

PWC

SECTION

POWER WINDOW CONTROL SYSTEM

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PRECAUTION

PRECAUTIONS

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

INFOID:000000008381275

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

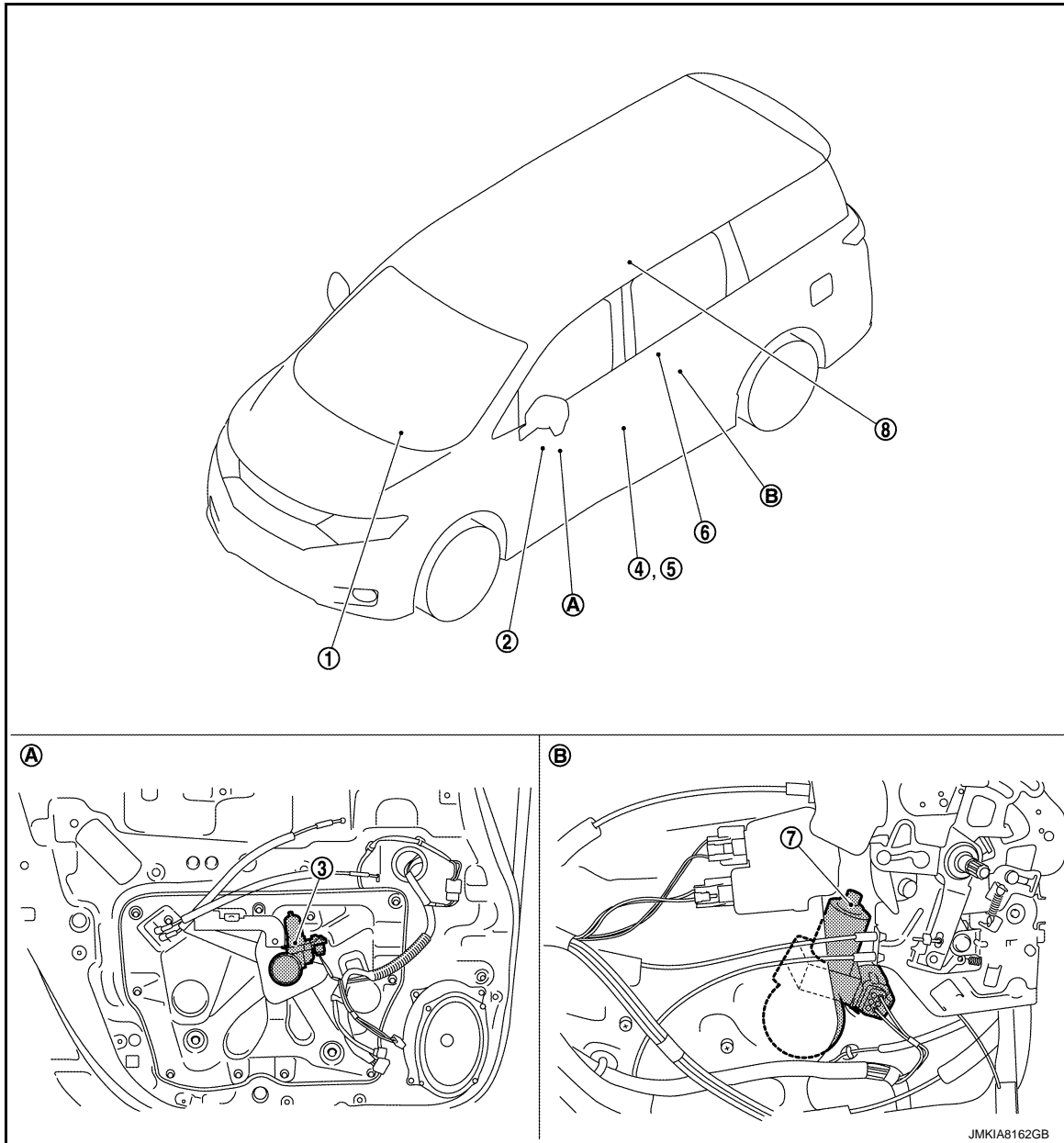
- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:000000008381276



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

| No. | Component | Function |
|-----|--|--|
| 1. | BCM | <ul style="list-style-type: none"> Supplies power supply to power window switch. Controls retained power. Receives key ID signal from remote keyless entry receiver. Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location. |
| 2. | Power window main switch | Refer to PWC-8, "Power Window Main Switch" . |
| 3. | Front power window motor (driver side) | Refer to PWC-8, "Front Power Window Motor (Driver Side)" . |

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

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

Power Window Main Switch

INFOID:000000008381277

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

Front Power Window Motor (Driver Side)

INFOID:000000008381278

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

Sliding Door Power Window Switch

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Controls power window motor of sliding door.

Sliding Door Power Window Motor

INFOID:000000008381280

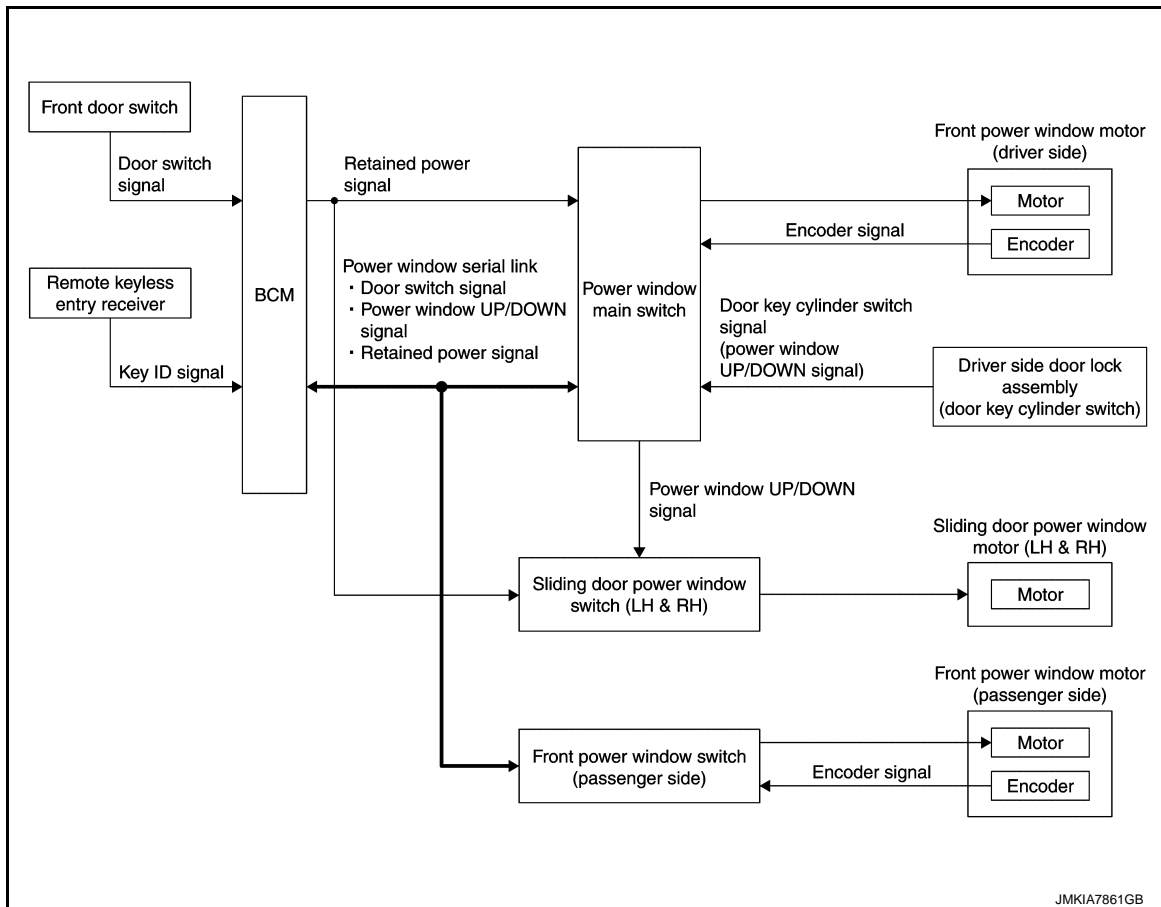
Operates with signals from power window main switch and sliding door power window switch.

SYSTEM

System Description

INFOID:000000008381281

SYSTEM DIAGRAM



DESCRIPTION

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

Power Window AUTO-Operation

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

Retained Power Operation

SYSTEM

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

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

Retained Power Cancel Conditions

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

Power Window Lock Function

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

Power Window Serial Link

- Power window main switch, front power window switch (passenger side), and BCM transmit and receive the signal by power window serial link.
- Power window serial link transmits the power window main switch operation signals and retained power signal to power window main switch module and front power window switch (passenger side) module.

Anti-Pinch Operation

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

Operation Condition

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

NOTE:

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

Door Key Cylinder Switch Operation

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

Operation Conditions

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

Keyless Power Window Down Operation

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

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

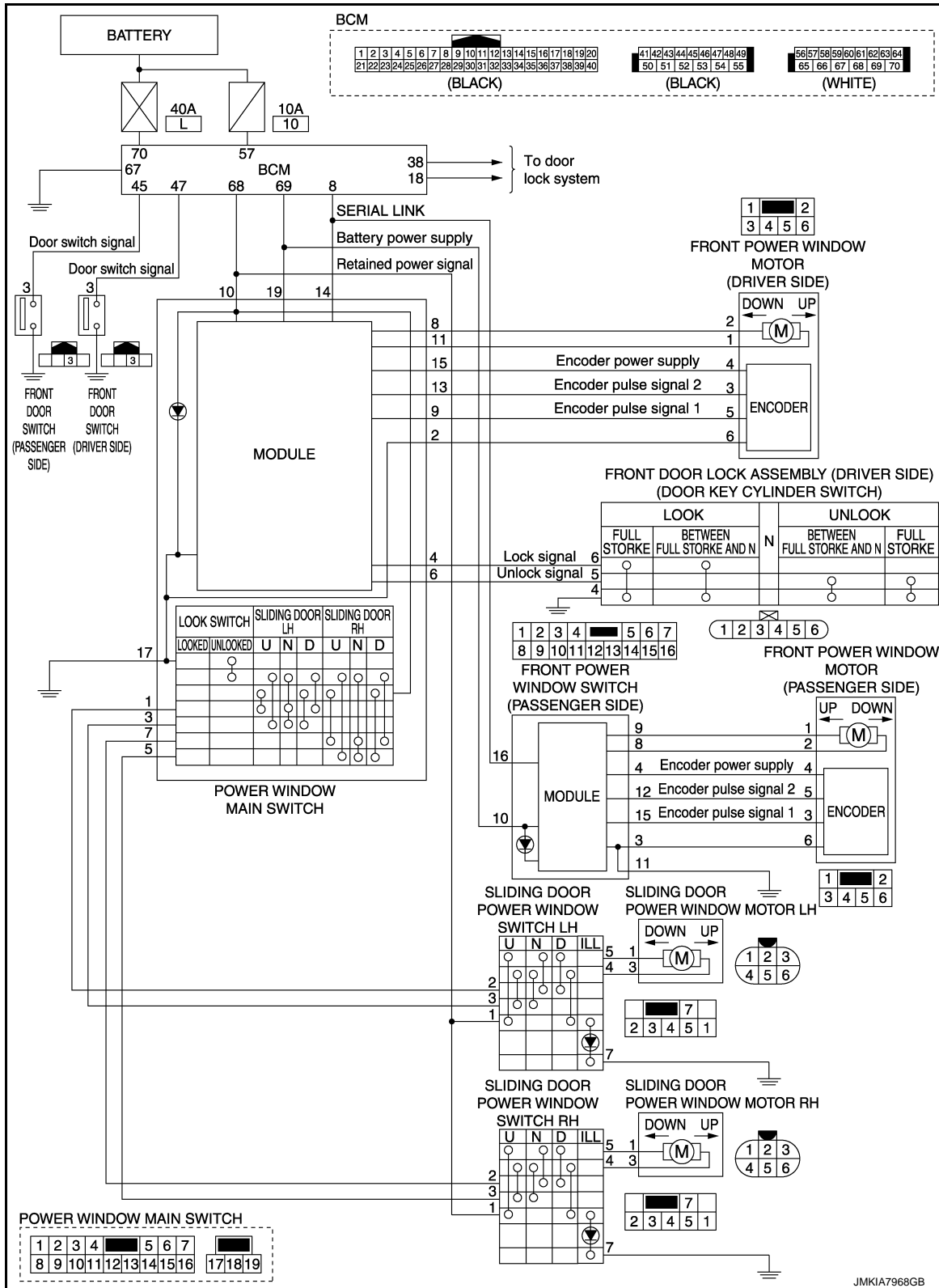
- When the unlock button is kept pressed more than 15 seconds.
- When the ignition switch is turned ON while the power window opening is operated.
- When the unlock button is released.

