all power windows.
- Main power window and door lock/unlock switch integrates UP/ DOWN switch, power window lock switch, and door lock/unlock switch.
- Main power window and door lock/unlock switch controls power window lock function and AUTO UP/DOWN function.
- Receives encoder pulse signal and then controls anti-pinch system.

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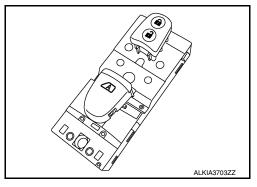
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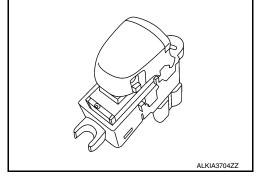
#### Power Window and Door Lock/Unlock Switch RH

- Power window and door lock/unlock switch RH transmits AUTO UP/DOWN signal to front power window motor RH.
- Receives AUTO UP/DOWN signal from BCM and then transmits to front power window motor RH.
- Receives encoder pulse signal and then controls anti-pinch system



#### Rear Power Window Switch

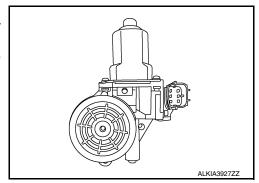
- Each power window switch transmits UP/DOWN signal to each motor.
- Each power window switch transmits UP/DOWN signal from main power window and door lock/unlock switch to each motor.



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#### **Power Window Motor**

- Integrates the encoder for front power windows.
- Starts operation according to signals from each power window switch.
- Transmits each power window motor rotation as a pulse signal to each power window switch.



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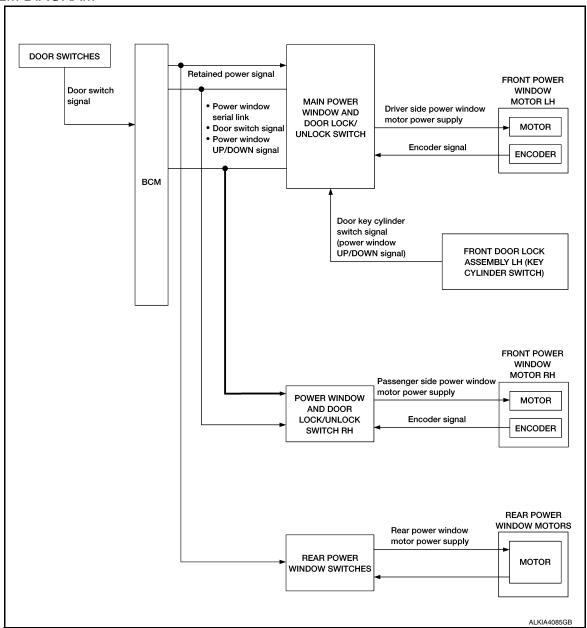
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#### **SYSTEM**

# System Description

#### INFOID:0000000012183444

#### SYSTEM DIAGRAM



#### POWER WINDOW OPERATION

- Power window system is activated by the power window switches when the ignition switch is in the ON position or during the retained power operation after ignition switch turns OFF.
- Main power window and door lock/unlock switch can open/close door glass.
- Front and rear power window switches can open/close the corresponding door glass.
- · Power window lock switch can lock all power windows other than driver front.
- Front power windows open when pressing Intelligent Key unlock button for 3 seconds.
- If door glass receives resistance that is more than the specified value and the power window is in the AUTO-UP operation, power window will move in the reverse direction (anti-pinch function).

#### POWER WINDOW AUTO-OPERATION

- AUTO-UP/DOWN operation can be performed when each power window motor turns to AUTO.
- Encoder continues detecting the movement of power window motor and outputs the encoder pulse signal to power window switch while power window motor is operating.

#### SYSTEM

#### < SYSTEM DESCRIPTION >

- Power window switch reads the changes of encoder signal and stops AUTO operation when door glass is at fully open/closed position.
- · Power window motor is operable in case encoder is malfunctioning.
- AUTO function does not operate if encoder is malfunctioning.

#### POWER WINDOW SERIAL LINK

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and BCM transmit and receive the signal by power window serial link.

The signals mentioned below are transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH.

- Keyless power window down signal.
- Door switch signal.

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

- Front passenger side door window operation signal.
- Retained power operation signal.

#### RETAINED POWER OPERATION

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

#### **Retained Power Function Cancel Conditions:**

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

#### POWER WINDOW LOCK FUNCTION

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

#### ANTI-PINCH OPERATION

- 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) or 2 seconds when detected.
- Encoder continues detecting the movement of power window motor and transmits to the power window switch as the encoder pulse signal while power window motor is operating.
- Resistance is applied to the power window motor rotation that changes the frequency of encoder pulse signal if foreign material is trapped in the door glass.
- Power window switch lowers the door glass for 150 mm (5.9 in) or 2 seconds after it detects encoder pulse signal frequency change.

#### Operation Condition

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

#### NOTE:

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

#### DOOR KEY CYLINDER SWITCH OPERATION

Hold the door key cylinder to the LOCK or UNLOCK direction for 1 second or more to OPEN or CLOSE front power windows when ignition switch is OFF. In addition, it stops when key position is moved to the neutral position when operating.

#### Operation Condition

- · Ignition switch is OFF.
- Hold door key cylinder to LOCK position for 1 second or more to perform CLOSE operation of the door
- Hold door key cylinder to UNLOCK position for 1 second or more to perform OPEN operation of the door glass.

#### KEYLESS POWER WINDOW DOWN FUNCTION

Front power windows open when the unlock button on Intelligent Key is activated and pressed for more than 3 seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed. The power window opening stops when the following operations are performed:

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#### **SYSTEM**

#### < SYSTEM DESCRIPTION >

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

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

Fail-safe

#### FAIL-SAFE CONTROL

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

Malfunction	Malfunction condition		
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.		
Both pulse sensors mal- function	When both pulse signals have not been detected for more than the specified value during glass open/close operation.		
Pulse direction malfunction	When the pulse signal that is detected during glass open/close operation detects the opposite condition of power window motor operating direction.		
Glass recognition position malfunction 1	When it detects the error between glass fully closed position in power window switch memory and actual fully closed position during glass open/close operation is more than the specified value.		
Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.		
Malfunction of not yet up- dated closed position of glass	When glass open/close operation is continuously performed without fully closing for more than the specified value (approximately 10 strokes).		

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

- Auto-up operation
- Anti-pinch function
- Retained power 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 switch or in motor.

## **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (BCM)

**COMMON ITEM** 

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

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#### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
ECU Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

#### SYSTEM APPLICATION

BCM can perform the following functions:

				Direct D	Diagnosti	c Mode		
System	Sub System	ECU Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×	×		
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	ВСМ	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Trunk	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×	×			
TPMS	AIR PRESSURE MONITOR		×	×	×			

FREEZE FRAME DATA (FFD)

Revision: October 2015 PWC-11 2016 Maxima NAM

## **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

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

CONSULT screen item	Indication/Unit	Description					
Vehicle Speed	km/h	Vehicle speed at the moment a particular DTC is detected					
Odo/Trip Meter	km	Total mileage (Odometer value) at 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 "LOCK"*).				
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)				
	LOCK>ACC		While turning power supply position from "LOCK"*to "ACC"				
	ACC>ON		While turning power supply position from "ACC" to "IGN"				
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopped and selector lever is in P position.)				
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)				
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)				
	ACC>OFF		While turning power supply position from "ACC" to "OFF"				
	OFF>LOCK	Power position status at	While turning power supply position from "OFF" to "LOCK"*				
Vehicle Condition	OFF>ACC	the moment a particular DTC is detected*	While turning power supply position from "OFF" to "ACC"				
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"				
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode				
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode				
	LOCK		Power supply position is "LOCK" (Ignition switch OFF)*				
	OFF		Power supply position is "OFF" (Ignition switch OFF)				
	ACC		Power supply position is "ACC" (Ignition switch ACC)				
	ON		Power supply position is "IGN" (Ignition switch ON wit stopped)				
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)				
	CRANKING		Power supply position is "CRANKING" (At engine cranking)				
IGN Counter	0 - 39	<ul> <li>The number of times that ignition switch is turned ON after DTC is detected</li> <li>The number is 0 when a malfunction is detected now.</li> <li>The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition is switched OFF → ON.</li> <li>The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul>					

#### NOTE

- \*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met:
- Closing door
- · Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

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

#### RETAINED PWR

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

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DATA MONITOR

# **DIAGNOSIS SYSTEM (BCM)**

# < SYSTEM DESCRIPTION >

Monitor Item [Unit]	Description
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH

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# **BCM (BODY CONTROL MODULE)**

< ECU DIAGNOSIS INFORMATION >

# **ECU DIAGNOSIS INFORMATION**

# BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000012183448

ECU	Reference
	BCS-31, "Reference Value"
BCM	BCS-51, "Fail Safe"
BOM	BCS-52, "DTC Inspection Priority Chart"
	BCS-53, "DTC Index"

