SECTION PWC

POWER WINDOW CONTROL SYSTEM

CONTENTS

PRECAUTION

PRECAUTIONS

Precaution for Technicians Using Medical Electric

INFOID:0000000010119921

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:0000000010119922

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:0000000010119923

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 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:0000000010119924

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:

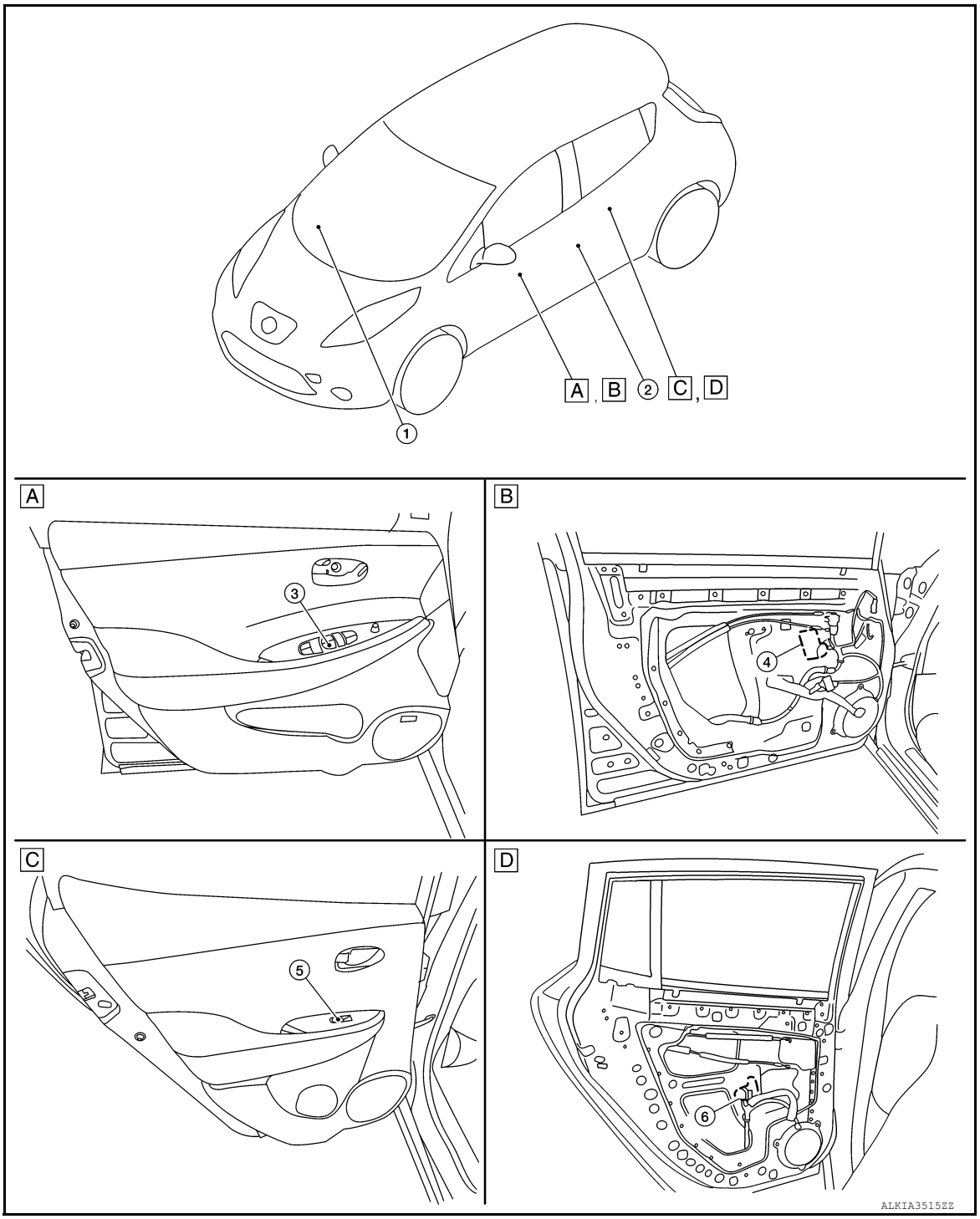
   - **After all doors (including back door) are closed, if a door (including back door) is opened before battery terminals are disconnected, start over from Step 1.**
   - **After turning the power switch OFF, if "Remote A/C" is activated by user operation, stop the air conditioner and start over from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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000010119925



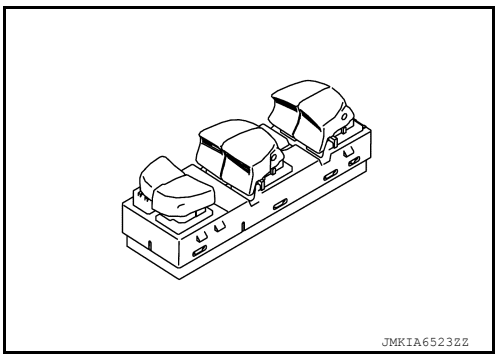
A. Front door finisher LH
B. View with front door finisher removed
C. Rear door finisher LH
B. View with rear door finisher removed

No.	Component parts	Function
1.	BCM	• Supplies power supply to power window switches • Controls retained power • Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
2.	Front door switch LH	• Inputs door open/close condition to BCM • Refer to DLK-15, "Component Parts Location" for detailed installation location.
3.	Main power window and door lock/unlock switch	Refer to PWC-7, "Power Window Main Switch".
4.	Front power window motor LH	Refer to PWC-7, "Power Window Motor".
5.	Rear power window switch LH	Refer to PWC-7, "Power Window Switch".
6.	Rear power window motor LH	Refer to PWC-7, "Power Window Motor".