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

Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUPPORT". Refer to [DLK-95. "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Circuit Diagram

INFOID:000000008381282



Fail-safe

INFOID:000000008381283

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.

SYSTEM

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

| Error | Error condition |
|--|--|
| Pulse sensor malfunction | When only one side of pulse signal is being detected for more than the specified value. |
| Both pulse sensors 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

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008839769

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode | Function Description |
|--------------------------|---|
| Work Support | Changes the setting for each system function. |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. |
| Data Monitor | The BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Ecu Identification | The BCM part number is displayed. |
| Configuration | <ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM. |

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|---|---------------------------|----------------|--------------|-------------|
| | | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp control system | INT LAMP | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | × | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| Air conditioning control system | AIR CONDITONER | | × | ×* |
| <ul style="list-style-type: none"> Intelligent Key system Engine start system | INTELLIGENT KEY | × | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| NVIS | IMMU | × | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door open | TRUNK | | × | |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | AIR PRESSURE MONITOR | × | × | × |

NOTE:

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

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

| CONSULT screen item | Indication/Unit | Description | |
|---------------------|-----------------|--|---|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected | |
| Vehicle Condition | SLEEP>LOCK | Power position status of the moment a particular DTC is detected* | While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (LOCK)] |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (OFF)] |
| | LOCK>ACC | | While turning power supply position from OFF (LOCK) to ACC |
| | ACC>ON | | While turning power supply position from ACC to ON |
| | RUN>ACC | | While turning power supply position from RUN to ACC (Except emergency stop operation) |
| | CRANK>RUN | | While turning power supply position from CRANK to RUN |
| | RUN>URGENT | | While turning power supply position from RUN to ACC (Emergency stop operation) |
| | ACC>OFF | | While turning power supply position from ACC to OFF (OFF) |
| | OFF>LOCK | | While turning power supply position from OFF (OFF) to OFF (LOCK) |
| | OFF>ACC | | While turning power supply position from OFF (OFF) to ACC |
| | ON>CRANK | | While turning power supply position from ON to CRANK |
| | OFF>SLEEP | | While turning BCM status from normal mode [Power supply position is OFF (OFF)] to low power consumption mode |
| | LOCK>SLEEP | | While turning BCM status from normal mode [Power supply position is OFF (LOCK)] to low power consumption mode |
| | LOCK | | Power supply position is OFF (LOCK) |
| | OFF | | Power supply position is OFF (OFF) |
| | ACC | | Power supply position is ACC |
| | ON | | Power supply position is ON |
| | ENGINE RUN | | Power supply position is RUN |
| | CRANKING | | Power supply position is CRANK |
| IGN Counter | 0 - 39 | The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | |

NOTE:

*: Refer to the following for details of the power supply position.

- OFF (OFF, LOCK): Ignition switch OFF
- ACC: Ignition switch ACC
- IGN: Ignition switch ON with engine stopped
- RUN: Ignition switch ON with engine running
- CRANK: At engine cranking

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

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

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

RETAINED PWR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[FRONT WINDOW ANTI-PINCH]

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000008381285

DATA MONITOR

NOTE:

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

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

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[FRONT WINDOW ANTI-PINCH]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000008381286

| ECU | Reference |
|-----|---|
| BCM | BCS-40, "Reference Value" |
| | BCS-62, "Fail-safe" |
| | BCS-62, "DTC Inspection Priority Chart" |
| | BCS-63, "DTC Index" |

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

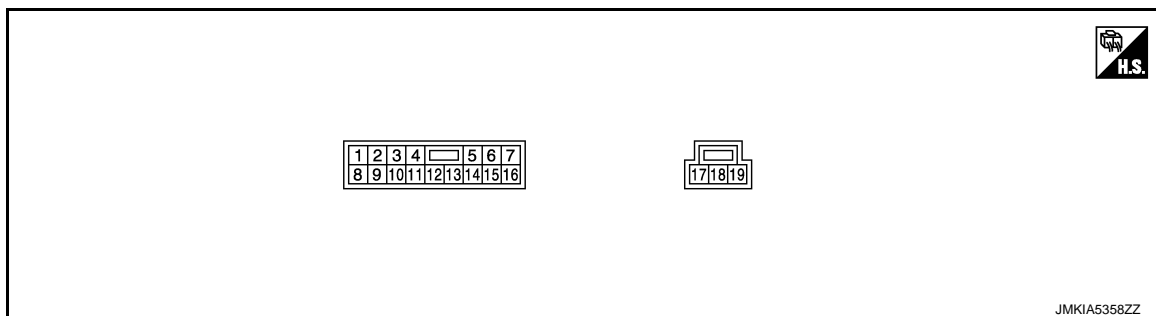
[FRONT WINDOW ANTI-PINCH]

POWER WINDOW MAIN SWITCH

Reference Value

INFOID:000000008381287

TERMINAL LAYOUT



PHYSICAL VALUES

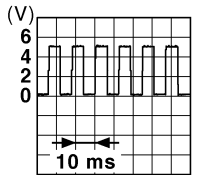
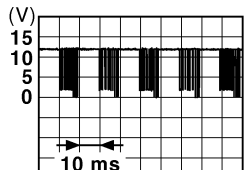
| Terminal No. (wire color) | | Description | | Condition | Voltage (V) |
|------------------------------|--------|--|------------------|---|-----------------|
| + | - | Signal name | Input/ Output | | |
| 1 (O) | Ground | Sliding door power window motor LH UP signal | Output | When sliding door LH switch in power window main switch is in UP operation. | 9 - 16 |
| 2 (W) | Ground | Encoder ground | — | — | 0 - 1 |
| 3 (BR) | Ground | Sliding door power window motor LH DOWN signal | Output | When sliding door LH switch in power window main switch is in DOWN operation. | 9 - 16 |
| 4 (P) | Ground | Door key cylinder switch LOCK signal | Input | Key position (Neutral → Locked) | 4 - 6 → 0 - 1.5 |
| 5 (SB) | Ground | Sliding door power window motor RH DOWN signal | Output | When sliding door RH switch in power window main switch is in DOWN operation. | 9 - 16 |
| 6 (GR) | Ground | Door key cylinder switch UNLOCK signal | Input | Key position (Neutral → Unlocked) | 4 - 6 → 0 - 1.5 |
| 7 (P) | Ground | Sliding door power window motor RH UP signal | Output | When sliding door RH switch in power window main switch is in UP operation. | 9 - 16 |
| 8 (L) | Ground | Front power window motor (driver side) UP signal | Output | When front LH switch in power window main switch is in UP operation. | 9 - 16 |
| 9 (SB) | Ground | Encoder pulse signal 2 | Input | When power window motor operates. | |

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POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[FRONT WINDOW ANTI-PINCH]

| Terminal No. (wire color) | | Description | | Condition | Voltage (V) |
|------------------------------|--------|--|------------------|--|---|
| + | - | Signal name | Input/ Output | | |
| 10 (V) | Ground | Retained power signal | Input | Ignition switch ON | 9 – 16 |
| | | | | Within 45 seconds after ignition switch is turned to OFF. | 9 – 16 |
| | | | | When driver side or passenger side door is opened during retained power operation. | 0 – 1 |
| 11 (LG) | Ground | Front power window motor (driver side) DOWN signal | Output | When front LH switch in power window main switch is in DOWN operation. | 9 – 16 |
| 13 (Y) | Ground | Encoder pulse signal 1 | Input | When power window motor operates. |  JMKIA0070GB |
| 14 (BR) | Ground | Power window serial link | Input/ Output | Ignition switch ON or power window timer operating. |  JPMIA0013GB |
| 15 (R) | Ground | Encoder power supply | Output | When ignition switch ON or power window timer operates. | 9 – 16 |
| 17 (B) | Ground | Ground | — | — | 0 – 1 |
| 19 (LG) | Ground | Battery power supply | Input | — | 9 – 16 |

Fail-safe

INFOID:000000008381288

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. |

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[FRONT WINDOW ANTI-PINCH]

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

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

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FRONT POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

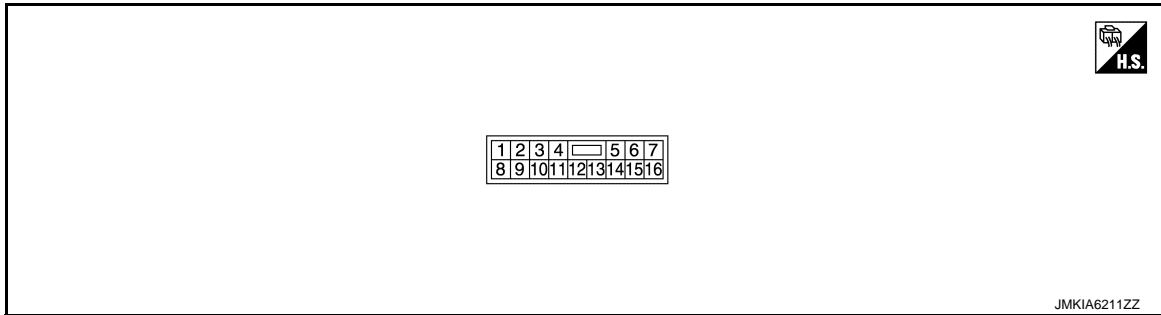
[FRONT WINDOW ANTI-PINCH]

FRONT POWER WINDOW SWITCH

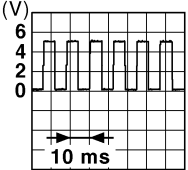
Reference Value

INFOID:000000008381289

TERMINAL LAYOUT



PHYSICAL VALUES

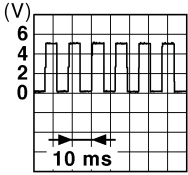
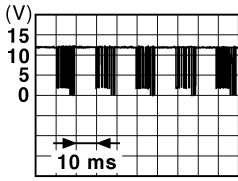
| Terminal No. (wire color) | | Description | | Condition | Voltage (V) |
|------------------------------|--------|---|------------------|---|---|
| + | – | Signal name | Input/ Output | | |
| 3 (BR) | Ground | Encoder ground | — | — | 0 – 1 |
| 4 (SB) | Ground | Encoder power supply | Output | When ignition switch ON or power window timer operates | 9 – 16 |
| 8 (Y) | Ground | Front power window motor (passenger side) UP signal | Output | When front power window switch (passenger side) is in UP operation. | 9 – 16 |
| 9 (G) | Ground | Front power window motor (passenger side) DOWN signal | Output | When front power window switch (passenger side) is in DOWN operation. | 9 – 16 |
| 10 (V) | Ground | Battery power supply | Input | — | 9 – 16 |
| 11 (W) | Ground | Ground | — | — | 0 – 1 |
| 12 (O) | Ground | Encoder pulse signal 1 | Input | When power window motor operates. |  |

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FRONT POWER WINDOW SWITCH

< ECU DIAGNOSIS INFORMATION >

[FRONT WINDOW ANTI-PINCH]

| Terminal No. (wire color) | | Description | | Condition | Voltage (V) |
|------------------------------|--------|--------------------------|------------------|---|---|
| + | - | Signal name | Input/ Output | | |
| 15 (R) | Ground | Encoder pulse signal 2 | Input | When power window motor operates. |  |
| 16 (L) | Ground | Power window serial link | Input/ Output | Ignition switch ON or power window timer operating. |  |