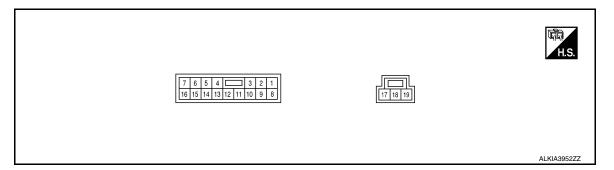
#### MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

< ECU DIAGNOSIS INFORMATION >

## MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

Reference Value

#### **TERMINAL LAYOUT**



#### PHYSICAL VALUES

	nal No. e color)	Description		Condition	Voltage
+	-	Signal name	Input/ Output	Condition	(Approx.)
1 (B)	Ground	Ground	Output	_	0
3 (P)	Ground	Door lock actuator signal	Output	_	_
4 (R)	12 (B)	Encoder pulse signal 2	Input	When power window motor operates	(V) 6 4 2 0 10 ms JMKIA0070GB
5 (BG)	12 (B)	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms
6 (SB)	Ground	Rear power window motor RH DOWN signal.	Output	When rear power window switch RH is operated DOWN	Battery voltage
7 (V)	Ground	Rear power window motor RH UP signal.	Output	When rear power window switch RH is operated UP	Battery voltage
8 (L)	Ground	Rear power window motor LH DOWN signal.	Output	When rear power window switch LH is operated DOWN	Battery voltage
9 (Y)	Ground	Rear power window motor LH UP signal.	Output	When rear power window switch LH is operated UP	Battery voltage
10	Ground	Ignition switch power supply	Input	Ignition switch ON	Battery voltage
(BR)			•	Other than above	0

Revision: October 2015 PWC-15 2016 Maxima NAM

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# MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

# < ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description		Condition	Voltage
+	-	Signal name	Input/ Output	Conducti	(Approx.)
11 (P)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window operating	(V) 15 10 5 0 10 ms  JPMIA0013GB
12 (B)	Ground	Encoder ground	_	_	0
14 (LG)	Ground	Encoder power supply	Output	When ignition is ON or power window timer operates	Battery voltage
15 (G)	Ground	Door lock actuator signal	Output	_	Battery voltage
17 (W)	19 (R)	Main power window and door lock/unlock switch UP signal	Output	When main power window and door lock/unlock switch is operated UP	Battery voltage
18 (LG)	Ground	Battery power supply	Input	_	Battery voltage
19 (R)	17 (W)	Main power window and door lock/unlock switch UP signal	Output	When main power window and door lock/unlock switch is operated DOWN	Battery voltage

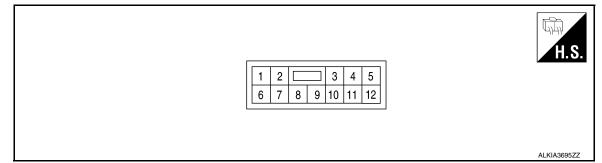
## POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

< ECU DIAGNOSIS INFORMATION >

# POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

Reference Value

#### **TERMINAL LAYOUT**



#### PHYSICAL VALUES

	nal No. color)	Description		Condition	Voltage
+	-	Signal name	Input/ Output	Condition	(Approx.)
3 (P)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window operating	(V) 15 10 5 0 JPMIA0013GB
4 (BG)	Ground	Encoder ground	_	_	_
5 (W)	Ground	Encoder power supply	Output	When ignition switch is ON or power window timer operates	Battery voltage
7 (B)	Ground	Ground	_	_	_
8 (LG)	Ground	Battery power supply	Input	_	Battery voltage
9 (LG)	4 (BG)	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms
10 (G)	4 (BG)	Encoder pulse signal 2	Input	When power window motor operates	(V) 6 4 2 0 10 ms

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## POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

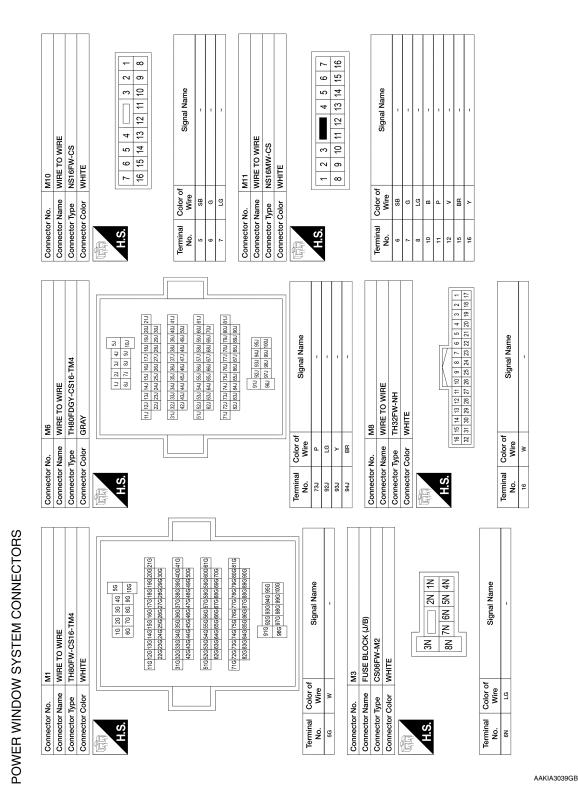
#### < ECU DIAGNOSIS INFORMATION >

		Description		Condition	Voltage
+	-	Signal name	Input/ Output	Condition	(Approx.)
11 (Y)	11 12	Assistant window switch UP signal	Output	When power window and door lock/unlock switch RH is operated UP	Battery voltage
		Assistant window switch DOWN signal	Output	When power window and door lock/unlock switch RH is operated DOWN	Battery voltage

#### < WIRING DIAGRAM > WIRING DIAGRAM Α POWER WINDOW SYSTEM Wiring Diagram INFOID:0000000012183451 В REAR POWER WINDOW MOTOR LH (D204) REAR POWER WINDOW MOTOR RH (D304) FRONT POWER WINDOW MOTOR RH С Nwod A ENCODER REAR POWER WINDOW SWITCH LH (D203) D REAR POWER WINDOW SWITCH RH Е POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (D105) - II (%) ထ ၈ F CPU 94J 93J 92J 9 1 M6) Н FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) (D10) FRONT POWER WINDOW MOTOR LH (D9) J du ★ ↓wwod ENCODER MH T PWC 유 [5] **-**□ (29) L M11 12 12 14 REAR RH M CPU FUSE BLOCK (J/B) M3 BCM (BODY CONTROL MODULE) (M17). (M19). (M20) POWER WINDOW SYSTEM REAR LH Ν MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7 . D8 10A FRONT DOOR SWITCH RH (B108) POWER WINDOW 0 Lock E30 (\overline{\overline{\pi}} BATTERY SWITCH LH

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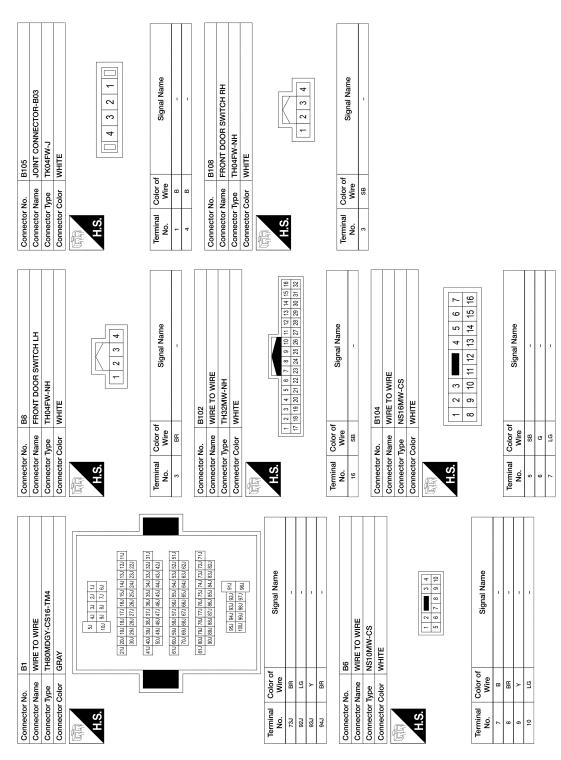