Power Window Main Switch

INFOID:0000000010119926

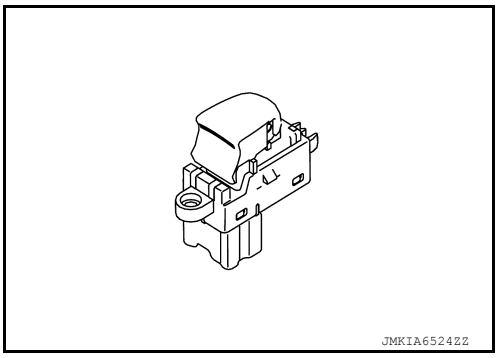
- Main power window and door lock/unlock switch controls all power windows.
- Main power window and door lock/unlock switch integrates UP/DOWN switch, power window lock switch, and door lock/unlock switch.
- Main power window and door lock/unlock switch controls power window lock function, AUTO UP/DOWN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



Power Window Switch

INFOID:0000000010119927

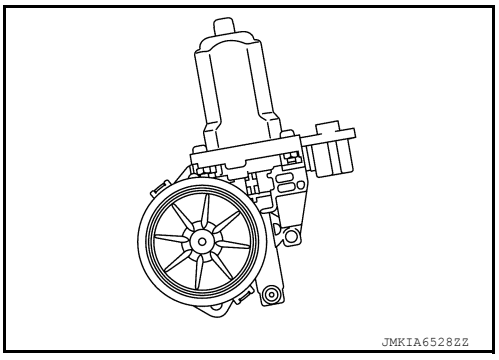
- Each power window switch transmits UP/DOWN signal to each motor.
- Each power window switch transmits UP/DOWN signal from main power window and door lock/unlock switch to each motor.



Power Window Motor

INFOID:0000000010119928

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

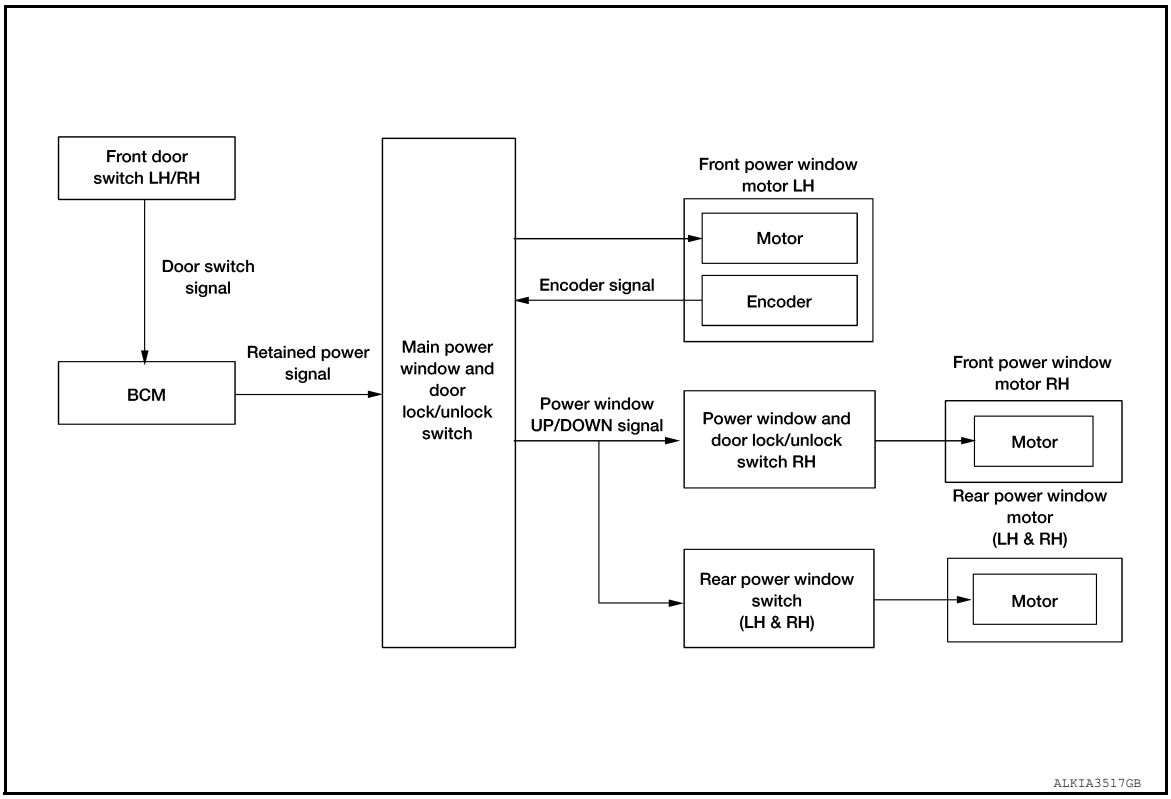


SYSTEM

System Description

INFOID:0000000010119929

SYSTEM DIAGRAM



POWER WINDOW OPERATION

- Main power window and door lock/unlock switch can open/close all windows.
- Front and rear power window switches can open/close the corresponding windows.

POWER WINDOW AUTO-OPERATION (FRONT DRIVER SIDE)

- AUTO UP/DOWN operation can be performed when main power window and door lock/unlock switch turns to AUTO.
- Encoder continues detecting the movement of power window motor and transmits to main power window and door lock/unlock switch as the encoder pulse signal while power window motor is operating.
- Main power window and door lock/unlock switch reads the changes of encoder signal and stops AUTO operation when door glass is at fully opened/closed position.
- Front power window motor LH 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 main power window and door lock/unlock switch shuts off when power window lock switch is ON. This inhibits power window switch operation except with the main power window and door lock/unlock switch.

