

SECTION **PWC**

POWER WINDOW CONTROL SYSTEM

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

CONTENTS

PRECAUTION	3	POWER WINDOW SYSTEM	14
PRECAUTIONS	3	Wiring Diagram	14
Precaution for Technicians Using Medical Electric.....	3	BASIC INSPECTION	32
Point to Be Checked Before Starting Maintenance		DIAGNOSIS AND REPAIR WORK FLOW	32
Work	3	Work Flow	32
Precaution for Supplemental Restraint System		ADDITIONAL SERVICE WHEN REMOVING	
(SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	3	12V BATTERY NEGATIVE TERMINAL	34
Precaution for Removing 12V Battery	4	Description	34
SYSTEM DESCRIPTION	5	Work Procedure	34
COMPONENT PARTS	5	ADDITIONAL SERVICE WHEN REPLACING	
Component Parts Location	5	POWER WINDOW MAIN SWITCH	35
Power Window Main Switch	6	Description	35
Power Window Switch	6	Work Procedure	35
Power Window Motor	6	SYSTEM INITIALIZATION	36
SYSTEM	7	Description	36
System Description	7	Work Procedure	36
Fail Safe	8	CHECK ANTI-PINCH FUNCTION	37
DIAGNOSIS SYSTEM (BCM)	9	Description	37
COMMON ITEM	9	Work Procedure	37
COMMON ITEM : CONSULT Function (BCM -		DTC/CIRCUIT DIAGNOSIS	38
COMMON ITEM)	9	POWER SUPPLY AND GROUND CIRCUIT	38
RETAINED PWR	9	BCM	38
RETAINED PWR : CONSULT Function (BCM -		BCM : Diagnosis Procedure	38
RETAINED PWR)	10	POWER WINDOW MAIN SWITCH	38
ECU DIAGNOSIS INFORMATION	11	POWER WINDOW MAIN SWITCH : Diagnosis	
BCM	11	Procedure	38
List of ECU Reference	11	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	39
POWER WINDOW MAIN SWITCH	12	FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure	39
Reference Value	12	REAR POWER WINDOW SWITCH	40
Fail Safe	13		
WIRING DIAGRAM	14		

REAR POWER WINDOW SWITCH : Diagnosis Procedure	40	WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED	57
		WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED : Diagnosis Procedure	57
FRONT POWER WINDOW SWITCH (PASSENGER SIDE)	42	WHEN REAR POWER WINDOW SWITCH LH IS OPERATED	57
Diagnosis Procedure	42	WHEN REAR POWER WINDOW SWITCH LH IS OPERATED : Diagnosis Procedure	57
Component Inspection	43	WHEN POWER WINDOW MAIN SWITCH IS OPERATED	57
REAR POWER WINDOW SWITCH	44	WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure	58
Diagnosis Procedure	44	REAR RH SIDE POWER WINDOW DOES NOT OPERATE	59
Component Inspection	45	WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH RH ARE OPERATED	59
POWER WINDOW MOTOR	46	WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH RH ARE OPERATED : Diagnosis Procedure	59
DRIVER SIDE	46	WHEN REAR POWER WINDOW SWITCH RH IS OPERATED	59
DRIVER SIDE : Diagnosis Procedure	46	WHEN REAR POWER WINDOW SWITCH RH IS OPERATED : Diagnosis Procedure	59
PASSENGER SIDE	46	WHEN POWER WINDOW MAIN SWITCH IS OPERATED	59
PASSENGER SIDE : Diagnosis Procedure	46	WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure	60
REAR LH	47	AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY (DRIVER SIDE)	61
REAR LH : Diagnosis Procedure	47	Diagnosis Procedure	61
REAR RH	48	ANTI-PINCH SYSTEM DOES NOT OPERATE NORMALLY (DRIVER SIDE)	62
REAR RH : Diagnosis Procedure	48	Diagnosis Procedure	62
ENCODER CIRCUIT	50	POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY	63
Diagnosis Procedure	50	Diagnosis Procedure	63
SYMPTOM DIAGNOSIS	53	POWER WINDOW LOCK SWITCH DOES NOT FUNCTION	64
POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH	53	Diagnosis Procedure	64
Diagnosis Procedure	53	REMOVAL AND INSTALLATION	65
DRIVER SIDE POWER WINDOW DOES NOT OPERATE	54	POWER WINDOW MAIN SWITCH	65
Diagnosis Procedure	54	Removal and Installation	65
FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE	55		
WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED	55		
WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED : Diagnosis Procedure	55		
WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED	55		
WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED : Diagnosis Procedure	55		
WHEN POWER WINDOW MAIN SWITCH IS OPERATED	55		
WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure	56		
REAR LH SIDE POWER WINDOW DOES NOT OPERATE	57		

PRECAUTIONS

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PRECAUTION

PRECAUTIONS

Precaution for Technicians Using Medical Electric

INFOID:000000009352728

OPERATION PROHIBITION

WARNING:

- Parts with strong magnet is used in this vehicle.
- Technicians using a medical electric device such as pacemaker must never perform operation on the vehicle, as magnetic field can affect the device function by approaching to such parts.

NORMAL CHARGE PRECAUTION

WARNING:

- If a technician uses a medical electric device such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator, the possible effects on the devices must be checked with the device manufacturer before starting the charge operation.
- As radiated electromagnetic wave generated by PDM (Power Delivery Module) at normal charge operation may affect medical electric devices, a technician using a medical electric device such as implantable cardiac pacemaker or an implantable cardioverter defibrillator must not approach motor room [PDM (Power Delivery Module)] at the hood-opened condition during normal charge operation.

PRECAUTION AT TELEMATICS SYSTEM OPERATION

WARNING:

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of TCU might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), when using the service, etc.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of TCU might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before TCU use.

PRECAUTION AT INTELLIGENT KEY SYSTEM OPERATION

WARNING:

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of Intelligent Key might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), at door operation, at each request switch operation, or at engine starting.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of Intelligent Key might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before Intelligent Key use.

Point to Be Checked Before Starting Maintenance Work

INFOID:000000008745063

The high voltage system may starts automatically. It is required to check that the timer air conditioner and timer charge (during EVSE connection) are not set before starting maintenance work.

NOTE:

If the timer air conditioner or timer charge (during EVSE connection) is set, the high voltage system starts automatically even when the power switch is in OFF state.

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

INFOID:000000009329203

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

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

PWC

PRECAUTIONS

< PRECAUTION >

system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

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

Precaution for Removing 12V Battery

INFOID:000000008745065

1. Check that EVSE is not connected.

NOTE:

If EVSE is connected, the air conditioning system may be automatically activated by the timer A/C function.

2. Turn the power switch OFF → ON → OFF. Get out of the vehicle. Close all doors (including back door).
3. Check that the charge status indicator lamp does not blink and wait for 5 minutes or more.

NOTE:

If the battery is removed within 5 minutes after the power switch is turned OFF, plural DTCs may be detected.

4. Remove 12V battery within 1 hour after turning the power switch OFF → ON → OFF.

NOTE:

- The 12V battery automatic charge control may start automatically even when the power switch is in OFF state.
- Once the power switch is turned ON → OFF, the 12V battery automatic charge control does not start for approximately 1 hour.

CAUTION:

- After all doors (including back door) are closed, if a door (including back door) is opened before battery terminals are disconnected, start over from Step 1.
- After turning the power switch OFF, if "Remote A/C" is activated by user operation, stop the air conditioner and start over from Step 1.