Revision: October 2015 PWC-20 2016 Maxima NAM

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			7 -																							
						G 12G 11G G 22G	G 32G 31G 3 42G	3526516	3626	3726716	6826															
	777	M4		6 36 26 16	100 96 86 76 66	20G 19G 18G 17G 18G 15G 14G 13G 12G 30G 29G 28G 27G 28G 25G 24G 23G 22G	G 36G 35G 34G 33C G 46G 45G 44G 43C	G 56G 55G 54G 53C	G66G65G64G63C	376G75G74G730	3866856846830	95G 94G 93G 92G 91G 100G 99G 98G 97G 96G		Signal Name												
WIRE TO WIRE	20 WWW	MUITE	<u> </u>	56	106	21G20G19G18G17G16G15G14G13G12G11G 30G29G28G27G28G25G24G23G22G	41G 40G 39G 38G 37G 38G 35G 34G 33G 32G 31G 50G 49G 48G 44G 44G 43G 42G	31G60G59G58G57	70G 69G 68G 67G 66G 65G 64G 63G 62G	816 806 796 786 776 766 756 746 736 726 716	90G 89G 88G 87	956 9														
Connector Name   WI														Wire P												
		Connector Type		NATA .	Ŋ. V.									Terminal No.												
_					18	<b>3</b>								80 59 59 57 56 55 54 53 72 71 70 72 72 73 72 71 73 72 71 77 70 69 69 67 66 65 67 66 65 64 63 62 61												
MODILE F					92 91 90 89 88 87 86 85 84 83 82 81	86 97 96 95	Signal Name	AS DOOR SW	DR DOOR SW		BCM (BODY CONTROL MODULE) TH40FB-NH			0 49 48 47 46 0 69 68 67 66		Signal Name										
BCM (BODY CONTROL MODULE)	- N	LN-L			90 88 87	102 101 100 88	Sign	ASI	DRIC		ODY CONTR			54 53 52 51 57 77 77 77 77 77 77 77 77 77 77 77 77		Sign										
_	+	I DEAFGY-NH			92 91	104 103	Color of Wire	A	<u> </u>					59 58 57 56 55 79 78 77 76 75		Color of Wire										
Connector Name	The state of the s	Connector type			Ŋ.		Terminal Col	H	96	Connector No.	Connector Name	Connector Color		्र हु		Terminal Col No. M										
S	3 8	3 8	3 2	<b>F</b>			[ <u>F</u>			8	8 8	8			_ [ 	<u> </u>		T	T							
						_					OULE)			134 135 136 137	-				Y BAT	Y IGN	_					
					1 2  3 4		Signal Name	1	1 1		NTROL MOE	-SA		11-1-2		Signal Name	GND2	BAT BCM FUSE	P/W POWER SUPPLY BAT	P/W POWER SUPPLY IGN	BAT-POWER F/L					
WIRE TO WIRE	20 00 00	NSTUMW-CS	4		1 2						M17 BCM (BODY CONTROL MODULE)	FEA09FW-FHA6-SA WHITE	1	130					P/W	M/A						
	Ţ						Color of Wire	GR	٥ >		e e			129 13		Color of Wire	В	97 a	>	97	*					
Connector Name	Factorial	Connector lype	Collinector		S.		Terminal No.		2 8		Connector No.	Connector Type	F	H.S.		Terminal No.	-	135	140	141	142					
								- 1						<b>,</b>					1				AAŀ	KIA3040G	ЭВ	

**PWC-21** Revision: October 2015 2016 Maxima NAM



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MIRETOWIRE		Connector Name Connector Type	.	MAIN POWER WINDOW AND DOOR LOCK/ UNLOCK SWITCH	Connector Name		FRONT POWER WINDOW MOTOR LH
NSTOMW-CS WHITE of e		Connector 1		LOCK SWITCH	Connector Type		
white of the control		Connector 1					TB06F2-1V-LC
9 9		Connector (		NS16FW-CS	Connector Color	or WHITE	Щ
1   2   1   2   1   2   1   2   1   2   2				WHITE			
Color of Wire B B B C G G G G G G G G G G G G G G G G	П	F					
Color of Wire B B B B G G G G G G G G G G G G G G G	₩ c	H.S.		7 6 5 4	Ŋ.		
Color of Wire Wire SB	2			9 10 11 12 13 14			6 5 4 3
Wire 8 8 6 9 6 9 6 9 9 9 9 9 9 9 9 9 9 9 9 9	Signal Name				ᡖ	Color of	Signal Name
		lerminal No.	Color of Wire	Signal Name	No.	Wire	) 
		-	8	GND	- 64		NO NO
Н	1	3	<u>a</u>	D LOCK ACTR DR		BG	OUTPUT1
	1	4	ж	ENCODER SIG2		LG	VCC
		5	BG	ENCODER SIG1	2	В	OUTPUT2
Connector No. D1		9	SB	RR DN	9	В	GND
٥		7	>	RRUP			
$\top$		89	-	RL DN	Connector No.	D10	
Т		6	>	RL UP	Connoctor Namo	$\top$	EDONT DOOR LOCK ASSEMBLY LH
Connector Color WHITE		10	#	IGN	COILLICCTO NAIL	Т	AL DOOR ECON ASSEMBLE ELL
		F	<u>a</u>	сом	Connector Type		E06FGY-RS
14		12	8	ENCODER GND	Connector Color	or GRAY	
		14	2	ENCODER+	E		
7 6 5 4	3 2 1	15	5	D LOCK ACTR DR	MATATA		
16 15 14 13	12 11 10 9 8				H.S.		
		Connector No.					
		Connector Name		MAIN POWER WINDOW AND DOOR LOCK/ UNLOCK SWITCH			1 2 3 4 5 6
Terminal Color of Siç	Signal Name	Connector Type		NS03FW-CS			
	1	Connector Color		WHILE	Terminal	Color of	
	1	The state of the s				Wire	Signal Name
8 BR	1	H			4	8	1
10 B	1	S			2	5	1
11 P	1				9	<u>a</u>	1
	-			17 18 19			
	-						
	1						
		Terminal	Color of				
		No.	Wire	Signal Name			
		17	>	DR UP			
		18	FG	BAT			
		19	œ	DRDN			

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Revision: October 2015 PWC-23 2016 Maxima NAM

Connector No. D203			Connector Color WHITE	H.S. 2 3 4 5 1	Terminal Color of Signal Name No.	·	2 v	3 BR -	4 LG		7 B –		Comparation	+	0	Connector Type RS06FG	Connector Color GREEN			H.S.	4 7 8 9	<b>⊣</b> I		_			3 FG					
D105	POWER WINDOW AND DOOR LOCK/	MECCK SWILCH AN	NS12FW-CS	1 2     3 4 5	Second Name	Signal Name	COM	ENCODER GND	ENCODER+	GND	BAT	ENCODER SIG1	ENCODER SIG2	AS UP	AS DN		D201	WIRE TO WIRE	NS10FW-CS	WHITE			4 3 2 1	10 9 8 7 6 5				Signal Name		1	1	1
Connector No. D.	e	T	1	S.	Terminal Color of	No. Wire	3 P	4 BG	9 M	7 B	8 LG	6 PG	10 G	+	12 V		Connector No. DX	Connector Name W	Connector Type N	Connector Color W		U	į.				-	<u></u>	<u> </u>			> 6
Connector No. D101	ne WIRE TO WIRE	NS10FW-CS	Connector Color WHITE Connector Color WHITE	H.S. 4 3 - 2 1 1 H.S. 4 1 0 0 8 7 6 5 1 H.S.	Terminal Color of Signal Name Te	89		- FG - 8		Connector No				Connector Color WHITE				2	6 5 4 3	8		Terminal Color of Signal Name No.		2 v	3 FG	4 W	5	e BG				

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Connector No.	No.	D303	Connector No.		D306
Connector Name	Name	REAR POWER WINDOW SWITCH RH	Connector Name	_	WIRE TO WIRE
Connector Type	Type	NS08FW-CS	Connector Type		NS10FW-CS
Connector Color	Color	WHITE	Connector Color		WHITE
H.S.		2 3 4 5 7	S.H		10 9 8 7 7 6 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Terminal No.	Color of Wire	Signal Name	Terminal Color of No. Wire	Color of Wire	Signal Name
-	>	-	7	æ	-
2	>	1	8	BB	1
8	H	1	6	>	1
4	PG PG	1	10	>	1
22	_	1			
7	ď	1			

Signal Name	1	1
Color of Wire	٦	5 5
Terminal C No.	-	e

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**PWC-25** Revision: October 2015 2016 Maxima NAM

 Connector No.
 D304

 Connector Name
 REAR POWER WINDOW MOTOR RH

 Connector Type
 RS06FG

 Connector Color
 GREEN

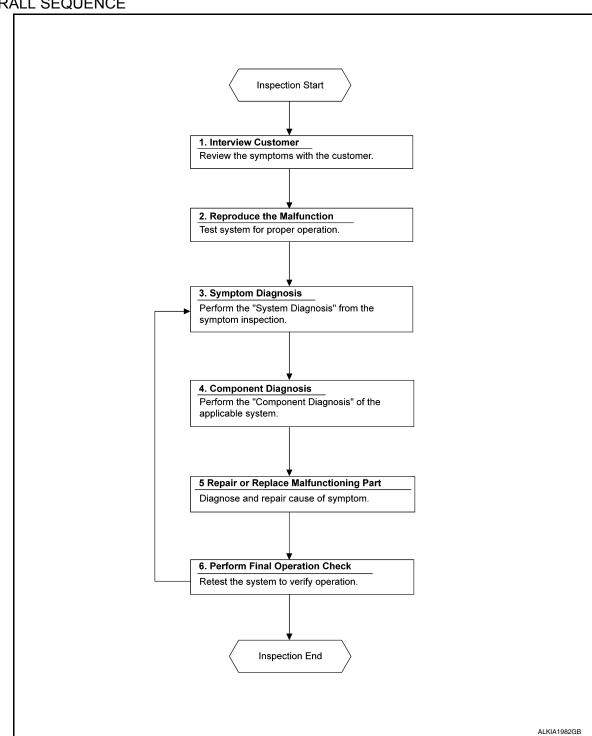
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# **BASIC INSPECTION**

## DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

#### **OVERALL SEQUENCE**



#### **DETAILED FLOW**

# 1. INTERVIEW CUSTOMER

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

## **DIAGNOSIS AND REPAIR WORKFLOW**

#### < BASIC INSPECTION >

>> GO TO 2.	1
2. REPRODUCE THE MALFUNCTION	
Reproduce the malfunction that the customer describes on the vehicle. Inspect the relation of the symptoms and the condition when the symptoms occur.	
>> GO TO 3.	(
3. SYMPTOM DIAGNOSIS	
Use Symptom Diagnosis from the symptom inspection result in step 2 and then identify where to start performing the diagnosis based on possible causes and symptoms.	[
>> GO TO 4.	
4. COMPONENT DIAGNOSIS	
Perform the diagnosis with Component Diagnosis of the applicable system.	
>> GO TO 5.	
5. REPAIR OR REPLACE THE MALFUNCTIONING PART	
Repair or replace the specified malfunctioning parts.	(
>> GO TO 6.	ŀ
6. PERFORM FINAL OPERATIONAL CHECK	
Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 2.  Are the malfunctions corrected?	
YES >> Inspection End. NO >> GO TO 3.	

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#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

# ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description INFOID:0000000012183453

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

#### **CAUTION:**

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

- Auto-up operation
- Anti-pinch function

Work Procedure

# 1.SYSTEM INITIALIZATION

Perform system initialization. Refer to PWC-30, "Work Procedure".

>> GO TO 2.

# 2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to PWC-31, "Work Procedure".

>> Inspection End.

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

# < BASIC INSPECTION > ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT Α Description INFOID:0000000012183455 When the negative battery terminal is disconnected, the initialization is necessary for normal operation of В power window system. **CAUTION:** The following specified operations can not be performed under the non-initialized condition: C Auto-up operation Anti-pinch function Work Procedure INFOID:0000000012183456 D 1. SYSTEM INITIALIZATION Perform system initialization. Refer to PWC-30, "Work Procedure". Е >> GO TO 2. 2.check anti-pinch function F Check anti-pinch function. Refer to PWC-31, "Work Procedure". >> Inspection End. Н **PWC** M Ν 0

**PWC-29** Revision: October 2015 2016 Maxima NAM

#### SYSTEM INITIALIZATION

#### < BASIC INSPECTION >

#### SYSTEM INITIALIZATION

Description INFOID:000000012183457

The initialization is necessary for normal operation of power window system if any of the following operations are performed:

- When control unit is replaced.
- Electric power supply to power window switch or motor is interrupted by blown fuse or disconnection and connection of the negative battery terminal.
- · Removal and installation of regulator assembly.
- Power supply to the main power window and door lock/unlock switch or power window motor is cut off by the removal of battery terminal or if the battery fuse is blown.
- Disconnection and connection of main power window and door lock/unlock switch harness connector.
- · Removal and installation of motor from regulator assembly.
- Operation of regulator assembly as an independent unit.
- · Removal and installation of door glass.
- · Removal and installation of door glass run.

The following specified operations cannot be performed under the non-initialized condition:

- Auto-up operation
- · Anti-pinch function

Work Procedure

## **1.**STEP 1

- 1. Turn ignition switch ON.
- 2. Open the window not less than halfway.
- 3. Pull up on the power window switch to close the window completely. Continue to hold the power window switch up for 3 or more seconds.
- 4. Check that AUTO-UP function operates normally.

>> GO TO 2.

#### **2.**STEP 2

Check anti-pinch function. Refer to PWC-31, "Work Procedure".

>> Inspection End.

#### CHECK ANTI-PINCH FUNCTION

#### < BASIC INSPECTION >

#### **CHECK ANTI-PINCH FUNCTION**

Description INFOID:000000012183459

The initialization is necessary for normal operation of power window system if any of the following operations are performed:

- · When control unit is replaced.
- Electric power supply to power window switch or motor is interrupted by blown fuse or disconnection and connection of the negative battery terminal.
- Removal and installation of regulator assembly.
- Power supply to the main power window and door lock/unlock switch or power window motor is cut off by the removal of battery terminal or if the battery fuse is blown.
- Disconnection and connection of main power window and door lock/unlock switch harness connector.
- · Removal and installation of motor from regulator assembly.
- Operation of regulator assembly as an independent unit.
- · Removal and installation of door glass.
- Removal and installation of door glass run.

The following specified operations cannot be performed under the non-initialized condition:

- Auto-up operation
- Anti-pinch function

Work Procedure

## 1. CHECK ANTI-PINCH FUNCTION

- Fully open the door window.
- Place a piece of wood near fully closed position.
- Close door glass completely with AUTO-UP function.
- 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 when operating the main power window and door lock/unlock 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.

>> Inspection End.

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Revision: October 2015 PWC-31 2016 Maxima NAM

#### < DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT

**BCM** 

**BCM**: Diagnosis Procedure

INFOID:0000000012436026

Regarding Wiring Diagram information, refer to BCS-56, "Wiring Diagram".

# 1. CHECK FUSE AND FUSIBLE LINK

Check if the following BCM fuses or fusible link are blown.

Signal name	Fuse and fusible link No.
Fusible link battery power	I (40A)
BCM battery fuse	1 (10A)

#### Is the fuse or fusible link blown?

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

NO >> GO TO 2.

# 2. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connector M17.
- 3. Check voltage between BCM harness connector M17 and ground.

	Voltage (Approx.)			
BCM			(Approx.)	
Connector	Terminal	Ground		
M17	135	Ground	Pottory voltage	
IVI I 7	142		Battery voltage	

#### Is the measurement normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector M17 and ground.

BCM			Continuity	
Connector Terminal		Ground	Continuity	
M17	138	Yes	Voc	
IVI I 7	132		res	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

#### POWER WINDOW MAIN SWITCH

## POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000012183462

Regarding Wiring Diagram information, refer to PWC-19, "Wiring Diagram".

#### < DTC/CIRCUIT DIAGNOSIS >

# 1. CHECK POWER SUPPLY

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- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch connector.
- 3. Turn ignition switch ON.

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

(+)				
Main power window and door lock/unlock switch		(–)	Voltage (Approx.)	
Connector	Terminal		( 1-1//	
D7	10	Ground	Rattery voltage	
D8	18	Giouna	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.CHECK POWER SUPPLY CIRCUIT

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

В	BCM		Main power window and door lock/unlock switch	
Connector	Terminal	Connector Terminal		Continuity
M17	140	0 D8		Yes
IVI I 7	141	D7	10	165

4. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Terminal	Ground	Continuity	
M17	140	Giodila	No	
19117	141		No	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

# 3.CHECK GROUND CIRCUIT

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

Main power window and	d door lock/unlock switch		Continuity
Connector	Terminal	Ground	Continuity
D7 1			Yes

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Revision: October 2015 PWC-33 2016 Maxima NAM

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#### < DTC/CIRCUIT DIAGNOSIS >

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

INFOID:0000000012183463

Regarding Wiring Diagram information, refer to PWC-19, "Wiring Diagram".

# 1. CHECK POWER SUPPLY

- Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between power window and door lock/unlock switch RH harness connector and ground.

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

#### 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.
- Check continuity between BCM harness connector and power window and door lock/unlock switch RH harness connector.

ВС	ВСМ		Power window and door lock/unlock switch RH	
Connector	Terminal	Connector Terminal		Continuity
M17	140	D105	8	Yes

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

# 3. CHECK GROUND CIRCUIT

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

Power window and door lock/unlock switch RH			Continuity	
Connector Terminal		Ground	Continuity	
D105	7		Yes	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

#### REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000012183464

#### < DTC/CIRCUIT DIAGNOSIS >

Regarding Wiring Diagram information, refer to PWC-19. "Wiring Diagram".

## 1. CHECK POWER SUPPLY

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

(+) Rear power window switch		(–)	Voltage (Approx.)	
Connector Terminal			(· .pprox.)	
LH	D203	1	Ground	Pattery voltage
RH	D303	<b>'</b>	Giouria	Battery voltage

#### 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 rear power window switch harness connector.

В	СМ	Rear power window switch		Continuity	
Connector	Terminal	Connector		Terminal	Continuity
M17	141	LH	D203	1	Yes
IVI I 7	141	RH	D303	ı	163

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

# 3. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Check continuity between rear power window switch harness connector and ground.

Rear power window switch				Continuity
Connector		Terminal	Ground	Continuity
LH	D203	7	- Ground	Yes
RH	D303			

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

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Revision: October 2015 PWC-35 2016 Maxima NAM

#### **POWER WINDOW MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### POWER WINDOW MOTOR

#### **DRIVER SIDE**

**DRIVER SIDE: Component Function Check** 

INFOID:0000000012183465

# 1. CHECK POWER WINDOW MOTOR CIRCUIT

Check front power window motor LH operation with main power window and door lock/unlock switch.