ANTI-PINCH 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 LH and transmits to main power window and door lock/unlock switch as the encoder pulse signal while front power window motor LH is operating.
- Resistance is applied to the front power window motor LH rotation that changes the frequency of encoder pulse signal if foreign material is trapped in the door glass.
- Main power window and door lock/unlock 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 LH 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:0000000010119930

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

INFOID:0000000010503112

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	• 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		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×			
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×	×		
Air conditioner	AIR CONDITIONER			×	×			
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×	×		
Interior room lamp battery saver	BATTERY SAVER			×	×	×		
Trunk open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

RETAINED PWR

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000010503113

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.

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000010119933

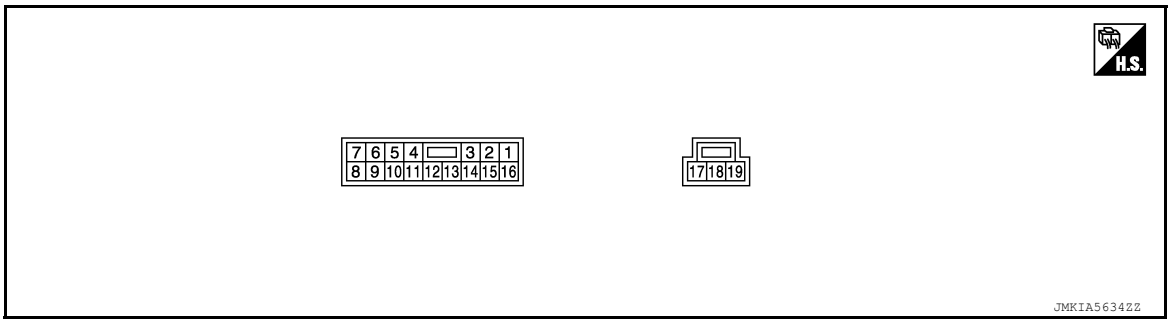
ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-46, "Fail-safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

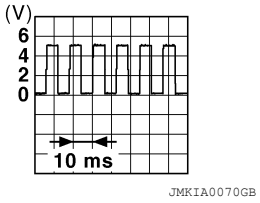
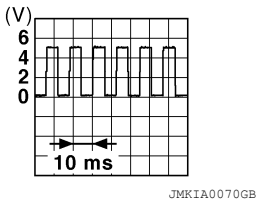
Reference Value

INFOID:0000000010119934

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage (Approx)
+	-	Signal name	Input/ Output		
1 (B)	Ground	Ground	—	—	0
2 (SB)	16 (W)	Front power window motor RH DOWN signal	Output	When front RH switch in main power window and door lock/unlock switch is operated DOWN.	Battery voltage
3 (Y)	Ground	Door key cylinder switch LOCK signal	Input	Key position (Neutral → LOCK)	5 → 0
4 (W)	12 (R)	Encoder pulse signal 2	Input	When front power window motor LH operates.	
5 (Y)	12 (R)	Encoder pulse signal 1	Input	When front power window motor LH operates.	
6 (Y)	Ground	Rear power window motor RH DOWN signal	Output	When rear RH switch in main power window and door lock/unlock switch is DOWN at operated.	Battery voltage
7 (LG)	Ground	Rear power window motor RH UP signal	Output	When rear RH switch in main power window and door lock/unlock switch is UP at operated.	Battery voltage
8 (BR)	Ground	Rear power window motor LH DOWN signal	Output	When rear LH switch in main power window and door lock/unlock switch is DOWN at operated.	Battery voltage

Terminal No. (Wire color)		Description		Condition	Voltage (Approx)
+	-	Signal name	Input/ Output		
9 (P)	Ground	Rear power window motor LH UP signal	Output	When rear LH switch in main power window and door lock/unlock switch is UP at operated.	Battery voltage
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
15 (BR)	Ground	Door key cylinder switch UNLOCK signal	Input	Key position (Neutral → UNLOCK)	5 → 0
16 (W)	2 (SB)	Front power window motor RH UP signal	Output	When front RH switch in main power window and door lock/unlock switch is UP at operated.	Battery voltage
17 (R)	19 (GR)	Front power window motor LH UP signal	Output	When front LH switch in main power window and door lock/unlock switch is UP at operated.	Battery voltage
18 (R)	Ground	Battery power supply	Input	Power switch OFF	Battery voltage
19 (GR)	17 (R)	Front power window motor LH DOWN signal	Output	When front LH switch in main power window and door lock/unlock switch is DOWN at operated.	Battery voltage

