

# SECTION **PWC**

## POWER WINDOW CONTROL SYSTEM

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# PRECAUTIONS

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## PRECAUTION

### PRECAUTIONS

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

INFOID:000000010272430

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.

#### Precautions for Removing of Battery Terminal

INFOID:000000010272783

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

#### **NOTE:**

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

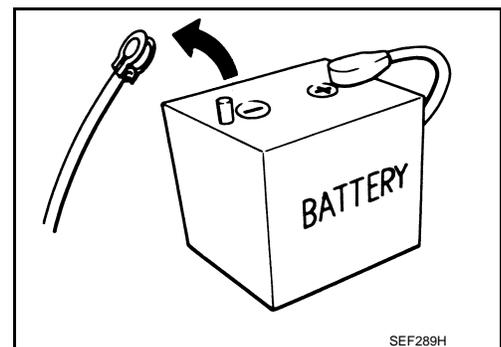
#### **NOTE:**

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

#### **NOTE:**

The removal of 12V battery may cause a DTC detection error.



# PREPARATION

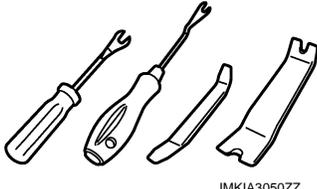
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## PREPARATION

### PREPARATION

#### Commercial Service Tools

INFOID:000000009753772

| Tool name  | Description                              |
|--|--|
| Remover tool<br><br>JMKIA3050ZZ | Removes the clips, pawls and metal clips |

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# COMPONENT PARTS

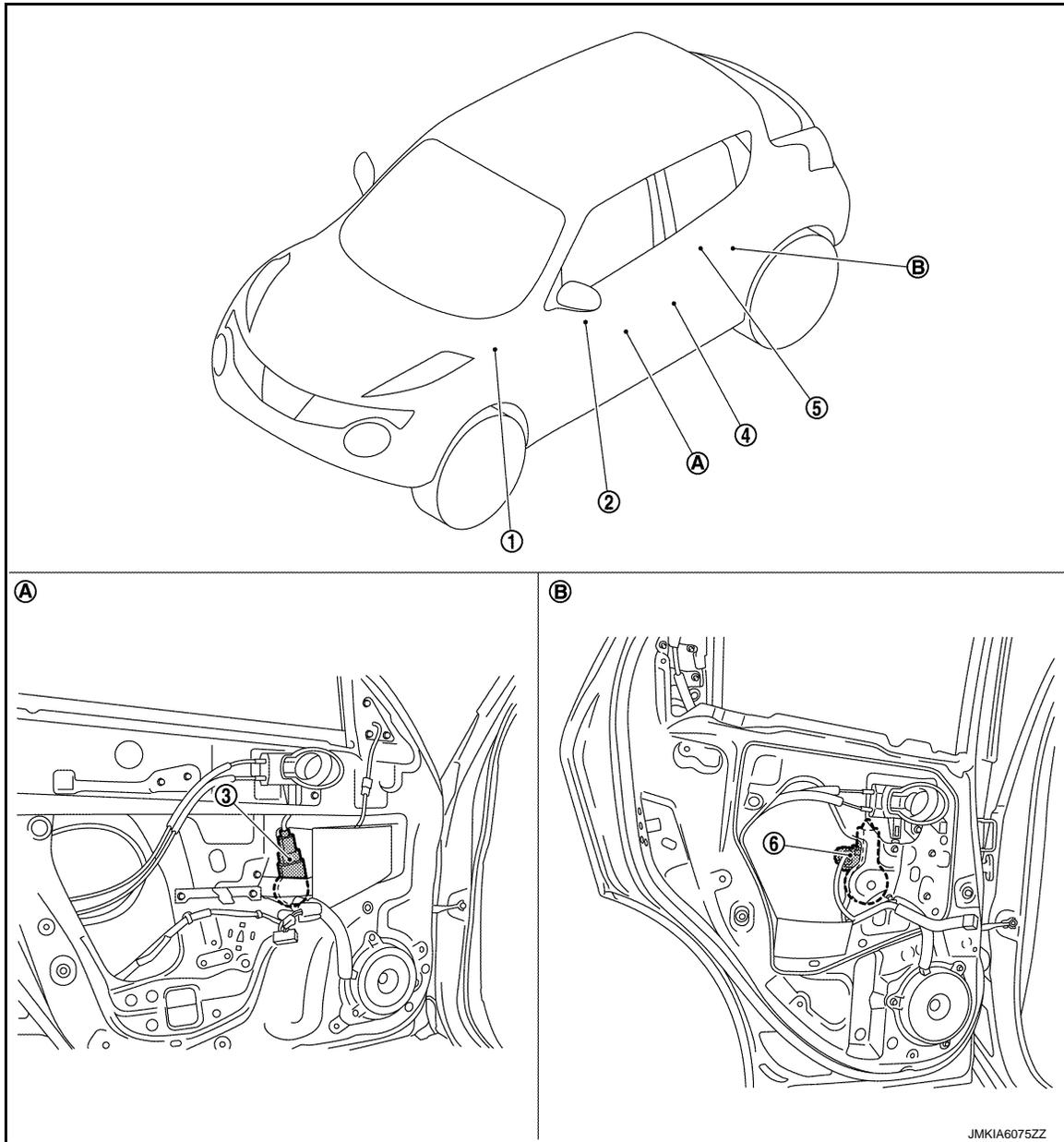
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## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