Fail-safe

INFOID:0000000008381290

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

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

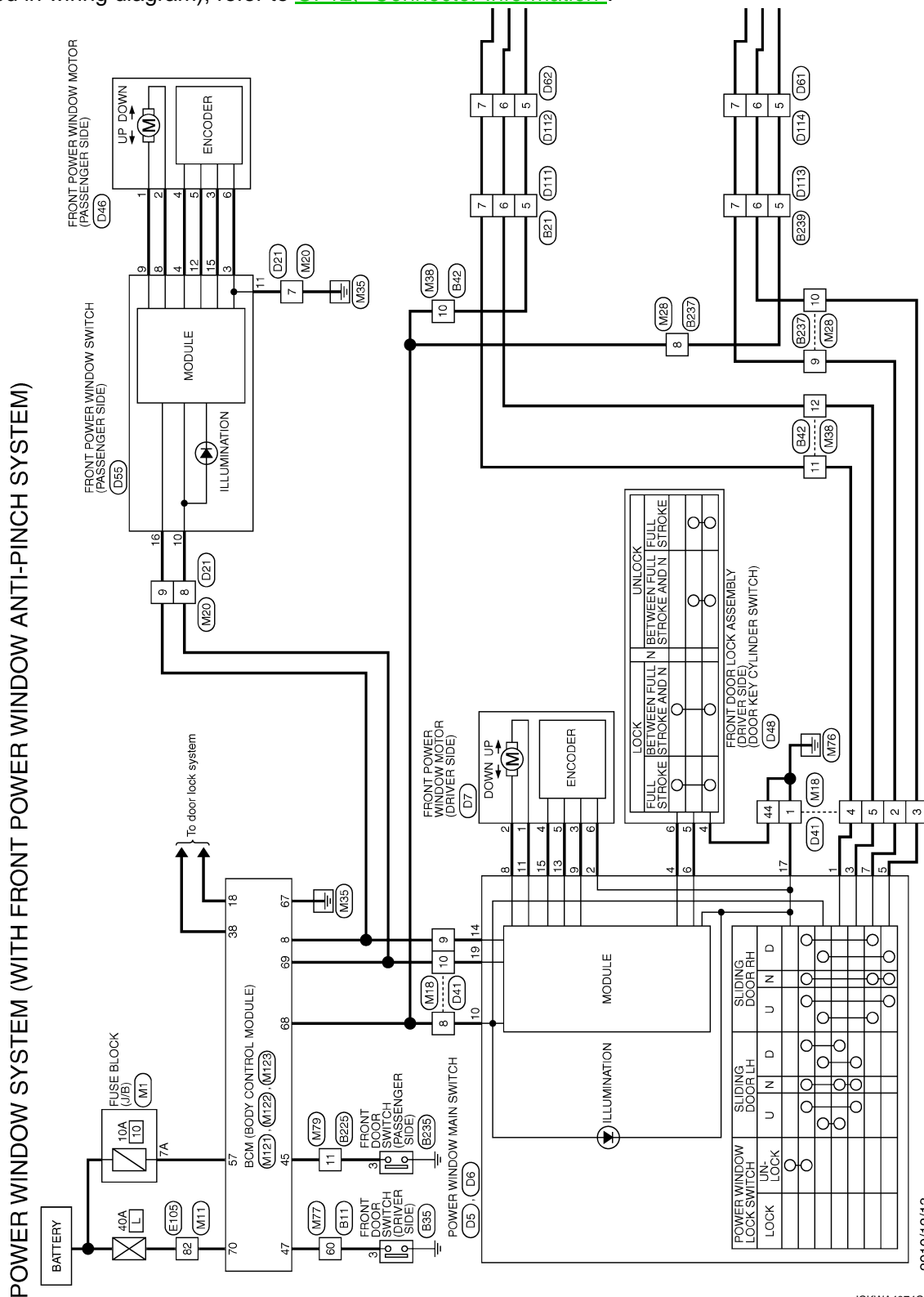
[FRONT WINDOW ANTI-PINCH]

WIRING DIAGRAM

Wiring Diagram

INFOID:0000000008381291

For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not described in wiring diagram), refer to [GI-12, "Connector Information"](#).



2010/12/13

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POWER WINDOW SYSTEM

< WIRING DIAGRAM >

[FRONT WINDOW ANTI-PINCH]

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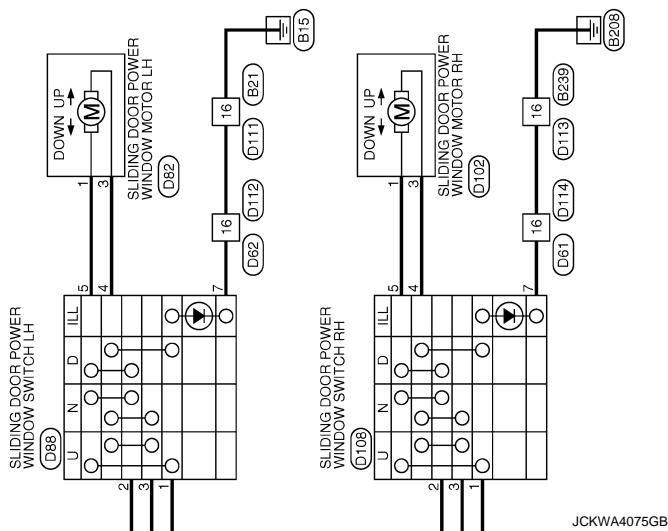
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000008381292

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.REPRODUCE THE MALFUNCTION INFORMATION

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

>> GO TO 3.

3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

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

>> GO TO 4.

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

Perform the diagnosis with "DTC/CIRCUIT DIAGNOSIS" of the applicable system.

>> GO TO 5.

5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6.FINAL CHECK

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

Is the malfunctioning part repaired or replaced?

YES >> Trouble diagnosis is completed.

NO >> GO TO 3.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

[FRONT WINDOW ANTI-PINCH]

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000008381293

When the 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:0000000008381294

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [PWC-27. "Work Procedure"](#).

>> GO TO 2.

2.CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to [PWC-28. "Work Procedure"](#).

>> END

PWC

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW SWITCH

< BASIC INSPECTION >

[FRONT WINDOW ANTI-PINCH]

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW SWITCH

Description

INFOID:0000000008381295

When the power window main switch or front power window switch (passenger side) replaced, the initialization in necessary for normal operation of power window system.

CAUTION:

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

- Auto-up operation
- Anti-pinch function

Work Procedure

INFOID:0000000008381296

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [PWC-27. "Work Procedure"](#).

>> GO TO 2.

2.CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to [PWC-28. "Work Procedure"](#).

>> END

SYSTEM INITIALIZATION

Description

INFOID:0000000008381297

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

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

CAUTION:

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

- Auto-up operation
- Anti-pinch function

Work Procedure

INFOID:0000000008381298

1.STEP 1

1. Turn ignition switch ON.
2. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
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-28, "Work Procedure"](#).

>> END

CHECK ANTI-PINCH FUNCTION

< BASIC INSPECTION >

[FRONT WINDOW ANTI-PINCH]

CHECK ANTI-PINCH FUNCTION

Description

INFOID:000000008381299

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

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

Work Procedure

INFOID:000000008381300

1.CHECK ANTI-PINCH FUNCTION

1. Fully open the door window.
2. Place a piece of wood near fully closed position.
3. Close door glass completely with AUTO-UP.
4. Check the following conditions.
 - Check that glass lowers for approximately 150 mm (5.9 in) without pinching piece of wood and stops.
 - Check that glass does not rise not when operating the power window main switch or front power window switch (passenger side) while lowering.

CAUTION:

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

>> END

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000008381301

1.CHECK POWER SUPPLY

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

| (+) Power window main switch | | (-) | Condition | | Voltage (V) |
|------------------------------|----------|--------|-----------------|-----|-------------|
| Connector | Terminal | | | | |
| D5 | 10 | Ground | Ignition switch | ON | 9 – 16 |
| D6 | 19 | | | OFF | |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| BCM | | Power window main switch | | Continuity |
|-----------|----------|--------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M123 | 68 | D5 | 10 | Existed |
| | 69 | D6 | 19 | |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M123 | 68 | | Not existed |
| | 69 | | |

Is the inspection result normal?

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

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

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

| Power window main switch | | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector | Terminal | | |
| D6 | 17 | | Existed |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:000000008381302

1.CHECK POWER SUPPLY

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

| (+) | | (-) | Voltage (V) |
|--|----------|--------|-------------|
| Front power window switch (passenger side) | | | |
| Connector | Terminal | | |
| D55 | 10 | Ground | 9 – 16 |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. 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 | |
| M123 | 69 | D55 | 10 | Existed |

3. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M123 | 69 | | Not existed |

Is the inspection result normal?

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

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

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

| Front power window switch (passenger side) | | Ground | Continuity |
|--|----------|--------|------------|
| Connector | Terminal | | |
| D55 | 11 | | Existed |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

SLIDING DOOR POWER WINDOW SWITCH

SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:000000008381303

1.CHECK POWER SUPPLY

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

| (+) Sliding door power window switch | | Terminal | (-) | Voltage (V) |
|--------------------------------------|------|----------|--------|-------------|
| Connector | | | | |
| LH | D88 | 1 | Ground | 9 – 16 |
| RH | D108 | | | |

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| BCM | | Sliding door power window switch | | Continuity |
|-----------|----------|----------------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M123 | 68 | LH | D88 | Existed |
| | | RH | D108 | |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M123 | 68 | | Not existed |

Is the inspection result normal?

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

NO >> Repair or replace harness.

PWC

SLIDING DOOR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

SLIDING DOOR POWER WINDOW SWITCH

Component Function Check

INFOID:0000000008381304

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-32. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000008381305

1.CHECK SLIDING DOOR POWER WINDOW SWITCH INPUT SIGNAL

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

| (+) | | | (-) | Condition | | Voltage (V) |
|----------------------------------|------|----------|--------|--|---------|-------------|
| Sliding door power window switch | | | | | | |
| Connector | | Terminal | | | | |
| LH | D88 | 2 | Ground | Power window main switch (sliding door LH side) | NEUTRAL | 0 – 1 |
| | | | | | UP | 9 – 16 |
| | | 3 | | | NEUTRAL | 0 – 1 |
| | | | | | DOWN | 9 – 16 |
| RH | D108 | 2 | | Power window main switch (sliding door RH side) | NEUTRAL | 0 – 1 |
| | | | | | UP | 9 – 16 |
| | | 3 | | | NEUTRAL | 0 – 1 |
| | | | | | DOWN | 9 – 16 |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK SLIDING DOOR POWER WINDOW SWITCH CIRCUIT

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

| Sliding door power window switch | | | Power window main switch | | Continuity |
|----------------------------------|------|----------|--------------------------|----------|------------|
| Connector | | Terminal | Connector | Terminal | |
| LH | D88 | 2 | D5 | 1 | Existed |
| | | 3 | | 3 | |
| RH | D108 | 2 | | 7 | |
| | | 3 | | 5 | |

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

SLIDING DOOR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

| Sliding door power window switch | | | Continuity |
|----------------------------------|------|----------|-------------|
| Connector | | Terminal | |
| LH | D88 | 2 | Not existed |
| | | 3 | |
| RH | D108 | 2 | |
| | | 3 | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK SLIDING DOOR POWER WINDOW SWITCH

Check sliding door power window switch.

Refer to [PWC-33, "Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> Replace sliding door power window switch. Refer to [PWC-62, "Removal and Installation"](#).

Component Inspection

INFOID:000000008381306

1.CHECK SLIDING DOOR POWER WINDOW SWITCH

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

| Sliding door power window switch | | Condition | Continuity |
|----------------------------------|---|-----------|------------|
| Terminal | | | |
| 1 | 5 | UP | Existed |
| 3 | 4 | | |
| 2 | 5 | NEUTRAL | |
| 3 | 4 | | |
| 1 | 4 | DOWN | |
| 2 | 5 | | |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace sliding door power window switch. Refer to [PWC-62, "Removal and Installation"](#).

PWC

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000008381307

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-34. "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008381308

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

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

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

Is the inspection result normal?

YES >> Replace front power window motor (driver side). Refer to [GW-28. "Removal and Installation"](#).

NO >> GO TO 2.

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

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

| Front power window motor (driver side) | | Power window main switch | | Continuity |
|--|----------|--------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D7 | 1 | D5 | 11 | Existed |
| | 2 | | 8 | |

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

| Front power window motor (driver side) | | Ground | Continuity |
|--|----------|--------|-------------|
| Connector | Terminal | | |
| D7 | 1 | | Not existed |
| | 2 | | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-61. "Removal and Installation"](#).

NO >> Repair or replace harness.

PASSENGER SIDE

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

PASSENGER SIDE : Component Function Check

INFOID:000000008381309

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-35, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000008381310

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

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

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

Is the inspection result normal?

YES >> Replace front power window motor (passenger side). Refer to [GW-28, "Removal and Installation"](#).

NO >> GO TO 2.

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

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

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

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

| Front power window motor (passenger side) | | Ground | Continuity |
|---|----------|--------|-------------|
| Connector | Terminal | | |
| D46 | 1 | | Not existed |
| | 2 | | |

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-61, "Removal and Installation"](#).

NO >> Repair or replace harness.

SLIDING DOOR LH

A
B
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POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

SLIDING DOOR LH : Component Function Check

INFOID:000000008381311

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-36, "SLIDING DOOR LH : Diagnosis Procedure"](#).

SLIDING DOOR LH : Diagnosis Procedure

INFOID:000000008381312

1.CHECK SLIDING DOOR POWER WINDOW MOTOR LH INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace sliding door power window motor LH.

NO >> GO TO 2.

2.CHECK SLIDING DOOR POWER WINDOW MOTOR LH CIRCUIT

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

| Sliding door power window motor LH | | Sliding door power window switch LH | | Continuity |
|------------------------------------|----------|-------------------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D82 | 1 | D88 | 5 | Existed |
| | 3 | | 4 | |

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

| Sliding door power window motor LH | | Ground | Continuity |
|------------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D82 | 1 | | Not existed |
| | 3 | | |

Is the inspection result normal?