Fail Safe

INFOID:0000000010119935

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

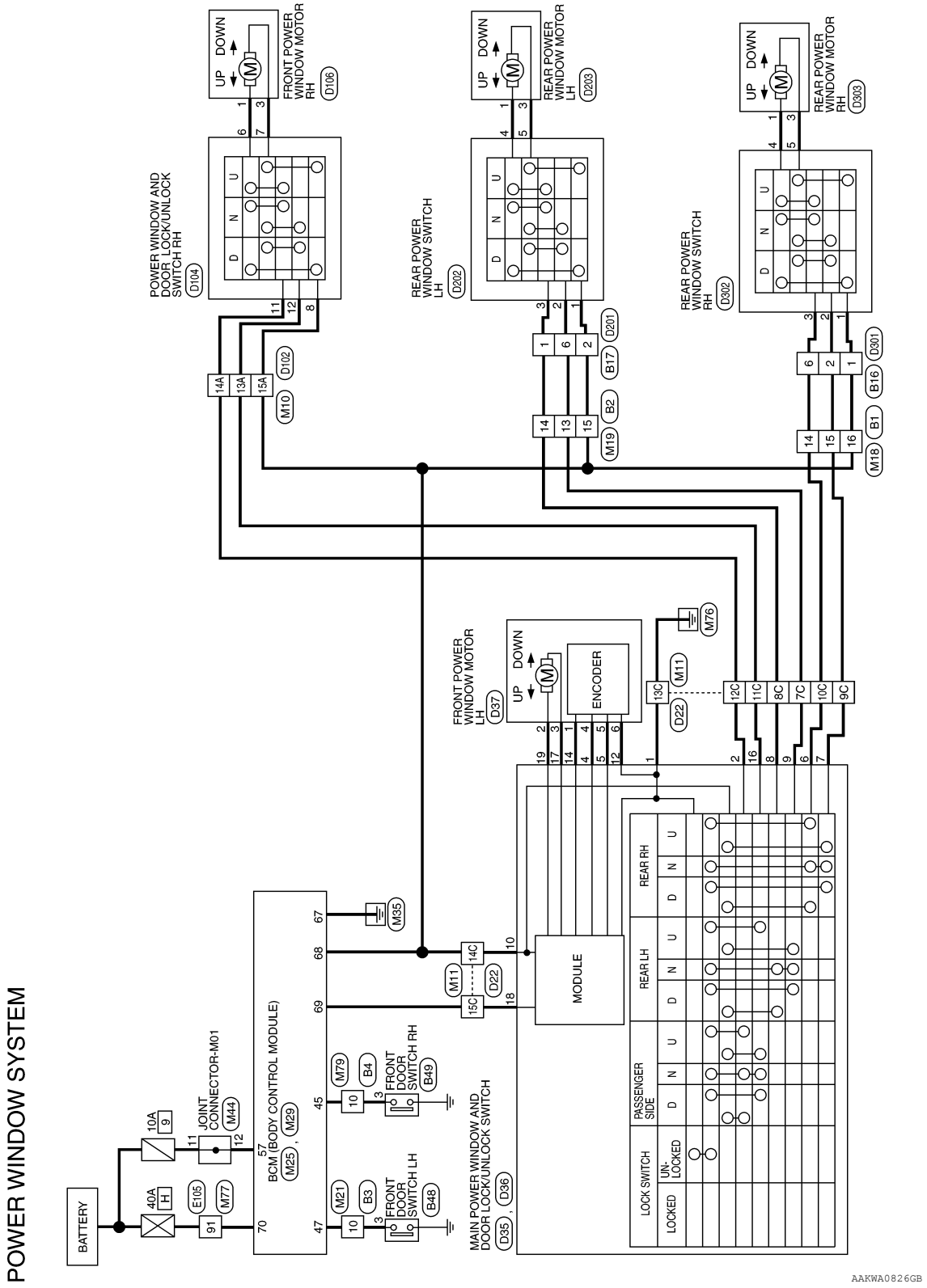
Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in main power window and door lock/unlock switch or front power window motor LH.

WIRING DIAGRAM

POWER WINDOW SYSTEM

Wiring Diagram

INFOID:0000000010119936



POWER WINDOW SYSTEM - CONNECTORS

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

H.S.

1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A	15A
16A	17A	18A	19A	20A	21A	22A	23A	24A	25A	26A	36A	37A	38A	39A	40A	41A	42A	43A	44A	45A	46A
27A	28A	29A	30A	31A	32A	33A	34A	35A	47A	48A	49A	50A	51A	52A	53A	54A	55A

Terminal No.	Color of Wire	Signal Name
13A	W	–
14A	SB	–
15A	L	–

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

H.S.

1C	2C	3C	4C	5C	6C	7C	8C	9C	10C	11C	12C	13C	14C	15C
16C	17C	18C	19C	20C	21C	22C	23C	24C	25C	26C	36C	37C	38C	39C	40C	41C	42C	43C	44C	45C	46C
27C	28C	29C	30C	31C	32C	33C	34C	35C	47C	48C	49C	50C	51C	52C	53C	54C	55C

Terminal No.	Color of Wire	Signal Name
7C	BR	–
8C	SB	–
9C	LG	–
10C	Y	–
11C	W	–
12C	SB	–
13C	B	–
14C	L	–
15C	R	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
14	Y	–
15	LG	–
16	L	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	BR	–
14	SB	–
15	L	–

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

H.S.

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
10	SB	–

AAKIA1962GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
57	P	BATTERY (FUSE)
67	B	GND
68	L	POWER WINDOW POWER SUPPLY (RAP)
69	R	POWER WINDOW POWER SUPPLY (BATTERY)
70	Y	BATTERY (F/L)

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

H.S.

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name
45	BR	DOOR SW (AS)
47	SB	DOOR SW (DR)

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

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
11	P	–
12	P	–

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

H.S.

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
91	Y	–

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

H.S.

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
10	BR	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	6	11	21	20	31	41	40	51	61	60	71	81	80	91	96
2	7	12	22	13	23	32	42	52	62	53	63	72	82	73	83	92	97
3	8	14	24	15	25	34	44	54	64	55	65	74	84	75	85	93	98
4	9	16	26	36	46	56	66	76	86	94	99						
5	10	17	27	37	47	57	67	77	87	95	100						
		18	28	38	48	58	68	78	88								
		19	29	39	49	59	69	79	89								
			30		50		70		90								

Terminal No.	Color of Wire	Signal Name
91	Y	–

AAKIA1963GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
14	Y	–
15	W	–
16	L	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	SB	–
14	Y	–
15	L	–

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

H.S.

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
10	SB	–

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

H.S.

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
10	BR	–

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

H.S.

5	4		3	2	1
12	11	10	9	8	7	6

Terminal No.	Color of Wire	Signal Name
1	L	–
2	W	–
6	Y	–

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

H.S.