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- |   |   |   |
|---|---|---|
| 1. BCM<br>Refer to <a href="#">BCS-6. "BODY CONTROL SYSTEM : Component Parts Location"</a> (with Intelligent Key) or <a href="#">BCS-93. "BODY CONTROL SYSTEM : Component Parts Location"</a> (without Intelligent Key) | 2. Power window main switch             | 3. Front power window motor (driver side) |
| 4. Front door switch (driver side)  | 5. Rear power window switch LH          | 6. Rear power window motor LH             |
| A. View with front door finisher removed  | B. View with rear door finisher removed |   |

JMKIA6075ZZ

# COMPONENT PARTS

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## Component Description

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| Component parts                            | Description  |
|--|--|
| BCM  | <ul style="list-style-type: none"> <li>Supplies power supply to power window switch.</li> <li>Controls retained power.</li> </ul>  |
| Power window main switch                   | <ul style="list-style-type: none"> <li>Directly controls all power window motor of all doors.</li> <li>Controls anti-pinch operation of power window.</li> </ul>   |
| Front power window switch (passenger side) | Controls power window motor of front passenger side door.  |
| Rear power window switch (LH & RH)         | Controls power window motor of rear door (LH & RH).  |
| Front power window motor (driver side)     | <ul style="list-style-type: none"> <li>Integrates the encoder and power window motor.</li> <li>Operates with signals from power window main switch.</li> <li>Transmits front power window motor (driver side) rotation as a pulse signal to power window main switch.</li> </ul> |
| Front power window motor (passenger side)  | Operates with signals from power window main switch and front power window switch (passenger side).  |
| Rear power window motor (LH & RH)          | Operates with signals from power window main switch and rear power window switch (LH & RH).  |
| Encoder                                    | Detects condition of the front power window motor (driver side) operation and transmits to power window main switch as pulse signal.   |
| Front door switch                          | Detects door open/close condition and transmits to BCM.  |

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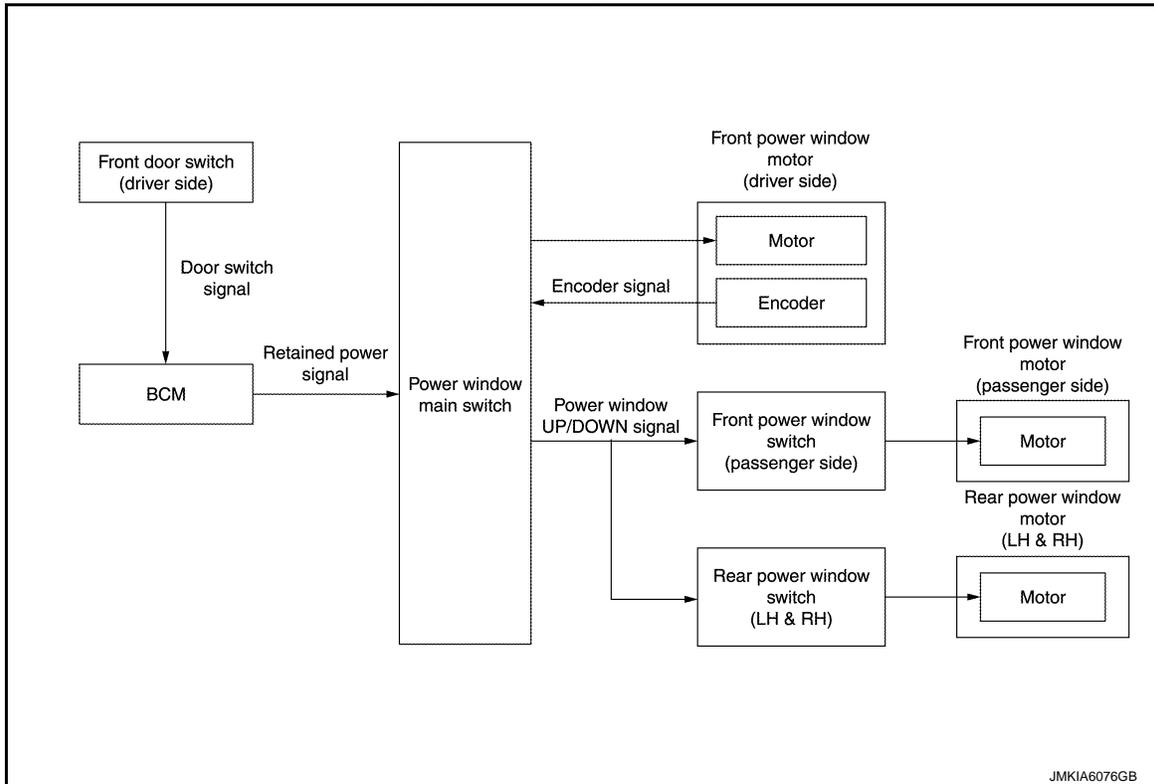
< SYSTEM DESCRIPTION >

## SYSTEM

### POWER WINDOW SYSTEM

#### POWER WINDOW SYSTEM : System Diagram

INFOID:000000009753775



#### POWER WINDOW SYSTEM : System Description

INFOID:000000009753776

- 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 rear 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 (FRONT DRIVER SIDE)

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

#### RETAINED POWER OPERATION (FRONT DRIVER SIDE)

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

# SYSTEM

## < SYSTEM DESCRIPTION >

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.