YES >> Replace sliding door power window switch LH. Refer to [PWC-62, "Removal and Installation"](#).

NO >> Repair or replace harness.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:000000008381313

1. CHECK FUNCTION

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-37, "SLIDING DOOR RH : Diagnosis Procedure"](#).

SLIDING DOOR RH : Diagnosis Procedure

INFOID:000000008381314

1. CHECK SLIDING DOOR POWER WINDOW MOTOR RH INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace sliding door power window motor RH.

NO >> GO TO 2.

2. CHECK SLIDING DOOR POWER WINDOW MOTOR RH CIRCUIT

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

| Sliding door power window motor RH | | Sliding door power window switch RH | | Continuity |
|------------------------------------|----------|-------------------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D102 | 1 | D108 | 5 | Existed |
| | 3 | | 4 | |

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

| Sliding door power window motor RH | | Ground | Continuity |
|------------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D102 | 1 | | Not existed |
| | 3 | | |

Is the inspection result normal?

YES >> Replace sliding door power window switch RH. Refer to [PWC-62, "Removal and Installation"](#).

NO >> Repair or replace harness.

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

ENCODER CIRCUIT DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000008381315

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-38, "DRIVER SIDE : Diagnosis Procedure"](#).

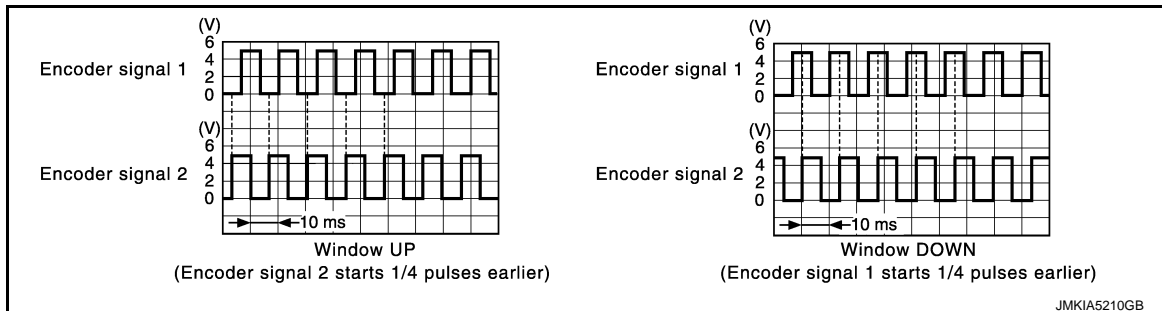
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008381316

1.CHECK ENCODER PULSE SIGNAL

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

| (+) | | (-) | Signal (Reference value) |
|--------------------------|----------|--------|-------------------------------|
| Power window main switch | | | |
| Connector | Terminal | | |
| D5 | 9 | Ground | Refer to the following signal |
| | 13 | | |



Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK ENCODER SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector and front power window motor (driver side) connector.
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 | |
| D5 | 9 | D7 | 3 | Existed |
| | 13 | | 5 | |

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

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

ENCODER CIRCUIT

[FRONT WINDOW ANTI-PINCH]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCODER POWER SUPPLY

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

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK ENCODER POWER SUPPLY CIRCUIT

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

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

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

| Power window main switch | | Ground | Continuity |
|--------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D5 | 15 | | Not existed |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).

NO >> Repair or replace harness.

5.CHECK ENCODER GROUND CIRCUIT 1

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

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

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

| Power window main switch | | Ground | Continuity |
|--------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D5 | 2 | | Not existed |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK ENCODER GROUND CIRCUIT 2

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

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

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

Is the inspection result normal?

YES >> Replace front power window motor (driver side). Refer to [GW-28, "Removal and Installation"](#).

NO >> Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000008381317

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-40, "PASSENGER SIDE : Diagnosis Procedure"](#).

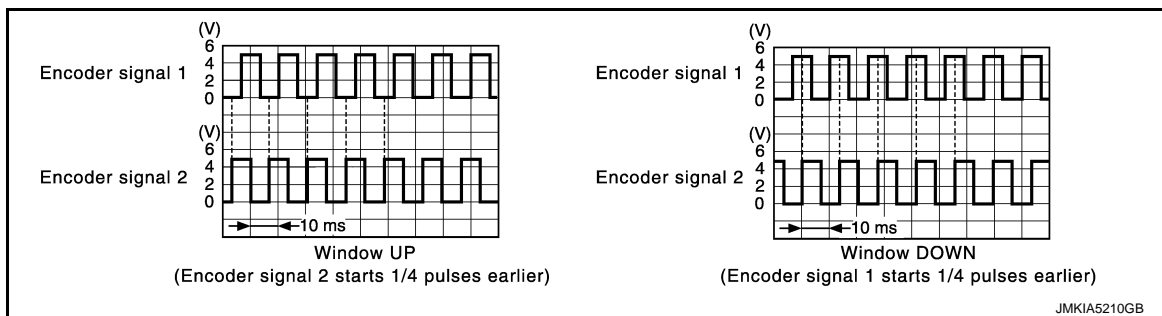
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000008381318

1.CHECK ENCODER PULSE SIGNAL

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

| (+) | | (-) | Signal (Reference value) |
|--|----------|--------|-------------------------------|
| Front power window switch (passenger side) | | | |
| Connector | Terminal | | |
| D55 | 12 | Ground | Refer to the following signal |
| | 15 | | |



Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-61, "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK ENCODER SIGNAL CIRCUIT

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

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

| Front power window switch (passenger side) | | Front power window motor (passenger side) | | Continuity |
|--|----------|---|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D55 | 12 | D46 | 5 | Existed |
| | 15 | | 3 | |

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

| Front power window switch (passenger side) | | Ground | Continuity |
|--|----------|--------|-------------|
| Connector | Terminal | | |
| D55 | 12 | | Not existed |
| | 15 | | |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK ENCODER POWER SUPPLY

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

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK ENCODER POWER SUPPLY CIRCUIT

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

| Front power window switch (passenger side) | | Front power window motor (passenger side) | | Continuity |
|--|----------|---|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D55 | 4 | D46 | 4 | Existed |

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

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

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-61. "Removal and Installation"](#).

NO >> Repair or replace harness.

5.CHECK ENCODER GROUND CIRCUIT 1

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

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

| Front power window switch (passenger side) | | Front power window motor (passenger side) | | Continuity |
|--|----------|---|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D55 | 3 | D46 | 6 | Existed |

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

| Front power window switch (passenger side) | | Ground | Continuity |
|--|----------|--------|-------------|
| Connector | Terminal | | |
| D55 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6. CHECK ENCODER GROUND CIRCUIT 2

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

| Front power window switch (passenger side) | | Ground | Continuity |
|--|----------|--------|------------|
| Connector | Terminal | | |
| D55 | 3 | | Existed |

Is the inspection result normal?

YES >> Replace front power window motor (passenger side). Refer to [GW-28, "Removal and Installation"](#).

NO >> Replace front power window switch (passenger side). Refer to [PWC-61, "Removal and Installation"](#).

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000008381319

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-43, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000008381320

1.CHECK DOOR KEY CYLINDER SWITCH SIGNAL

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

| (+) Front door lock assembly (driver side) (key cylinder switch) | | (-) | Voltage (V) |
|--|----------|--------|-------------|
| Connector | Terminal | | |
| D48 | 5 | Ground | 4 – 6 |
| | 6 | | |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR KEY CYLINDER SWITCH CIRCUIT

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

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

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

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

| Power window main switch | | Ground | Continuity |
|--------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D5 | 4 | | Not existed |
| | 6 | | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between front door lock assembly (driver side) (key cylinder switch) harness connector and ground.

| Front door lock assembly (driver side) (key cylinder switch) | | Ground | Continuity |
|--|----------|--------|------------|
| Connector | Terminal | | |
| D48 | 4 | | Existed |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR KEY CYLINDER SWITCH

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

Refer to [PWC-44, "Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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

Component Inspection

INFOID:000000008381321

COMPONENT INSPECTION

1.CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) (key cylinder switch) connector.
3. Check front door lock assembly (driver side) (key cylinder switch) terminals under the following conditions.

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

Is the inspection result normal?

YES >> INSPECTION END

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

POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

POWER WINDOW SERIAL LINK

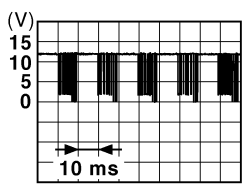
POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000008381322

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

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

| (+) Power window main switch | | (-) | Signal (Reference value) |
|------------------------------|----------|--------|---|
| Connector | Terminal | | |
| D5 | 14 | Ground |  JPMA0013GB |

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).
NO >> GO TO 2.

2. CHECK POWER WINDOW SERIAL LINK SIGNAL

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

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

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).
NO >> GO TO 3.

3. CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

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

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M121 | 8 | | Not existed |

Is the inspection result normal?

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

POWER WINDOW SERIAL LINK

[FRONT WINDOW ANTI-PINCH]

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

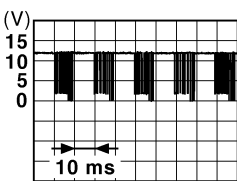
FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:000000008381323

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

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

| (+)Front power window switch (passenger side) | | (-) | Signal (Reference value) |
|---|----------|--------|---|
| Connector | Terminal | | |
| D55 | 16 | Ground |  JPMA0013GB |

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-61. "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector and front power window switch (passenger side) connector.
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 | |
| D5 | 14 | D55 | 16 | Existed |

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

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

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-61. "Removal and Installation"](#).

NO >> Repair or replace harness.

SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

Diagnosis Procedure

INFOID:0000000008381324

1.CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to [BCS-79, "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-29, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK POWER WINDOW MAIN SWITCH SERIAL LINK CIRCUIT

Check power window main switch serial link circuit.

Refer to [PWC-45, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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PWC

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008381325

1.CHECK DRIVER SIDE POWER WINDOW MOTOR

Check front power window motor (driver side).

Refer to [PWC-34, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE WHEN BOTH POWER WINDOW MAIN SWITCH AND FRONT POWER WINDOW SWITCH ARE OPERATED

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

INFOID:000000008381326

1.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) POWER SUPPLY AND GROUND CIR- CUIT

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

Refer to [PWC-30. "FRONT POWER WINDOW SWITCH \(PASSENGER SIDE\) : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE)

Check front power window motor (passenger side).

Refer to [PWC-35. "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED

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

INFOID:000000008381327

1.REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Replace front power window switch (passenger side).

Refer to [PWC-61. "Removal and Installation"](#)

>> INSPECTION END

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008381328

1.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) SERIAL LINK CIRCUIT

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

Refer to [PWC-46. "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.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

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SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE

WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDOW SWITCHES ARE OPERATED

WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDOW SWITCHES ARE OPERATED : Diagnosis Procedure

INFOID:000000008381329

1.CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH.

Refer to [PWC-32, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW MOTOR LH

Check sliding door power window motor LH.

Refer to [PWC-36, "SLIDING DOOR LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED

WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008381330

1.CHECK SLIDING DOOR POWER WINDOW SWITCH LH POWER SUPPLY AND GROUND CIRCUIT

Check sliding door power window switch LH power supply and ground circuit.

Refer to [PWC-30, "SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH.

Refer to [PWC-32, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000008381331

1.CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH.

Refer to [PWC-32. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

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SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE

WHEN POWER WINDOW MAIN AND SLIDING DOOR RH POWER WINDOW SWITCHES ARE OPERATED

WHEN POWER WINDOW MAIN AND SLIDING DOOR RH POWER WINDOW SWITCHES ARE OPERATED : Diagnosis Procedure

INFOID:000000008381332

1.CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH.

Refer to [PWC-32, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW MOTOR RH

Check sliding door power window motor RH.

Refer to [PWC-36, "SLIDING DOOR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN SLIDING DOOR RH POWER WINDOW SWITCH IS OPERATED

WHEN SLIDING DOOR RH POWER WINDOW SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008381333

1.CHECK SLIDING DOOR POWER WINDOW SWITCH RH POWER SUPPLY AND GROUND CIRCUIT

Check sliding door power window switch RH power supply and ground circuit.

Refer to [PWC-30, "SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH.

Refer to [PWC-32, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000008381334

1.CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH.

Refer to [PWC-32. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

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AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:000000008381335

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-27, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER CIRCUIT (DRIVER SIDE)

Check encoder circuit (driver side). Refer to [PWC-38, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000008381336

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-27, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER CIRCUIT (PASSENGER SIDE)

Check encoder circuit (passenger side). Refer to [PWC-40, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

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

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008381337

1.CHECK POWER WINDOW AUTO OPERATION

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [PWC-54, "DRIVER SIDE : Diagnosis Procedure"](#).

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000008381338

1.CHECK POWER WINDOW AUTO OPERATION

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [PWC-54, "PASSENGER SIDE : Diagnosis Procedure"](#).