5	4		3	2	1
12	11	10	9	8	7	6

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	L	–
6	SB	–

AAKIA1964GB

Connector No.	B48
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	SB	–

Connector No.	B49
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	BR	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
7C	P	–
8C	BR	–
9C	LG	–
10C	Y	–
11C	W	–
12C	SB	–
13C	B	–
14C	V	–
15C	R	–

AAKIA1965GB

Connector No.	D35
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

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

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

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.	D36
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

17	18	19

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

Connector No.	D37
Connector Name	FRONT POWER WINDOW MOTOR LH
Connector Color	GREEN

H.S.

2	1	3
6	4	5

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

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

H.S.

15A	14A	13A	12A	11A	10A	9A	8A	7A	6A	5A	4A	3A	2A	1A
46A	45A	44A	43A	42A	41A	40A	39A	38A	37A	36A	26A	25A	24A	23A	22A	21A	20A	19A	18A	17A	16A
		55A	54A	53A	52A	51A	50A	49A	48A	47A		35A	34A	33A	32A	31A	30A	29A	28A	27A	

Terminal No.	Color of Wire	Signal Name
13A	W	–
14A	SB	–
15A	R	–

AAKIA1966GB

Connector No.	D104
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	BR	–
3	B	–

Connector No.	D106
Connector Name	FRONT POWER WINDOW MOTOR RH
Connector Color	GREEN

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	–	–
5	–	–
6	Y	–
7	R	–
8	R	–
9	–	–
10	–	–
11	SB	–
12	W	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	L	–
6	BR	–

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

H.S.

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

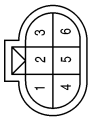
H.S.

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

AAKIA1967GB

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

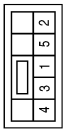
H.S.



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

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

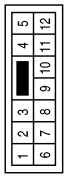
H.S.



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

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

H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	LG	–
6	Y	–

AAKIA1968GB

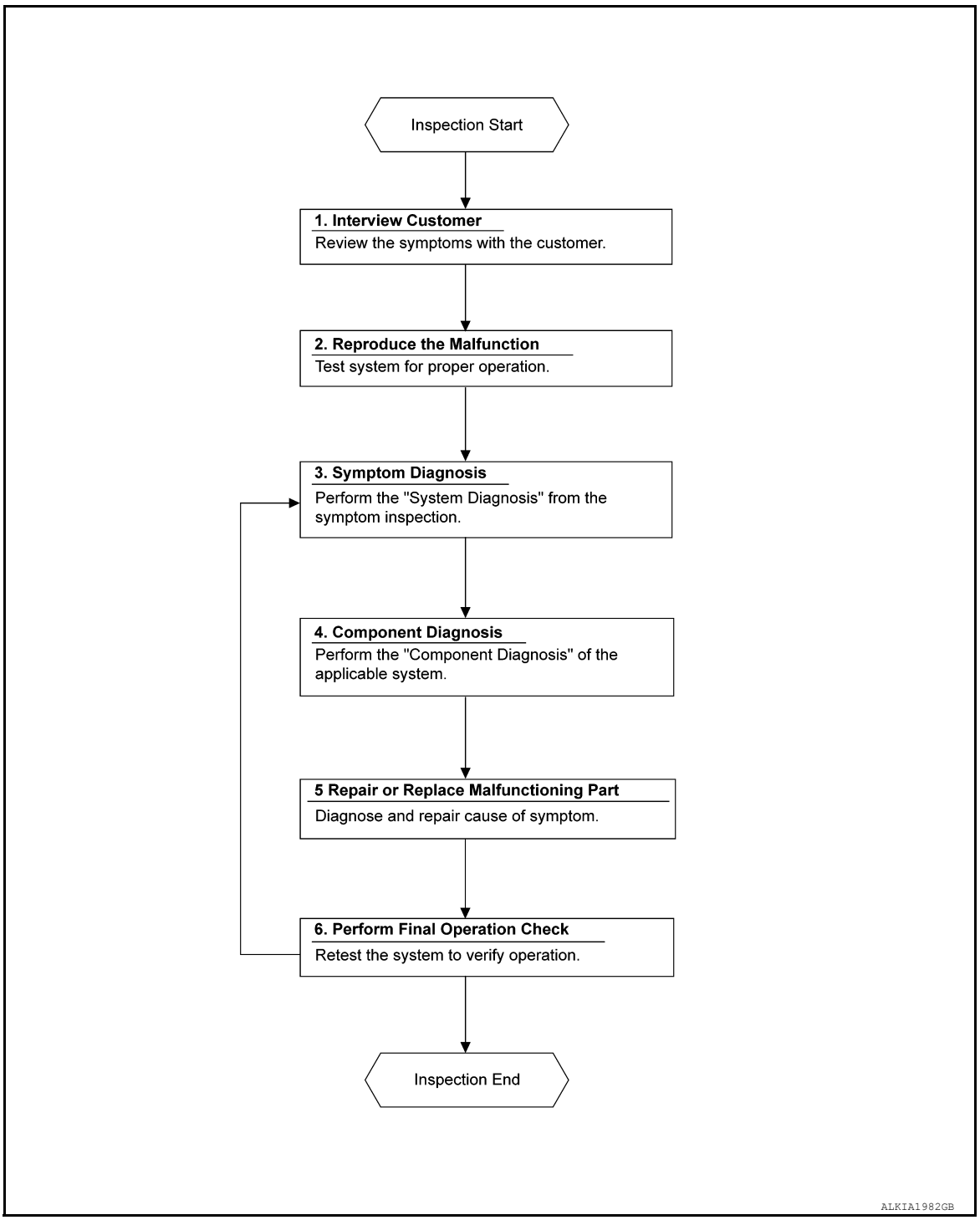
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000010119937

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.

