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

WARNING:

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

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
 ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s)
 with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly
 causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

(A) B 7

- Remote keyless entry receiver Refer to <u>DLK-9</u>, "<u>DOOR LOCK SYS-TEM</u>: Component Parts Location"
- 4. Front power window motor (driver side)
- 7. Rear power window motor LH
- A. View with front door finisher removed B.
- 2. BCM
 Refer to BCS-4, "BODY CONTROL
 SYSTEM: Component Parts Location"
- 5. Front door switch (driver side)
- 8. Rear power window switch LH
 - B. View with rear door finisher removed
- 3. Power window main switch
 - Front door lock assembly (driver side) (door key cylinder switch)

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

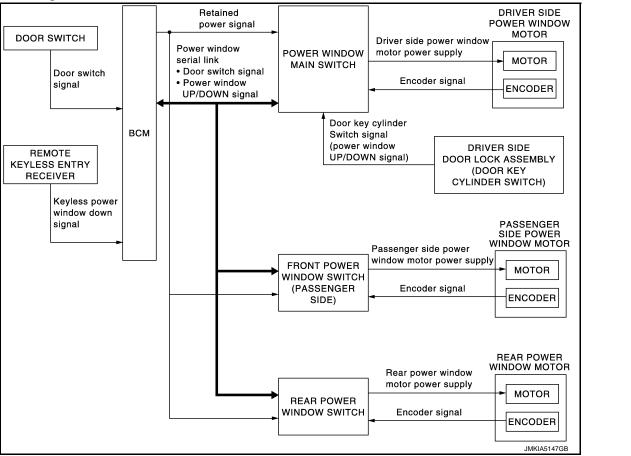
Component Description

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Component	Function	
BCM	Supplies power supply to power window switch.Controls retained power.	
Power window main switch	 Directly controls all power window motor of all doors. Controls anti-pinch operation of power window. 	
Front power window switch (passenger side)	Controls anti-pinch operation of power window.Controls power window motor of passenger door.	
Rear power window switch	 Controls anti-pinch operation of power window. Controls power window motor of rear right and left doors. 	
Power window motor	 Integrates the ENCODER and WINDOW MOTOR. Starts operating with signals from each power window switch. Transmits power window motor rotation as a pulse signal to power window switch. 	
Remote keyless entry receiver	Receives lock/unlock signal from the intelligent key, and then transmits to BCM.	
Front door lock assembly (door key cylinder switch)	Transmits operation condition of door key cylinder switch to power window main switch.	
Front door switch (driver side/passenger side)	Front door open/close condition and transmits to BCM.	

SYSTEM

System Diagram



System Description

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POWER WINDOW OPERATION

- Power window system is activated by power window switch operation when ignition switch turns ON, or during the retained power operation after ignition switch turns OFF.
- Power window main switch can open/close door glass.
- Front and rear power window switch can open/close the corresponding door glass.
- Power window lock switch can lock all power windows other than driver seat.
- All power windows open when pressing Intelligent Key unlock button for 3 seconds.
- If door glass receives resistance that is the specified value or more while power window of each seat is in AUTO-UP operation, power window operates in the reverse direction.
- Power window serial link transmits the signals from power window main switch to each power window switch.
- AUTO UP/DOWN operation can be performed when front power window switch turns to AUTO.

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 transmits to power window switch
 as the encoder pulse signal while power window motor is operating.
- Power window switch reads the changes of encoder signal and stops AUTO operation when door glass is at fully opened/closed position.
- Power window motor is operable in case encoder is malfunctioning.

POWER WINDOW SERIAL LINK

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

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SYSTEM

< SYSTEM DESCRIPTION >

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

- Keyless power window down signal
- · Door switch signal

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

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

RETAINED POWER OPERATION

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

Retained power function cancel conditions

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

POWER WINDOW LOCK FUNCTION

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

ANTI-PINCH OPERATION

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

OPERATION CONDITION

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

NOTE:

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

DOOR KEY CYLINDER SWITCH OPERATION

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

OPERATION CONDITION

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

KEYLESS POWER WINDOW DOWN FUNCTION

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

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

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

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

Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to <u>DLK-32</u>, "INTELLIGENT KEY: <u>CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

NOTE:

SYSTEM

< SYSTEM DESCRIPTION >

Use CONSULT-III to change settings.
MODE 1 (3 sec) / MODE 2 (OFF) / MODE 3 (5 sec)

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FAIL-SAFE CONTROL

Fail-safe

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

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

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

- Auto-up operation
- Anti-pinch function
- Retained power function

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

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

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APPLICATION ITEM

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

Diagnosis mode	Function Description	
Work Support	Changes the setting for each system function.	
Self Diagnostic Result	Displays the diagnosis results judged by BCM.	
CAN DIAG SUPPORT MNTR Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III tion manual.		
Data Monitor	The BCM input/output signals are displayed.	
Active Test	The signals used to activate each device are forcibly supplied from BCM.	
Ecu Identification	The BCM part number is displayed.	
Configuration	This function is not used even though it is displayed.	

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

C) rators	Cult sustains a la etian itam	Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner*	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open TRUNK			×	
/ehicle security system THEFT ALM		×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

^{*:} This item is displayed, but is not used.

FREEZE FRAME DATA (FFD) AND IGN COUNTER

Freeze Frame Data

The BCM records the following condition at the moment a particular DTC is detected.

- Vehicle Speed
- Odd Trip Meter

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

• Vehicle Condition (BCM detected condition)

CONSULT screen terms	Description		
SLEEP>LOCK	While turning BCM status from low power consumption mode to normal mode (Power 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 stopping and selector lever is except 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	While turning power supply position from "OFF" to "LOCK"		
OFF>ACC	While turning power supply position from "OFF" to "ACC"		
ON>CRANK	While turning power supply position from "IGN" to "CRANKING"		
OFF>SLEEP	While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode		
LOCK>SLEEP	While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode		
LOCK	Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)		
OFF	Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)		
ACC	Power supply position is "ACC" (Ignition switch ACC)		
ON	Power supply position is "IGN" (Ignition switch ON with engine stopped)		
ENGINE RUN	Power supply position is "RUN" (Ignition switch ON with engine running)		
CRANKING	Power supply position is "CRANKING" (At engine cranking)		

IGN Counter

IGN counter indicates the number of times that ignition switch is turned ON after DTC is detected.

- The number is 0 when a malfunction is detected now.
- The number increases like 1 \rightarrow 2 \rightarrow 3...38 \rightarrow 39 after returning to the normal condition whenever ignition switch OFF \rightarrow ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

RETAIND PWR

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

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Data monitor

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

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

ECU	Reference
	BCS-32, "Reference Value"
BCM	BCS-52, "Fail-safe"
BOIVI	BCS-54, "DTC Inspection Priority Chart"
	BCS-55, "DTC Index"

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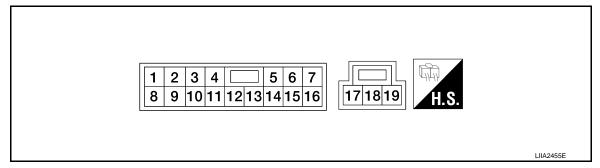
POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

POWER WINDOW MAIN SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES POWER WINDOW MAIN SWITCH

Terminal No. (wire color)		Description		Condition	Voltage [V]	
+	-	Signal name	Input/ Output	Condition	(Approx.)	
3 (B)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates.	12	
4 (Y)	Ground	Battery power supply	Input	_	12	
5 (G)	Ground	Front driver side power win- dow motor DOWN signal	Output	When front LH switch in power window main switch is operated DOWN	12	
6 (L)	Ground	Front driver side power win- dow motor UP signal	Output	When front LH switch in power window main switch is operated UP	12	
7 (B)	Ground	Ground	_	_	0	
-				IGN SW ON	12	
9 (O) Ground	Ground	und Retained power signal	ed power signal Input	Within 45 second after ignition switch is turned to OFF	12	
	Trouble trouble to the second	rotainos ponto orginar		When driver side or pas- senger side door is opened during retained power operation	0	
10 (LG)	Ground	Encoder ground	_	_	0	
11 (P)	Ground	Encoder pulse signal 1	Input	When power window motor operates.	(V) 6 4 2 0 10 ms	