### ANTI-PINCH SYSTEM (FRONT DRIVER SIDE)

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

#### Operation Condition

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

#### NOTE:

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

### Fail Safe

INFOID:000000009753777

### 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 motor (driver side).

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# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

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## DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010273660

### 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"> <li>Read and save the vehicle specification.</li> <li>Write the vehicle specification when replacing BCM.</li> </ul> |

### 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 timer  | INT LAMP                  | ×              | ×            | ×           |
| Exterior lamp   | HEAD LAMP                 | ×              | ×            | ×           |
| Wiper and washer  | WIPER                     | ×              | ×            | ×           |
| Turn signal and hazard warning lamps  | FLASHER                   | ×              | ×            | ×           |
| Air conditioning system   | AIR CONDITONER            |                | ×            | ×*          |
| <ul style="list-style-type: none"> <li>Intelligent Key system</li> <li>Engine start system</li> </ul> | INTELLIGENT KEY           | ×              | ×            | ×           |
| Combination switch  | COMB SW                   |                | ×            |             |
| Body control system   | BCM                       | ×              |              |             |
| NVIS - NATS   | IMMU                      | ×              | ×            | ×           |
| Interior room lamp battery saver  | BATTERY SAVER             | ×              | ×            | ×           |
| Back door open  | TRUNK                     |                | ×            |             |
| Theft warning alarm   | THEFT ALM                 | ×              | ×            | ×           |
| RAP   | RETAINED PWR              |                | ×            |             |
| Signal buffer system  | SIGNAL BUFFER             |                | ×            | ×           |
| TPMS  | AIR PRESSURE MONITOR      | ×              | ×            | ×           |

#### NOTE:

\*: For models with automatic A/C, 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) (WITH INTELLIGENT KEY SYSTEM)

## < SYSTEM DESCRIPTION >

| 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 position is "LOCK".)             |
|                     | SLEEP>OFF  |  | While turning BCM status from low power consumption mode to normal mode (Power position is "OFF".)              |
|                     | LOCK>ACC   |  | While turning power position from "LOCK"* to "ACC"  |
|                     | ACC>ON   |  | While turning power position from "ACC" to "IGN"  |
|                     | RUN>ACC  |  | While turning power position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) |
|                     | CRANK>RUN  |  | While turning power position from "CRANKING" to "RUN" (From cranking up the engine to run it)                   |
|                     | RUN>URGENT   |  | While turning power position from "RUN" to "ACC" (Emergency stop operation)                                     |
|                     | ACC>OFF  |  | While turning power position from "ACC" to "OFF"  |
|                     | OFF>LOCK   |  | While turning power position from "OFF" to "LOCK"*  |
|                     | OFF>ACC  |  | While turning power position from "OFF" to "ACC"  |
|                     | ON>CRANK   |  | While turning power position from "IGN" to "CRANKING"   |
|                     | OFF>SLEEP  |  | While turning BCM status from normal mode (Power position is "OFF".) to low power consumption mode              |
|                     | LOCK>SLEEP   |  | While turning BCM status from normal mode (Power position is "LOCK".) to low power consumption mode             |
|                     | LOCK   |  | Power position is "LOCK"*   |
|                     | OFF  |  | Power position is "OFF" (Ignition switch OFF)   |
|                     | ACC  |  | Power position is "ACC" (Ignition switch ACC)   |
|                     | ON   |  | Power position is "IGN" (Ignition switch ON with engine stopped)  |
| ENGINE RUN          | Power position is "RUN" (Ignition switch ON with engine running) |  |   |
| CRANKING            | Power position is "CRANKING" (At engine cranking)                |  |   |
| IGN Counter         | 0 - 39   | The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> <li>• The number is 0 when a malfunction is detected now.</li> <li>• The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON.</li> <li>• The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul> |   |

### NOTE:

\*: Power position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (A/T models and CVT models), 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 position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

## RETAINED PWR

### RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:000000010273661

### 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.

# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

## < SYSTEM DESCRIPTION >

---

| 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. |

# DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000010273662

### 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"> <li>Read and save the vehicle specification.</li> <li>Write the vehicle specification when replacing BCM.</li> </ul> |

### 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           | INT LAMP                  | ×              | ×            | ×           |
| Remote keyless entry system          | MULTI REMOTE ENT          | ×              | ×            | ×           |
| Exterior lamp                        | HEAD LAMP                 | ×              | ×            | ×           |
| Wiper and washer                     | WIPER                     | ×              | ×            | ×           |
| Turn signal and hazard warning lamps | FLASHER                   |                | ×            | ×           |
| Air conditioning system              | AIR CONDITONER            |                | ×            | ×           |
| Combination switch                   | COMB SW                   |                | ×            |             |
| Body control system                  | BCM                       | ×              |              |             |
| NATS                                 | IMMU                      | ×              |              | ×           |
| Interior room lamp battery saver     | BATTERY SAVER             | ×              | ×            | ×           |
| Back door open                       | TRUNK                     |                | ×            |             |
| Theft warning alarm                  | THEFT ALM                 | ×              | ×            | ×           |
| RAP system                           | RETAINED PWR              |                | ×            | ×           |
| Signal buffer system                 | SIGNAL BUFFER             |                | ×            | ×           |
| Panic alarm                          | PANIC ALARM               |                |              | ×           |
| TPMS                                 | AIR PRESSUE MONITOR       | ×              | ×            | ×           |

### RETAINED PWR

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:000000010273663

### DATA MONITOR

#### NOTE:

## DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

### < SYSTEM DESCRIPTION >

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. |

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## ECU DIAGNOSIS INFORMATION

### BCM (BODY CONTROL MODULE)

#### List of ECU Reference

INFOID:000000009753782

| ECU |                         | Reference  |
|-----|-------------------------|--|
| BCM | With Intelligent Key    | <a href="#">BCS-36, "Reference Value"</a>                |
|     |                         | <a href="#">BCS-57, "Fail-safe"</a>                      |
|     |                         | <a href="#">BCS-58, "DTC Inspection Priority Chart"</a>  |
|     |                         | <a href="#">BCS-59, "DTC Index"</a>                      |
|     | Without Intelligent Key | <a href="#">BCS-118, "Reference Value"</a>               |
|     |                         | <a href="#">BCS-131, "Fail-safe"</a>                     |
|     |                         | <a href="#">BCS-132, "DTC Inspection Priority Chart"</a> |
|     |                         | <a href="#">BCS-132, "DTC Index"</a>                     |