>> 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.

ADDITIONAL SERVICE WHEN REMOVING 12V BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000010119938

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:0000000010119939

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to PWC-28, "Work Procedure".

>> GO TO 2.

2.CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to PWC-29, "Work Procedure".

>> Inspection End.

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW MAIN SWITCH

Description

INFOID:0000000010119940

When the main power window and door lock/unlock switch replaced, the initialization in 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:0000000010119941

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to PWC-28, "Work Procedure".

>> GO TO 2.

2.CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to PWC-29, "Work Procedure".

>> Inspection End.

SYSTEM INITIALIZATION

Description

INFOID:0000000010119942

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 main power window and door lock/unlock switch replaced.
- Electric power supply to main power window and door lock/unlock switch or front power window motor LH is interrupted by blown fuse or disconnection and connection of the negative terminal of 12V battery, etc.
- Disconnection and connection of main power window and door lock/unlock switch harness connector.
- Removal of front power window motor LH 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:0000000010119943

1.STEP 1

1. Turn power switch ON.
2. Operate main power window and door lock/unlock switch to fully open the window. (This operation is unnecessary if the window is already fully open)
3. Continue pulling the main power window and door lock/unlock 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-29, "Work Procedure".

>> Inspection End.

CHECK ANTI-PINCH FUNCTION

Description

INFOID:0000000010119944

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 main power window and door lock/unlock switch is replaced.
- Electric power supply to main power window and door lock/unlock switch or power window motor LH is interrupted by blown fuse or disconnection and connection of the negative terminal of 12V battery, etc.
- Disconnection and connection of main power window and door lock/unlock switch harness connector.
- Removal of front power window motor LH 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:0000000010119945

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 main power window and door lock/unlock switch while lowering.

CAUTION:

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

>> Inspection End.

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000010503115

Regarding Wiring Diagram information, refer to BCS-50, "Wiring Diagram".

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:0000000010119947

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

1.CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH POWER SUPPLY

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

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

(+)		(-)	Condition		Voltage (Approx.)
Main power window and door lock/unlock switch					
Connector	Terminal				
D35	10	Ground	Power switch	ON	Battery voltage
D36	18			OFF	

Is the inspection result normal?

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

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

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and main power window and door lock/unlock switch harness connector.

BCM		Main power window and door lock/unlock 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-72, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH GROUND CIRCUIT

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

Main power window and door lock/unlock 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:0000000010119948

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

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

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

(+)		(-)	Voltage (Approx.)
Power window and door lock/unlock switch RH			
Connector	Terminal		
D104	8	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH POWER SUPPLY CIRCUIT

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

BCM		Power window and door lock/unlock switch RH		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-72, "Removal and Installation".
NO >> Repair or replace harness.

REAR POWER WINDOW SWITCH

REAR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:0000000010119949

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

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		
LH	D202	1	Ground	Battery voltage
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	1	Yes
		RH	D302		

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-72, "Removal and Installation".
NO >> Repair or replace harness.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Diagnosis Procedure

INFOID:0000000010119950

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

1.CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
Power window and door lock/unlock switch RH					
Connector	Terminal				
D104	11	Ground	Power window and door lock/unlock switch RH	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 POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH CIRCUIT

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

Main power window and door lock/unlock switch		Power window and door lock/unlock switch RH		Continuity
Connector	Terminal	Connector	Terminal	
D35	2	D104	11	Yes
	16		12	

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

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D35	2		No
	16		

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-61, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH SWITCH

Check power window and door lock/unlock switch RH.
Refer to PWC-35, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power window and door lock/unlock switch RH. Refer to PWC-61, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000010119951

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

1. Turn power switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check power window and door lock/unlock switch RH terminals under the following conditions.

Front power window and door lock/unlock switch RH		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 power window and door lock/unlock switch RH. Refer to PWC-61, "Removal and Installation".

REAR POWER WINDOW SWITCH

Diagnosis Procedure

INFOID:0000000010119952

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

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	2	Ground	Rear power window switch LH	NEUTRAL	0
					UP	Battery voltage
		3			NEUTRAL	0
					DOWN	Battery voltage
RH	D302	2		Rear power window switch RH	NEUTRAL	0
					UP	Battery voltage
		3			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 main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch harness connector and rear power window switch harness connector.

Main power window and door lock/unlock 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 main power window and door lock/unlock switch harness connector and ground.

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D35	9	Ground	No
	8		
	7		
	6		

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-61, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.
Refer to PWC-37, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear power window switch. Refer to PWC-61, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000010119953

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-61, "Removal and Installation".

POWER WINDOW MOTOR
DRIVER SIDE
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000010119954

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

1.CHECK FRONT POWER WINDOW MOTOR LH INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (Approx.)
Front power window motor LH					
Connector	Terminal				
D37	3	Ground	Main power window and door lock/un-lock switch	NEUTRAL	0
				UP	Battery voltage
	2			NEUTRAL	0
				DOWN	Battery voltage

Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to GW-21, "Removal and Installation".
NO >> GO TO 2.

2.CHECK FRONT POWER WINDOW MOTOR LH CIRCUIT

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

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D36	19	D37	2	Yes
	17		3	

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

Main power window and door lock/unlock 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:0000000010119955

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

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

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

(+)		(-)	Condition		Voltage (Approx.)
Power window and door lock/unlock switch RH					
Connector	Terminal				
D106	3	Ground	Power window and door lock/unlock switch RH	NEUTRAL	0
				UP	Battery voltage
	1			NEUTRAL	0
				DOWN	Battery voltage

Is the inspection result normal?

YES >> Replace power window and door lock/unlock switch RH. Refer to GW-21, "Removal and Installation".

NO >> GO TO 2.