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POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
12 (LG)	Ground	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms JMKIA0070GB
13 (V)	Ground	Power window serial link	Input/ Output	IGN SW ON or power window timer operating.	(V) 15 10 5 0 JPMIA0013GB
15 (BR)	Ground	Door key cylinder switch LOCK signal	Input	Key position (Neutral →Locked)	5 → 0
16 (GR)	Ground	Door key cylinder switch UN- LOCK signal	Input	Key position (Neutral →Unlocked)	5 → 0

Fail-safe

FAIL-SAFE CONTROL

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

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

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

- Auto-up operation
- Anti-pinch function
- Retained power function

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

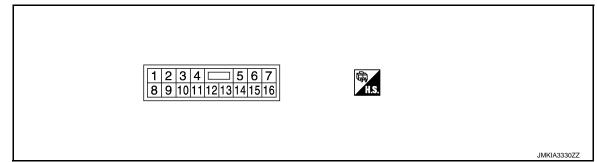
FRONT POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

FRONT POWER WINDOW SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES FRONT POWER WINDOW SWITCH

	nal No. color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
3 (LG)	Ground	Encoder ground	_	_	0
4 (B)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates	12
8 (LG)	Ground	Power window motor UP signal	Output	When power window motor is operated UP	12
9 (G)	Ground	Power window motor DOWN signal	Output	When power window motor is operated DOWN	12
10 (Y)	Ground	Battery power supply	Input	_	12
11 (B)	Ground	Ground	_	_	0
12 (P)	Ground	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms

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FRONT POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
15 (O)	Ground	Encoder pulse signal 2	Input	When power window motor operates	(V) 6 4 2 0 10 ms
16 (V)	Ground	Power window serial link	Input/ Output	When ignition switch ON or power window timer operates	(V) 15 10 5 0 10 ms JPMIA0013GB

Fail-safe

FAIL-SAFE CONTROL

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

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

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

- Auto-up operation
- Anti-pinch function
- · Retained power function

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

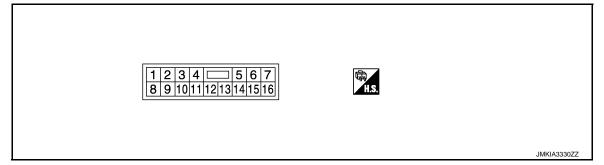
REAR POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

REAR POWER WINDOW SWITCH

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

REAR POWER WINDOW SWITCH

	ninal No. e color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
3 (Y)	Ground	Encoder ground	_	_	0
4 (V)	Ground	Encoder power supply	Output	When ignition switch ON or power window timer operates	12
8 (P)	Ground	Power window motor UP signal	Output	When power window motor is operated UP	12
9 (G)	Ground	Power window motor DOWN signal	Output	When power window motor is operated DOWN	12
10 (P)	Ground	Battery power supply	Input	_	12
11 (B)	Ground	Ground	_	_	0
12 (W)	Ground	Encoder pulse signal 1	Input	When power window motor operates	(V) 6 4 2 0 10 ms

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REAR POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

	ninal No. e color)	Description		Condition	Voltage [V]
+	-	Signal name	Input/ Output	Condition	(Approx.)
15 (O)	Ground	Encoder pulse signal 2	Input	When power window motor operates.	(V) 6 4 2 0 10 ms
16 (LG)	Ground	Power window serial link	Input/ Output	When ignition switch ON or power window timer operates	(V) 15 10 5 0 10 ms JPMIA0013GB

Fail-safe

FAIL-SAFE CONTROL

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

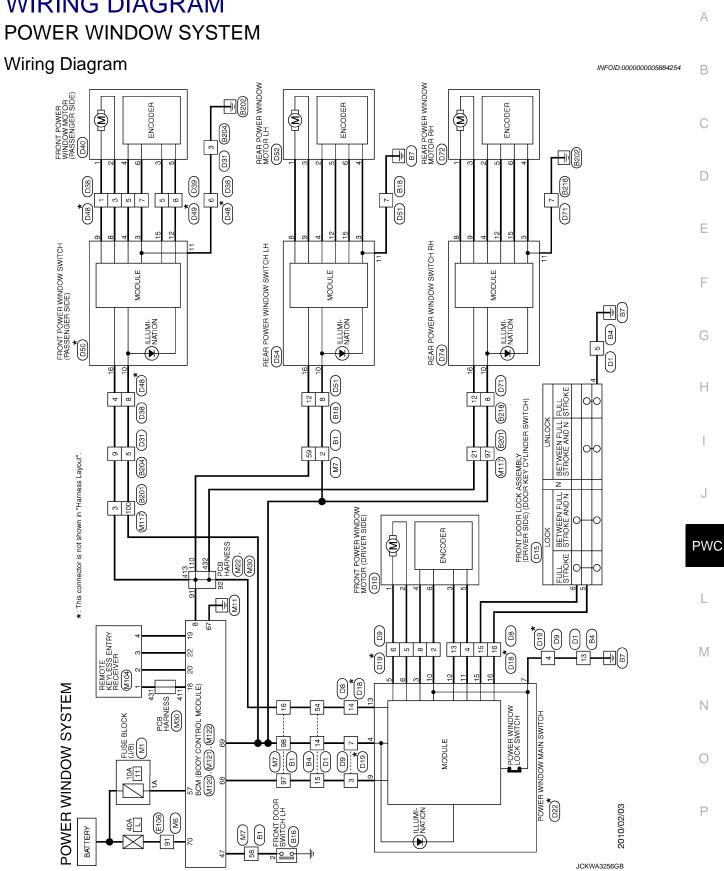
Malfunction	Malfunction condition
Pulse sensor malfunction	When one pulse signal that is the specified value or more is detected continuously for the specified time or more, while door glass is being operated UP or DOWN.
Both pulse sensors mal- function	When both pulse signals are not detected continuously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

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

- Auto-up operation
- Anti-pinch function
- · Retained power function

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

WIRING DIAGRAM



43 L/O - [Without Pre-crash seat belt system] 44 R	Н	>	SB	+	5 c		ອ ແ	4	53 B –	-	55 W =			Connector No. B16	THOUSE GOOD THOOLE	Connector Name FRONT DOOR SWITCH LH	Connector Type Angely	odf: iono	1	K	<u>K</u>		2	<u> </u>		- 1-	Terminal Color Signal Name [Specification]	of Wire	2 LG =																						
84	WIRE TO WIRE	Connector Type TH40MW-CS15	_1		2 3 4 5 6 7 8 9 10 11 12 13 14 15	GARDA EN PONCO DE PONCO DE CONTROL DE CONTRO	27.28.29.30.31.32 33.34.35 47.48.49.50.51.52 53.54.55				Signal Name [Specification]	7		-	1							1	1	1	I				-	1	1			1			1	1			1			_		1	1	1	- [With Dre-creek cost helt exetem]	- [Without Pre-crack coat helt exctern]	5
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- (With Climate controlled seat] - [With Climate controlled seat] - [With heated seat] - [With Climate controlled seat] (With Climate controlled seat]	I
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Revision: 2010 June **PWC-21** 2011 M37/M56