COMPONENT PARTS

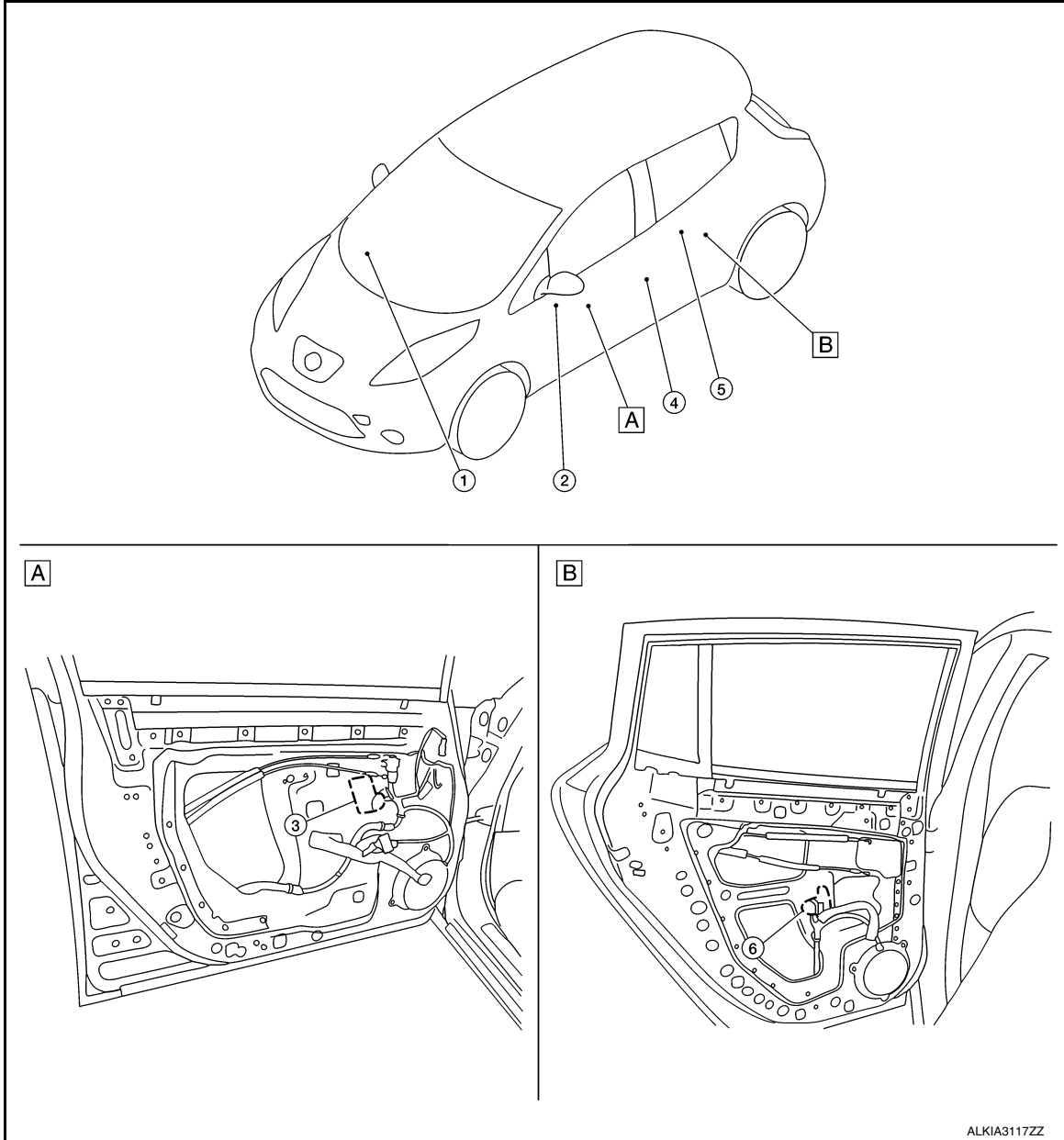
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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

No.	Component parts	Function
1.	BCM	<ul style="list-style-type: none"> Supplies power supply to power window switch Controls retained power Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location
2.	Power window main switch	Refer to PWC-6, "Power Window Main Switch"
3.	Front power window motor (driver side)	Refer to PWC-6, "Power Window Motor"

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

PWC

COMPONENT PARTS

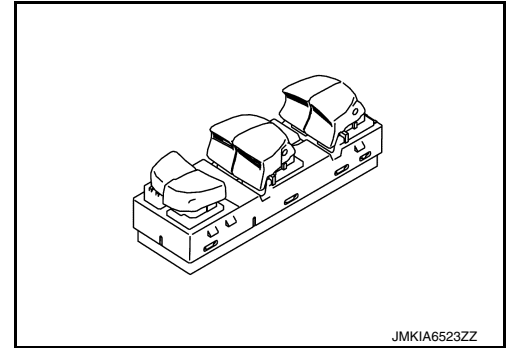
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No.	Component parts	Function
4.	Front door switch (driver side)	<ul style="list-style-type: none"> Inputs door open/close condition to BCM Refer to DLK-15. "Component Parts Location" for detailed installation location
5.	Rear power window switch LH	Refer to PWC-6. "Power Window Switch"
6.	Rear power window motor LH	Refer to PWC-6. "Power Window Motor"

Power Window Main Switch

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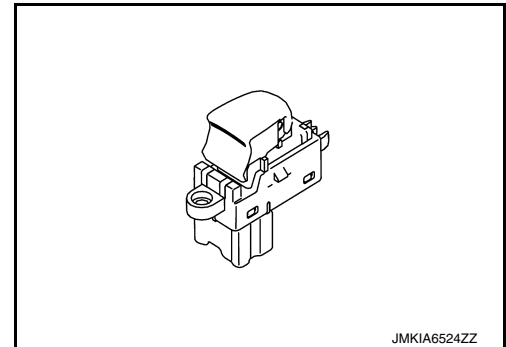
- Power window main switch controls all power windows.
- Power window main switch integrates UP/DOWN switch, power window lock switch, and door lock/unlock switch.
- Power window main switch controls power window lock function, AUTO UP/DOWN function, and anti-pinch function.



Power Window Switch

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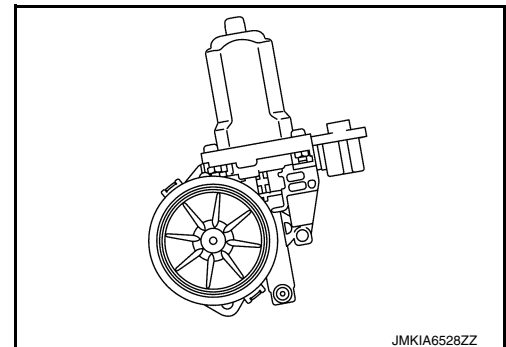
- Each power window switch transmits UP/DOWN signal to each motor.
- Each power window switch transmits UP/DOWN signal from power window main switch to each motor.



Power Window Motor

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- Integrates the encoder and power window motor (front driver side).
- Starts operation according to signals from power window main switch (front driver side).
- Transmits front power window motor (driver side) rotation as a pulse signal to power window main switch.
- Excepting power window motor for driver door, starts operation according to signals from power window main switch or each power window switches.



SYSTEM

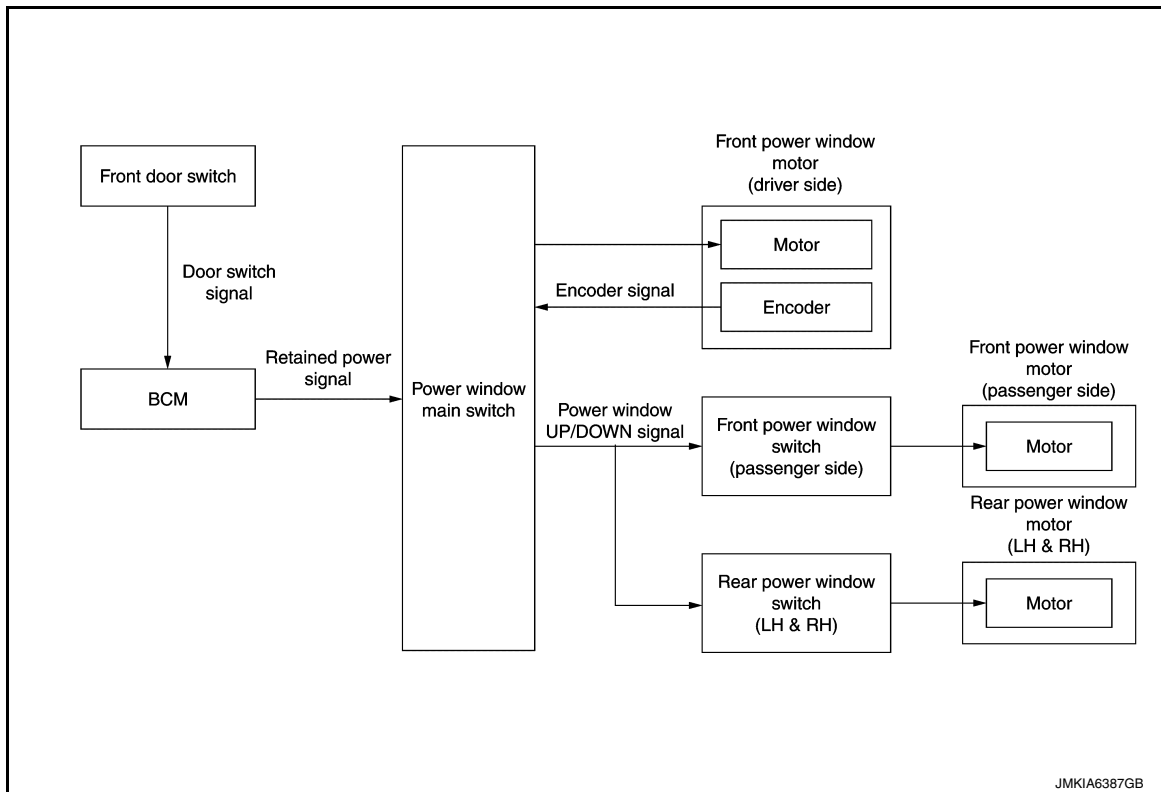
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SYSTEM

System Description

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SYSTEM DIAGRAM



POWER WINDOW OPERATION

- Power window main switch can open/close all windows.
- Front & rear power window switch can open/close the corresponding windows.