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PWC

# POWER WINDOW MAIN SWITCH

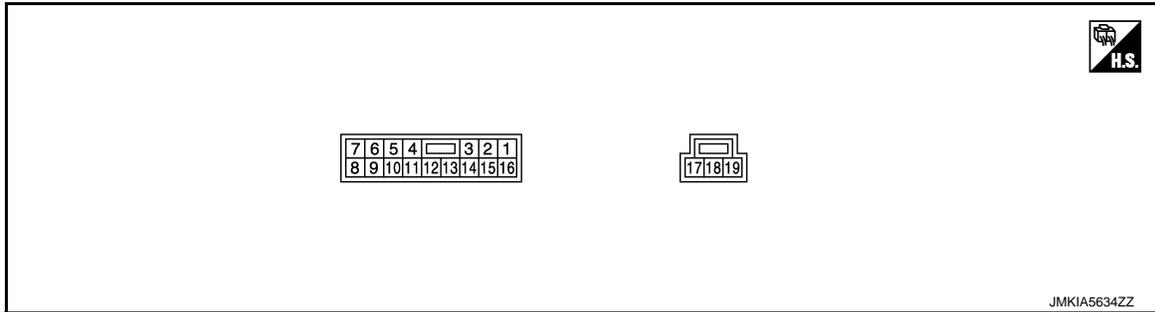
< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW MAIN SWITCH

Reference Value

INFOID:00000009753783

### TERMINAL LAYOUT



### PHYSICAL VALUES

| Terminal No.<br>(Wire color) |        | Description   |                  | Condition  | Voltage (V)     |
|------------------------------|--------|---|------------------|--|-----------------|
| +                            | -      | Signal name   | Input/<br>Output |  |                 |
| 1<br>(B)                     | Ground | Ground  | —                | —  | 0 – 1           |
| 2<br>(SB)                    | Ground | Front power window motor<br>(passenger side) DOWN<br>signal | Output           | When front RH switch in<br>power window main switch<br>is in DOWN operation. | 9 – 16          |
| 4<br>(P)                     | Ground | Encoder pulse signal 2                                      | Input            | When front power window<br>motor (driver side) operates.                     | <br>JMKIA0070GB |
| 5<br>(W)                     | Ground | Encoder pulse signal 1                                      | Input            | When front power window<br>motor (driver side) operates.                     | <br>JMKIA0070GB |
| 6<br>(BR)                    | Ground | Rear power window motor RH<br>DOWN signal                   | Output           | When rear RH switch in<br>power window main switch<br>is in DOWN operation.  | 9 – 16          |
| 7<br>(LG)                    | Ground | Rear power window motor RH<br>UP signal                     | Output           | When rear RH switch in<br>power window main switch<br>is in UP operation.    | 9 – 16          |
| 8<br>(BG)                    | Ground | Rear power window motor LH<br>DOWN signal                   | Output           | When rear LH switch in<br>power window main switch<br>is in DOWN operation.  | 9 – 16          |
| 9<br>(G)                     | Ground | Rear power window motor LH<br>UP signal                     | Output           | When rear LH switch in<br>power window main switch<br>is in UP operation.    | 9 – 16          |
| 10<br>(L)                    | Ground | Ignition switch power supply                                | Input            | Ignition switch ON   | 9 – 16          |
|                              |        |   |                  | Other than above   | 0 – 1           |

# POWER WINDOW MAIN SWITCH

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(Wire color) |        | Description  |                  | Condition  | Voltage (V) |
|------------------------------|--------|--|------------------|--|-------------|
| +                            | -      | Signal name  | Input/<br>Output |  |             |
| 12<br>(LG)                   | Ground | Encoder ground   | —                | —  | 0 – 1       |
| 14<br>(G)                    | Ground | Encoder power supply                                   | Output           | Ignition switch ON   | 9 – 16      |
| 16<br>(W)                    | Ground | Front power window motor<br>(passenger side) UP signal | Output           | When front RH switch in<br>power window main switch<br>is in UP operation.   | 9 – 16      |
| 17<br>(R)                    | Ground | Front power window motor<br>(driver side) UP signal    | Output           | When front LH switch in<br>power window main switch<br>is in UP operation.   | 9 – 16      |
| 18<br>(P)                    | Ground | Battery power supply                                   | Input            | Ignition switch OFF  | 9 – 16      |
| 19<br>(GR)                   | Ground | Front power window motor<br>(driver side) DOWN signal  | Output           | When front LH switch in<br>power window main switch<br>is in DOWN operation. | 9 – 16      |