Connector No. D15 Connector Name FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) Connector Type E08FGY-RS	Terminal Color Signal Name Specification Color Col	Connector No. D18 Connector Type Int24M/I-NH MRE TO WRE LIZ 3 4 5 6 7 8 9 10 11 112 13 14 15 16 17 18 19 20 21 22 23 24	Bu	13 L/G
Connector No. D9 Connector Name WIPE TO WIPE Connector Type NSIGEW-CS ALS. 3	Terminal Color C	Connector No. D10 Connector Name FRONT POWER WINDOW MOTOR (DRIVER SIDE) Connector Type INSUGEW-CS T T T T 3 4 5 6	Terminal Color Signal Name [Specification] No. of Wire C	
46 LG	Ocurector No. D8 Connector Name WIRE TO WIRE Connector Type ITH&HW-NH (本) (本) (本) (121110) 9 8 7 6 5 4 3 2 1 1	Signal Name [Specifics	+++++++	
POWER WINDOW SYSTEM Connector Name WIPE TO WIPE Connector Type TH40FW-CS15	Color of Wire Signal Name [Specification] L L R R CGR CGR CGR CGR CGR CGR CGR CGR CGR	B.W. P. C.	G 8 × × B 5 C G R F C C C C C C C C C C C C C C C C C C	O O O O SHELD

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	(cation)		Е
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			Р

POWER WINDOW SYSTEM Connector No. 049 Connector Type ITH08MW-NH A.S. 1 2 3 4 1 5 6 7 8	Corrector No. D51 Corrector Name WIRE TO WIRE Connector Type NH10MW-CS10 1 2 3 1 1 2 6 7 8 9 10 11 12 13 7 8 9 10 11 12 13 7 8 9 10 11 15 16 17 18 7 9 9 10 11 15 16 17 18	Connector No. Connector Name Connector Type	No. D54 Name REAR POWER WINDOW SWITCH LH Type NISIGFW-CS 3 4		Connector No. Connector Na. Connector Typ		PEAR POWER WINDOW MOTOR RH RSS06FG-DGY	
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∞ - ∞	LG LG B ctor No. D52	Connector No.	LG No. D71 Name WIRE TO WIRE		Connector No. Connector Type		D74 REAR POWER WINDOW SWITCH RH NS16FW-CS	
nal Color Signal of Wire LG B	Connector Name REAR POWER WINDOW MOTOR LH Connector Type RSOBFG-DGY MA H.S.	H.S. 1	2 3 9 9	9 8	S.	8 9 10	112 1516	
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Wife TO WRE TH80MV-CS16-TM4 TH80MV-CS16-TM4 Signal Name [Specification]	F
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Connector Name Color	0
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Revision: 2010 June **PWC-25** 2011 M37/M56

Connector No. M30	T,	Т	Connector Type TH40FW-NH	香	HS	412 411 410	105 102 101		- 1	Signal Name [Specification] Terminal Golor Signal Name [Specification]	\top	403	407 V	- 408 B	410 B	411 B	4	414 DN 416 LG	- 417 B -	SB	420 SHIELD	╀	- 428 V -	429 P	- 430 Lu	432 Y	- 435 V -	437 B	438 P	- 439 L -		1 1					- [With VK engine]	[With VQ engine]	
Connector No. M22	T,		Connector Type TH40FB-NH	修	HS.	100 39 98 97 96 95 94 92 91 90 89	18 117 118 115 114 113		- 1	Terminal Color Signal Nam	T	Н	+	25.	H	H	0 2	+	Н	93 B	+	╀	Н	D 0	100 G	Н	102 P	╀	Н	4	108 Y	109 BR	112 B	H	114 L	116 B	117 B – [With	BG -	
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Connector No. MI21 Connector No. MI21 Connector Name BCM (BODY CONTROL MODULE) Connector Type FEAURF-PHARG-SA FEAURF-PHARG-PHA	Color Signal Name (Specification) No. of Wive Signal Name (Specification) No. of Wive TR RECY CYLINDER SW 45 CV TR LED DP C ANGEL SW 45 CV TR LED P C ANGEL SW 46 CV CV CV CV CV CV CV C	
Connector Name BCM (BODY CONTROL MODULE) Connector Type THAIRE-NH THAIRE THAI	Color	
41 R	52 Y S S S S S S S S S S S S S S S S S S	
POWER WINDOW SYSTEM Connector No. MIGA Connector Name REMOTE KEYLESS ENTRY RECEIVER Connector Type IHOAFW-NH Connector Type IHOAFW-NH	Terminal Color	JCKWA3264GB

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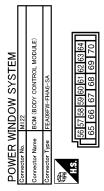
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PWC-27 Revision: 2010 June 2011 M37/M56



Signal Name [Specification]	INT ROOM LAMP PWR SPLY	BAT (FUSE)	AIR BAG	PASS DOOR UNLK OUTPUT	TURN SIG LH OUTPUT	TURN SIG RH OUTPUT	STEP LAMP CONT	ROOM LAMP TIMER CONT	ALL DOOR, FL LID LOCK OUTPUT	DR DOOR, FL LID UNLK OUTPUT	GND	PW PWR SPLY (IGN)	PW PWR SPLY (BAT)	BAT (F/L)	
Color of Wire	Я	œ	7	ß	5	۸	۸	٦	۸	PT	В	BG	Υ	W	
Terminal No.	99	25	89	69	09	19	29	63	99	99	L9	89	69	0/	

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION > **BASIC INSPECTION** Α DIAGNOSIS AND REPAIR WORKFLOW Work Flow INFOID:0000000005884185 **DETAILED FLOW** 1. OBTAIN INFORMATION ABOUT SYMPTOM Interview the customer to obtain as much malfunction information (conditions and environment when the malfunction occurred) as possible when the customer brings the vehicle in. D >> GO TO 2. $2.\mathsf{REPRODUCE}$ THE MALFUNCTION INFORMATION Е Check the malfunction on the vehicle that the customer describes. Inspect the relation of the symptoms and the condition when the symptoms occur. F >> GO TO 3. 3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS" Use "Symptom diagnosis" from the symptom inspection result in step 2. Then identify where to start the diagnosis based on possible causes and symptoms. Н >> GO TO 4. f 4.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS" Perform the diagnosis with "Component diagnosis" of the applicable system. >> GO TO 5. J ${f 5}$. REPAIR OR REPLACE THE MALFUNCTIONING PARTS Repair or replace the specified malfunctioning parts. >> GO TO 6.

6. FINAL CHECK

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

Is the malfunctioning part repaired or replaced?

YES >> Trouble diagnosis is completed.

NO >> GO TO 3. **PWC**

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ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description INFOID:000000006046607

Initialize the system if any of the following work has been done.

- When control unit replaced.
- Electric power supply to power window switch or motor is interrupted by blown fuse or disconnection and connection of the negative terminal of battery, etc.
- Removal and installation of regulator assembly.
- Power supply to the power window main 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 power window main 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 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-32, "Work Procedure".

>> GO TO 2.

2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to PWC-33, "Work Procedure".

>> END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

< BASIC INSPECTION >

>> END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT Α Description INFOID:0000000006046608 Initialize the system if any of the following work has been done. В When control unit replaced. • Electric power supply to power window switch or motor is interrupted by blown fuse or disconnection and connection of the negative terminal of battery, etc. C Removal and installation of regulator assembly. Power supply to the power window main 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 power window main switch harness connector. D Removal and installation of motor from regulator assembly. Operation of regulator assembly as an independent unit. Removal and installation of door glass. Е Removal and installation of door glass run. The following specified operations can not be performed under the non-initialized condition. Auto-up operation Anti-pinch function F Work Procedure INFOID:0000000005911722 1.SYSTEM INITIALIZATION Perform system initialization. Refer to PWC-32, "Work Procedure". Н >> GO TO 2. 2.check anti-pinch function Check anti-pinch function. Refer to PWC-33, "Work Procedure".

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PWC-31 Revision: 2010 June 2011 M37/M56

SYSTEM INITIALIZATION

< BASIC INSPECTION >

SYSTEM INITIALIZATION

Description INFOID:0000000000046609

Initialize the system if any of the following work has been done.

- When control unit replaced.
- Electric power supply to power window switch or motor is interrupted by blown fuse or disconnection and connection of the negative terminal of battery, etc.
- · Removal and installation of regulator assembly.
- Power supply to the power window main 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 power window main 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 can not be performed under the non-initialized condition.