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

PWC

POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

Diagnosis Procedure

INFOID:0000000008381339

1.CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to [DLK-210, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

Diagnosis Procedure

INFOID:0000000008381340

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-27, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

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

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

Refer to [PWC-43, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008381341

1.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent key button?

YES >> GO TO 2.

NO >> Refer to [DLK-44, "REMOTE KEYLESS ENTRY FUNCTION : System Description"](#).

2.CHECK POWER WINDOW OPERATION

Check power window operation.

Does power window up/down with power window main switch?

YES >> GO TO 3.

NO >> Refer to [PWC-47, "Diagnosis Procedure"](#).

3.CHECK "PW DOWN SET" SETTING IN "WORK SUPPORT"

Check "PW DOWN SET" setting in "WORK SUPPORT".

Refer to [DLK-95, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "PW DOWN SET" setting in "WORK SUPPORT".

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000008381342

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch. Refer to [PWC-61, "Removal and Installation"](#).

>> INSPECTION END

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POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

[FRONT WINDOW ANTI-PINCH]

POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:000000008381343

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

Refer to [PWC-61, "Removal and Installation"](#).

>> INSPECTION END

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000008381344

1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Replace front power window switch (passenger side).

Refer to [PWC-61, "Removal and Installation"](#).

>> INSPECTION END

SLIDING DOOR LH

SLIDING DOOR LH : Diagnosis Procedure

INFOID:000000008381345

1. REPLACE SLIDING DOOR POWER WINDOW SWITCH LH

Replace sliding door power window switch LH.

Refer to [PWC-62, "Removal and Installation"](#).

>> INSPECTION END

SLIDING DOOR RH

SLIDING DOOR RH : Diagnosis Procedure

INFOID:000000008381346

1. REPLACE SLIDING DOOR POWER WINDOW SWITCH RH

Replace sliding door power window switch RH.

Refer to [PWC-62, "Removal and Installation"](#).

>> INSPECTION END

POWER WINDOW MAIN SWITCH

< REMOVAL AND INSTALLATION >

[FRONT WINDOW ANTI-PINCH]

REMOVAL AND INSTALLATION


POWER WINDOW MAIN SWITCH

Removal and Installation

INFOID:000000008381347

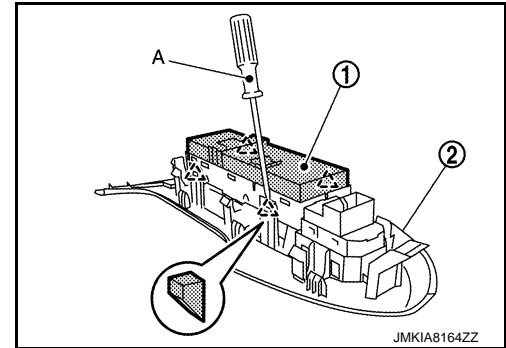
REMOVAL

1. Remove the power window main switch finisher. Refer to [INT-13, "Removal and Installation"](#).
2. Remove power window main switch (1) from power window main switch finisher (2) using a remover tool (A).

 : Pawl

NOTE:

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



INSTALLATION

Install in the reverse order of removal.

NOTE:

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

Refer to [PWC-27, "Work Procedure"](#).

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SLIDING DOOR POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

[FRONT WINDOW ANTI-PINCH]


SLIDING DOOR POWER WINDOW SWITCH

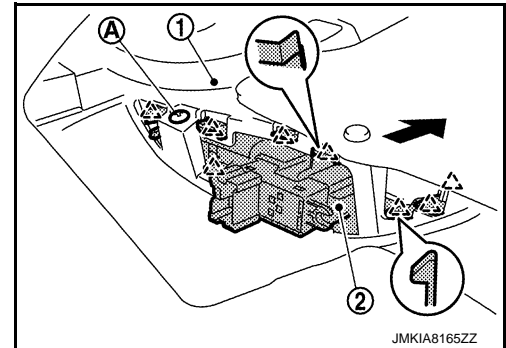
Removal and Installation

INFOID:000000008381348


REMOVAL

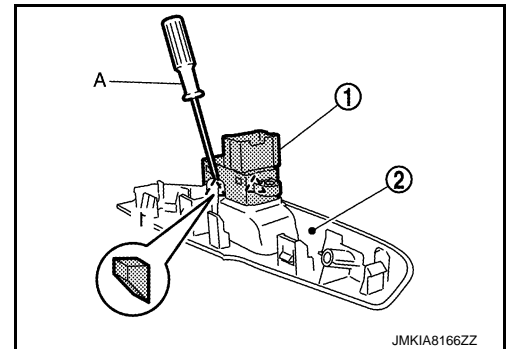
1. Remove sliding door finisher. Refer to [INT-16. "Removal and Installation"](#).
2. Remove screw (A), disconnect pawls from sliding door finisher (1), and then remove power window switch finisher (2).

 : Pawl



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

 : Pawl



INSTALLATION

Install in the reverse order of removal.

PRECAUTION

PRECAUTIONS

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

INFOID:000000008381349

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

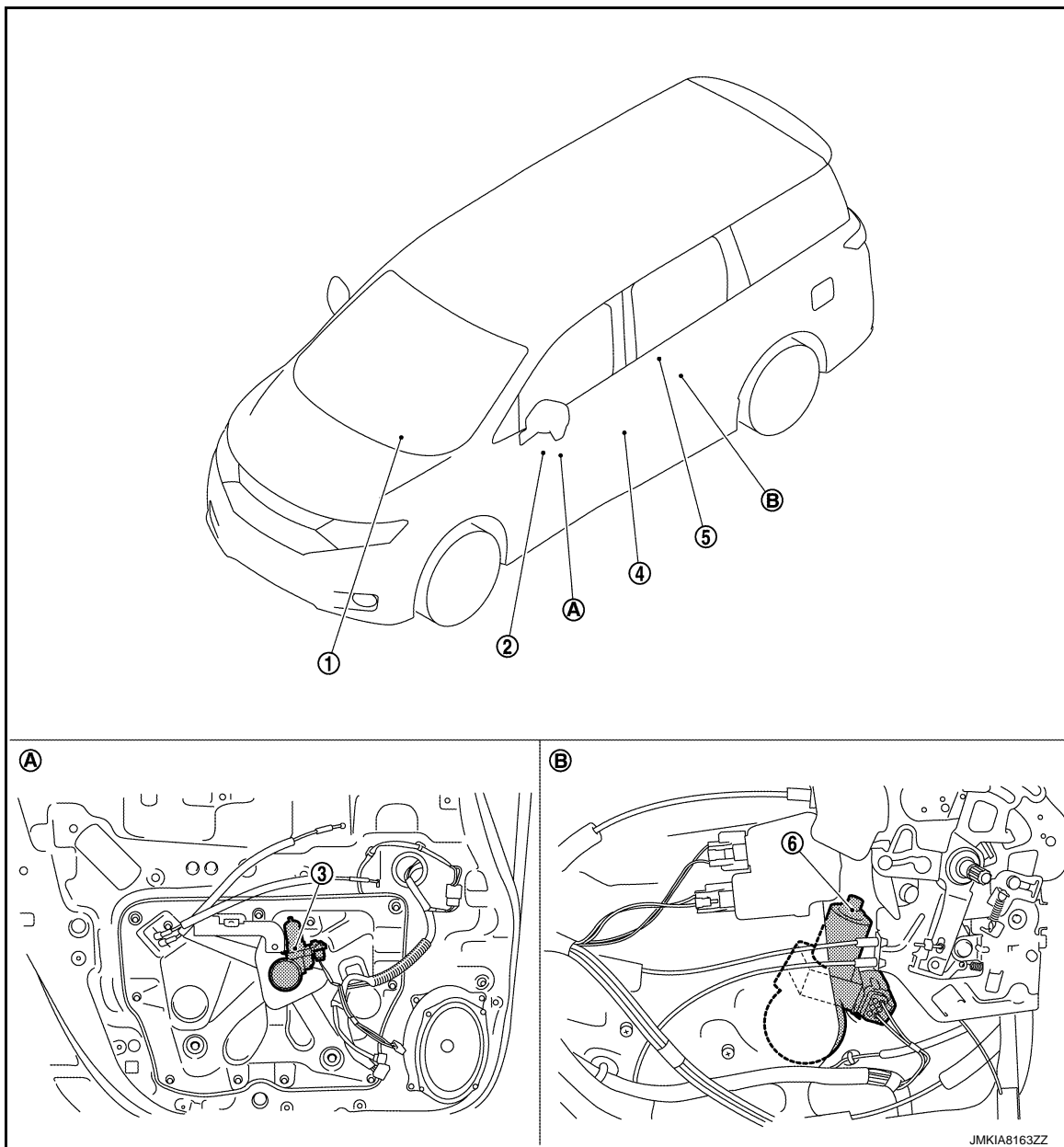
[DRIVER SIDE WINDOW ANTI-PINCH]

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:000000008381350



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

| No. | Component parts | Description |
|-----|--|--|
| 1. | BCM | <ul style="list-style-type: none"> Supplies power supply to power window switch. Controls retained power. Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location. |
| 2. | Power window main switch | Refer to PWC-65, "Power Window Main Switch" . |
| 3. | Front power window motor (driver side) | Refer to PWC-65, "Front Power Window Motor (Driver Side)" . |
| 4. | Front door switch (driver side) | Detects door open/close condition and transmits to BCM. Refer to DLK-28, "Front Door Switch" . |

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

| No. | Component parts | Description |
|-----|-------------------------------------|---|
| 5. | Sliding door power window switch LH | Refer to PWC-65, "Sliding Door Power Window Switch" . |
| 6. | Sliding door power window motor LH | Refer to PWC-65, "Sliding Door Power Window Motor" . |

Power Window Main Switch

INFOID:0000000008381351

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

Front Power Window Motor (Driver Side)

INFOID:0000000008381352

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

Sliding Door Power Window Switch

INFOID:0000000008381353

Controls power window motor of sliding door.

Sliding Door Power Window Motor

INFOID:0000000008381354

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

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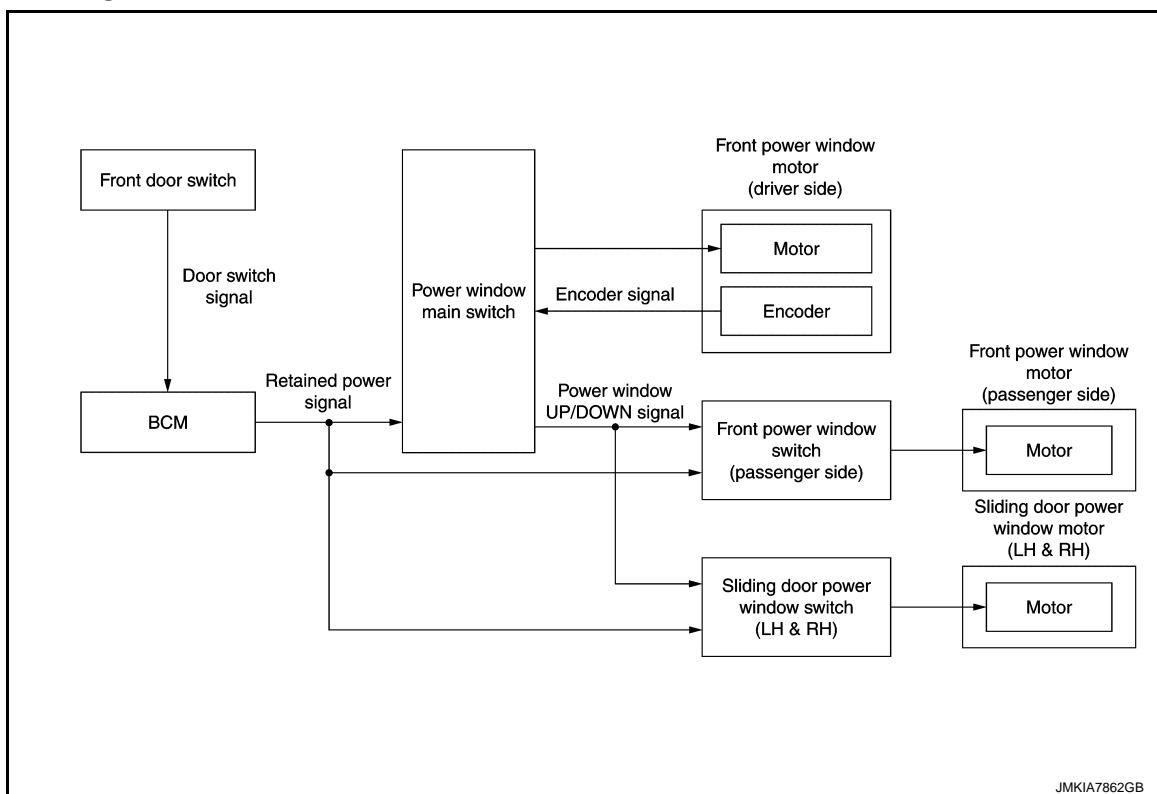
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SYSTEM

System Description

INFOID:000000008381355

SYSTEM DIAGRAM



DESCRIPTION

- Power window system is activated by power window switch when ignition switch turns ON, or during the retained power operation after ignition switch turns OFF.
- Power window main switch opens/closes all door glass.
- Front and sliding door power window switch opens/closes the corresponding door glass.
- AUTO UP/DOWN operation can be performed when power window main switch turns to AUTO.
- Power window lock switch can lock all power windows other than driver seat.
- If door glass receives resistance that is the specified value or more while power window of driver seat is in AUTO-UP operation, power window of driver seat operates in the reverse direction.