## Fail Safe

INFOID:000000010273656

### 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 motor (driver side).

# POWER WINDOW SYSTEM

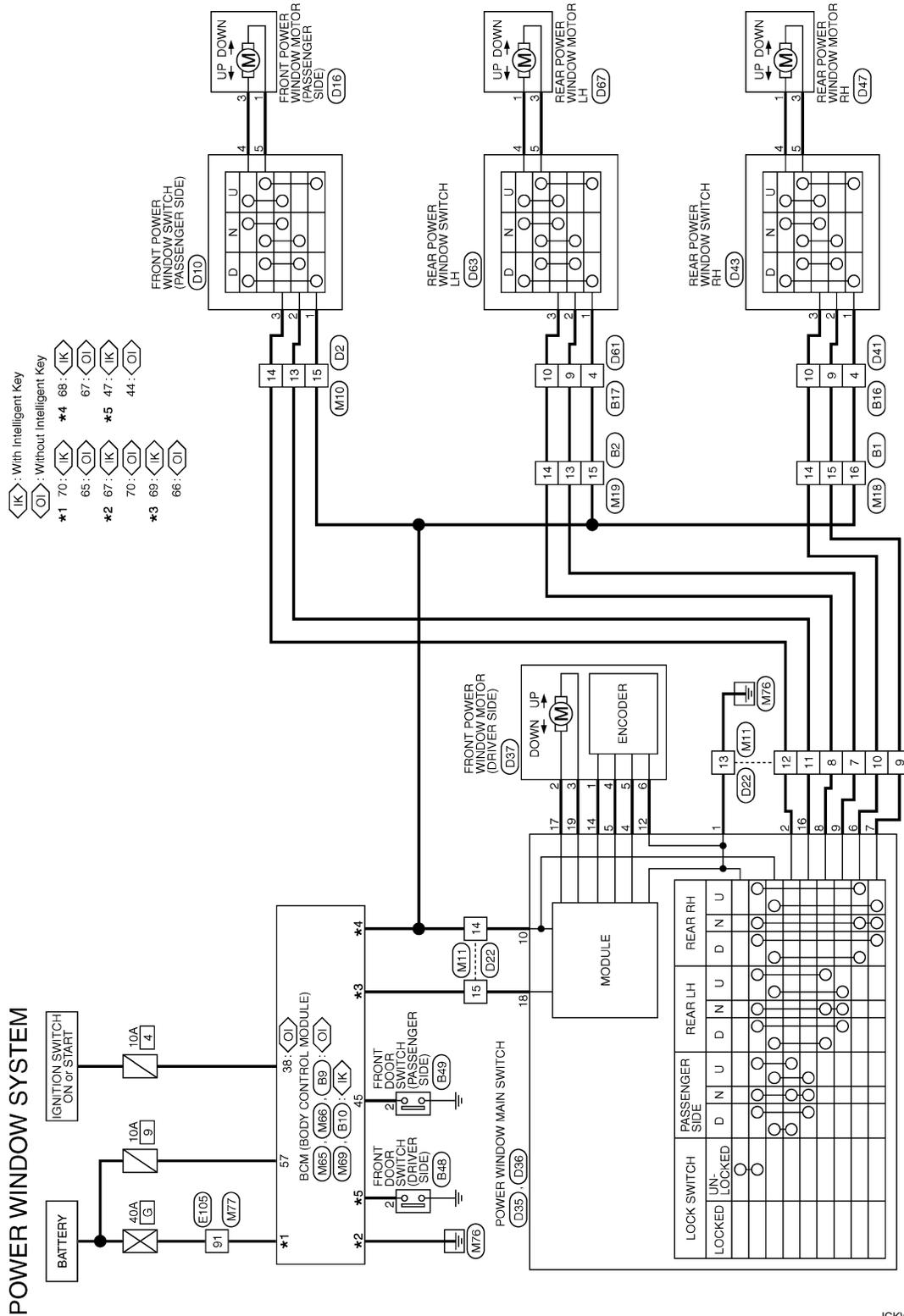
< WIRING DIAGRAM >

## WIRING DIAGRAM

### POWER WINDOW SYSTEM

#### Wiring Diagram

INFOID:000000009753785



2010/08/30

JCKWA3413GB

# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

|                |              |
|----------------|--------------|
| Connector No.  | B1           |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS18MW-CS    |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 1            | P             | -                           |
| 2            | GR            | -                           |
| 3            | SB            | -                           |
| 4            | G             | -                           |
| 5            | W             | -                           |
| 6            | LG            | -                           |
| 7            | Y             | -                           |
| 8            | R             | -                           |
| 9            | BR            | -                           |
| 10           | L             | -                           |
| 11           | LG            | -                           |
| 12           | GR            | -                           |
| 13           | GR            | -                           |
| 14           | Y             | -                           |
| 15           | LG            | -                           |
| 16           | L             | -                           |



|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |

|    |   |
|----|---|
| 11 | W |
| 12 | R |
| 13 | R |
| 14 | P |
| 15 | L |
| 16 | G |

|                |                           |
|----------------|---------------------------|
| Connector No.  | B9                        |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FEA09FB-FH46-SA           |



|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 50 | 51 | 53 | 55 |    |    |    |    |    |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 41           | LG            | REAR WIPER STOP POSITION    |
| 42           | LG            | REAR RH DOOR SW             |
| 43           | BR            | REAR LH DOOR SW             |
| 44           | SB            | DRIVER DOOR SW              |
| 45           | R             | PASSENGER DOOR SW           |
| 46           | P             | BACK DOOR SW                |
| 47           | V             | TURN SIGNAL OUTPUT          |
| 48           | Y             | TRIP SIGNAL OUTPUT          |
| 49           | GR            | BK DOOR OPEN OUTPUT         |
| 50           | P             | REAR WIPER OUTPUT           |
| 51           | L             | LUGGAGE LAMP OUTPUT         |

|                |                           |
|----------------|---------------------------|
| Connector No.  | B10                       |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FEA09FB-FH46-SA           |



|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 51 | 53 | 54 | 55 |    |    |    |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 43           | P             | BACK DOOR SW                |
| 44           | R             | REAR WIPER STOP POSITION    |
| 45           | R             | PASSENGER DOOR SW           |
| 46           | LG            | REAR RH DOOR SW             |
| 47           | SB            | DRIVER DOOR SW              |
| 48           | BR            | REAR LH DOOR SW             |
| 49           | L             | LUGGAGE LAMP OUTPUT         |
| 51           | Y             | BACK DOOR REO SW            |
| 53           | GR            | BK DOOR OPEN OUTPUT         |
| 54           | P             | REAR WIPER OUTPUT           |
| 55           | G             | RR DOOR UNLK OUTPUT         |