- Auto-up operation
- Anti-pinch function

Work Procedure

1.STEP 1

- 1. Turn ignition switch ON.
- 2. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)

>> GO TO 2.

2.STEP 2

Continue pulling the power window switch UP (AUTO-UP operation). Even after glass stops at fully closed position, keep pulling the switch for 2 seconds or more.

>> GO TO 3.

3.STEP 3

Check that auto-up function operates normally.

>> GO TO 4.

4.STEP 4

Check anti-pinch function. Refer to PWC-33, "Work Procedure".

>> END

CHECK ANTI-PINCH FUNCTION

< BASIC INSPECTION >

CHECK ANTI-PINCH FUNCTION Α Description INFOID:0000000006046610 Initialize the system if any of the following work has been done. В When control unit replaced. Electric power supply to power window switch or motor is interrupted by blown fuse or disconnection and connection of the negative terminal of battery, etc. Removal and installation of regulator assembly. Power supply to the power window main 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 power window main switch harness connector. D Removal and installation of motor from regulator assembly. Operation of regulator assembly as an independent unit. Removal and installation of door glass. Е Removal and installation of door glass run. The following specified operations can not be performed under the non-initialized condition. Auto-up operation Anti-pinch function Work Procedure INFOID:0000000005911724 1.STEP 1 Fully open the door window. Н >> GO TO 2. 2.STEP $_{2}$ Place a piece of food near fully closed position. >> GO TO 3. 3.STEP $_{3}$ Close door glass completely with AUTO-UP. **PWC** >> GO TO 4. **4**.STEP 4 Check the following conditions Check that glass lowers for approximately 150 mm (5.9 in) without pinching piece of wood and stops. · Check that glass does not rise not when operating the power window main switch while lowering. **CAUTION:** Perform initial setting when auto-up operation or anti-pinch function does not operate normally. Check that AUTO-UP operates before inspection when system initialization is performed. Do not check with hands and other body parts because they may be pinched. Do not get pinched. Ν It may switch to fail-safe mode if open/close operation is performed continuously without full close. Perform initial setting in that situation. Refer to PWC-32, "Work Procedure". >> END

Revision: 2010 June PWC-33 2011 M37/M56

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000005884196

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
57	Battery power supply	11 (10A)
70	Battery power supply	L (40A)

Is the fuse fusing?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

-	(+) BCM	(-)	Voltage (Approx.)
Connector	Terminal		(πρριοχ.)
M122	57	Ground	Pottory voltage
IVI I ZZ	70	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	67		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000005884197

1. CHECK POWER SUPPLY CIRCUIT 1

- Turn ignition switch OFF.
- 2. Disconnect power window main switch connectors.

Revision: 2010 June **PWC-34** 2011 M37/M56

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- Turn ignition switch ON.
- Check voltage between power window main switch harness connector and ground.

	+) w main switch	(-)	Voltage (V) (Approx.)
Connector	Terminal		(ripproxi)
D22	4	Ground	12
DZZ	9	Giouna	12

Is the inspection result normal?

>> GO TO 2. YES

NO >> GO TO 3.

2.CHECK GROUND CIRCUIT

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

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
D22	7		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

3.CHECK POWER SUPPLY CIRCUIT 2

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

В	CM	Power windo	w main switch	Continuity		
Connector	Terminal	Connector	Terminal	Continuity		
M122	68	D22	9	Existed		
IVITZZ	69	DZZ	4	LAISIEU		

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	68	Giouna	Not existed
IVITZZ	69		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

FRONT POWER WINDOW SWITCH (PASSENGER SIDE): Diagnosis Procedure

1. CHECK POWER SUPPLY CIRCUIT 1

Turn ignition switch OFF.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Front power window switch (passenger side)		(-)	Voltage (V) (Approx.)
Connector	Terminal		
D50	10	Ground	12

Is the inspection result normal?

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

2.CHECK GROUND CIRCUIT

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

Front power window switch (passenger side)			Continuity
Connector	Terminal	Ground	
D50	11		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

3.CHECK POWER SUPPLY CIRCUIT 2

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

всм		Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M122	69	D50	10	Existed

3. Check continuity between BCM harness connector and ground.

ВСМ			
Connector	Terminal	Ground	Continuity
M122	69		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH: Diagnosis Procedure

INFOID:0000000005884199

1. CHECK POWER SUPPLY CIRCUIT 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 harnes connector and ground.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

	(+) Rear power window switch			Voltage (V) (Approx.)	
Coni	Connector			(* 'PP' 5')	
LH	D54	10	Ground	12	
RH	D74	10	Giouria	12	

Is the inspection result normal?

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

2. 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	D54	11	Giouria	Existed	
RH	D74			LAISIEU	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

3.CHECK POWER SUPPLY CIRCUIT 2

- 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
M122	69	LH	D54	10	Existed
IVITZZ	09	RH	D74	10	Existed

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	69		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

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< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE: Component Function Check

INFOID:0000000005884201

1. CHECK POWER WINDOW MOTOR CIRCUIT

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

Is the inspection result normal?

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

NO >> Refer to PWC-38, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

INFOID:00000000006038410

1. CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

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

(+) Front power window motor (driver side)		(–) Condition			Voltage (V) (Approx.)
Connector	Terminal				(Approxi)
2				UP	12
D10	2	Ground	Power window main switch	DOWN	0
1	Giodila	Fower window main switch	UP	0	
	1		DOWN	12	

Is the inspection result normal?

YES >> Replace front power window motor (driver side). Refer to <u>GW-20, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK POWER WINDOW MOTOR CIRCUIT

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

Power window main switch		Front power (drive	Continuity		
Connector	Terminal	Connector	Terminal		
D22	5	D10	1	Existed	
	D22 6		2	EXISTEC	

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

Power window main switch			Continuity	
Connector	Terminal	Ground	Continuity	
Daa	5	Ground	Not existed	
D22	6		NOT EXISTED	

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

NO >> Repair or replace harness.

PASSENGER SIDE

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE: Component Function Check

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1. CHECK POWER WINDOW MOTOR CIRCUIT

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

Is the inspection result normal?

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

NO >> Refer to PWC-39, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000006038411

1. CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

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

Front power	(+) Front power window motor (passenger side)		Condition		Voltage (V) (Approx.)
Connector	Terminal				
	2	Crawad		UP	12
D40			Front power window switch	DOWN	0
D40	Ground	(passenger side)	UP	0	
	I			DOWN	12

Is the inspection result normal?

YES >> Replace front power window motor (passenger side). Refer to <u>GW-20, "Removal and Installation"</u>.

NO >> GO TO 2.

2.CHECK POWER WINDOW MOTOR CIRCUIT

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

Front power window switch (passenger side)		Front power window r	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
D50	8 D40		2	Existed
D30	9	D40	1	LAISIEU

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

Front power window s	witch (passenger side)		Continuity
Connector	Terminal	Ground	Continuity
D50	8	Ground	Not existed
	9		Not existed

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to PWC-72, "Removal and Installation".

NO >> Repair or replace harness.

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REAR LH: Component Function Check

INFOID:0000000005884209

1. CHECK POWER WINDOW MOTOR CIRCUIT

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

Is the inspection result normal?

YES >> Rear power window motor LH is OK.

NO >> Refer to PWC-40, "REAR LH: Diagnosis Procedure".

REAR LH: Diagnosis Procedure

INFOID:0000000006038412

1. CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

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

(+) Rear power window motor LH		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(, ,prox.)
	D52 3	Ground	Rear power window switch LH	UP	12
D52				DOWN	0
D32		Giouna		UP	0
	3			DOWN	12

Is the inspection result normal?

YES >> Replace rear power window motor LH. Refer to <u>GW-23</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 wi	ndow switch LH	Rear power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
D54	DE4.		1	Existed
D34	9	D52	3	LAISIEU

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

Rear power window switch LH			Continuity	
Connector	Terminal	Ground	Continuity	
D54	8	Giouna	Not existed	
D34	9		Not existed	

Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to PWC-73, "Removal and Installation".