POWER WINDOW AUTO-OPERATION (FRONT DRIVER SIDE)

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

RETAINED POWER OPERATION

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

RETAINED POWER CANCEL CONDITIONS

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

POWER WINDOW LOCK

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

ANTI-PINCH SYSTEM (FRONT DRIVER SIDE)

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

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

PWC

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- Resistance is applied to the front power window motor (driver side) rotation that changes the frequency of encoder pulse signal if foreign material is trapped in the door glass.
- Power window main switch controls to lower the window glass for 150 mm (5.9 in) after it detects encoder pulse signal frequency change.

OPERATION CONDITION

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

NOTE:

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

Fail Safe

INFOID:000000008745072

FAIL-SAFE CONTROL

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

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

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

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

Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window switch or in the motor.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000009346249

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul style="list-style-type: none"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

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

RETAINED PWR

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PWC

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

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DATA MONITOR

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

BCM

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:000000008745075

ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-46, "Fail-safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"

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P

PWC

POWER WINDOW MAIN SWITCH

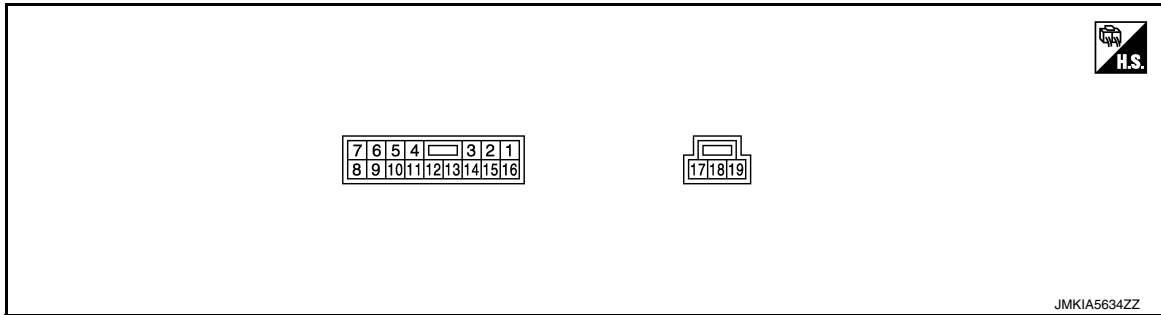
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POWER WINDOW MAIN SWITCH

Reference Value

INFOID:000000008745076

TERMINAL LAYOUT



PHYSICAL VALUES

POWER WINDOW MAIN SWITCH

Terminal No. (Wire color)		Description		Condition	Voltage (Approx)
+	-	Signal name	Input/ Output		
1 (B)	Ground	Ground	—	—	0
2 (SB)	Ground	Front power window motor (passenger side) DOWN signal	Output	When front RH switch in power window main switch is DOWN at operated.	Battery voltage
4 (W)	Ground	Encoder pulse signal 2	Input	When front power window motor (driver side) operates.	 JMKIA0070GB
5 (Y)	Ground	Encoder pulse signal 1	Input	When front power window motor (driver side) operates.	 JMKIA0070GB
6 (Y)	Ground	Rear power window motor RH DOWN signal	Output	When rear RH switch in power window main switch is DOWN at operated.	Battery voltage
7 (LG)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in power window main switch is UP at operated.	Battery voltage
8 (BR)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in power window main switch is DOWN at operated.	Battery voltage
9 (P)	Ground	Rear power window motor LH UP signal	Output	When rear LH switch in power window main switch is UP at operated.	Battery voltage

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Voltage (Approx)
+	-	Signal name	Input/ Output		
10 (V)	Ground	Power switch power supply	Input	Power switch ON	Battery voltage
				Other than above	0
12 (R)	Ground	Encoder ground	—	—	0
14 (G)	Ground	Encoder power supply	Output	Power switch ON	Battery voltage
16 (W)	Ground	Front power window motor (passenger side) UP signal	Output	When front RH switch in power window main switch is UP at operated.	Battery voltage
17 (R)	Ground	Front power window motor (driver side) UP signal	Output	When front LH switch in power window main switch is UP at operated.	Battery voltage
18 (R)	Ground	Battery power supply	Input	Power switch OFF	Battery voltage
19 (GR)	Ground	Front power window motor (driver side) DOWN signal	Output	When front LH switch in power window main switch is DOWN at operated.	Battery voltage

Fail Safe

INFOID:000000008745077

FAIL-SAFE CONTROL

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

Error	Error condition
Pulse sensor malfunction	When only one side of pulse signal is being detected for more than the specified value.
Both pulse sensors malfunction	When both pulse signals have not been detected for more than the specified value during glass open/close operation.
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Glass recognition position malfunction 2	When it detects pulse count more than the value of glass full stroke during glass open/close operation.

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

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

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

POWER WINDOW SYSTEM

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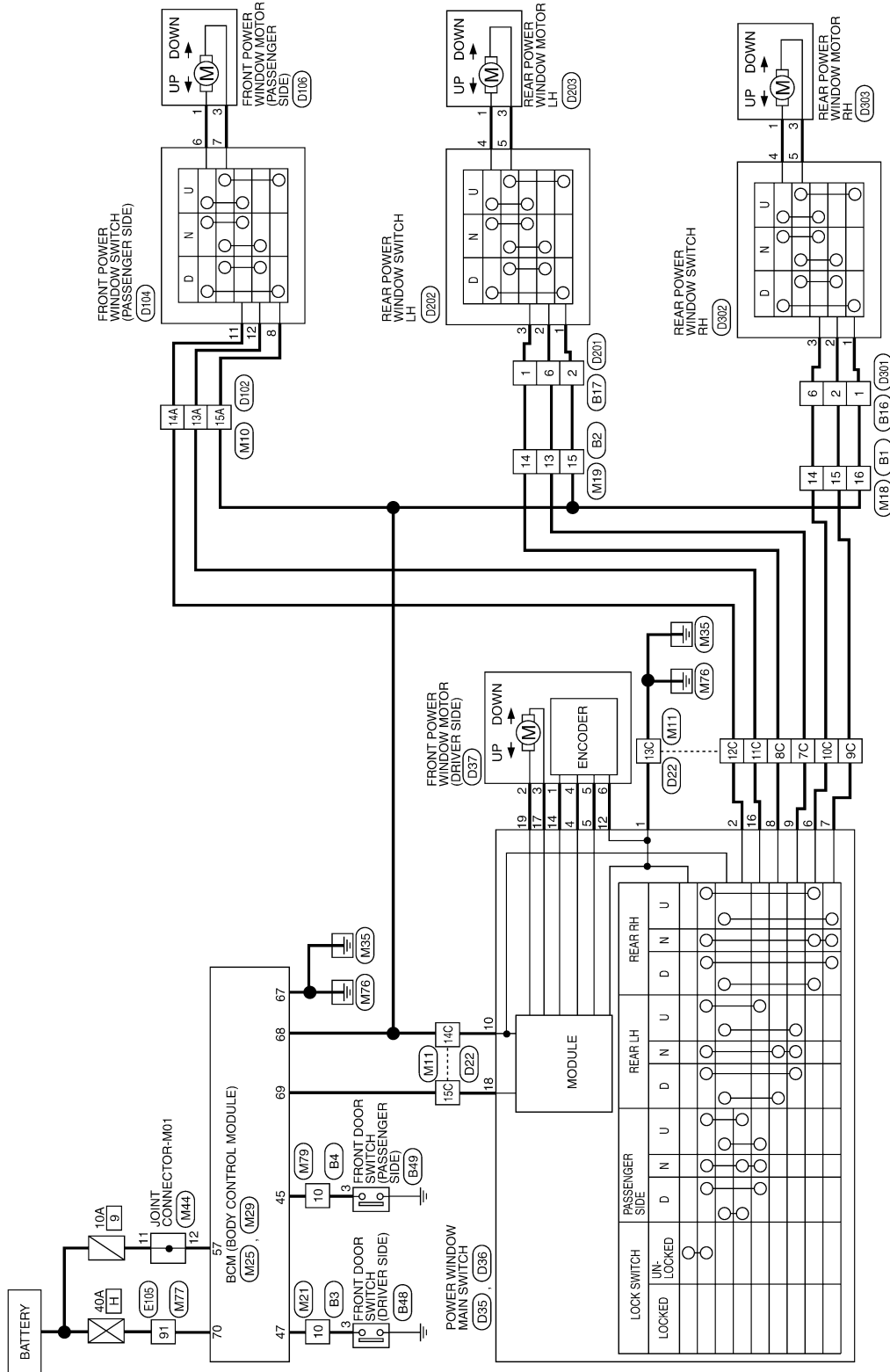
WIRING DIAGRAM