#### Is the inspection result normal?

YES >> Front power window motor LH is OK.

NO >> Refer to PWC-36, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000012183466

Regarding Wiring Diagram information, refer to PWC-19, "Wiring Diagram".

# 1. CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

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

(+) Front power window motor LH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
D9	1	Ground	Main power window and door lock/unlock switch	UP	Battery voltage
				DOWN	0
	2			UP	0
				DOWN	Battery voltage

#### Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to GW-19, "Removal and Installation".

NO >> GO TO 2.

## 2.CHECK POWER WINDOW MOTOR CIRCUIT

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

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D8	17	D9	1	Yes
	19		2	

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

Main power window and door lock/unlock switch			Continuity	
Connector	Terminal	Ground	Continuity	
D8	17	Ground	No	
	19		INU	

#### Is the inspection result normal?

#### < DTC/CIRCUIT DIAGNOSIS >

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-67, "Removal and Instal-

NO >> Repair or replace harness.

#### PASSENGER SIDE

## PASSENGER SIDE: Component Function Check

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# 1. CHECK POWER WINDOW MOTOR CIRCUIT

Check front power window motor RH operation with main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

#### Is the inspection result normal?

YES >> Front power window motor RH is OK.

NO >> Refer to PWC-37, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure

Е INFOID:0000000012183468

Regarding Wiring Diagram information, refer to PWC-19, "Wiring Diagram".

# 1. CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

Turn ignition switch OFF.

2. Disconnect front power window motor RH connector.

3. Turn ignition switch ON.

Check voltage between front power window motor RH harness connector and ground.

(+) Front power window motor RH		(–) Condition			Voltage (Approx.)
Connector	Terminal				
	1		Power window and door lock/ unlock switch RH	UP	Battery voltage
D104	D104	Ground		DOWN	0
D104				UP	0
	2			DOWN	Battery voltage

#### Is the inspection result normal?

YES >> Replace front power window motor RH. Refer to GW-19, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK POWER WINDOW MOTOR CIRCUIT

Turn ignition switch OFF.

Disconnect power window and door lock/switch RH connector. 2. Check continuity between power window and door lock/unlock switch RH harness connector and front

power window motor RH harness connector.

Power window and door lock/unlock switch RH		Front power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D105	11	D104	1	Yes
	12	D104	2	163

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

Power window and doo	or lock/unlock switch RH		Continuity	
Connector	Terminal	Ground	Continuity	
D105	11	Giodila	No	
	12		INO	

**PWC-37** Revision: October 2015 2016 Maxima NAM **PWC** 

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#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to <a href="PWC-68">PWC-68</a>, "Removal and Installation".

NO >> Repair or replace harness.

REAR LH

## REAR LH: Component Function Check

INFOID:0000000012183469

# 1. CHECK POWER WINDOW MOTOR CIRCUIT

Check rear power window motor LH operation with main power window and door lock/unlock switch or rear power window switch LH.

#### Is the inspection result normal?

YES >> Rear power window motor LH is OK.

NO >> Refer to PWC-38, "REAR LH: Diagnosis Procedure".

## REAR LH: Diagnosis Procedure

INFOID:0000000012183470

Regarding Wiring Diagram information, refer to PWC-19, "Wiring Diagram".

# 1. CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

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

Rear power wi	+) ndow motor LH	(–)	Condition		Voltage (Approx.)
Connector	Terminal				
	3			UP	Battery voltage
D204	3	Ground	Rear power window switch LH	DOWN	0
D20 <del>4</del>	1	iteal power willdow switch Err	UP	0	
				DOWN	Battery voltage

#### Is the inspection result normal?

YES >> Replace rear power window motor LH. Refer to <u>GW-25</u>, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK POWER WINDOW MOTOR CIRCUIT

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

Rear power window switch LH		Rear power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D203	4	D204	3	Yes
	5	5204	1	103

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

#### < DTC/CIRCUIT DIAGNOSIS >

Rear power v	vindow switch LH		Continuity
Connector	Terminal	Ground	Continuity
D203	4	Ground	No
D203	5		

#### Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to PWC-69, "Removal and Installation".

NO >> Repair or replace harness.

REAR RH

## REAR RH: Component Function Check

1. CHECK POWER WINDOW MOTOR CIRCUIT

Check rear power window motor RH operation with main power window and door lock/unlock switch or rear power window switch RH.

Is the inspection result normal?

YES >> Rear power window motor RH is OK.

>> Refer to PWC-39, "REAR RH: Diagnosis Procedure". NO

REAR RH: Diagnosis Procedure

Regarding Wiring Diagram information, refer to <a href="PWC-19">PWC-19</a>, "Wiring Diagram".

# 1. CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

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

(+) Rear power window motor RH		(–)	Condition		Voltage (Approx.)
Connector	Terminal				, , ,
	1			UP	Battery voltage
D304	D304	Ground	Rear power window switch RH	DOWN	0
D30 <del>4</del>			ixear power window switch ixi i	UP	Battery voltage
	3			DOWN	0

#### Is the inspection result normal?

>> Replace rear power window motor RH. Refer to GW-25, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK POWER WINDOW MOTOR CIRCUIT

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

Rear power wi	Rear power window switch RH		Rear power window motor RH	
Connector	Terminal	Connector	Terminal	Continuity
D303	5	D304	1	Yes
D303	D303 4		3	165

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

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#### < DTC/CIRCUIT DIAGNOSIS >

Rear power window switch RH			Continuity
Connector	Terminal	Ground	Continuity
D303	5	Giouna	No
D303	4	_	INO

#### Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to PWC-69, "Removal and Installation".

NO >> Repair or replace harness.

#### DRIVER SIDE

# **DRIVER SIDE: Component Function Check**

#### INFOID:0000000012183473

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## 1.CHECK ENCODER

Check that driver side door glass performs AUTO open/close operation normally by main power window and door lock/unlock switch.

#### Is the inspection result normal?

YES >> Encoder is OK.

NO >> Refer to PWC-41, "DRIVER SIDE : Diagnosis Procedure".

## DRIVER SIDE: Diagnosis Procedure

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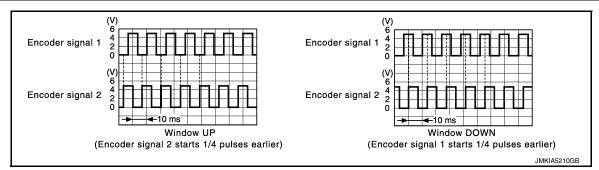
Regarding Wiring Diagram information, refer to <a href="PWC-19">PWC-19</a>. "Wiring Diagram".

# 1. CHECK ENCODER SIGNAL

Turn ignition switch ON.

2. Check signal between main power window and door lock/unlock switch harness connector and ground with oscilloscope.

Signal name		(+) Main power window and door lock/unlock switch		Signal (Reference value)
	Connector	Terminal		(11010101100 10100)
Encoder signal 1	D7	5	Ground	Refer to following signals
Encoder signal 2		4	Ground	Relei to following signals



#### Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to <a href="PWC-67">PWC-67</a>, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK ENCODER SIGNAL CIRCUIT

1. Turn ignition switch OFF.

Disconnect main power window and door lock/unlock switch connector and front power window motor LH connector.

Check continuity between main power window and door lock/unlock switch harness connector and front power window motor LH harness connector.

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D7	4	4 D9		Yes
	5	D9	3	163

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#### < DTC/CIRCUIT DIAGNOSIS >

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

Main power window a	nd door lock/unlock switch		Continuity	
Connector	Terminal	Ground	Continuity	
	4	Giouna	No	
DΓ	5		INU	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK ENCODER POWER SUPPLY

- 1. Connect main power window and door lock/unlock switch connector.
- 2. Turn ignition switch ON.
- Check voltage between front power window motor LH harness connector and ground.

(+) Front power window motor LH		(-)	Voltage (Approx.)
Connector	Terminal		(* FF. 2)
D9	4	Ground	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

# 4. CHECK ENCODER POWER SUPPLY CIRCUIT

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

Main power window and	d door lock/unlock switch	Front power w	indow motor LH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D7	14	D9	4	Yes

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

Main power window and door lock/unlock switch			Continuity
Connector	Terminal	Ground	Continuity
D7	14		No

#### Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to <a href="PWC-67">PWC-67</a>, "Removal and Installation".

NO >> Repair or replace harness.

# CHECK GROUND CIRCUIT 1

- 1. Turn ignition switch OFF.
- 2. Check continuity between front power window motor LH harness connector and ground.

Front power window motor LH			Continuity
Connector	Terminal	Ground	Continuity
D9	6		Yes

#### Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>".

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 6.

# 6. CHECK GROUND CIRCUIT 2

1. Disconnect main power window and door lock/unlock switch connector.

2. Check continuity between main power window and door lock/unlock switch harness connector and front power window motor LH harness connector.

Main power window and	d door lock/unlock switch	Front power w	indow motor LH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D7	12	D9	6	Yes

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

Main power window and	d door lock/unlock switch		Continuity
Connector	Terminal	Ground	Continuity
D7	12		No

#### Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to <a href="PWC-67">PWC-67</a>, "Removal and Installation".