|                |              |
|----------------|--------------|
| Connector No.  | B16          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS18PW-CS    |



|    |   |   |
|----|---|---|
| 4  | 6 | 7 |
| 10 | 9 | 8 |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 1            | SB            | -                           |
| 4            | L             | -                           |
| 7            | LG            | -                           |
| 8            | GR            | -                           |
| 9            | LG            | -                           |
| 10           | Y             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | B17          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS18PW-CS    |



|    |   |   |
|----|---|---|
| 4  | 6 | 7 |
| 10 | 9 | 8 |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 1            | Y             | -                           |
| 4            | G             | -                           |
| 5            | G             | -                           |
| 7            | W             | -                           |
| 8            | R             | -                           |
| 9            | R             | -                           |
| 10           | P             | -                           |

|                |                                 |
|----------------|---------------------------------|
| Connector No.  | B48                             |
| Connector Name | FRONT DOOR SWITCH (DRIVER SIDE) |
| Connector Type | A03FW                           |



|    |   |   |
|----|---|---|
| 4  | 6 | 7 |
| 10 | 9 | 8 |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 2            | SB            | -                           |

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PWC

JRKWC9425GB

# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

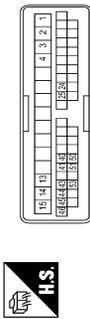
## POWER WINDOW SYSTEM

|                |                                    |
|----------------|------------------------------------|
| Connector No.  | D19                                |
| Connector Name | FRONT DOOR SWITCH (PASSENGER SIDE) |
| Connector Type | A03FW                              |



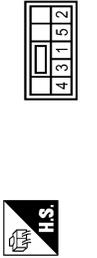
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R             | -                           |
| 2            | R             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | D2           |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH46PW-CS15  |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R             | -                           |
| 2            | G             | -                           |
| 3            | Y             | -                           |
| 4            | V             | -                           |
| 13           | W             | -                           |
| 14           | SB            | -                           |
| 15           | L             | -                           |
| 24           | R             | -                           |
| 25           | G             | -                           |
| 40           | LG            | -                           |
| 41           | Y             | -                           |
| 42           | GR            | -                           |
| 45           | W             | -                           |
| 46           | BG            | -                           |
| 50           | P             | -                           |
| 51           | B             | -                           |
| 53           | B             | -                           |

|                |  |
|----------------|--|
| Connector No.  | D10  |
| Connector Name | FRONT POWER WINDOW SWITCH (PASSENGER SIDE) |
| Connector Type | NS08FW-CS                                  |



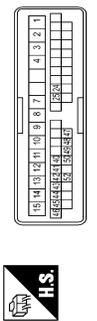
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | L             | -                           |
| 2            | W             | -                           |
| 3            | SB            | -                           |
| 4            | Y             | -                           |
| 5            | R             | -                           |

|                |   |
|----------------|---|
| Connector No.  | D18                                       |
| Connector Name | FRONT POWER WINDOW MOTOR (PASSENGER SIDE) |
| Connector Type | RS08FWG                                   |



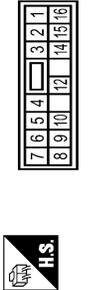
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R             | -                           |
| 3            | Y             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | D22          |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH46PW-CS15  |



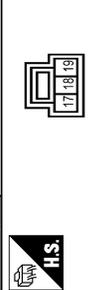
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W             | -                           |
| 2            | W             | -                           |
| 3            | SB            | -                           |
| 4            | V             | -                           |
| 7            | G             | -                           |
| 8            | BG            | -                           |
| 9            | LG            | -                           |
| 10           | BR            | -                           |
| 11           | W             | -                           |
| 12           | SB            | -                           |
| 13           | B             | -                           |
| 14           | L             | -                           |
| 15           | P             | -                           |
| 24           | G             | -                           |
| 25           | V             | -                           |
| 40           | Y             | -                           |
| 41           | P             | -                           |
| 42           | L             | -                           |
| 43           | GR            | -                           |
| 44           | W             | -                           |
| 45           | Y             | -                           |
| 46           | BG            | -                           |
| 47           | G             | -                           |
| 48           | L             | -                           |
| 49           | R             | -                           |
| 50           | LG            | -                           |
| 52           | BR            | -                           |

|                |                          |
|----------------|--------------------------|
| Connector No.  | D35                      |
| Connector Name | POWER WINDOW MAIN SWITCH |
| Connector Type | NS18FW-CS                |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W             | -                           |
| 2            | W             | -                           |
| 3            | SB            | -                           |
| 4            | P             | -                           |
| 5            | W             | -                           |
| 6            | BR            | -                           |
| 7            | LG            | -                           |
| 8            | BG            | -                           |
| 9            | G             | -                           |
| 10           | L             | -                           |
| 12           | LG            | -                           |
| 14           | G             | -                           |
| 15           | BR            | -                           |
| 16           | W             | -                           |

|                |                          |
|----------------|--------------------------|
| Connector No.  | D38                      |
| Connector Name | POWER WINDOW MAIN SWITCH |
| Connector Type | NS08FW-CS                |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 17           | R             | -                           |
| 18           | P             | -                           |
| 19           | GR            | -                           |

JRKWC9426GB

# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

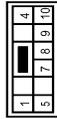
## POWER WINDOW SYSTEM

|                |  |
|----------------|--|
| Connector No.  | D37                                    |
| Connector Name | FRONT POWER WINDOW MOTOR (DRIVER SIDE) |
| Connector Type | RS08EG                                 |