POWER WINDOW SYSTEM

Wiring Diagram

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POWER WINDOW SYSTEM



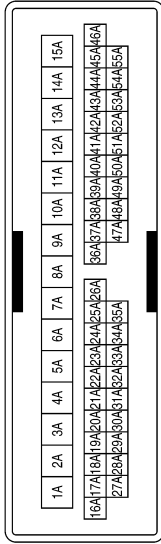
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POWER WINDOW SYSTEM

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POWER WINDOW SYSTEM - CONNECTORS

Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1A	L	- (WITH BOSE)
1A	R	- (WITHOUT BOSE)
2A	P	- (WITH BOSE)
2A	G	- (WITHOUT BOSE)
3A	SHIELD	-
4A	LG	-
5A	V	-
10A	BR	-
11A	Y	-
12A	B	-
13A	W	-
14A	SB	-
15A	L	-
24A	Y	-
25A	BR	-
26A	SHIELD	-

Terminal No.	Color of Wire	Signal Name
36A	B	-
37A	P	-
38A	Y	-
39A	LG	-
43A	V	-
44A	L	-
45A	LG	-
46A	BR	-
47A	W	-
48A	B	-
49A	R	-
50A	SHIELD	-

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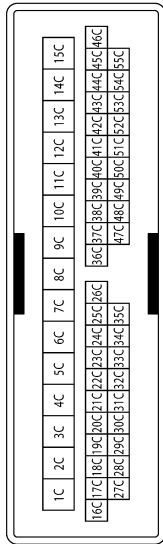
POWER WINDOW SYSTEM

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Terminal No.	Color of Wire	Signal Name
32C	-	-
33C	-	-
34C	-	-
35C	-	-
36C	LG	-
37C	R	-
38C	GR	-
39C	W	-
40C	P	-
41C	V	-
42C	V	-
43C	B	-
44C	L	-
45C	BR	-
46C	L	-
47C	Y	-
48C	BR	-
49C	B	-
50C	W	-
51C	R	-
52C	SHIELD	-
53C	-	-
54C	R	-
55C	LG	-

Terminal No.	Color of Wire	Signal Name
9C	LG	-
10C	Y	-
11C	W	-
12C	SB	-
13C	B	-
14C	L	-
15C	R	-
16C	-	-
17C	-	-
18C	-	-
19C	-	-
20C	-	-
21C	-	-
22C	-	-
23C	-	-
24C	G	-
25C	R	-
26C	SHIELD	-
27C	-	-
28C	-	-
29C	-	-
30C	-	-
31C	-	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE



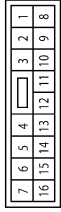
Terminal No.	Color of Wire	Signal Name
1C	R	- (WITH BOSE)
1C	P	- (WITHOUT BOSE)
2C	G	- (WITH BOSE)
2C	L	- (WITHOUT BOSE)
3C	SHIELD	-
4C	G	-
5C	V	-
6C	-	-
7C	BR	-
8C	SB	-

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POWER WINDOW SYSTEM

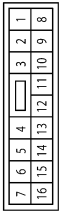
< WIRING DIAGRAM >

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	LG	-
3	P	-
4	GR	-
5	GR	-
6	W	-
7	-	-
8	-	-
9	-	-
10	V	-
11	V	-
12	LG	-
13	BR	-
14	SB	-
15	L	-
16	G	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	G	-
2	-	-
3	GR	-
4	L	-
5	G	-
6	V	-
7	P	-
8	P	-
9	B	-
10	R	-
11	LG	-
12	P	-
13	W	-
14	Y	-
15	LG	-
16	L	-

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POWER WINDOW SYSTEM

< WIRING DIAGRAM >

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-

Terminal No.	Color of Wire	Signal Name
7	B	-
8	SHIELD	-
9	R	-
10	SB	-
11	P	-
12	V	-
13	GR	-
14	P	-
15	L	-
16	G	-
17	-	-
18	-	-
19	-	-

Terminal No.	Color of Wire	Signal Name
20	-	-
21	-	-
22	-	-
23	-	-
24	W	-
25	B	-
26	W	-
27	Y	-
28	-	-
29	W	-
30	L	-
31	L	-
32	P	-

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
60	V	FLASHER OUTPUT (LEFT)
61	R	FLASHER OUTPUT (RIGHT)
62	-	-
63	BR	ROOM LAMP OUTPUT
64	-	-
65	V	DOOR LOCK OUTPUT
66	G	DOOR UNLOCK COMMON (DR)
67	B	GND
68	L	POWER WINDOW POWER SUPPLY (RAP)
69	R	POWER WINDOW POWER SUPPLY (BATTERY)
70	Y	BATTERY (F/L)

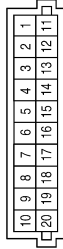
Terminal No.	Color of Wire	Signal Name
56	P	BATTERY SAVER OUTPUT
57	P	BATTERY (FUSE)
58	-	-
59	LG	DOOR UNLOCK OUTPUT (AS)

AAKIA1538GB

POWER WINDOW SYSTEM

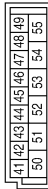
< WIRING DIAGRAM >

Connector No.	M44
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	P	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	B	-
9	B	-
10	B	-
11	P	-
12	P	-
13	W	-
14	W	-
15	LG	-
16	R	-
17	R	-
18	W	-
19	W	-
20	W	-

Connector No.	M29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
41	-	-
42	-	-
43	Y	DOOR SW (BACK)
44	LG	REAR WIPER AUTO STOP SW
45	BR	DOOR SW (AS)
46	R	DOOR SW (RR)
47	SB	DOOR SW (DR)
48	W	DOOR SW (RL)
49	L	LUGGAGE LAMP OUTPUT
50	-	-
51	P	REQUEST SW (TRUNK/BACK DOOR)
52	-	-
53	GR	TRUNK/BACK DOOR OPEN OUTPUT
54	P	REAR WIPER MOTOR OUTPUT
55	G	DOOR UNLOCK OUTPUT (RR, RL)

AAKIA1539GB

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POWER WINDOW SYSTEM

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
63	BR	-
64	SHIELD	-
65	W	-
66	LG	-
67	R	-
68	G	-
69	BG	-
70	GR	-
71	R	-
72	R	-
73	B	-
74	W	-
76	L	-
80	W	-
81	LG	-
83	GR	-
84	L	-
85	Y	-
86	SB	-
88	R	-
89	G	-
90	SHIELD	-
91	Y	-
92	BR	-
93	W	-
94	P	-
95	L	-
96	P	-
97	G	-
98	V	-
99	LG	-
100	R	-

Terminal No.	Color of Wire	Signal Name
27	B	-
28	B	-
29	R	-
31	R	-
32	W	-
33	GR	-
34	BR	-
35	BR	-
36	W	-
37	L	-
38	LG	-
39	SB	-
40	V	-
41	P	-
42	SB	-
43	G	-
44	LG	-
45	Y	-
46	R	-
47	W	-
48	L	-
49	G	-
50	L	-
51	SB	-
52	L	-
54	B	-
55	R	-
56	V	-
57	Y	-
58	L	-
60	Y	-
61	GR	-
62	W	-

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	R	-
2	L	-
3	V	-
4	LG	-
6	P	-
7	GR	-
9	G	-
10	L	-
11	L	-
12	Y	-
13	V	-
14	R	-
15	G	-
16	W	-
17	R	-
18	G	-
19	W	-
20	GR	-
21	P	-
22	B	-
23	BG	-
24	B	-
25	W	-
26	G	-

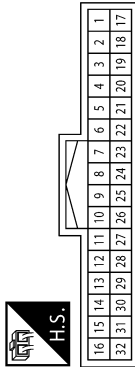
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POWER WINDOW SYSTEM