NO >> Repair or replace harness.

REAR RH

REAR RH: Component Function Check

INFOID:0000000005884213

1. CHECK POWER WINDOW MOTOR CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> Rear power window motor RH is OK.

NO >> Refer to PWC-41, "REAR RH: Diagnosis Procedure".

REAR RH: Diagnosis Procedure

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1. CHECK REAR POWER WINDOW MOTOR INPUT SIGNAL

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

(+) Rear power wind	(+) Rear power window motor RH Connector Terminal (-) Condition		Condition		Voltage (V) (Approx.)	
Connector				(44)		
	1	Ground	Cround Pear newer window switch PH	UP	12	
D72	1			Ground	Rear power window switch RH	DOWN
012	3		Real power window switch Kir	UP	0	
	3				DOWN	12

Is the inspection result normal?

YES >> Replace rear power window motor RH. Refer to <u>GW-23</u>, "Removal and Installation".

NO >> GO TO 2.

2. CHECK POWER WINDOW MOTOR CIRCUIT

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

Rear power win	ndow switch RH	Rear power window motor RH		Continuity
Connector	Terminal	Connector Terminal		Continuity
D74	8	D72	1	Existed
D/4	9	DIZ	3	LXISIEU

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

Rear power w	Rear power window switch RH		Continuity
Connector	Terminal	Ground	Continuity
D74	8	Giouna	Not existed
D74	9		Not existed

Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to PWC-73, "Removal and Installation".

NO >> Repair or replace harness.

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ENCODER

DRIVER SIDE

DRIVER SIDE: Component Function Check

INFOID:0000000005884221

1. CHECK ENCODER

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

Is the inspection result normal?

YES >> Encoder is OK.

NO >> Refer to PWC-42, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE: Diagnosis Procedure

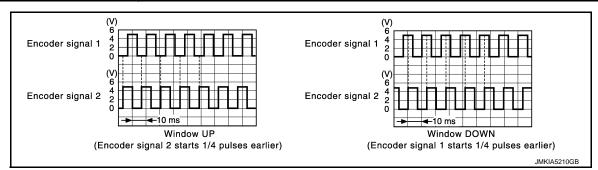
INFOID:0000000005884222

1. CHECK ENCODER SIGNAL

1. Turn ignition switch ON.

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

	(+) Power window main switch		Signal (Reference value)	
Connector	Terminal		(,	
D22	11	Ground	Refer to following signal	
DZZ	12	Giodila	Refer to following signal	



Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

NO >> GO TO 2.

2. CHECK ENCORDER SIGNAL CIRCUIT

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

Power windo	w main switch	Front power window motor (driver side)		Continuity
Connector	Terminal	Connector Terminal		
D22	11	D10	5	Existed
	12	010	3	LXISIEG

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

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Power windo	Power window main switch		Continuity
Connector	Terminal	Ground	Continuity
D22	11	Giodila	Not existed
DZZ	12		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3.}$ CHECK ENCORDER POWER SUPPLY CIRCUIT 1

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

Front power window	(+) Front power window motor (driver side)		Voltage (V) (Approx.)
Connector	Terminal		(Αρρίολ.)
D10	4	Ground	12

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK ENCORDER POWER SUPPLY CIRCUIT 2

Turn ignition switch OFF.

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

Power window main switch		Front power window motor (driver side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
D22	3	D10	4	Existed

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D22	3		Not existed

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

NO >> Repair or replace harness.

${f 5.}$ CHECK GROUND CIRCUIT 1

Turn ignition switch OFF.

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

Front power window	Front power window motor (driver side)			Front power window motor (driver side)		Continuity
Connector	Terminal	Ground	Continuity			
D10	6		Existed			

Is the inspection result normal?

YES >> Replace front power window motor (driver side). Refer to <u>GW-20, "Removal and Installation"</u>.

NO >> GO TO 6.

6.CHECK GROUND CIRCUIT 2

1. Disconnect power window main switch connector.

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

Power window main switch		Front power window motor (driver side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
D22	10	D10	6	Existed

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

Power window main switch			Continuity	
Connector	Terminal	Ground	Continuity	
D22	10		Not existed	

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72. "Removal and Installation".

NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE: Component Function Check

INFOID:0000000005884224

1.CHECK ENCODER

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

Is the inspection result normal?

YES >> Encoder is OK.

NO >> Refer to PWC-44, "PASSENGER SIDE : Diagnosis Procedure".

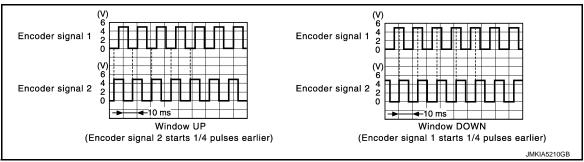
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000005884225

1. CHECK ENCODER SIGNAL

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

(+) Front power window switch (passenger side)			Signal (Reference value)	
		(–)		
Connector	Terminal		(
D50	12	Ground	Refer to following signal	
550	15	Giodila	Trefer to following signal	



Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to PWC-72, "Removal and Installation".

NO \gg GO TO 2.

2. CHECK ENCORDER SIGNAL CIRCUIT

1. Turn ignition switch OFF.

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

Front power window s	witch (passenger side)	Front power window motor (passenger side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
D50	12	D40	5	Existed
550	15	540	3	LAISIGU

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

Front power window switch (passenger side)			Continuity	
Connector	Terminal	Ground	Continuity	
	12	Ground	Not existed	
D50	15	-	Not existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCORDER POWER SUPPLY CIRCUIT 1

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

Front power window r	+) notor (passenger side)	(-)	Voltage (V) (Approx.)	
Connector	Terminal		, , ,	
D40	4	Ground	12	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 5.

4. CHECK GROUND CIRCUIT 1

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

Front power window mo		Continuity	
Connector	Terminal	Ground	Continuity
D40	6		Existed

Is the inspection result normal?

YES >> Replace front power window motor (passenger side). Refer to <u>GW-20, "Removal and Installation"</u>.

NO >> GO TO 6.

${f 5.}$ CHECK ENCORDER POWER SUPPLY CIRCUIT 2

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

Front power window s	switch (passenger side)	Front power window motor (passenger side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
D50	4	D40	4	Existed

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

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Front power window switch (passenger side)			Continuity
Connector	Terminal	Ground	Continuity
D50	4		Not existed

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to PWC-72, "Removal and Installation".

NO >> Repair or replace harness.

6. CHECK GROUND CIRCUIT 2

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

Front power window s	Front power window switch (passenger side)		Front power window motor (passenger side)	
Connector	Terminal	Connector Terminal		Continuity
D50	3	D40	6	Existed

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

Front power window switch (passenger side)			Continuity	
Connector	Terminal	Ground	Continuity	
D50	3		Not existed	

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to PWC-72, "Removal and Installation".

NO >> Repair or replace harness.

REAR LH

REAR LH: Component Function Check

INFOID:0000000005884227

1. CHECK ENCODER OPERATION

Check that rear door LH glass performs AUTO open/close operation normally by power window main switch or rear power window switch LH.

Is the inspection result normal?

YES >> Encoder operation is OK.

NO >> Refer to <u>PWC-46</u>, "<u>REAR LH</u>: <u>Diagnosis Procedure</u>".

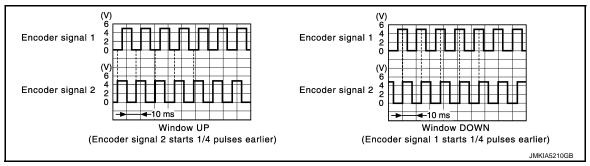
REAR LH: Diagnosis Procedure

INFOID:0000000005884228

1. CHECK ENCODER SIGNAL

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

(+)			Signal (Reference value)
Rear power wi	Rear power window switch LH		
Connector	Terminal		,
D54	12	Ground	Refer to following signal
D34	15	- Ground	ixelet to following signal



Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to PWC-73, "Removal and Installation".