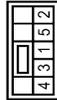
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | G             | -                           |
| 2            | GR            | -                           |
| 3            | GR            | -                           |
| 4            | W             | -                           |
| 5            | P             | -                           |
| 6            | LG            | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | D41          |
| Connector Name | WIRE TO WIRE |
| Connector Type | INS10MW-CS   |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | V             | -                           |
| 4            | L             | -                           |
| 5            | G             | -                           |
| 7            | LG            | -                           |
| 8            | GR            | -                           |
| 9            | BR            | -                           |
| 10           | Y             | -                           |

|                |                             |
|----------------|-----------------------------|
| Connector No.  | D43                         |
| Connector Name | REAR POWER WINDOW SWITCH RH |
| Connector Type | NS08PW-CS                   |



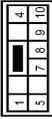
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | V             | -                           |
| 2            | BR            | -                           |
| 3            | G             | -                           |
| 4            | G             | -                           |
| 5            | R             | -                           |

|                |                            |
|----------------|----------------------------|
| Connector No.  | D47                        |
| Connector Name | REAR POWER WINDOW MOTOR RH |
| Connector Type | RS08EG                     |



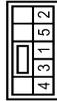
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | G             | -                           |
| 3            | R             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | D61          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS10MW-CS    |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | V             | -                           |
| 5            | C             | -                           |
| 7            | LG            | -                           |
| 8            | GR            | -                           |
| 9            | BR            | -                           |
| 10           | Y             | -                           |

|                |                             |
|----------------|-----------------------------|
| Connector No.  | D63                         |
| Connector Name | REAR POWER WINDOW SWITCH LH |
| Connector Type | NS08PW-CS                   |



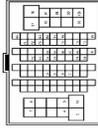
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | L             | -                           |
| 2            | BR            | -                           |
| 3            | Y             | -                           |
| 4            | G             | -                           |
| 5            | R             | -                           |

|                |                            |
|----------------|----------------------------|
| Connector No.  | D67                        |
| Connector Name | REAR POWER WINDOW MOTOR LH |
| Connector Type | RS08EG                     |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | G             | -                           |
| 3            | R             | -                           |

|                |                  |
|----------------|------------------|
| Connector No.  | F105             |
| Connector Name | WIRE TO WIRE     |
| Connector Type | TH86MM-CS (P-TM) |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | L             | -                           |
| 4            | Y             | -                           |
| 5            | GR            | -                           |
| 6            | P             | -                           |
| 9            | G             | -                           |
| 10           | R             | -                           |
| 34           | O             | -                           |
| 35           | GR            | -                           |
| 36           | B             | -                           |
| 37           | P             | -                           |
| 52           | SB            | -                           |
| 53           | BY            | -                           |
| 55           | O             | -                           |
| 58           | L             | -                           |
| 59           | Y             | -                           |
| 64           | LG            | -                           |
| 65           | GR            | -                           |

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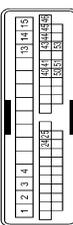
# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

|     |        |   |   |   |   |
|-----|--------|---|---|---|---|
| 69  | R      | - | - | - | - |
| 70  | W      | - | - | - | - |
| 68  | SB     | - | - | - | - |
| 43  | Y      | - | - | - | - |
| 70  | R      | - | - | - | - |
| 71  | LG     | - | - | - | - |
| 72  | V      | - | - | - | - |
| 73  | L      | - | - | - | - |
| 76  | R      | - | - | - | - |
| 78  | B      | - | - | - | - |
| 79  | W      | - | - | - | - |
| 80  | L      | - | - | - | - |
| 83  | Y      | - | - | - | - |
| 84  | LG     | - | - | - | - |
| 85  | GR     | - | - | - | - |
| 86  | SHIELD | - | - | - | - |
| 81  | LG     | - | - | - | - |
| 82  | R      | - | - | - | - |
| 95  | BR     | - | - | - | - |
| 96  | P      | - | - | - | - |
| 97  | GR     | - | - | - | - |
| 98  | W      | - | - | - | - |
| 99  | V      | - | - | - | - |
| 100 | O      | - | - | - | - |

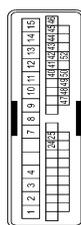
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|----------------|--------------|
| Connector No.  | M10          |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH48MW-CS15  |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R             | -                           |
| 2            | G             | -                           |
| 3            | SP            | -                           |
| 13           | GR            | -                           |
| 14           | GR            | -                           |
| 15           | L             | -                           |
| 24           | R             | -                           |
| 25           | G             | -                           |
| 40           | LG            | -                           |

|    |    |   |   |   |   |
|----|----|---|---|---|---|
| 41 | Y  | - | - | - | - |
| 42 | V  | - | - | - | - |
| 44 | Y  | - | - | - | - |
| 45 | LG | - | - | - | - |
| 46 | BR | - | - | - | - |
| 50 | P  | - | - | - | - |
| 51 | B  | - | - | - | - |
| 53 | B  | - | - | - | - |

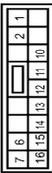
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|----------------|--------------|
| Connector No.  | M11          |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH48MW-CS15  |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | GR            | -                           |
| 2            | W             | -                           |
| 3            | W             | -                           |
| 4            | W             | -                           |
| 6            | G             | -                           |
| 8            | LG            | -                           |
| 10           | Y             | -                           |
| 11           | GR            | -                           |
| 12           | GR            | -                           |
| 13           | B             | -                           |
| 14           | L             | -                           |
| 15           | P             | -                           |
| 24           | BR            | -                           |
| 25           | Y             | -                           |
| 40           | V             | -                           |
| 41           | P             | -                           |
| 42           | GR            | -                           |
| 43           | V             | -                           |
| 44           | P             | -                           |
| 45           | G             | -                           |
| 46           | Y             | -                           |
| 47           | GR            | -                           |
| 48           | L             | -                           |
| 49           | R             | -                           |
| 50           | LG            | -                           |