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
20	BR	-
21	V	-
22	SB	-
23	W	-
24	B	-
25	W	-
26	R	-
27	-	-
28	-	-
29	W	-
30	R	-
31	G	-
32	-	-

Connector No.	M79
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	P	-
3	SHIELD	-
4	G	-
5	R	-
6	SHIELD	-
7	L	-
8	GR	-
9	R	-
10	BR	-
11	L	-
12	BR	-
13	B	-
14	-	-
15	R	-
16	G	-
17	R	-
18	G	-
19	SHIELD	-

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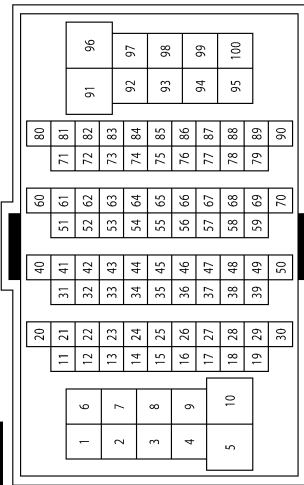
POWER WINDOW SYSTEM

< WIRING DIAGRAM >

57	Y	-
58	L	-
60	LG	-
61	GR	-
62	W	-
63	SB	-
64	SHIELD	-
65	W	-
66	G	-
67	V	-
68	R	-
69	B	-
70	BR	-
71	LG	-
72	R	-
73	B	-
74	O	-
76	L	-
77	Y	-
80	P	-
81	SB	-
83	GR	-
84	L	-
85	O	-
86	BR	-
88	B	-
89	W	-
90	SHIELD	-
91	Y	-
92	BR	-
93	O	-
94	R	-
95	V	-
96	P	-
97	G	-
98	W	-
99	O	-
100	SB	-

19	W/L	-
20	BR	-
21	R	-
22	B	-
23	LG	-
24	B	-
25	W	-
26	W	-
27	B	-
28	O/L	-
29	W	-
31	R	-
32	W	-
33	G	-
34	BR	-
35	V	-
36	O	-
37	L	-
38	SB	-
39	P	-
40	V	-
41	O	-
42	Y	-
43	BR	-
44	W	-
45	G	-
46	P	-
47	LG	-
47	R	-
48	B	-
49	L	-
50	G	-
51	W	-
52	O	-
54	B	-
55	R	-
56	Y	-

Connector No.	E 105
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	R	-
2	L	-
3	BW	- (WITHOUT FRONT FOG LAMPS)
3	R	- (WITH LED HEADLAMPS)
4	LG	- (WITH LED HEADLAMPS)
4	B/W	- (WITHOUT FRONT FOG LAMPS)
6	B/R	-
7	W	-
9	G	-
10	R	-
11	L	-
12	Y	-
13	W	-
14	R	-
15	G	-
16	G	-
17	R	-
18	O	-

AAKIA1584GB

POWER WINDOW SYSTEM

< WIRING DIAGRAM >

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	G	-
2	-	-
3	GR	-
4	L	-
5	G	-
6	R	-
7	BR	-
8	SB	-
9	GR	-

Terminal No.	Color of Wire	Signal Name
10	W	-
11	LG	-
12	P	-
13	V	-
14	Y	-
15	W	-
16	L	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	-	-
2	LG	-
3	P	-
4	GR	-
5	GR	-
6	W	-
7	-	-

Terminal No.	Color of Wire	Signal Name
8	-	-
9	-	-
10	SB	-
11	V	-
12	LG	-
13	SB	-
14	Y	-
15	L	-
16	G	-

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POWER WINDOW SYSTEM

< WIRING DIAGRAM >

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
1	L	-
2	P	-
3	S H I E L D	-
4	R	-
5	L	-
6	S H I E L D	-
7	P	-
8	S B	-
9	R	-
10	B R	-

Terminal No.	Color of Wire	Signal Name
5	-	-
6	-	-
7	B	-
8	S H I E L D	-
9	B	-
10	S B	-
11	P	-
12	B R	-
13	GR	-
14	P	-
15	L	-
16	G	-
17	-	-
18	-	-

Terminal No.	Color of Wire	Signal Name
11	GR	-
12	BR	-
13	B	-
14	-	-
15	R	-
16	G	-
17	R	-
18	G	-
19	S H I E L D	-
20	LG	-
21	V	-
22	GR	-
23	G	-
24	B	-
25	W	-
26	R	-
27	-	-

Terminal No.	Color of Wire	Signal Name
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	R	-
25	W	-
26	LG	-
27	Y	-
28	-	-
29	R	-
30	GR	-
31	L	-
32	P	-

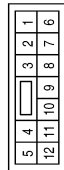
Terminal No.	Color of Wire	Signal Name
28	-	-
29	W	-
30	V	-
31	LG	-
32	S H I E L D	-

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POWER WINDOW SYSTEM

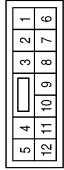
< WIRING DIAGRAM >

Connector No.	B16
Connector Name	WIRE TO WIRE
Connector Color	WHITE



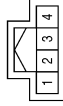
Terminal No.	Color of Wire	Signal Name
1	L	-
2	W	-
3	R	-
4	-	-
5	-	-
6	Y	-
7	-	-
8	G	-
9	L	- (WITH BOSE)
9	LG	- (WITHOUT BOSE)
10	P	- (WITH BOSE)
10	P	- (WITHOUT BOSE)
11	SHIELD	-
12	-	-

Connector No.	B17
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	L	-
3	W	-
4	-	-
5	-	-
6	SB	-
7	-	-
8	GR	-
9	R	- (WITH BOSE)
9	V	- (WITHOUT BOSE)
10	G	- (WITH BOSE)
10	LG	- (WITHOUT BOSE)
11	SHIELD	-
12	-	-

Connector No.	B48
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	SB	-
4	-	-

Connector No.	B49
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	BR	-
4	-	-

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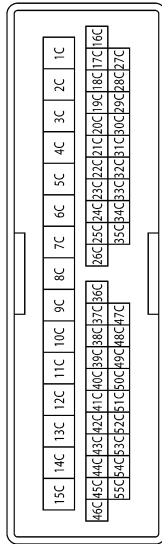
POWER WINDOW SYSTEM

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
33C	-	-
34C	-	-
35C	-	-
36C	LG	-
37C	R	-
38C	L	-
39C	G	-
40C	P	-
41C	-	-
42C	P	-
43C	GR	-
44C	L	-
45C	BR	-
46C	L	-
47C	Y	-
48C	BR	-
49C	B	-
50C	W	-
51C	R	-
52C	SHIELD	-
53C	-	-
54C	V	-
55C	LG	-

Terminal No.	Color of Wire	Signal Name
9C	LG	-
10C	Y	-
11C	W	-
12C	SB	-
13C	B	-
14C	V	-
15C	R	-
16C	-	-
17C	-	-
18C	-	-
19C	-	-
20C	-	-
21C	-	-
22C	-	-
23C	-	-
24C	G	-
25C	R	-
26C	SHIELD	-
27C	-	-
28C	-	-
29C	-	-
30C	-	-
31C	-	-
32C	-	-

Connector No.	D22
Connector Name	WIRE TO WIRE
Connector Color	WHITE



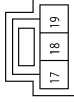
Terminal No.	Color of Wire	Signal Name
1C	R	- (WITH BOSE)
1C	L	- (WITHOUT BOSE)
2C	G	- (WITH BOSE)
2C	V	- (WITHOUT BOSE)
3C	SHIELD	-
4C	SB	-
5C	V	-
6C	-	-
7C	P	-
8C	BR	-

AAKIA1588GB

POWER WINDOW SYSTEM

< WIRING DIAGRAM >

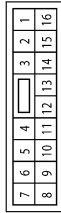
Connector No.	D36
Connector Name	POWER WINDOW MAIN SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
17	R	MOTOR UP DR
18	R	+B
19	GR	MOTOR DN DR

Terminal No.	Color of Wire	Signal Name
5	Y	ENCODER SIG1
6	Y	MOTOR DN RR
7	LG	MOTOR UP RR
8	BR	MOTOR DN RL
9	P	MOTOR UP RL
10	V	IGN
11	-	-
12	R	ENCODER GND
13	-	-
14	G	ENCODER +
15	BR	UNLOCK SW
16	W	MOTOR UP AS

Connector No.	D35
Connector Name	POWER WINDOW MAIN SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	GND
2	SB	MOTOR DN AS
3	Y	LOCK SW
4	W	ENCODER SIG2

Connector No.	D37
Connector Name	FRONT POWER WINDOW MOTOR (DRIVER SIDE)
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
1	G	-
2	GR	-
3	R	-
4	W	-
5	Y	-
6	R	-