NO >> Repair or replace harness.

#### PASSENGER SIDE

# PASSENGER SIDE: Component Function Check

# 1. CHECK ENCODER

Check that passenger side door glass performs AUTO open/close operation normally by main power window and door lock/unlock switch or power window and door lock/unlock switch RH.

#### Is the inspection result normal?

YES >> Encoder is OK.

NO >> Refer to PWC-43, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to PWC-19. "Wiring Diagram".

# 1. CHECK ENCODER SIGNAL

1. Turn ignition switch ON.

2. Check signal between power window and door lock/unlock switch RH harness connector and ground with oscilloscope.

	(+)			a
Signal name	Power window and door lock/unlock switch RH		(–)	Signal (Reference value)
	Connector	Terminal		(,
Encoder signal 1	D105	9	Ground	Refer to following signals
Encoder signal 2	105	10	Ground	Refer to following signals

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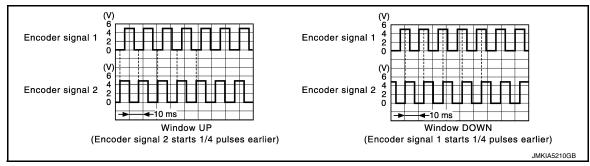
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#### Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to <a href="PWC-68">PWC-68</a>, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK ENCODER SIGNAL CIRCUIT

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

Power window and doo	or lock/unlock switch RH	Front power wi	ndow motor RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D105	9	D104	3	Yes
D103	10	D104	5	165

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

Power window and door lock/unlock switch RH			Continuity	
Connector	Terminal	Ground	Continuity	
D105	9	Ground	No	
D 105	10	-	No	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK ENCODER POWER SUPPLY

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

(+) Power window and door lock/unlock switch RH		(–)	Voltage (Approx.)	
Connector	Terminal		(11 /	
D104	4	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

# 4. CHECK ENCODER POWER SUPPLY CIRCUIT

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

#### < DTC/CIRCUIT DIAGNOSIS >

Power window and doo	or lock/unlock switch RH	Front power wi	indow motor RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D105	5	D104	4	Yes

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

Power window and door lock/unlock switch RH			Continuity
Connector	Terminal	Ground	Continuity
D105	5		No

#### Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to <a href="PWC-68">PWC-68</a>, "Removal and Installation".

NO >> Repair or replace harness.

# 5. CHECK GROUND CIRCUIT 1

1. Turn ignition switch OFF.

2. Check continuity between front power window motor RH harness connector and ground.

Front power wind		Continuity	
Connector Terminal		Ground	Continuity
D104	6		Yes

#### Is the inspection result normal?

YES >> Replace front power window motor RH. Refer to <u>GW-19</u>, "<u>Removal and Installation</u>".

NO >> GO TO 6.

#### 6. CHECK GROUND CIRCUIT 2

1. Disconnect power window and door lock/unlock switch RH connector.

2. Check continuity between power window and door lock/unlock switch RH harness connector and front power window motor RH harness connector.

Power window and door lock/unlock switch RH		Front power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D105	4	D104	6	Yes

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

_	Power window and door lock/unlock switch RH			Continuity
_	Connector Terminal		Ground	Continuity
	D105	4		No

#### Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to <a href="PWC-68">PWC-68</a>, "Removal and Installation".

NO >> Repair or replace harness.

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## **DOOR SWITCH**

# Component Function Check

INFOID:0000000012436027

## 1. CHECK FUNCTION

#### (P)CONSULT

- Select "DOOR LOCK" of "BCM".
- 2. Select "DOOR SW-DR", "DOOR SW-AS", "DOOR SW-RL" or "DOOR SW-RR" in "Data Monitor" mode.
- 3. Check that the function operates normally according to the following conditions:

Monitor Item	Condition		Status
DOOR SW-DR	Front door LH	Open	On
DOOK SW-DR	FIOIIL GOOL LEI	Closed	Off
DOOD CW AC	Front door RH	Open	On
DOOR SW-AS		Closed	Off
DOOD CW DI	Rear door LH	Open	On
DOOR SW-RL		Closed	Off
DOOD OW DD	5 . 5	Open	On
DOOR SW-RR	Rear door RH	Closed	Off

#### Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to PWC-46, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000012436028

Regarding Wiring Diagram information, refer to DLK-51, "Wiring Diagram".

# 1. CHECK DOOR SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect malfunctioning door switch connector.
- 3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

	(+)			0: 1
	Door switch		(-)	Signal (Reference value)
Conne	Connector Terminal			( 10.0.000
Front LH	B8			
Front RH	B108			(V) 15
Rear LH	B18			10 5
Rear RH	B116	3	Ground	0 + 10ms PKIB4960J 7.0 - 8.0 V

#### Is the inspection result normal?

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

# 2. CHECK DOOR SWITCH CIRCUIT

- Disconnect BCM connector.
- Check continuity between door switch harness connector and BCM harness connector.

#### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

	Door switch		В	CM	Continuity
Con	nector	Terminal	Connector	Terminal	Continuity
Front LH	B8			96	
Front RH	B108	3 M	M19	94	Voo
Rear LH	B18		10119	82	Yes
Rear RH	B116			93	

3. Check continuity between door switch harness connector and ground.

	Door switch			Continuity	
Coni	nector	Terminal		Continuity	
Front LH	B8		Ground		
Front RH	B108	3		Ground	No
Rear LH	B18			INO	
Rear RH	B116				

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

# 3. CHECK DOOR SWITCH

Refer to PWC-47, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to <u>DLK-197, "Removal and Installation"</u>.

#### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

# Component Inspection

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.

Disconnect malfunctioning door switch connector.
 Check continuity between door switch terminals.

Door switch		Condition		Continuity	
Terminal					
3	Ground contact is part of the	tact is part of the Door switch		No	
3	switch.	DOOI SWITCH	Released	Yes	

### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunctioning door switch. Refer to <u>DLK-197, "Removal and Installation"</u>.

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#### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# DOOR KEY CYLINDER SWITCH

## Component Function Check

INFOID:0000000012436030

## 1. CHECK FUNCTION

#### CONSULT

- 1. Select "DOOR LOCK" of "BCM".
- 2. Select "KEY CYL LK-SW" or "KEY CYL UN-SW" in "Data Monitor" mode.
- Check that the function operates normally according to the following conditions:

Monitor Item	Condition		Status
KEY CYL LK-SW		Lock	ON
RET GTL LR-SW	Driver side door key cylinder	Neutral / Unlock	OFF
KEY CYL UN-SW	Driver side door key cyllider	Unlock	ON
KET CIL UN-3W		Neutral / Lock	OFF

#### Is the inspection result normal?

YES >> Door key cylinder switch is OK.

NO >> Refer to PWC-48, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000012436031

Regarding Wiring Diagram information, refer to DLK-42, "Wiring Diagram".

# 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect front door lock assembly LH connector.
- 3. Check voltage between front door lock assembly LH harness connector and ground.

	(+) Front door lock assembly LH		Voltage (Approx.)	
Connector	Terminal		( 'PP' 5/4)	
D10	5	Ground	5 V	
DIO	6	Giouna	5 V	

#### Is the inspection result normal?

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

# 2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

- 1. Disconnect main power window and door lock/unlock switch connector.
- Check continuity between main power window and door lock/unlock switch harness connector and front door lock assembly LH harness connector.

Main power window and	d door lock/unlock switch	Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3	D10	6	Yes
D1	15	010	5	163

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

#### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

Main power window and door lock/unlock switch			Continuity
Connector	Terminal	Ground	Continuity
D7	3 Ground	No	
וט	15		INO

#### Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to <a href="PWC-67">PWC-67</a>, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check door key cylinder switch ground circuit

Check continuity between front door lock assembly LH harness connector and ground.

Front door lock assembly LH			Continuity	
Connector Terminal		Ground	Continuity	
D10	4		Yes	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK DOOR KEY CYLINDER SWITCH

Refer to PWC-49, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-179</u>, "<u>DOOR LOCK</u>: Removal and Installation".

# 5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

# Component Inspection

1. CHECK DOOR KEY CYLINDER SWITCH

Turn ignition switch OFF.

2. Disconnect front door lock assembly LH connector.

3. Check continuity between front door lock assembly LH terminals.

Front door lock	c assembly LH	Condition		Continuity	
Term	inals			Continuity	
E			Unlock	Yes	
5	Driver eide deer key eylinder	Neutral / Lock	No		
6	4	Driver side door key cylinder	Lock	Yes	
6		Neutral / Unlock	No		

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to <u>DLK-179</u>, "<u>DOOR LOCK</u>: Removal and Installation".

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Revision: October 2015

#### < DTC/CIRCUIT DIAGNOSIS >

# POWER WINDOW SERIAL LINK POWER WINDOW MAIN SWITCH

## POWER WINDOW MAIN SWITCH: Description

INFOID:0000000012183480

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and BCM transmit and receive the signal by power window serial link.