Power Window AUTO-Operation

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

Retained Power Operation

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

Retained Power Cancel Conditions

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

Power Window Lock Function

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

SYSTEM

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

Anti-Pinch System

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

Operation Condition

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

NOTE:

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

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PWC

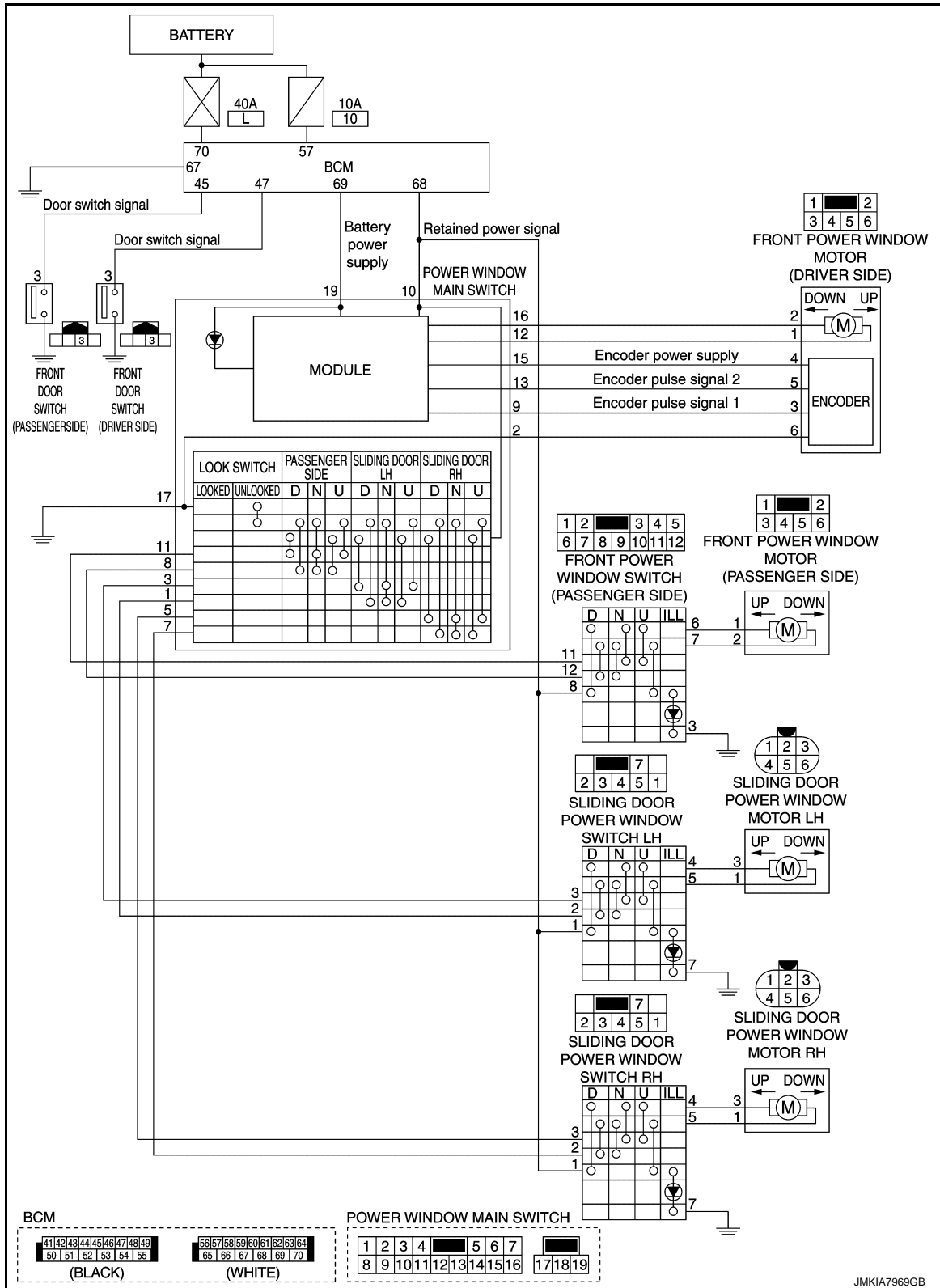
SYSTEM

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

Circuit Diagram

INFOID:000000008381356



Fail-safe

INFOID:000000008381357

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.

SYSTEM

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

| Error | Error condition |
|--|--|
| Pulse sensor malfunction | When only one side of pulse signal is being detected for more than the specified value. |
| Both pulse sensors 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

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).

PWC

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000008839770

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode | Function Description |
|--------------------------|---|
| Work Support | Changes the setting for each system function. |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. |
| Data Monitor | The BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Ecu Identification | The BCM part number is displayed. |
| Configuration | <ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM. |

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|---|---------------------------|----------------|--------------|-------------|
| | | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp control system | INT LAMP | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | × | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| Air conditioning control system | AIR CONDITONER | | × | ×* |
| <ul style="list-style-type: none"> Intelligent Key system Engine start system | INTELLIGENT KEY | × | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| NVIS | IMMU | × | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door open | TRUNK | | × | |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | AIR PRESSURE MONITOR | × | × | × |

NOTE:

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

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

| CONSULT screen item | Indication/Unit | Description | | |
|---------------------|-----------------|--|---|-----|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | | A |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected | | |
| Vehicle Condition | SLEEP>LOCK | Power position status of the moment a particular DTC is detected* | While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (LOCK)] | B |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (OFF)] | C |
| | LOCK>ACC | | While turning power supply position from OFF (LOCK) to ACC | |
| | ACC>ON | | While turning power supply position from ACC to ON | D |
| | RUN>ACC | | While turning power supply position from RUN to ACC (Except emergency stop operation) | |
| | CRANK>RUN | | While turning power supply position from CRANK to RUN | E |
| | RUN>URGENT | | While turning power supply position from RUN to ACC (Emergency stop operation) | |
| | ACC>OFF | | While turning power supply position from ACC to OFF (OFF) | F |
| | OFF>LOCK | | While turning power supply position from OFF (OFF) to OFF (LOCK) | |
| | OFF>ACC | | While turning power supply position from OFF (OFF) to ACC | G |
| | ON>CRANK | | While turning power supply position from ON to CRANK | |
| | OFF>SLEEP | | While turning BCM status from normal mode [Power supply position is OFF (OFF)] to low power consumption mode | H |
| | LOCK>SLEEP | | While turning BCM status from normal mode [Power supply position is OFF (LOCK)] to low power consumption mode | |
| | LOCK | | Power supply position is OFF (LOCK) | I |
| | OFF | | Power supply position is OFF (OFF) | |
| | ACC | | Power supply position is ACC | J |
| | ON | | Power supply position is ON | |
| | ENGINE RUN | | Power supply position is RUN | |
| | CRANKING | | Power supply position is CRANK | PWC |
| IGN Counter | 0 - 39 | The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | | L |

NOTE:

*: Refer to the following for details of the power supply position.

- OFF (OFF, LOCK): Ignition switch OFF
- ACC: Ignition switch ACC
- IGN: Ignition switch ON with engine stopped
- RUN: Ignition switch ON with engine running
- CRANK: At engine cranking

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

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

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

RETAINED PWR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:0000000008381359

DATA MONITOR

NOTE:

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

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

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000008381360

| ECU | Reference |
|-----|---|
| BCM | BCS-40, "Reference Value" |
| | BCS-62, "Fail-safe" |
| | BCS-62, "DTC Inspection Priority Chart" |
| | BCS-63, "DTC Index" |

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PWC

POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

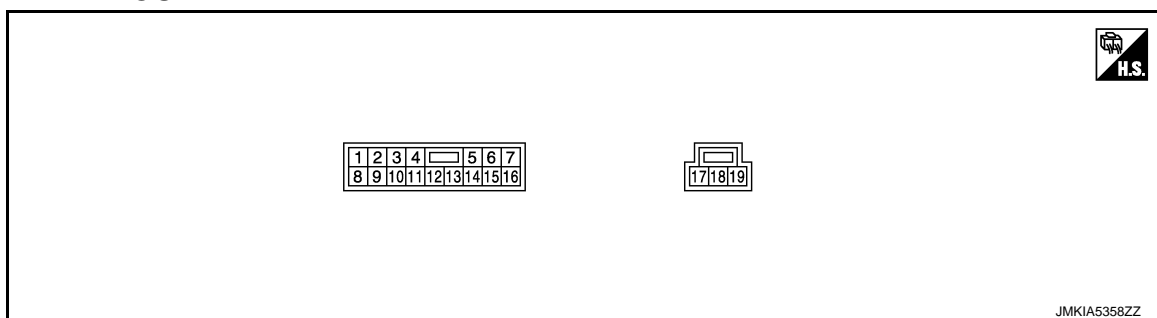
[DRIVER SIDE WINDOW ANTI-PINCH]

POWER WINDOW MAIN SWITCH

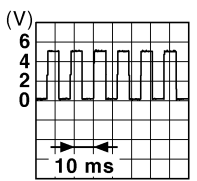
Reference Value

INFOID:000000008381361

TERMINAL LAYOUT



PHYSICAL VALUES

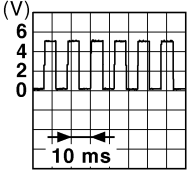
| Terminal No. (Wire color) | | Description | | Condition | Voltage (V) |
|------------------------------|--------|---|------------------|--|---|
| + | - | Signal name | Input/ Output | | |
| 1 (O) | Ground | Sliding door power window motor LH UP signal | Output | When sliding door LH switch in power window main switch is in UP operation. | 9 – 16 |
| 2 (W) | Ground | Encoder ground | — | — | 0 – 1 |
| 3 (BR) | Ground | Sliding door power window motor LH DOWN signal | Output | When sliding door LH switch in power window main switch is in DOWN operation. | 9 – 16 |
| 5 (SB) | Ground | Sliding door power window motor RH DOWN signal | Output | When sliding door RH switch in power window main switch is in DOWN operation. | 9 – 16 |
| 7 (P) | Ground | Sliding door power window motor RH UP signal | Output | When sliding door RH switch in power window main switch is in UP operation. | 9 – 16 |
| 8 (BR) | Ground | Front power window motor (passenger side) UP signal | Output | When front RH switch in power window main switch is in UP operation. | 9 – 16 |
| 9 (SB) | Ground | Encoder pulse signal 2 | Input | When front power window motor (driver side) operates. |  |
| 10 (V) | Ground | Retained power signal | Input | Ignition switch ON | 9 – 16 |
| | | | | Within 45 seconds after ignition switch is turned to OFF. | 9 – 16 |
| | | | | When driver side or passenger side door is opened during retained power operation. | 0 – 1 |

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POWER WINDOW MAIN SWITCH

< ECU DIAGNOSIS INFORMATION >

[DRIVER SIDE WINDOW ANTI-PINCH]

| Terminal No. (Wire color) | | Description | | Condition | Voltage (V) |
|------------------------------|--------|---|------------------|--|---|
| + | - | Signal name | Input/ Output | | |
| 11 (GR) | Ground | Front power window motor (passenger side) DOWN signal | Output | When front RH switch in power window main switch is in DOWN operation. | 9 - 16 |
| 12 (LG) | Ground | Front power window motor (driver side) DOWN signal | Output | When front LH switch in power window main switch is in DOWN operation. | 9 - 16 |
| 13 (Y) | Ground | Encoder pulse signal 1 | Input | When front power window motor (driver side) operates. |  |
| 15 (R) | Ground | Encoder power supply | Output | When ignition switch ON or power window timer operat- ing. | 9 - 16 |
| 16 (L) | Ground | Front power window motor (driver side) UP signal | Output | When front LH switch in power window main switch is in UP operation. | 9 - 16 |
| 17 (B) | Ground | Ground | — | — | 0 - 1 |
| 19 (LG) | Ground | Battery power supply | Input | Ignition switch OFF | 9 - 16 |

Fail-safe

INFOID:000000008381362

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.