2.CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH CIRCUIT

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

Power window and door lock/unlock switch RH		Front power window motor RH		Continuity
Connector	Terminal	Connector	Terminal	
D104	6	D106	1	Yes
	7		3	

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

Power window and door lock/unlock switch RH		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:0000000010119956

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

1.CHECK REAR POWER WINDOW MOTOR LH INPUT SIGNAL

1. Turn power switch OFF.
2. Disconnect rear power window motor LH connector.
3. Turn power switch ON.
4. 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	Rear power window switch LH	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.

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:0000000010119957

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

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.)
Rear power window motor RH					
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.

Rear power window switch RH		Ground	Continuity
Connector	Terminal		
D302	4		No
	5		

Is the inspection result normal?

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

ENCODER CIRCUIT

Diagnosis Procedure

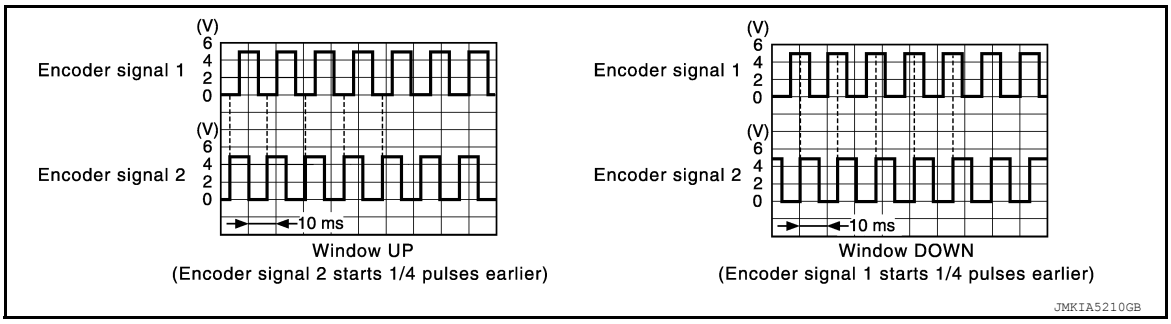
INFOID:0000000010119958

Regarding Wiring Diagram information, refer to PWC-16, "Wiring Diagram".

1.CHECK ENCODER PULSE SIGNAL

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

(+)		(-)	Signal (Reference value)
Main power window and door lock/unlock switch			
Connector	Terminal		
D35	4	Ground	Refer to following signal
	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 main power window and door lock/unlock switch connector and front power window motor LH connector.
3. Check continuity between main power window and door lock/unlock switch harness connector and front power window motor LH harness connector.

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D35	4	D37	4	Yes
	5		5	

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

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D35	4		No
	5		

Is the inspection result normal?

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

3.CHECK ENCODER POWER SUPPLY

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

(+)		(-)	Voltage (Approx.)
Front power window motor LH			
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 main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch harness connector and front power window motor LH harness connector.

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D35	14	D37	1	Yes

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

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D35	14		No

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch.
NO >> Repair or replace harness.

5.CHECK ENCODER GROUND CIRCUIT

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

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

Main power window and door lock/unlock switch		Front power window motor LH		Continuity
Connector	Terminal	Connector	Terminal	
D35	12	D37	6	Yes

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

Main power window and door lock/unlock switch		Ground	Continuity
Connector	Terminal		
D35	12		No

Is the inspection result normal?

YES >> Replace front power window motor LH.
NO >> Repair or replace harness.

7.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

DOOR SWITCH

Component Function Check

INFOID:0000000010503116

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR SW-DR”, “DOOR SW-AS”, “DOOR SW-RL”, “DOOR SW-RR”, “DOOR SW-BK” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
DOOR SW-DR	Front door LH	Open	ON
		Closed	OFF
DOOR SW-AS	Front door RH	Open	ON
		Closed	OFF
DOOR SW-RL	Rear door LH	Open	ON
		Closed	OFF
DOOR SW-RR	Rear door RH	Open	ON
		Closed	OFF
DOOR SW-BK	Back door	Open	ON
		Closed	OFF

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to PWC-45, "Diagnosis Procedure".

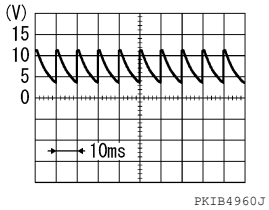
Diagnosis Procedure

INFOID:0000000010503117

Regarding Wiring Diagram information, refer to DLK-44, "Wiring Diagram".

1.CHECK DOOR SWITCH INPUT SIGNAL

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

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Front LH	B48	3	Ground	
Front RH	B49			
Rear LH	B71			
Rear RH	B53			
Back door	D562			

7.0 - 8.0 V

Is the inspection result normal?

YES-1 >> Back door: GO TO 3.
YES-2 >> Other door: GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between door switch harness connector and BCM harness connector.

Door switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Front LH	B48	3	M29	47	Yes
Front RH	B49			45	
Rear LH	B71			48	
Rear RH	B53			46	
Back door	D562			43	

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

Door switch			Ground	Continuity
Connector		Terminal		
Front LH	B48	3	Ground	No
Front RH	B49			
Rear LH	B71			
Rear RH	B53			
Back door	D562			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-72, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D562	4	Ground	Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK DOOR SWITCH

Refer to PWC-46, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace malfunctioning door switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-53, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000010503118

1.CHECK DOOR SWITCH

1. Turn power switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check continuity between door switch terminals.

Door switch			Condition		Continuity
Terminal					
• Front LH • Front RH • Rear LH • Rear RH	3	Ground part of door switch	Door switch	Pressed	Yes
				Released	No
Back door		4	Back door lock	Lock	Yes
				Unlock	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunctioning door switch.