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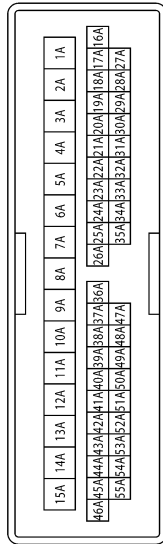
POWER WINDOW SYSTEM

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Terminal No.	Color of Wire	Signal Name
49A	R	-
50A	S HIELD	-
51A	-	-
52A	-	-
53A	-	-
54A	-	-
55A	-	-

Terminal No.	Color of Wire	Signal Name
17A	-	-
18A	-	-
19A	-	-
20A	-	-
21A	-	-
22A	-	-
23A	-	-
24A	Y	-
25A	BR	-
26A	S HIELD	-
27A	-	-
28A	-	-
29A	-	-
30A	-	-
31A	-	-
32A	-	-
33A	-	-
34A	-	-
35A	-	-
36A	B	-
37A	P	-
38A	Y	-
39A	LG	-
40A	-	-
41A	-	-
42A	-	-
43A	V	-
44A	V	-
45A	W	-
46A	BG	-
47A	W	-
48A	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE



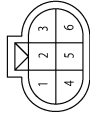
Terminal No.	Color of Wire	Signal Name
1A	L	- (WITH BOSE)
2A	BR	- (WITHOUT BOSE)
3A	P	- (WITH BOSE)
4A	R	- (WITHOUT BOSE)
5A	S HIELD	-
6A	Y	-
7A	V	-
8A	-	-
9A	-	-
10A	BR	-
11A	Y	-
12A	B	-
13A	W	-
14A	S B	-
15A	R	-
16A	-	-

AAKIA1590GB

POWER WINDOW SYSTEM

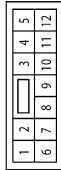
< WIRING DIAGRAM >

Connector No.	D106
Connector Name	FRONT POWER WINDOW MOTOR (PASSENGER SIDE)
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	-	-
3	R	-
4	-	-
5	-	-
6	-	-

Connector No.	D104
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	-
2	BR	-
3	B	-
4	-	-
5	-	-
6	Y	-
7	R	-
8	R	-
9	-	-
10	-	-
11	SB	-
12	W	-

Terminal No.	Color of Wire	Signal Name
4	-	-
5	-	-
6	BR	-
7	-	-
8	G	-
9	R	-(WITH BOSE)
10	G	-(WITHOUT BOSE)
10	LG	-(WITH BOSE)
11	SHIELD	-(WITHOUT BOSE)
12	-	-

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



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

AAKIA1591GB

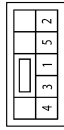
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PWC

POWER WINDOW SYSTEM

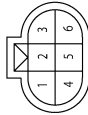
< WIRING DIAGRAM >

Connector No.	D202
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Color	WHITE



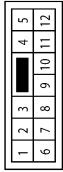
Terminal No.	Color of Wire	Signal Name
1	L	-
2	BR	-
3	Y	-
4	G	-
5	R	-
6	-	-
7	-	-
8	-	-

Connector No.	D203
Connector Name	REAR POWER WINDOW MOTOR LH
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
1	G	-
2	-	-
3	R	-
4	-	-
5	-	-
6	-	-

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



Terminal No.	Color of Wire	Signal Name
1	L	-
2	LG	-
3	V	-
4	-	-
5	-	-
6	Y	-
7	-	-
8	G	-
9	L	- (WITH BOSE)
9	LG	- (WITHOUT BOSE)
10	P	-
11	SHIELD	-
12	-	-

Connector No.	D302
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Color	WHITE



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

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

AAKIA1725GB

POWER WINDOW SYSTEM

< WIRING DIAGRAM >

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Connector No.	D303
Connector Name	REAR POWER WINDOW MOTOR RH
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
1	G	-
2	-	-
3	R	-
4	-	-
5	-	-
6	-	-

PWC

AAKIA1726GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

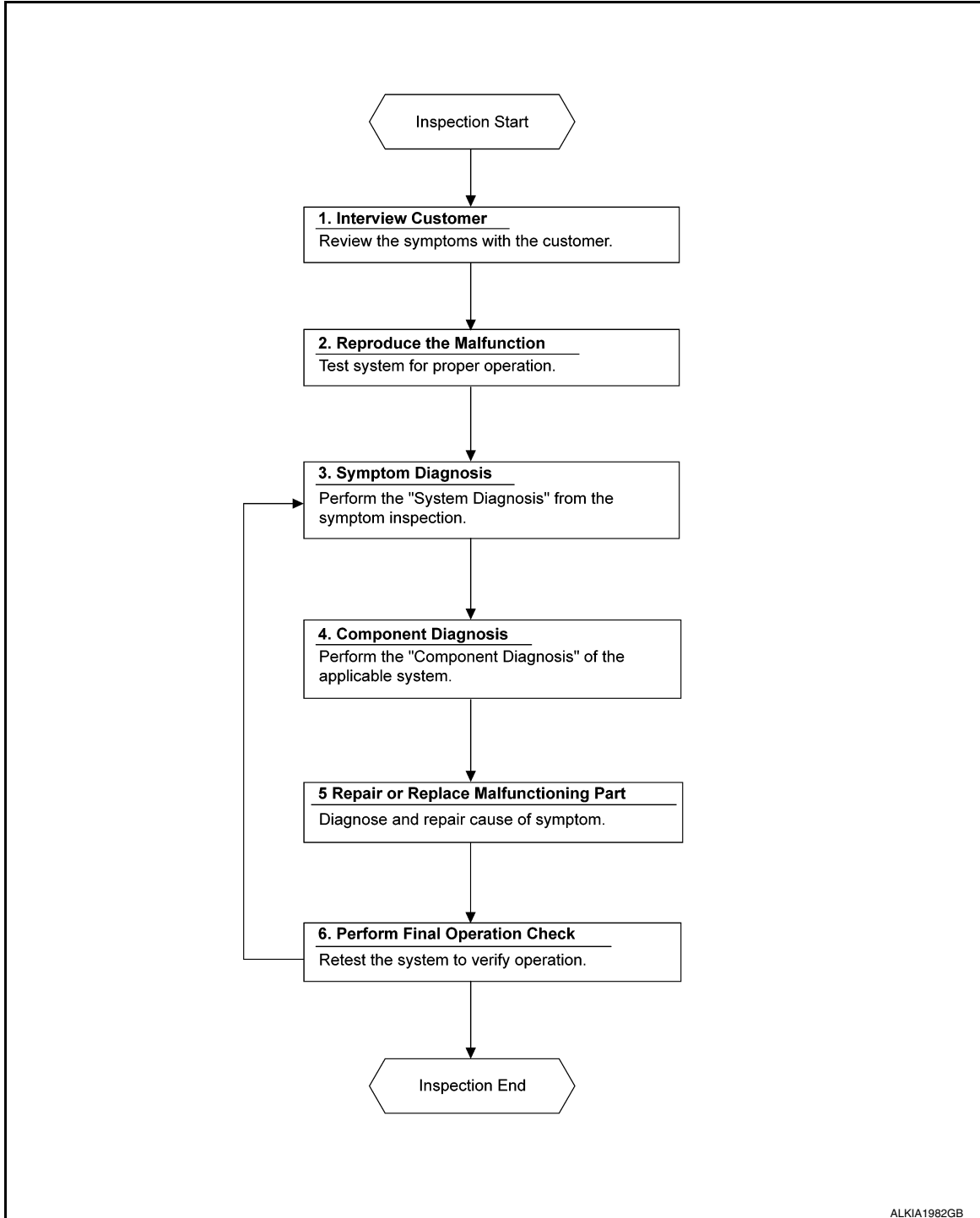
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000009345109

OVERALL SEQUENCE



DETAILED FLOW

1. OBTAIN INFORMATION ABOUT SYMPTOM

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

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

>> GO TO 2.

2. CONFIRM THE SYMPTOM

Check the malfunction on the vehicle that the customer describes.
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

3. IDENTIFY THE MALFUNCTIONING SYSTEM WITH SYMPTOM DIAGNOSIS

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

>> GO TO 4.

4. PERFORM THE COMPONENT DIAGNOSIS OF THE OF THE APPLICABLE SYSTEM

Perform the diagnosis with Component diagnosis of the applicable system.

>> GO TO 5.

5. REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6. FINAL CHECK

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

Are the malfunctions corrected?

YES >> Inspection End.

NO >> GO TO 3.