NO >> GO TO 2.

2. CHECK ENCORDER SIGNAL CIRCUIT

Turn ignition switch OFF.

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

Rear power wi	ndow switch LH	Rear power window motor LH		Continuity
Connector	Terminal	Connector Terminal		Continuity
D54	12	D52	5	Existed
D34	15	D32	6	LXISIEU

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

Rear power window switch LH			Continuity
Connector	Terminal	Ground	Continuity
D54	12	Clound	Not existed
	15		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCORDER POWER SUPPLY CIRCUIT 1

- Connect rear power window switch LH connector.
- Turn ignition switch ON.
- 3. Check voltage between rear power window motor LH harness connector and ground.

(+) Rear power window motor LH		(-)	Voltage (V) (Approx.)
Connector	Terminal		(, 41, 2,)
D52	2	Ground	12

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 5.

4. CHECK GROUND CIRCUIT 1

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

Rear power window motor LH			Continuity
Connector	Terminal	Ground	Continuity
D52	4		Existed

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Is the inspection result normal?

YES >> Replace rear power window motor LH. Refer to <u>GW-23, "Removal and Installation"</u>.

NO >> GO TO 6.

5. CHECK ENCORDER POWER SUPPLY CIRCUIT2

- 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	
D54	4	D52	2	Existed	

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

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

Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to PWC-73, "Removal and Installation".

NO >> Repair or replace harness.

6.CHECK GROUND CIRCUIT 2

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

Rear power wi	ndow switch LH	Rear power window motor LH		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
D54	3	D52	4	Existed	

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

Rear power window switch LH			Continuity
Connector	Terminal	Ground	Continuity
D54	3		Not existed

Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to PWC-73, "Removal and Installation".

NO >> Repair or replace harness.

REAR RH

REAR RH: Component Function Check

1. CHECK ENCODER OPERATION

Check that rear door RH glass performs AUTO open/close operation normally by power window main switch or rear power window switch RH.

Is the inspection result normal?

YES >> Encoder operation is OK.

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

REAR RH: Diagnosis Procedure

1. CHECK ENCODER SIGNAL

Turn ignition switch ON.

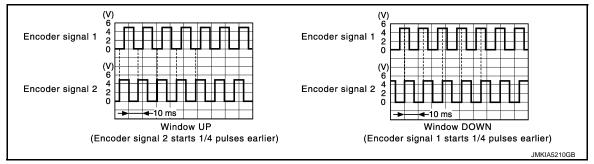
2. Check signal between rear power window switch RH harness connector and ground with oscilloscope.

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(+) Rear power window switch RH		(-)	Signal (Reference value)
Connector	Terminal		(Itererenee value)
	12	Ground	Refer to following signal
	15	Ground	



Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to PWC-73, "Removal and Installation".

NO >> GO TO 2.

2. CHECK ENCODER SIGNAL CIRCUIT

Turn ignition switch OFF.

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

Rear power wi	ndow switch RH	Rear power window motor RH		Rear power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity		
D74	12	D72	5	Existed		
	15	072	6	LAISIEU		

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

Rear power window switch RH			Continuity
Connector	Terminal	Ground	Continuity
D74	12		Not existed
	15		NOI existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCODER POWER SUPPLY CIRCUIT 1

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

(+) Rear power window motor RH		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(17.5)	
D72	2	Ground	12	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 5.

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< DTC/CIRCUIT DIAGNOSIS >

4. CHECK GROUND CIRCUIT 1

Turn ignition switch OFF.

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

Rear power window motor RH			Continuity
Connector	Terminal	Ground	Continuity
D72	4		Existed

Is the inspection result normal?

YES >> Replace rear power window motor RH. Refer to <u>GW-23</u>, "Removal and Installation".

NO >> GO TO 6.

${f 5.}$ CHECK ENCORDER POWER SUPPLY CIRCUIT 2

1. Turn ignition switch OFF.

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

Rear power wi	ndow switch RH	Rear power wi	ndow motor RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D74	4	D72	2	Existed

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

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

Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to PWC-73, "Removal and Installation".

NO >> Repair or replace harness.

6. CHECK GROUND CIRCUIT 2

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

Rear power wi	ndow switch RH	Rear power wi	ndow motor RH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
D74	3	D72	4	Existed

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

Rear power window switch RH			Continuity
Connector	Terminal	Ground	Continuity
D74	3		Not existed

Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to PWC-73, "Removal and Installation".

NO >> Repair or replace harness.

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000005884233

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYS-TEM" with CONSULT-III. Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLI-**GENT KEY)**".

Monitor item		Condition
KEY CYL LK-SW	Lock	: ON
RET GTE EN-GW	Neutral / Unlock	: OFF
KEY CYL UN-SW	Unlock	: ON
RETUTE ON-SW	Neutral / Lock	: OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.

>> Refer to PWC-51, "Diagnosis Procedure". NO

Diagnosis Procedure

INFOID:0000000005884234

1. CHECK DOOR KEY CYLINDER SWITCH SIGNAL

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

Front door lock assembly (c	+) driver side) (door key cylinder itch)	(-)	Voltage (V) (Approx.)	
Connector	Terminal			
D15	5 6	Ground	5	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR KEY CYLINDER SWITCH CIRCUIT

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

Power window main switch		Front door lock assembly (driver side) (door key cylinder switch)		Continuity
Connector	Terminal	Connector	Terminal	
D22	15	D15	6	Existed
DZZ	16	פוט	5	Existed

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

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DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Power window	Power window main switch		Continuity
Connector	Terminal	Ground	Continuity
D22	15	Giodila	Not existed
DZZ	16		NOT EXISTED

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly (driver side) (door key cylinder switch) harness connector and ground.

Front door lock assembly (driver side	e) (door key cylinder switch)		Continuity
Connector	Terminal	Ground	Continuity
D15	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

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

Refer to PWC-52, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (driver side) (door key cylinder switch). Refer to <u>DLK-174</u>, "DOOR LOCK: Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005884235

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly (driver side) (key cylinder switch) connector.
- 3. Check front door lock assembly (driver side) (key cylinder switch).

Front door lock assembly (driver side) (key cylinder switch)		Key position	Continuity	
Terminal		Ney position	Continuity	
		Unlock	Existed	
5	4	Neutral / Lock	Not existed	
6		Lock	Existed	
O		Neutral / Unlock	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side) (key cylinder switch). Refer to <u>DLK-176, "OUTSIDE HANDLE</u>: Removal and Installation".

< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW SERIAL LINK POWER WINDOW MAIN SWITCH

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POWER WINDOW MAIN SWITCH: Component Function Check

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

(III) With CONSULT-III

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYS-TEM" with CONSULT-III. Refer to DLK-30, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

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

Is the inspection result normal?

YES >> Power window serial link is OK.

>> Refer to PWC-53, "POWER WINDOW MAIN SWITCH: Diagnosis Procedure". NO

POWER WINDOW MAIN SWITCH: Diagnosis Procedure

INFOID:0000000005884238

1. CHECK POWER WINDOW SWITCH INPUT SIGNAL

Turn ignition switch ON.

Check signal between power window main switch harness connector and ground with oscilloscope.

(+) power window main switch		(–)	Signal (Reference value)	
Connector	Terminal		,	
D22	13	Ground	(V) 15 10 5 0 JPMIA0013GB	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

(+) Power window main switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(44 - 111)	
D22	13	Ground	12	

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

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NO >> GO TO 3.

3. CHECK POWER WINDOW SERIAL LINK CIRCUIT

- 1. Disconnect BCM connector and power window main switch connector.
- Check continuity between BCM harness connector and power window main switch harness connector.