PWC

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

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

- Auto-up operation
- Anti-pinch function

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

POWER WINDOW SYSTEM

< WIRING DIAGRAM >


[DRIVER SIDE WINDOW ANTI-PINCH]

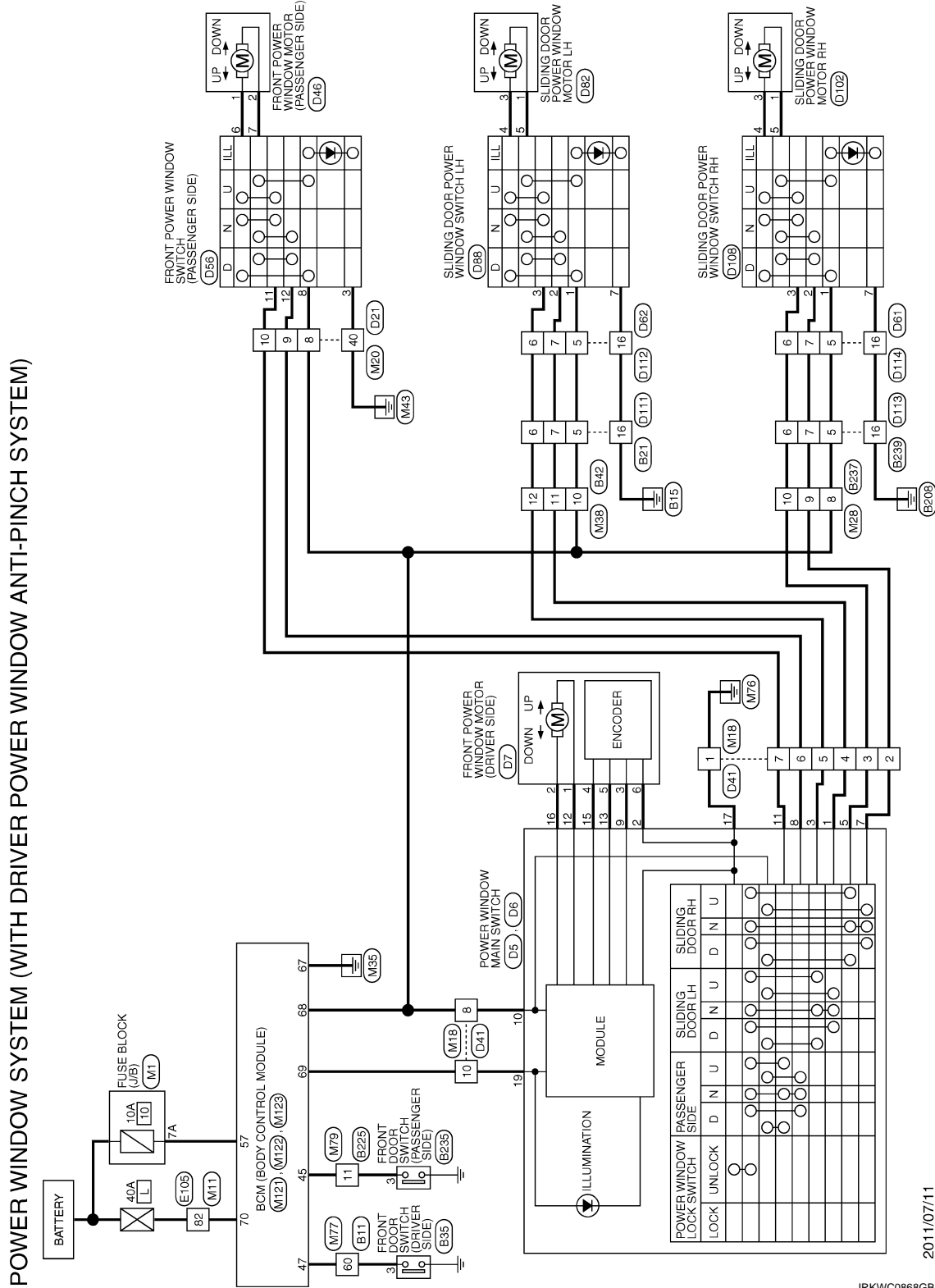
WIRING DIAGRAM

POWER WINDOW SYSTEM

Wiring Diagram

INFOID:000000008381363

For connector terminal arrangements, harness layouts, and alphabets in a  (option abbreviation; if not described in wiring diagram), refer to [GI-12. "Connector Information"](#).



2011/07/11

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000008381364

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.REPRODUCE THE MALFUNCTION INFORMATION

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

>> GO TO 3.

3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

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

>> GO TO 4.

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

Perform the diagnosis with "DTC/CIRCUIT DIAGNOSIS" of the applicable system.

>> GO TO 5.

5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6.FINAL CHECK

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

Is the malfunctioning part repaired or replaced?

YES >> Trouble diagnosis is completed.

NO >> GO TO 3.

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PWC

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000008381365

When the 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:0000000008381366

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [PWC-80. "Work Procedure"](#).

>> GO TO 2.

2.CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to [PWC-81. "Work Procedure"](#).

>> END

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

ADDITIONAL SERVICE WHEN REPLACING POWER WINDOW MAIN SWITCH

Description

INFOID:0000000008381367

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:0000000008381368

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [PWC-80. "Work Procedure"](#).

>> GO TO 2.

2.CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to [PWC-81. "Work Procedure"](#).

>> END

PWC

SYSTEM INITIALIZATION

Description

INFOID:000000008381369

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

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

CAUTION:

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

- Auto-up operation
- Anti-pinch function

Work Procedure

INFOID:000000008381370

1.STEP 1

1. Turn ignition switch ON.
2. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
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-81, "Work Procedure"](#).

>> END

CHECK ANTI-PINCH FUNCTION

< BASIC INSPECTION >

[DRIVER SIDE WINDOW ANTI-PINCH]

CHECK ANTI-PINCH FUNCTION

Description

INFOID:000000008381371

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

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

Work Procedure

INFOID:000000008381372

1.CHECK ANTI-PINCH FUNCTION

1. Fully open the door window.
2. Place a piece of wood near fully closed position.
3. Close door glass completely with AUTO-UP.
4. Check the following conditions.
 - Check that glass lowers for approximately 150 mm (5.9 in) without pinching piece of wood and stops.
 - Check that glass does not rise not when operating the power window main switch while lowering.

CAUTION:

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

>> END

PWC

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

POWER WINDOW MAIN SWITCH

POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000008381373

1.CHECK POWER SUPPLY

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

| (+) | | (-) | Condition | | Voltage (V) |
|--------------------------|----------|--------|-----------------|-----|-------------|
| Power window main switch | | | | | |
| Connector | Terminal | | | | |
| D5 | 10 | Ground | Ignition switch | ON | 9 – 16 |
| D6 | 19 | | | OFF | |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| BCM | | Power window main switch | | Continuity |
|-----------|----------|--------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M123 | 68 | D5 | 10 | Existed |
| | 69 | D6 | 19 | |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M123 | 68 | | Not existed |
| | 69 | | |

Is the inspection result normal?

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

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

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

| Power window main switch | | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector | Terminal | | |
| D6 | 17 | | Existed |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure

INFOID:000000008381374

1.CHECK POWER SUPPLY

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

| (+) | | (-) | Voltage (V) |
|--|----------|--------|-------------|
| Front power window switch (passenger side) | | | |
| Connector | Terminal | | |
| D56 | 8 | Ground | 9 – 16 |

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
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 | |
| M123 | 68 | D56 | 8 | Existed |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M123 | 68 | | Not existed |

Is the inspection result normal?

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

SLIDING DOOR POWER WINDOW SWITCH

SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:000000008381375

1.CHECK POWER SUPPLY

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

| (+) | | (-) | Voltage (V) | |
|----------------------------------|----------|-----|-------------|--------|
| Sliding door power window switch | | | | |
| Connector | Terminal | | | |
| LH | D88 | 1 | Ground | 9 – 16 |
| RH | D108 | | | |

Is the inspection result normal?

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

2. CHECK POWER SUPPLY CIRCUIT

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

| BCM | | Sliding door power window switch | | | Continuity |
|-----------|----------|----------------------------------|------|----------|------------|
| Connector | Terminal | Connector | | Terminal | |
| M123 | 68 | LH | D88 | 1 | Existed |
| | | RH | D108 | | |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M123 | 68 | | Not existed |

Is the inspection result normal?

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

NO >> Repair or replace harness.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Component Function Check

INFOID:000000008381376

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-85, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000008381377

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

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

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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

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

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| Front power window switch (passenger side) | | Power window main switch | | Continuity |
|--|----------|--------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D56 | 11 | D5 | 11 | Existed |
| | 12 | | 8 | |

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

| Front power window switch (passenger side) | | Ground | Continuity |
|--|----------|--------|-------------|
| Connector | Terminal | | |
| D56 | 11 | | Not existed |
| | 12 | | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-109, "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-86, "Component Inspection"](#).

Is the inspection result normal?

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

- YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).
NO >> Replace front power window switch (passenger side). Refer to [PWC-109, "Removal and Installation"](#).

Component Inspection

INFOID:000000008381378

1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

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

| Front power window switch (passenger side) | | Condition | Continuity |
|--|---|-----------|------------|
| Terminal | | | |
| 8 | 7 | UP | Existed |
| 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-109, "Removal and Installation"](#).

SLIDING DOOR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

SLIDING DOOR POWER WINDOW SWITCH

Component Function Check

INFOID:0000000008381379

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-87, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000008381380

1.CHECK SLIDING DOOR POWER WINDOW SWITCH INPUT SIGNAL

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

| (+) Sliding door power window switch | | | (-) | Condition | | Voltage (V) |
|--------------------------------------|------|----------|--------|--|---------|-------------|
| Connector | | Terminal | | | | |
| LH | D88 | 2 | Ground | Power window main switch (sliding door LH side) | NEUTRAL | 0 – 1 |
| | | | | | UP | 9 – 16 |
| | | 3 | | | NEUTRAL | 0 – 1 |
| | | | | | DOWN | 9 – 16 |
| RH | D108 | 2 | | Power window main switch (sliding door RH side) | NEUTRAL | 0 – 1 |
| | | | | | UP | 9 – 16 |
| | | 3 | | | NEUTRAL | 0 – 1 |
| | | | | | DOWN | 9 – 16 |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK SLIDING DOOR POWER WINDOW SWITCH CIRCUIT

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

| Sliding door power window switch | | | Power window main switch | | Continuity |
|----------------------------------|------|----------|--------------------------|----------|------------|
| Connector | | Terminal | Connector | Terminal | |
| LH | D88 | 2 | D5 | 1 | Existed |
| | | 3 | | 3 | |
| RH | D108 | 2 | | 7 | |
| | | 3 | | 5 | |

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

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SLIDING DOOR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

| Sliding door power window switch | | | Ground | Continuity |
|----------------------------------|------|----------|--------|-------------|
| Connector | | Terminal | | |
| LH | D88 | 2 | | Not existed |
| | | 3 | | |
| RH | D108 | 2 | | |
| | | 3 | | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-109, "Removal and Installation"](#).

NO >> Repair or replace harness.

3.CHECK SLIDING DOOR POWER WINDOW SWITCH

Check sliding door power window switch.

Refer to [PWC-88, "Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> Replace sliding door power window switch. Refer to [PWC-110, "Removal and Installation"](#).

Component Inspection

INFOID:000000008381381

1.CHECK SLIDING DOOR POWER WINDOW SWITCH

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

| Sliding door power window switch | | Condition | Continuity |
|----------------------------------|---|-----------|------------|
| Terminal | | | |
| 1 | 5 | UP | Existed |
| 3 | 4 | | |
| 2 | 5 | NEUTRAL | |
| 3 | 4 | | |
| 1 | 4 | DOWN | |
| 2 | 5 | | |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace sliding door power window switch. Refer to [PWC-110, "Removal and Installation"](#).

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

POWER WINDOW MOTOR

DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000008381382

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-89. "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008381383

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

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

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

Is the inspection result normal?

YES >> Replace front power window motor (driver side). Refer to [GW-28. "Removal and Installation"](#).

NO >> GO TO 2.

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

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

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

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

| Front power window motor (driver side) | | Ground | Continuity |
|--|----------|--------|-------------|
| Connector | Terminal | | |
| D7 | 1 | | Not existed |
| | 2 | | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-109. "Removal and Installation"](#).

NO >> Repair or replace harness.

PASSENGER SIDE

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POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

PASSENGER SIDE : Component Function Check

INFOID:000000008381384

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-90, "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000008381385

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

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

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

Is the inspection result normal?

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

NO >> GO TO 2.