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PWC

ADDITIONAL SERVICE WHEN REMOVING 12V BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING 12V BATTERY NEGATIVE TERMINAL

Description

INFOID:000000008745080

When the 12V battery negative terminal is disconnected, the initialization is necessary for normal operation of power window system.

CAUTION:

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

- Auto-up operation
- Anti-pinch function

Work Procedure

INFOID:000000008745081

1. SYSTEM INITIALIZATION

Perform system initialization. Refer to [PWC-36. "Work Procedure"](#).

>> GO TO 2.

2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to [PWC-37. "Work Procedure"](#).

>> END

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW MAIN SWITCH

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW MAIN SWITCH

Description

INFOID:000000008745082

When the power window main switch replaced, the initialization is necessary for normal operation of power window system.

CAUTION:

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

- Auto-up operation
- Anti-pinch function

Work Procedure

INFOID:000000008745083

1. SYSTEM INITIALIZATION

Perform system initialization. Refer to [PWC-36. "Work Procedure"](#).

>> GO TO 2.

2. CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to [PWC-37. "Work Procedure"](#).

>> END

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SYSTEM INITIALIZATION

< BASIC INSPECTION >

SYSTEM INITIALIZATION

Description

INFOID:000000008745084

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

- Disconnection and connection of 12V battery cable from negative terminal.
- When power window main switch replaced.
- Electric power supply to power window main switch or power window motor (driver side) is interrupted by blown fuse or disconnection and connection of the negative terminal of 12V battery, etc.
- Disconnection and connection of power window main switch harness connector.
- Removal of power window motor (driver side) from regulator assembly.
- Operation of regulator assembly as an independent unit.
- Removal and installation of glass.
- Removal and installation of door glass run.

CAUTION:

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

- **Auto-up operation**
- **Anti-pinch function**

Work Procedure

INFOID:000000008745085

1. STEP 1

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

>> GO TO 2.

2. STEP 2

Check anti-pinch function. Refer to [PWC-37. "Work Procedure"](#).

>> END

CHECK ANTI-PINCH FUNCTION

< BASIC INSPECTION >

CHECK ANTI-PINCH FUNCTION

Description

INFOID:000000008745086

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

- Disconnection and connection of 12V battery cable from negative terminal.
- When power window main switch replaced.
- Electric power supply to power window main switch or power window motor (driver side) is interrupted by blown fuse or disconnection and connection of the negative terminal of 12V battery, etc.
- Disconnection and connection of power window main switch harness connector.
- Removal of power window motor (driver side) from regulator assembly.
- Operation of regulator assembly as an independent unit.
- Removal and installation of glass.
- Removal and installation of door glass run.

Work Procedure

INFOID:000000008745087

1. CHECK ANTI-PINCH FUNCTION

- Fully open the door window.
- Place a piece of wood near fully closed position.
- Close door glass completely with AUTO-UP.
- 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.**
- **To prevent injury, do not check with hands and other body parts because they may be pinched. Do not get pinched.**

>> END

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PWC

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:000000009347456

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	9 (10A)
70		H (40A)

Is the fuse or fusible link blown?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M25.
2. Check voltage between BCM connector M25 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M25	57	—	Battery voltage
	70		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M25 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M25	67	—	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000008745088

1. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Condition	Voltage (Approx.)	
Power window main switch					
Connector	Terminal	Ground	Power switch	Battery voltage	
D35	10				ON
D36	18				OFF

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY CIRCUIT

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

BCM		Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	
M25	68	D35	10	Yes
	69	D36	18	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M25	68		No
	69		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-86. "Removal and Installation"](#).

NO >> Repair or replace harness.

3. CHECK POWER WINDOW MAIN SWITCH GROUND CIRCUIT

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	1		Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:000000008745089

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

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

(+)		(-)	Voltage (Approx.)
Front power window switch (passenger side)			
Connector	Terminal	Ground	Battery voltage
D104	8		

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PWC

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Inspection End.
NO >> GO TO 2.

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

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

BCM		Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M25	68	D104	8	Yes

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M25	68		No

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-86, "Removal and Installation"](#).
NO >> Repair or replace harness.

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:000000008745090

1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY

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

(+)		(-)	Voltage (Approx.)
Rear power window switch			
Connector	Terminal	Ground	Battery voltage
LH	D202		
RH	D302		

Is the inspection result normal?

- YES >> Inspection End.
NO >> GO TO 2.

2. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY CIRCUIT

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

BCM		Rear power window switch		Continuity
Connector	Terminal	Connector	Terminal	
M25	68	LH	D202	Yes
		RH	D302	

4. Check continuity between BCM harness connector and ground.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

BCM		Ground	Continuity
Connector	Terminal		No
M25	68		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-86, "Removal and Installation"](#).

NO >> Repair or replace harness.

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FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Diagnosis Procedure

INFOID:000000008745091

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

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

(+)		(-)	Condition	Voltage (Approx.)	
Connector	Terminal				
D104	11	Ground	Power window main switch (passenger side)	NEUTRAL	0
				DOWN	Battery voltage
	12			NEUTRAL	0
				UP	Battery voltage

Is the inspection result normal?

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

2. CHECK FRONT WINDOW SWITCH (PASSENGER SIDE) CIRCUIT

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

Power window main switch		Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
D35	2	D104	11	Yes
	16		12	

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	2		No
	16		

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-65, "Removal and Installation"](#).
NO >> Repair or replace harness.

3. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).
Refer to [PWC-43, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace front power window switch (passenger side). Refer to [PWC-65, "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

>> Inspection End.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

Component Inspection

INFOID:000000008745092

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

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

Front power window switch (passenger side)		Condition	Continuity
Terminal			
8	7	UP	Yes
11	6		
11	6	NEUTRAL	
12	7		
8	6	DOWN	
12	7		

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front power window switch (passenger side). Refer to [PWC-65, "Removal and Installation"](#).

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PWC

REAR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

REAR POWER WINDOW SWITCH

Diagnosis Procedure

INFOID:000000008745093

1. CHECK REAR POWER WINDOW SWITCH INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)	
Rear power window switch					
Connector	Terminal				
LH	D202	Ground	Power window main switch (rear LH)	NEUTRAL	0
				UP	Battery voltage
				NEUTRAL	0
				DOWN	Battery voltage
RH	D302		Power window main switch (rear RH)	NEUTRAL	0
				UP	Battery voltage
				NEUTRAL	0
				DOWN	Battery voltage

Is the inspection result normal?

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

2. CHECK REAR POWER WINDOW SWITCH CIRCUIT

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

Power window main switch		Rear power window switch			Continuity
Connector	Terminal	Connector	Terminal		
D35	9	LH	D202	2	Yes
	8			3	
	7	RH	D302	2	
	6			3	

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	9	Ground	No
	8		
	7		
	6		

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-65, "Removal and Installation"](#).
NO >> Repair or replace harness.

3. CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

REAR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Refer to [PWC-45. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace rear power window switch. Refer to [PWC-65. "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-53. "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:000000008745094

1. CHECK REAR POWER WINDOW SWITCH

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

Rear power window switch		Condition	Continuity
Terminal			
1	5	UP	Yes
3	4		
3	4	NEUTRAL	
2	5		
1	4	DOWN	
2	5		

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace rear power window switch. Refer to [PWC-65. "Removal and Installation"](#).

PWC

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MOTOR DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:000000008745095

1. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE) INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)	
Front power window motor (driver side)					
Connector	Terminal				
D37	3	Ground	Power window main switch	NEUTRAL	0
				UP	Battery voltage
	2			NEUTRAL	0
				DOWN	Battery voltage

Is the inspection result normal?

- YES >> Replace front power window motor (driver side). Refer to [GW-21, "Removal and Installation"](#).
 NO >> GO TO 2.

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

1. Turn power 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	
D36	19	D37	2	Yes
	17		3	

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D36	19		No
	17		

Is the inspection result normal?

- YES >> Inspection End.
 NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000008745096

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

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

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Condition	Voltage (Approx.)
Front power window motor (passenger side)				
Connector	Terminal			
D106	3	Ground	Front power window switch (passenger side) NEUTRAL	0
			UP	Battery voltage
	1		NEUTRAL	0
			DOWN	Battery voltage

Is the inspection result normal?

- YES >> Replace front power window motor (passenger side). Refer to [GW-21, "Removal and Installation"](#).
 NO >> GO TO 2.

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

- Turn power switch OFF.
- 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 motor (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
D104	6	D106	1	Yes
	7		3	

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

Front power window switch (passenger side)		Ground	Continuity
Connector	Terminal		
D104	6		No
	7		

Is the inspection result normal?