В	CM	Power window main switch				Continuity
Connector	Terminal	Connector Terminal		Continuity		
M120	8	D22	13	Existed		

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Connector Terminal		Continuity
M120	8		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

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

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

(P) With CONSULT-III

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to DOOR LOCK SYSTEM" with CONSULT-III. Refer to DLK-30, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition		
CDL LOCK SW	LOCK	: ON	
CDL LOCK SW	UNLOCK	: OFF	
CDL UNLOCK SW	LOCK	: OFF	
CDL UNLOCK 3W	UNLOCK	: ON	

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-54, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure".

FRONT POWER WINDOW SWITCH (PASSENGER SIDE): Diagnosis Procedure

INFOID:0000000005884241

1. CHECK POWER WINDOW SWITCH INPUT SIGNAL

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

< DTC/CIRCUIT DIAGNOSIS >

(+) Front power window switch (passenger side)		(-)	Signal (Reference value)	
Connector	Terminal		,	
D50	16	Ground	(V) 15 10 5 0 10 ms JPMIA0013GB	

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to PWC-72, "Removal and Installation".

NO >> GO TO 2.

2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

(+)			\/altaga (\/\	
Front power window switch (passenger side)		(–)	Voltage (V) (Approx.)	
Connector	Terminal		, , ,	
D50	16	Ground	12	

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

NO >> GO TO 3.

${f 3.}$ CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect power window main switch connector.

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

Power windo	w main switch	Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
D22	13	D50	16	Existed

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

Power windo	w main switch		Continuity
Connector Terminal		Ground	Continuity
D22	13		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END REAR POWER WINDOW SWITCH LH

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REAR POWER WINDOW SWITCH LH: Component Function Check

INFOID:0000000005884243

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

(P) With CONSULT-III

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to <u>DLK-30</u>, "DOOR LOCK: <u>CONSULT-III Function</u> (BCM - DOOR LOCK)".

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

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to PWC-56, "REAR POWER WINDOW SWITCH LH: Diagnosis Procedure".

REAR POWER WINDOW SWITCH LH: Diagnosis Procedure

INFOID:0000000005884244

1. CHECK POWER WINDOW SWITCH INPUT SIGNAL

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

(+) Rear power wind	(+) Rear power window switch LH				Signal (Reference value)	
Connector	Terminal		(
D54	16	Ground	(V) 15 10 5 0 JPMIA0013GB			

Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to PWC-72, "Removal and Installation".

NO >> GO TO 2.

2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

(+) Rear power window switch LH		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(Approx.)	
D54	16	Ground	12	

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

NO >> GO TO 3.

3.check power window serial link circuit

1. Disconnect power window main switch connector.

< DTC/CIRCUIT DIAGNOSIS >

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

Power windo	w main switch	Rear power window switch LH		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
D22	13	D54	16	Existed	

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D22	13		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

REAR POWER WINDOW SWITCH RH

REAR POWER WINDOW SWITCH RH : Component Function Check

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

(II) With CONSULT-III

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to PWC-57, "REAR POWER WINDOW SWITCH RH: Diagnosis Procedure".

Monitor item	Condition		
CDL LOCK SW	LOCK	: ON	
CDL LOCK SVV	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-57, "REAR POWER WINDOW SWITCH RH: Diagnosis Procedure".

REAR POWER WINDOW SWITCH RH: Diagnosis Procedure

1. CHECK POWER WINDOW SWITCH INPUT SIGNAL

Turn ignition switch ON.

Check signal between rear power window switch RH harness connector and ground with oscilloscope.

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(+) Rear power window switch RH		(–)	Signal (Reference value)
Connector	Terminal		
D74	16	Ground	(V) 15 10 5 0 JPMIA0013GB

Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to PWC-72, "Removal and Installation".

NO >> GO TO 2.

2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

(+)			V 14 00
Rear power window switch RH		(–)	Voltage (V) (Approx.)
Connector	Terminal		(11 - /
D74	16	Ground	12

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-72, "Removal and Installation".

NO >> GO TO 3.

3.check power window serial link circuit

- 1. Disconnect power window main switch connector.
- 2. Check continuity between power window main switch harness connector and rear power window switch RH harness connector.

Power windo	w main switch	Rear power window switch RH		Continuity	
Connector Terminal		Connector	Terminal	Continuity	
D22	13	D74	16	Existed	

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D22	13		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

Diagnosis Procedure

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

PWC-34, "BCM : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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

Check power window switch power supply and ground circuit.

Refer to PWC-34, "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 result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

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DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005884263

1. CHECK DRIVER SIDE POWER WINDOW MOTOR

Check driver side power window motor.

Refer to PWC-38, "DRIVER SIDE: Component Function Check".

Is the measurement value within the specification?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE < SYMPTOM DIAGNOSIS > FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED В WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED: Diagnosis Procedure INFOID:0000000005884266 ${f 1}$.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY AND GROUND CIR-Check front power window switch (passenger side) power supply and ground circuit. D Refer to PWC-35, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE): Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. Е >> Repair or replace the malfunctioning parts. 2.CHECK PASSENGER SIDE POWER WINDOW MOTOR CIRCUIT Check passenger side power window motor circuit. Refer to PWC-39, "PASSENGER SIDE: Component Function Check". Is the inspection result normal? >> GO TO 3. YES >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". >> GO TO 1. WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED: Diagnosis Procedure INFOID:0000000005884265 **PWC** 1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE) Replace front power window switch (passenger side). Refer to GI-38, "Intermittent Incident" >> INSPECTION END M WHEN POWER WINDOW MAIN SWITCH IS OPERATED WHEN POWER WINDOW MAIN SWITCH IS OPERATED: Diagnosis Procedure INFOID:0000000005884264 N Refer to PWC-54, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE): Component Function Check" Р

${f 1}$.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) SERIAL LINK CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 2.

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NO

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NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

>> GO TO 1. NO

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE 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

Check rear power window switch power supply and ground circuit.

Refer to PWC-36, "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-40, "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 result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED: Diagnosis Procedure

INFOID:0000000005884268

1. REPLACE REAR POWER WINDOW SWITCH LH

Replace rear power window switch LH.

Refer to PWC-73, "Removal and Installation"

>> INSPECTION END

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED: Diagnosis Procedure

INFOID:0000000005884267

1. CHECK REAR POWER WINDOW SWITCH LH SERIAL LINK CIRCUIT

Check rear power window switch LH serial link circuit.

Refer to PWC-56, "REAR POWER WINDOW SWITCH LH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

NO >> GO TO 1.

< SYMPTOM DIAGNOSIS >
REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE 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-36, "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-40, "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 result normal?
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".
NO >> GO TO 1. WHEN REAR POWER WINDOW SWITCH RH IS OPERATED
WHEN REAR POWER WINDOW SWITCH RH IS OPERATED : Diagnosis Procedure
1.REPLACE REAR POWER WINDOW SWITCH RH
Replace rear power window switch RH. Refer to PWC-73, "Removal and Installation"
>> INSPECTION END WHEN POWER WINDOW MAIN SWITCH IS OPERATED
WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure
1.CHECK REAR POWER WINDOW SWITCH RH SERIAL LINK CIRCUIT
Check rear power window switch RH serial link circuit. Refer to PWC-57, "REAR POWER WINDOW SWITCH RH: Component Function Check".
Is the inspection result normal?
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.
2.CONFIRM THE OPERATION
Confirm the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

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AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMAL-

< SYMPTOM DIAGNOSIS >

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NOR-**MALLY**

DRIVER SIDE

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005884277

1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed. Refer to PWC-30, "Work Procedure".

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER (DRIVER SIDE) CIRCUIT

Check encoder (driver side) circuit.

Refer to PWC-42, "DRIVER SIDE: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000005884278

1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to PWC-30, "Work Procedure".

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER (PASSENGER SIDE) CIRCUIT

Check encoder (passenger side) circuit.