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

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

| Front power window motor (passenger side) | | Front power window switch (passenger side) | | Continuity |
|---|----------|--|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D46 | 1 | D56 | 6 | Existed |
| | 2 | | 7 | |

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

| Front power window motor (passenger side) | | Ground | Continuity |
|---|----------|--------|-------------|
| Connector | Terminal | | |
| D46 | 1 | | Not existed |
| | 2 | | |

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-109, "Removal and Installation"](#).

NO >> Repair or replace harness.

SLIDING DOOR LH

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

SLIDING DOOR LH : Component Function Check

INFOID:000000008381386

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-91, "SLIDING DOOR LH : Diagnosis Procedure"](#).

SLIDING DOOR LH : Diagnosis Procedure

INFOID:000000008381387

1.CHECK SLIDING DOOR POWER WINDOW MOTOR LH INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace sliding door power window motor LH.

NO >> GO TO 2.

2.CHECK SLIDING DOOR POWER WINDOW MOTOR LH CIRCUIT

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

| Sliding door power window motor LH | | Sliding door power window switch LH | | Continuity |
|------------------------------------|----------|-------------------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D82 | 1 | D88 | 5 | Existed |
| | 3 | | 4 | |

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

| Sliding door power window motor LH | | Ground | Continuity |
|------------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D82 | 1 | | Not existed |
| | 3 | | |

Is the inspection result normal?

YES >> Replace sliding door power window switch LH. Refer to [PWC-110, "Removal and Installation"](#).

NO >> Repair or replace harness.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:000000008381388

1. CHECK FUNCTION

POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-92, "SLIDING DOOR RH : Diagnosis Procedure"](#).

SLIDING DOOR RH : Diagnosis Procedure

INFOID:000000008381389

1. CHECK SLIDING DOOR POWER WINDOW MOTOR RH INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace sliding door power window motor RH.

NO >> GO TO 2.

2. CHECK SLIDING DOOR POWER WINDOW MOTOR RH CIRCUIT

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

| Sliding door power window motor RH | | Sliding door power window switch RH | | Continuity |
|------------------------------------|----------|-------------------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| D102 | 1 | D108 | 5 | Existed |
| | 3 | | 4 | |

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

| Sliding door power window motor RH | | Ground | Continuity |
|------------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D102 | 1 | | Not existed |
| | 3 | | |

Is the inspection result normal?

YES >> Replace sliding door power window switch RH. Refer to [PWC-110, "Removal and Installation"](#).

NO >> Repair or replace harness.

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

ENCODER CIRCUIT

Component Function Check

INFOID:0000000008381390

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [PWC-93, "Diagnosis Procedure"](#).

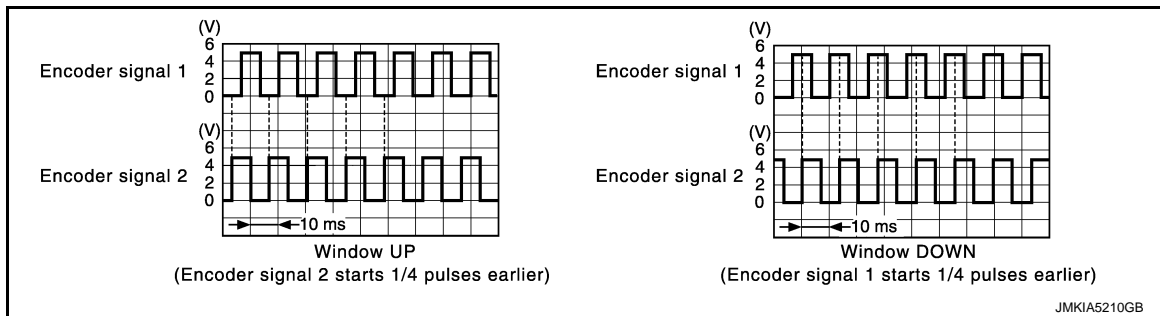
Diagnosis Procedure

INFOID:0000000008381391

1.CHECK ENCODER PULSE SIGNAL

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

| (+) | | (-) | Signal (Reference value) |
|--------------------------|----------|--------|-------------------------------|
| Power window main switch | | | |
| Connector | Terminal | | |
| D5 | 9 | Ground | Refer to the following signal |
| | 13 | | |



Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-109, "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK ENCODER SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector and front power window motor (driver side) connector.
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 | |
| D5 | 9 | D7 | 3 | Existed |
| | 13 | | 5 | |

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

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

Is the inspection result normal?

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

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

3.CHECK ENCODER POWER SUPPLY

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

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

Is the inspection result normal?

- YES >> GO TO 5.
NO >> GO TO 4.

4.CHECK ENCODER POWER SUPPLY CIRCUIT

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

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

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

| Power window main switch | | Ground | Continuity |
|--------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D5 | 15 | | Not existed |

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-109, "Removal and Installation"](#).
NO >> Repair or replace harness.

5.CHECK ENCODER GROUND CIRCUIT 1

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

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

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

| Power window main switch | | Ground | Continuity |
|--------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| D5 | 2 | | Not existed |

Is the inspection result normal?

- YES >> GO TO 6.
NO >> Repair or replace harness.

6.CHECK ENCODER GROUND CIRCUIT 2

1. Connect power window main switch connector.

ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

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

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

Is the inspection result normal?

- YES >> Replace front power window motor (driver side). Refer to [GW-28, "Removal and Installation"](#).
NO >> Replace power window main switch. Refer to [PWC-109, "Removal and Installation"](#).

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SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

Diagnosis Procedure

INFOID:000000008381392

1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit.

Refer to [BCS-79, "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-82, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

DRIVER SIDE POWER WINDOW DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008381393

1.CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE)

Check front power window motor (driver side).

Refer to [PWC-89, "DRIVER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch. Refer to [PWC-109, "Removal and Installation"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

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FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

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

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

INFOID:000000008381394

1.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).

Refer to [PWC-85, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK FRONT POWER WINDOW MOTOR (PASSENGER SIDE)

Check front power window motor (passenger side).

Refer to [PWC-90, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN FRONT POWER WINDOW SWITCH (PASSENGER SIDE) IS OPERATED

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

INFOID:000000008381395

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-83, "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 (PASSENGER SIDE)

Check front power window switch (passenger side).

Refer to [PWC-85, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000008381396

1.CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).

Refer to [PWC-85. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42. "Intermittent Incident"](#).

NO >> GO TO 1.

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SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE

WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDOW SWITCHES ARE OPERATED

WHEN POWER WINDOW MAIN AND SLIDING DOOR LH POWER WINDOW SWITCHES ARE OPERATED : Diagnosis Procedure

INFOID:000000008381397

1.CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH.

Refer to [PWC-87, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW MOTOR LH

Check sliding door power window motor LH.

Refer to [PWC-91, "SLIDING DOOR LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED

WHEN SLIDING DOOR LH POWER WINDOW SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008381398

1.CHECK SLIDING DOOR POWER WINDOW SWITCH LH POWER SUPPLY AND GROUND CIRCUIT

Check sliding door power window switch LH power supply and ground circuit.

Refer to [PWC-83, "SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH.

Refer to [PWC-87, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

SLIDING DOOR LH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000008381399

1.CHECK SLIDING DOOR POWER WINDOW SWITCH LH

Check sliding door power window switch LH.

Refer to [PWC-87, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE

WHEN POWER WINDOW MAIN AND SLIDING DOOR RH POWER WINDOW SWITCHES ARE OPERATED

WHEN POWER WINDOW MAIN AND SLIDING DOOR RH POWER WINDOW SWITCHES ARE OPERATED : Diagnosis Procedure

INFOID:000000008381400

1.CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH.

Refer to [PWC-87, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW MOTOR RH

Check sliding door power window motor RH.

Refer to [PWC-91, "SLIDING DOOR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN SLIDING DOOR RH POWER WINDOW SWITCH IS OPERATED

WHEN SLIDING DOOR RH POWER WINDOW SWITCH IS OPERATED : Diagnosis Procedure

INFOID:000000008381401

1.CHECK SLIDING DOOR POWER WINDOW SWITCH RH POWER SUPPLY AND GROUND CIRCUIT

Check sliding door power window switch RH power supply and ground circuit.

Refer to [PWC-83, "SLIDING DOOR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH.

Refer to [PWC-87, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

SLIDING DOOR RH POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000008381402

1.CHECK SLIDING DOOR POWER WINDOW SWITCH RH

Check sliding door power window switch RH.

Refer to [PWC-87, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

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

Diagnosis Procedure

INFOID:000000008381403

1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.

Refer to [PWC-80, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK ENCODER CIRCUIT

Check encoder circuit.

Refer to [PWC-93, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

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

Diagnosis Procedure

INFOID:000000008381404

1.CHECK POWER WINDOW AUTO OPERATION

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [PWC-104, "Diagnosis Procedure"](#).

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

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PWC

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

Diagnosis Procedure

INFOID:0000000008381405

1.CHECK FRONT DOOR SWITCH

Check front door switch.

Refer to [DLK-210, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-42, "Intermittent Incident"](#).

NO >> GO TO 1.

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

Diagnosis Procedure

INFOID:0000000008381406

1.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to [PWC-109. "Removal and Installation"](#).

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POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

[DRIVER SIDE WINDOW ANTI-PINCH]

POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008381407

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

Refer to [PWC-109, "Removal and Installation"](#).

>> INSPECTION END

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000008381408

1. REPLACE FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

Replace front power window switch (passenger side).

Refer to [PWC-109, "Removal and Installation"](#).

>> INSPECTION END

SLIDING DOOR LH

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000008381409

1. REPLACE SLIDING DOOR POWER WINDOW SWITCH LH

Replace sliding door power window switch LH.

Refer to [PWC-110, "Removal and Installation"](#).

>> INSPECTION END

SLIDING DOOR RH

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000008381410

1. REPLACE SLIDING DOOR POWER WINDOW SWITCH RH

Replace sliding door power window switch RH.

Refer to [PWC-110, "Removal and Installation"](#).

>> INSPECTION END

POWER WINDOW MAIN SWITCH

< REMOVAL AND INSTALLATION >

[DRIVER SIDE WINDOW ANTI-PINCH]

REMOVAL AND INSTALLATION


POWER WINDOW MAIN SWITCH

Removal and Installation

INFOID:000000008381411

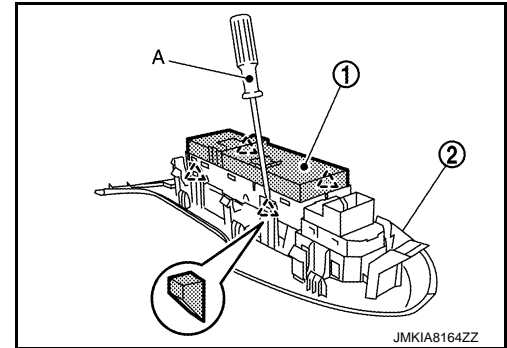
REMOVAL

1. Remove the power window main switch finisher. Refer to [INT-13. "Removal and Installation"](#).
2. Remove power window main switch (1) from power window main switch finisher (2) using a remover tool (A).

 : Pawl

NOTE:

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



INSTALLATION

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-80. "Work Procedure"](#).

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SLIDING DOOR POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

[DRIVER SIDE WINDOW ANTI-PINCH]


SLIDING DOOR POWER WINDOW SWITCH

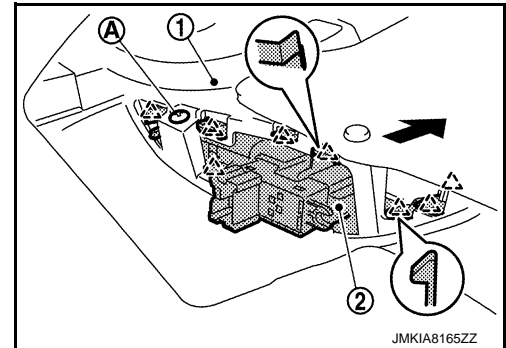
Removal and Installation

INFOID:000000008381412


REMOVAL

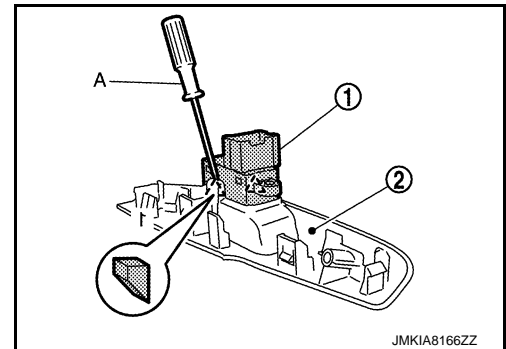
1. Remove sliding door finisher. Refer to [INT-16. "Removal and Installation"](#).
2. Remove screw (A), disconnect pawls from sliding door finisher (1), and then remove power window switch finisher (2).

 : Pawl



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

 : Pawl



INSTALLATION

Install in the reverse order of removal.