- YES >> Inspection End.
 NO >> Repair or replace harness.

REAR LH

REAR LH : Diagnosis Procedure

INFOID:000000008745097

1. CHECK REAR POWER WINDOW MOTOR LH INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (V) (Approx.)
Rear power window motor LH				
Connector	Terminal			
D203	1	Ground	NEUTRAL	0
			DOWN	Battery voltage
	3		NEUTRAL	0
			UP	Battery voltage

Is the inspection result normal?

- YES >> Replace rear power window motor LH. Refer to [GW-21, "Removal and Installation"](#).
 NO >> GO TO 2.

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POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

1. Turn power switch OFF.
2. Disconnect rear power window switch LH connector.
3. 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	
D202	4	D203	1	Yes
	5		3	

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

Rear power window switch LH		Ground	Continuity
Connector	Terminal		
D202	4		No
	5		

Is the inspection result normal?

- YES >> Inspection End.
 NO >> Repair or replace harness.

REAR RH

REAR RH : Diagnosis Procedure

INFOID:000000008745098

1. CHECK REAR POWER WINDOW MOTOR RH INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)	
Connector	Terminal				
D303	1	Ground	Rear power window switch RH	NEUTRAL	0
			DOWN	Battery voltage	
	3		NEUTRAL	0	
			UP	Battery voltage	

Is the inspection result normal?

- YES >> Replace rear power window motor RH. Refer to [GW-25, "Removal and Installation"](#).
 NO >> GO TO 2.

2. CHECK REAR POWER WINDOW MOTOR RH CIRCUIT

1. Turn power 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 window switch RH		Rear power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D302	4	D303	1	Yes
	5		3	

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

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Rear power window switch RH		Ground	Continuity
Connector	Terminal		
D302	4		No
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Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

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ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

ENCODER CIRCUIT

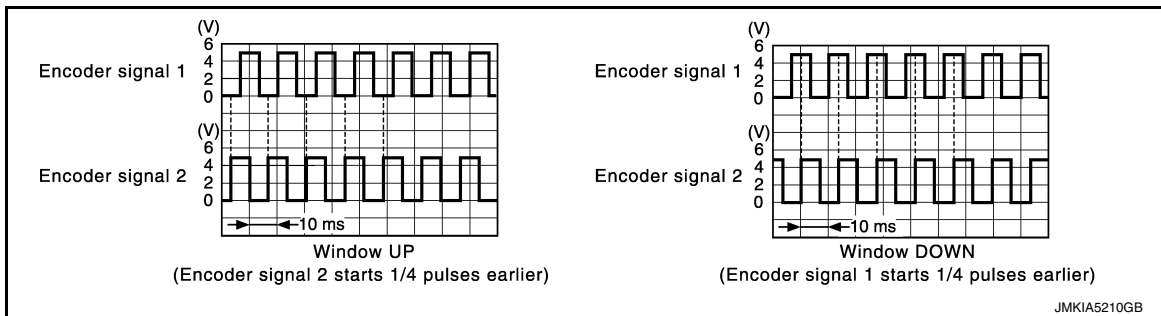
Diagnosis Procedure

INFOID:000000008745099

1. CHECK ENCODER PULSE SIGNAL

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

(+)		(-)	Signal (Reference value)
Power window main switch			
Connector	Terminal	Ground	Refer to following signal
D35	4		
	5		



Is the inspection result normal?

- YES >> GO TO 7.
NO >> GO TO 2.

2. CHECK ENCODER SIGNAL CIRCUIT

1. Turn power 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 window main switch		Front power window motor (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
D35	4	D37	4	Yes
	5		5	

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	4	Ground	No
	5		

Is the inspection result normal?

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

3. CHECK ENCODER POWER SUPPLY

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

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+)		(-)	Voltage (Approx.)
Front power window motor (driver side)			
Connector	Terminal		
D37	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK ENCODER POWER SUPPLY CIRCUIT

1. Turn power 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	
D35	14	D37	1	Yes

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	14		No

Is the inspection result normal?

YES >> Replace power window main switch.

NO >> Repair or replace harness.

5. CHECK ENCODER GROUND CIRCUIT

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

Front power window motor (driver side)		Ground	Continuity
Connector	Terminal		
D37	6		Yes

Is the inspection result normal?

YES >> GO TO 7.

NO >> GO TO 6.

6. CHECK ENCODER GROUND CIRCUIT

1. Disconnect power window main switch connector.
2. 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	
D35	12	D37	6	Yes

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D35	12		No

Is the inspection result normal?

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

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ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

7.CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

>> Inspection End.

POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH

Diagnosis Procedure

INFOID:000000008745100

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.
Refer to [PWC-38, "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 main switch power supply and ground circuit.
Refer to [PWC-38, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

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PWC

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008745101

1. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE)

Check front power window motor (driver side).

Refer to [PWC-46, "DRIVER SIDE : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

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

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

INFOID:000000008745102

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).

Refer to [PWC-42, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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2. CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE)

Check front power window motor (passenger side).

Refer to [PWC-46, "PASSENGER SIDE : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

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3. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

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WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED

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

INFOID:000000008745103

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

Check front power window switch (passenger side) power supply and ground circuit.

Refer to [PWC-39, "FRONT POWER WINDOW SWITCH \(PASSENGER SIDE\) : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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2. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).

Refer to [PWC-42, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

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3. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

P

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008745104

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).

Refer to [PWC-42. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53. "Intermittent Incident"](#).

REAR LH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

REAR LH SIDE POWER WINDOW 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

INFOID:000000008745105

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.
Refer to [PWC-44, "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-47, "REAR LH : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.

3. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED : Diagnosis Procedure

INFOID:000000008745106

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

Check rear power window switch LH power supply and ground circuit.
Refer to [PWC-40, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.
Refer to [PWC-44, "Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.

3. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

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REAR LH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008745107

1. CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.

Refer to [PWC-44. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53. "Intermittent Incident"](#).

REAR RH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

REAR RH SIDE POWER WINDOW 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

INFOID:000000008745108

1.CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.
Refer to [PWC-44, "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-48, "REAR RH : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.

3.REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

WHEN REAR POWER WINDOW SWITCH RH IS OPERATED

WHEN REAR POWER WINDOW SWITCH RH IS OPERATED : Diagnosis Procedure

INFOID:000000008745109

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

Check rear power window switch RH power supply and ground circuit.
Refer to [PWC-40, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Repair or replace the malfunctioning parts.

2.CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.
Refer to [PWC-44, "Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.

3.REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

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REAR RH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008745110

1. CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.

Refer to [PWC-44. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53. "Intermittent Incident"](#).

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:000000008745111

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-36, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to [PWC-50, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

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PWC

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

< SYMPTOM DIAGNOSIS >

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

Diagnosis Procedure

INFOID:000000008745112

1. CHECK POWER WINDOW AUTO OPERATION

Check AUTO operation when anti-pinch function does not operate.
Refer to [PWC-61, "Diagnosis Procedure"](#).

Is the inspection result normal?

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

2. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:000000008745114

1. CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to [DLK-117, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE BCM

• Replace BCM. Refer to [BCS-86, "Removal and Installation"](#).

• Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

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PWC

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:000000008745113

1. REPLACE POWER WINDOW MAIN SWITCH

- Replace power window main switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

POWER WINDOW MAIN SWITCH

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION


POWER WINDOW MAIN SWITCH

Removal and Installation

INFOID:000000008745115

REMOVAL

1. Remove power window main switch finisher. Refer to [INT-19, "Removal and Installation"](#).
2. Remove power window main switch (1) from power window main switch finisher (2) using flat-head screw driver (A).

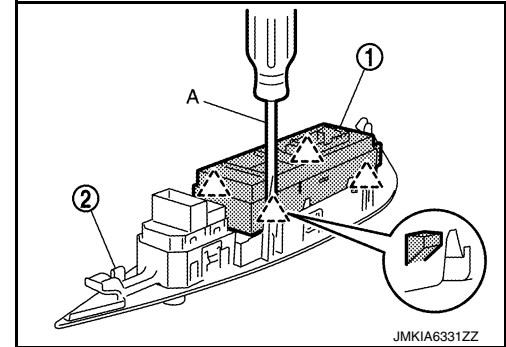
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CAUTION:

Do not fold the pawl of power window main switch finisher.

NOTE:

The same procedure is also performed for front power window switch (passenger side) and rear power window switch (LH & RH).



INSTALLATION

Install in the reverse order of removal.

NOTE:

If power window main switch is replaced or is removed, it is necessary to perform the initialization procedure. Refer to [PWC-36, "Work Procedure"](#).

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