Refer to PWC-44, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

>> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

REAR LH

REAR LH: Diagnosis Procedure

INFOID:0000000005884279

1. PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

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AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY

< SYMPTOM DIAGNOSIS >	
Refer to PWC-30, "Work Procedure"	ļ.
Is the inspection result normal?	Α
YES >> INSPECTION END	
NO >> GO TO 2.	В
2.CHECK ENCODER (REAR LH) CIRCUIT	
Check encoder (rear LH) circuit. Refer to PWC-46, "REAR LH: Component Function Check".	
Is the inspection result normal?	С
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	D
3.CONFIRM THE OPERATION	
Confirm the operation again.	_
Is the result normal?	Е
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO >> GO TO 1.	
REAR RH	F
REAR RH : Diagnosis Procedure	_
1.PERFORM INITIALIZATION PROCEDURE	G
Initialization procedure is performed and operation is confirmed. Refer to PWC-30, "Work Procedure".	Н
Is the inspection result normal?	
YES >> INSPECTION END	
NO >> GO TO 2.	
2.CHECK ENCODER (REAR RH) CIRCUIT	
Check encoder (rear RH) circuit. Refer to PWC-48, "REAR RH: Component Function Check".	J
Is the inspection result normal?	
YES >> GO TO 3.	PWC
NO >> Repair or replace the malfunctioning parts.	
3.CONFIRM THE OPERATION	
Confirm the operation again.	L
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	\mathbb{M}
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ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:00000000006008026

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 >> R

>> Refer to <u>PWC-64</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>" (driver side), <u>PWC-64</u>, "<u>PASSENGER SIDE</u>: <u>Diagnosis Procedure</u>" (passenjer side), <u>PWC-64</u>, "<u>REAR LH</u>: <u>Diagnosis Procedure</u>" (rear LH), <u>PWC-65</u>, "<u>REAR RH</u>: <u>Diagnosis Procedure</u>" (rear RH).

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".

NO >> GO TO 1.

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS >	
POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY	А
Diagnosis Procedure	В
1.check door switch	
Check door switch. Refer to DLK-72, "Component Function Check".	С
Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D
2.CHECK POWER WINDOW MAIN SWITCH SERIAL LINK CIRCUIT Check power window main switch serial link circuit. Refer to PWC-53, "POWER WINDOW MAIN SWITCH: Component Function Check".	Е
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	F
3.CONFIRM THE OPERATION	G
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO >> GO TO 1.	Н
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Revision: 2010 June **PWC-67** 2011 M37/M56

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS >

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

Diagnosis Procedure

INFOID:0000000005884282

1. PERFORM INITIALIZATION PROCEDURE

Perform Initialization procedure and check that inspection result is normal.

Refer to PWC-30, "Work Procedure"

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

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

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

Refer to PWC-51, "Component Function Check"

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident"

NO >> GO TO 1.

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE	٨
Description INFOID:000000005884283	А
NOTE: Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-56, "Work Flow"</u> .	В
Diagnosis Procedure	С
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check remote keyless entry function. Does door lock/unlock with Intelligent key button? YES >> GO TO 2. NO >> Go to DLK-19, "REMOTE KEYLESS ENTRY FUNCTION: System Description". 2.CHECK POWER WINDOW OPERATION	D E
Check power window operation.	F
<u>Does power window up/down with power window main switch?</u> YES >> GO TO 3.	
NO >> Go to PWC-34, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure". 3.CHECK "PW DOWN SET" SETTING IN "WORK SUPPORT"	G
Check "PW DOWN SET" SETTING IN WORK SUPPORT". Refer to DLK-32, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal?	Н
YES >> GO TO 4. NO >> Set "PW DOWN SET" setting in "WORK SUPPORT". $\bf 4.$ CHECK POWER WINDOW MAIN SWITCH SERIAL LINK CIRCUIT	I
Check power window main switch serial link circuit. Refer to PWC-53 , "POWER WINDOW MAIN SWITCH: Component Function Check".	J
Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5. CONFIRM THE OPERATION	PW
Confirm the operation again.	L
Is the result normal? YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO >> GO TO 1.	M
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POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000005884285

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch. Refer to PWC-72, "Removal and Installation".

>> INSPECTION END

POWER WINDOW SWITCH DOES NOT ILLUMINATE

SYMPTOM DIAGNOSIS >	
POWER WINDOW SWITCH DOES NOT ILLUMINATE	٨
DRIVER SIDE	А
DRIVER SIDE : Diagnosis Procedure	В
1.REPLACE POWER WINDOW MAIN SWITCH	
Replace power window main switch. Refer to PWC-72, "Removal and Installation".	С
>> INSPECTION END PASSENGER SIDE	D
PASSENGER SIDE : Diagnosis Procedure	Е
1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	
Replace front power window switch (passenger side). Refer to PWC-72, "Removal and Installation".	F
>> INSPECTION END REAR LH	G
REAR LH : Diagnosis Procedure	Н
1. REPLACE REAR POWER WINDOW SWITCH LH	
Replace rear power window switch LH. Refer to PWC-73, "Removal and Installation".	I
>> INSPECTION END REAR RH	J
REAR RH : Diagnosis Procedure	PWC
1. REPLACE REAR POWER WINDOW SWITCH RH	
Replace rear power window switch RH. Refer to PWC-73, "Removal and Installation".	L
>> INSPECTION END	M
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FRONT POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

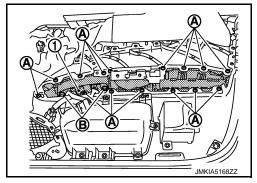
FRONT POWER WINDOW SWITCH

Removal and Installation

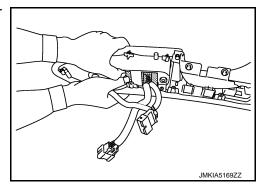
INFOID:0000000005884291

REMOVAL

- Remove the front door finisher.
 Refer to <u>INT-31</u>, "<u>FRONT DOOR FINISHER</u>: <u>Removal and Installation</u>".
- 2. Remove the armrst mounting screws (A), and then remove the armrest from the front door finisher.
- Remove mounting screws (B) of power window main switch(1) from the armrest.



4. Push out and remove power window main switch (1) from lower side, as shown in the figure.



INSTALLATION

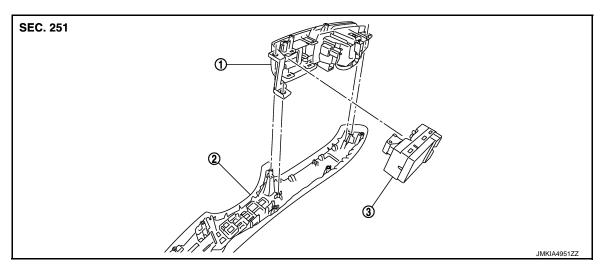
Install in the reverse order of removal.

NOTE:

- If power window main switch or front power window switch (passenger side) is replaced or is removed, it is necessary to perform the initialization procedure.
- The same procedure is also performed for front power window switch (passenger side).

REAR POWER WINDOW SWITCH

Exploded View



- 1. Power window switch finisher
- 2. Rear armrest

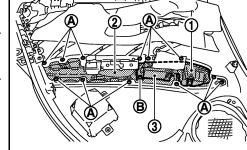
3. Rear power window switch

Removal and Installation

INFOID:0000000005911728

REMOVAL

- Remove the rear door finisher.
 Refer to <u>INT-33</u>, "<u>REAR DOOR FINISHER</u>: <u>Removal and Installation</u>".
- 2. Remove the armrst mounting screws (A), and then remove the armrest from the rear door finisher.
- 3. Remove grip finisher (2) from the armrest.
- Remove mounting screws (B) of power window switch finisher
 from the armrest. Remove power window switch finisher (1) from the armrest.
- 5. Disengage pawls of power window switch finisher (1) from rear power window switch (3), using a flat-bladed screwdriver. Remove rear power window switch(3).



CAUTION:

Never bend finisher pawls when removing switch.

INSTALLATION

Install in the reverse order of removal.

NOTE:

If rear power window switch is replaced or is removed, it is necessary to perform the initialization procedure.

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