The signals mentioned below are transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH:

Keyless power window down signal

The signal mentioned below is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH:

- Front door window RH operation signal
- Power window control by key cylinder switch signal
- · Power window lock switch signal
- Retained power operation signal

## POWER WINDOW MAIN SWITCH: Component Function Check

INFOID:0000000012183481

# 1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

Check "CDL LOCK SW" or "CDL UNLOCK SW" in "Data Monitor" mode of "BCM (DOOR LOCK)" with CONSULT. Refer to BCS-17, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

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

#### Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-50, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

## POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000012183482

Regarding Wiring Diagram information, refer to PWC-19, "Wiring Diagram".

#### Power Window Serial Link Check

# ${f 1}$ . CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- 1. Remove key and close front door LH and RH.
- 2. Check signal between BCM harness connector and ground with oscilloscope when door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".
- 3. Check that signals which are shown in the figure below can be detected during 10 seconds just after door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".

#### < DTC/CIRCUIT DIAGNOSIS >

Terminal				
(+)		( )	Signal (Reference value)	
BCM	Terminal	(-)	(	
M20	54	Ground	(V) 15 10 5 0	

#### Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> GO TO 2.

# 2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM and main power window and door lock/unlock switch.
- Check continuity between BCM harness connector and main power window and door lock/unlock switch harness connector.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M20	54	D7	11	Yes

Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M20	54	Giouna	No

#### Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-67, "Removal and Installation".

NO >> Repair or replace harness or connectors.

#### FRONT POWER WINDOW SWITCH

## FRONT POWER WINDOW SWITCH: Description

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and BCM transmit and receive the signal by power window serial link.

The signals mentioned below are transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH:

· Keyless power window down signal

The signal mentioned below is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH:

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

# FRONT POWER WINDOW SWITCH: Component Function Check

# ${f 1}$ . CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OUTPUT SIGNAL

Check "CDL LOCK SW" or "CDL UNLOCK SW" in "Data Monitor" mode of "" with CONSULT. Refer to BCS-17, "DOOR LOCK: CONSULT Function (BCM - DOOR LOCK)".

**PWC-51** 

**PWC** 

2016 Maxima NAM

Revision: October 2015

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INFOID:0000000012183483

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INFOID:0000000012183484

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-52, "FRONT POWER WINDOW SWITCH: Diagnosis Procedure".

### FRONT POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000012183485

Regarding Wiring Diagram information, refer to PWC-19, "Wiring Diagram".

#### Power Window Serial Link Check

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

- 1. Remove key and close the front door LH and RH.
- Check signal between BCM harness connector and ground with oscilloscope when door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".
- 3. Check that signals which are shown in the figure below can be detected during 10 seconds just after door lock and unlock switch (LH and RH) is turned to "LOCK" or "UNLOCK".

	Terminal			
(+)		( )	Signal (Reference value)	
BCM connector	Terminal	()	(	
M20	54	Ground	(V) 15 10 5 0	

#### Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> GO TO 2.

# 2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM.
- Check continuity between BCM harness connector and power window and door lock/unlock switch RH harness connector.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M20	54	D105	3	Yes

#### 4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M20	54	Oround	No

#### Is the inspection result normal?

#### < DTC/CIRCUIT DIAGNOSIS >

YES >> Replace main power window and door lock/unlock switch. Refer to <a href="PWC-67">PWC-67</a>, "Removal and Installation".

NO >> Repair or replace the harness or connectors.

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#### POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH

< SYMPTOM DIAGNOSIS >

# SYMPTOM DIAGNOSIS

# POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH

## Diagnosis Procedure

INFOID:0000000012183486

# 1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to BCS-82, "Removal and Installation".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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

Check main power window and door lock/unlock switch power supply and ground circuit. Refer to PWC-32, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure".

#### 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 inspection result normal?

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

NO >> GO TO 1.

#### DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

# < SYMPTOM DIAGNOSIS > DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000012183487 1. CHECK FRONT POWER WINDOW MOTOR LH В Check front power window motor LH. Refer to PWC-36, "DRIVER SIDE: Component Function Check". C Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION $\mathsf{D}$ Confirm the operation again. Is the inspection result normal? Е YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO >> GO TO 1. F Н J **PWC** L M Ν 0

**PWC-55** Revision: October 2015 2016 Maxima NAM

#### FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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

WHEN POWER WINDOW MAIN SWITCH IS OPERATED: Diagnosis Procedure

INFOID:0000000012183488

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

Check power window and door lock/unlock switch RH serial link circuit.

#### 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 inspection result normal?

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

NO >> GO TO 1.

WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED

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

Diagnosis Procedure

INFOID:0000000012183489

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

Replace power window and door lock/unlock switch RH.

Refer to PWC-68, "Removal and Installation".

>> Inspection End.

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

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

# 1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY AND GROUND CIRCUIT

Check power window and door lock/unlock switch RH power supply and ground circuit.

Refer to PWC-34, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE): Diagnosis Procedure".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2.CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

Check front power window motor RH circuit.

Refer to PWC-37, "PASSENGER SIDE: Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### ${f 3.}$ CONFIRM THE OPERATION

Confirm the operation again.

#### Is the inspection result normal?

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

NO >> GO TO 1.

# REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE
WHEN POWER WINDOW MAIN SWITCH IS OPERATED
WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure
1.CONFIRM THE OPERATION
Confirm the operation again.
<u>Is the inspection result normal?</u> YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".
NO >> GO TO 1. WHEN REAR POWER WINDOW SWITCH LH IS OPERATED
WHEN REAR POWER WINDOW SWITCH LH IS OPERATED : Diagnosis Procedure
1.REPLACE REAR POWER WINDOW SWITCH LH
Replace rear power window switch LH. Refer to PWC-69, "Removal and Installation".
>> Inspection End. WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED
WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW
SWITCH LH ARE OPERATED : Diagnosis Procedure
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to <a href="PWC-34">PWC-34</a> , "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.
1.CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2.CHECK REAR POWER WINDOW MOTOR LH  Check rear power window motor LH.
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2. CHECK REAR POWER WINDOW MOTOR LH
1.CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2.CHECK REAR POWER WINDOW MOTOR LH  Check rear power window motor LH.  Refer to PWC-38, "REAR LH: Component Function Check".  Is the inspection result normal?  YES >> GO TO 3.
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit. Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2. CHECK REAR POWER WINDOW MOTOR LH  Check rear power window motor LH.  Refer to PWC-38, "REAR LH: Component Function Check".  Is the inspection result normal?
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2. CHECK REAR POWER WINDOW MOTOR LH  Check rear power window motor LH.  Refer to PWC-38, "REAR LH: Component Function Check".  Is the inspection result normal?  YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.
1.CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit. Refer to PWC-34. "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2.CHECK REAR POWER WINDOW MOTOR LH  Check rear power window motor LH. Refer to PWC-38, "REAR LH: 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 inspection result normal?
1.CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2.CHECK REAR POWER WINDOW MOTOR LH  Check rear power window motor LH.  Refer to PWC-38, "REAR LH: 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.
1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY AND GROUND CIRCUIT  Check rear power window switch power supply and ground circuit.  Refer to PWC-34. "REAR POWER WINDOW SWITCH: Diagnosis Procedure".  Is the inspection result normal?  YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.  2. CHECK REAR POWER WINDOW MOTOR LH  Check rear power window motor LH.  Refer to PWC-38, "REAR LH: 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 inspection result normal?  YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

#### REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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

WHEN POWER WINDOW MAIN SWITCH IS OPERATED: Diagnosis Procedure

INFOID:0000000012183494

# 1. CONFIRM THE OPERATION

Confirm the operation again.

#### Is the inspection result normal?

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

NO >> GO TO 1.

## WHEN REAR POWER WINDOW SWITCH RH IS OPERATED

# WHEN REAR POWER WINDOW SWITCH RH IS OPERATED: Diagnosis Procedure

INFOID:0000000012183495

# 1. REPLACE REAR POWER WINDOW SWITCH RH

Replace rear power window switch RH.

Refer to PWC-69, "Removal and Installation".

>> Inspection End.

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

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

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

Check rear power window switch power supply and ground circuit.

Refer to PWC-34, "REAR POWER WINDOW SWITCH: Diagnosis Procedure".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2.CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.

Refer to PWC-39, "REAR RH: 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 inspection result normal?

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

NO >> GO TO 1.

# AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMAL-LY

< SYMPTOM DIAGNOSIS >

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NOR-	
MALLY	Α
DRIVER SIDE	
DRIVER SIDE : Diagnosis Procedure	В
1.PERFORM INITIALIZATION PROCEDURE	С
Perform initialization procedure and confirm operation.  Refer to <a href="https://www.enabledows.new.new.new.new.new.new.new.new.new.new&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Is the inspection result normal?&lt;/td&gt;&lt;td&gt;D&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;YES &gt;&gt; Inspection End. NO &gt;&gt; GO TO 2.&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;2.CHECK ENCODER (DRIVER SIDE) CIRCUIT&lt;/td&gt;&lt;td&gt;Е&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Check encoder (driver side) circuit.&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Refer to &lt;a href=" pwc-41"="">PWC-41</a> , "DRIVER SIDE: Component Function Check".  Is the inspection result normal?	F
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	G
3. CONFIRM THE OPERATION	0
Confirm the operation again.	
Is the inspection result normal?	Н
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	
PASSENGER SIDE	
PASSENGER SIDE : Diagnosis Procedure	
1.PERFORM INITIALIZATION PROCEDURE	J
Perform initialization procedure and confirm operation.	21110
Refer to PWC-30, "Work Procedure".  Is the inspection result normal?	PWC
YES >> Inspection End.	
NO >> GO TO 2.	L
2.CHECK ENCODER (PASSENGER SIDE) CIRCUIT	
Check encoder (passenger side) circuit.  Refer to <a href="PWC-43">PWC-43</a> , "PASSENGER SIDE: Component Function Check".	M
Is the inspection result normal?	
YES >> GO TO 3.	Ν
NO >> Repair or replace the malfunctioning parts.	IN
3.CONFIRM THE OPERATION	
Confirm the operation again.	0
Is the inspection result normal?  YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".	
NO >> GO TO 1.	Р

#### **ANTI-PINCH FUNCTION DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## ANTI-PINCH FUNCTION DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000012183501

# 1. CHECK POWER WINDOW AUTO OPERATION

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

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>PWC-59</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>" (driver side) and <u>PWC-59</u>, "<u>PASSEN-GER SIDE</u>: <u>Diagnosis Procedure</u>" (passenger side).

# 2.CONFIRM THE OPERATION

Confirm the operation again.

#### Is the inspection result normal?

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

NO >> GO TO 1.

### POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NOR-**MALLY**

# < SYMPTOM DIAGNOSIS > POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE Α NORMALLY Diagnosis Procedure INFOID:0000000012183502 В 1. CHECK DOOR SWITCH Check door switch. Refer to PWC-46, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. D >> Repair or replace the malfunctioning parts. NO 2.CONFIRM THE OPERATION Е Confirm the operation again. Is the inspection result normal? >> Check intermittent incident. Refer to GI-41, "Intermittent Incident". YES F NO >> GO TO 1. Н J **PWC**

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#### DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

#### < SYMPTOM DIAGNOSIS >

# DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

## Diagnosis Procedure

INFOID:0000000012183503

# 1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure and confirm operation.

Refer to PWC-30, "Work Procedure".

#### Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 2.

# $2. {\sf CHECK} \ {\sf FRONT} \ {\sf DOOR} \ {\sf LOCK} \ {\sf ASSEMBLY} \ {\sf LH} \ ({\sf KEY} \ {\sf CYLINDER} \ {\sf SWITCH})$

Check front door lock assembly LH (key cylinder switch).

Refer to DLK-109, "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.

#### <u>Is the inspection result normal?</u>

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

NO >> GO TO 1.

# **KEYLESS POWER WINDOW DOWN DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >	
KEYLESS POWER WINDOW DOWN DOES NOT OPERATE	
Diagnosis Procedure	INFOID:0000000012183504
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check remote keyless entry function.	
Is the inspection result normal?  YES >> GO TO 2.	
NO >> Refer to <u>DLK-111, "Diagnosis Procedure"</u> .	
2.CHECK POWER WINDOW OPERATION	
Check power window operation.  In the inspection result normal?	
YES >> GO TO 3.	
NO >> Refer to PWC-32, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".	
3.CONFIRM THE OPERATION	
Confirm the operation again.  Is the inspection result normal?	
YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".	
NO >> GO TO 1.	

## POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

# POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

# Diagnosis Procedure

INFOID:0000000012183505

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

Replace main power window and door lock/unlock switch. Refer to PWC-67, "Removal and Installation".

>> Inspection End.

# POWER WINDOW SWITCH DOES NOT ILLUMINATE

SYMPTOM DIAGNOSIS >	I E	
POWER WINDOW SWITCH DOES NOT ILLUMINATE		
DRIVER SIDE		Α
DRIVER SIDE : Diagnosis Procedure	INFOID:000000012183506	В
1. REPLACE MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH		D
Replace main power window and door lock/unlock switch. Refer to PWC-67, "Removal and Installation".		С
>> Inspection End. PASSENGER SIDE		D
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000012183507	Е
1.REPLACE POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH		
Replace power window and door lock/unlock switch RH. Refer to PWC-68, "Removal and Installation".		F
>> Inspection End. REAR LH		G
REAR LH : Diagnosis Procedure	INFOID:000000012183508	Н
1.REPLACE REAR POWER WINDOW SWITCH LH		
Replace rear power window switch LH. Refer to PWC-69, "Removal and Installation".		I
>> Inspection End. REAR RH		J
REAR RH : Diagnosis Procedure	INFOID:000000012183509	ΡW
1.REPLACE REAR POWER WINDOW SWITCH RH		
Replace rear power window switch RH. Refer to PWC-69, "Removal and Installation".		L
>> Inspection End.		M
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#### PRE-INSPECTION FOR DIAGNOSTIC

#### < PERIODIC MAINTENANCE >

# PERIODIC MAINTENANCE

# PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

#### **BASIC INSPECTION**

# 1.INSPECTION START

- 1. Check the service history.
- 2. Check the following parts.
- Fuse/circuit breaker blown.
- Poor connection, open or short circuit of harness connector.
- · Battery voltage.

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace the malfunctioning parts.

#### MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

< REMOVAL AND INSTALLATION >

# REMOVAL AND INSTALLATION

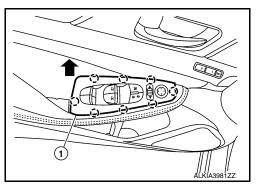
# MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

#### Removal and Installation

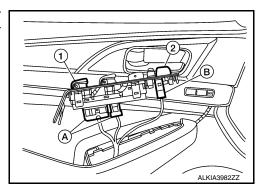
#### **REMOVAL**

 Release pawls using a suitable tool and the remove main power window and door lock/unlock switch finisher (1) upward in direction shown (♣).



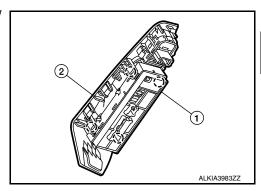


 Disconnect the harness connectors (A) from the main power window and door lock/unlock switch (1) and harness connector (B) from the door mirror remote control switch (2) and remove.



3. Release pawls, then remove main power window and door lock/ unlock switch (1) from the switch finisher (2).

( ) : Pawl



#### **INSTALLATION**

Installation is in the reverse order of removal.

#### NOTE:

Whenever the main power window and door lock/unlock switch is disconnected from the harness connector, it is necessary to perform the initialization procedure. Refer to <a href="PWC-29">PWC-29</a>, "Description".

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### POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

< REMOVAL AND INSTALLATION >

# POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH

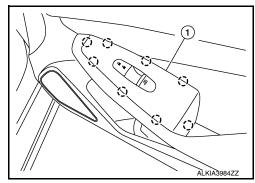
#### Removal and Installation

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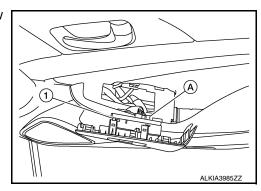
#### **REMOVAL**

 Release pawls using a suitable tool and remove power window and door lock/unlock switch finisher (RH) (1).

( ) : Pawl

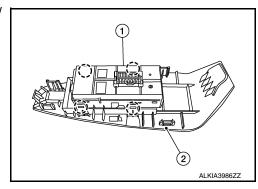


2. Disconnect the harness connector (A) from the power window and door lock/unlock switch RH (1) and remove.



3. Release pawls, then remove power window and door lock/ unlock switch RH (1) from switch finisher (2).

( ) : Pawl



#### **INSTALLATION**

Installation is in the reverse order of removal.

#### NOTE:

Whenever the power window and door lock/unlock switch is disconnected from the harness connector, it is necessary to perform the initialization procedure. Refer to <a href="PWC-29">PWC-29</a>, "Description".

#### **REAR POWER WINDOW SWITCH**

#### < REMOVAL AND INSTALLATION >

# **REAR POWER WINDOW SWITCH**

#### Removal and Installation

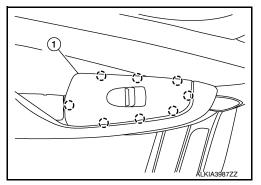
#### **REMOVAL**

1. Release pawls using a suitable tool and then remove the rear power window switch finisher (1).

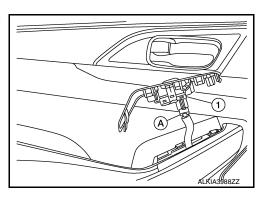


#### NOTE:

LH shown; RH similar

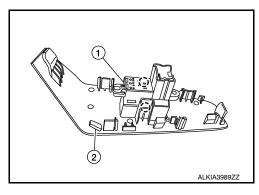


2. Disconnect power window switch harness connector (A) from rear power window switch (1).



3. Release pawls, then remove rear power window switch (1) from rear power window switch finisher (2).





#### **INSTALLATION**

Installation is in the reverse order of removal.

PWC

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