SYMPTOM DIAGNOSIS

POWER WINDOW CONTROL SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000010503201

Symptom	Reference page
Power windows do not operate with power window main switch.	Refer to PWC-49, "Diagnosis Procedure".
Driver side power window alone does not operate.	Refer to PWC-50, "Diagnosis Procedure".
Front passenger side power window does not operate (when both power window main switch and front power window switch are operated).	Refer to PWC-51, "WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED : Diagnosis Procedure".
Front passenger side power window does not operate (when front power window switch (passenger side) is operated).	Refer to PWC-51, "WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED : Diagnosis Procedure".
Front passenger side power window does not operate (when power window main switch is operated).	Refer to PWC-52, "WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure".
Rear LH side power window does not operate (when both power window main switch and rear power window switch LH are operated).	Refer to PWC-53, "WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED : Diagnosis Procedure".
Rear LH side power window does not operate (when rear power window switch LH is operated).	Refer to PWC-53, "WHEN REAR POWER WINDOW SWITCH LH IS OPERATED : Diagnosis Procedure".
Rear LH side power window does not operate (when power window main switch is operated).	Refer to PWC-54, "WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure".
Rear RH side power window does not operate (when both power window main switch and rear power window switch RH are operated).	Refer to PWC-55, "WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH RH ARE OPERATED : Diagnosis Procedure".
Rear RH side power window does not operate (when rear power window switch RH is operated).	Refer to PWC-55, "WHEN REAR POWER WINDOW SWITCH RH IS OPERATED : Diagnosis Procedure".
Rear RH side power window does not operate (when power window main switch is operated).	Refer to PWC-56, "WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure".
Auto operation does not operate manual operate normally (driver side).	Refer to PWC-57, "Diagnosis Procedure".
Anti-pinch system does not operate normally (drivers side).	Refer to PWC-58, "Diagnosis Procedure".
Power window retained power operation does not operate properly.	Refer to PWC-59, "Diagnosis Procedure".
Power window lock switch does not function.	Refer to PWC-60, "Diagnosis Procedure".

POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH

Diagnosis Procedure

INFOID:0000000010119959

1.CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.
Refer to PWC-30, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

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

Check main power window and door lock/unlock switch power supply and ground circuit.
Refer to PWC-30, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000010119960

1.CHECK FRONT POWER WINDOW MOTOR LH

Check front power window motor LH.
Refer to PWC-38, "DRIVER SIDE : Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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 WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED

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

INFOID:0000000010119961

1.CHECK FRONT POWER WINDOW SWITCH RH

Check front power window switch RH.
Refer to PWC-34, "Diagnosis Procedure".

Is the inspection result normal?

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

2.CHECK FRONT POWER WINDOW MOTOR RH

Check front power window motor RH.
Refer to PWC-38, "PASSENGER SIDE : Diagnosis Procedure".

Is the inspection result normal?

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

3.REPLACE MANI POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH

- Replace main power window and door lock/unlock 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 FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED

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

INFOID:0000000010119962

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

Check front power window switch RH power supply and ground circuit.
Refer to PWC-31, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure".

Is the inspection result normal?

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

2.CHECK FRONT POWER WINDOW SWITCH RH

Check front power window switch RH.
Refer to PWC-34, "Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000010119963

1.CHECK FRONT POWER WINDOW SWITCH RH

Check front power window switch RH.
Refer to PWC-34, "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 main power window and door lock/unlock 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 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:0000000010119964

1.CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.
Refer to PWC-36, "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-39, "REAR LH : Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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:0000000010119965

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-32, "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-36, "Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000010119966

1.CHECK REAR POWER WINDOW SWITCH LH

Check rear power window switch LH.
Refer to PWC-36, "Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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 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:0000000010119967

1.CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.
Refer to PWC-36, "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 : Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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:0000000010119968

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-32, "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-36, "Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000010119969

1.CHECK REAR POWER WINDOW SWITCH RH

Check rear power window switch RH.
Refer to PWC-36, "Diagnosis Procedure".

Is the inspection result normal?

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

2.REPLACE MAIN POWER WINDOW AND LOCK/UNLOCK SWITCH

- Replace main power window and door lock/unlock 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)

Diagnosis Procedure

INFOID:0000000010119970

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.
Refer to PWC-28, "Work Procedure".

Is the inspection result normal?

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

2.CHECK ENCODER CIRCUIT

Check encoder circuit.
Refer to PWC-42, "Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock switch.
- Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".

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

Diagnosis Procedure

INFOID:0000000010119971

1.CHECK POWER WINDOW AUTO OPERATION

Check AUTO operation when anti-pinch function does not operate.
Refer to PWC-57, "Diagnosis Procedure".

Is the inspection result normal?

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

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

- Replace main power window and door lock/unlock 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

Diagnosis Procedure

INFOID:0000000010119972

1.CHECK FRONT DOOR SWITCH

Check front door switch.
Refer to DLK-102, "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-72, "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".

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000010119973

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".

REMOVAL AND INSTALLATION

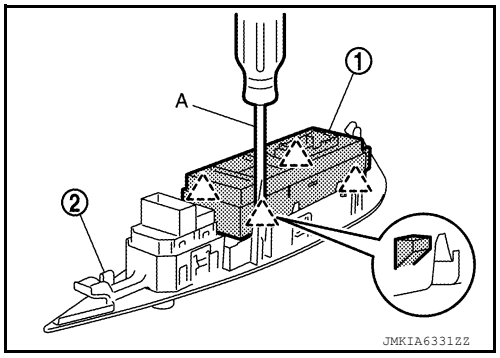
POWER WINDOW MAIN SWITCH

Removal and Installation

INFOID:0000000010119974

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).



: Pawl

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-28, "Work Procedure".