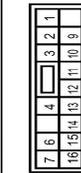
|    |    |   |   |   |   |
|----|----|---|---|---|---|
| 52 | BR | - | - | - | - |
|----|----|---|---|---|---|

|                |              |
|----------------|--------------|
| Connector No.  | M12          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS18FW-CS    |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R             | -                           |
| 2            | L             | -                           |
| 6            | V             | -                           |
| 7            | SB            | -                           |
| 10           | W             | -                           |
| 11           | BR            | -                           |
| 12           | Y             | -                           |
| 13           | Y             | -                           |
| 14           | Y             | -                           |
| 15           | LG            | -                           |
| 16           | L             | -                           |

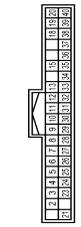
|                |              |
|----------------|--------------|
| Connector No.  | M13          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS18FW-CS    |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | P             | -                           |
| 2            | Y             | -                           |
| 3            | BR            | -                           |
| 4            | W             | -                           |
| 6            | SB            | -                           |
| 7            | V             | -                           |

|    |    |   |   |   |   |
|----|----|---|---|---|---|
| 9  | BR | - | - | - | - |
| 10 | V  | - | - | - | - |
| 11 | LG | - | - | - | - |
| 12 | W  | - | - | - | - |
| 13 | R  | - | - | - | - |
| 14 | G  | - | - | - | - |
| 15 | L  | - | - | - | - |
| 16 | G  | - | - | - | - |

|                |                           |
|----------------|---------------------------|
| Connector No.  | M15                       |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH48FW-NH                 |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2            | L             | COMBI SW INPUT 5            |
| 3            | GR            | COMBI SW INPUT 4            |
| 4            | BR            | COMBI SW INPUT 3            |
| 5            | G             | COMBI SW INPUT 2            |
| 9            | W             | KEY CYL UNLK SW             |
| 6            | R             | KEY CYL LOCK SW             |
| 8            | R             | STOP LAMP SW                |
| 9            | R             | REAR WINDOW DEF SW          |
| 10           | W             | IGN SW ACC                  |
| 11           | L             | IGN SW ACC                  |
| 12           | Y             | DOOR LK & UNLK SW LOCK      |
| 13           | BR            | DOOR LK & UNLK SW UNLOCK    |
| 15           | W             | -                           |
| 18           | V             | RECEIVER GND                |
| 19           | BR            | RECEIVER PWR SPLY           |
| 20           | G             | RECEIVER COMM               |
| 21           | P             | NAIS ANT AMP                |
| 23           | R             | SECURITY IND LAMP CONT      |
| 24           | SB            | SECURITY IND LAMP           |
| 25           | LG            | MASS GND AMP                |
| 26           | G             | THEMO CONT AMP              |
| 27           | W             | A/C SW                      |
| 28           | O             | BLOWER FAN SW               |
| 29           | L             | HAZARD SW                   |
| 30           | L             | BK DOOR OPENER SW           |
| 31           | G             | FR DEFROST SW               |

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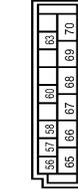
# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

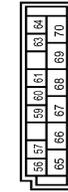
|    |    |                   |
|----|----|-------------------|
| 32 | LG | COMBI SW OUTPUT 5 |
| 33 | V  | COMBI SW OUTPUT 1 |
| 34 | V  | COMBI SW OUTPUT 3 |
| 35 | R  | COMBI SW OUTPUT 2 |
| 36 | P  | COMBI SW OUTPUT 1 |
| 37 | GR | KEY SW            |
| 38 | R  | IGN SW ON         |
| 39 | L  | CAN-H             |
| 40 | P  | CAN-L             |

|                |  |                           |
|----------------|--|---------------------------|
| Connector No.  |  | M65                       |
| Connector Name |  | BCM (BODY CONTROL MODULE) |
| Connector Type |  | FEA85FW-FH46-SA           |



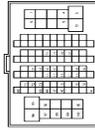
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 56           | W             | DR DOOR UNLK OUTPUT         |
| 57           | L             | BAT (FUSE)                  |
| 58           | LG            | INT ROOM LAMP PWR SPLY      |
| 59           | GR            | INT ROOM LAMP CONT          |
| 60           | SP            | IGN CRUISE                  |
| 61           | V             | BAT (E.C.U.)                |
| 62           | P             | PW PWR SPLY (BAT)           |
| 63           | L             | PW PWR SPLY (IGN)           |
| 64           | S             | PASS. RR DOOR UNLK OUTPUT   |
| 65           | V             | ALL DOOR LOCK OUTPUT        |
| 66           | B             | GND                         |

|                |  |                           |
|----------------|--|---------------------------|
| Connector No.  |  | M69                       |
| Connector Name |  | BCM (BODY CONTROL MODULE) |
| Connector Type |  | FEA85FW-FH46-SA           |



| Terminal No. | Color Of Wire | Signal Name [Specification]                  |
|--------------|---------------|--|
| 58           | LG            | INT ROOM LAMP PWR SPLY [With front fog lamp] |
| 59           | L             | INT ROOM LAMP CONT [With front fog lamp]     |
| 60           | V             | BAT (E.C.U.)                                 |
| 61           | W             | PASS DOOR UNLK OUTPUT                        |
| 62           | V             | TURN SIG LH OUTPUT                           |
| 63           | BR            | TURN SIG RH OUTPUT                           |
| 64           | R             | INT ROOM LAMP CONT                           |
| 65           | V             | REVERSE SW                                   |
| 66           | W             | ALL DOOR LOCK OUTPUT                         |
| 67           | B             | GND  |
| 68           | L             | PW PWR SPLY (IGN)                            |
| 69           | P             | PW PWR SPLY (BAT)                            |
| 70           | Y             | BAT (E.C.U.)                                 |

|                |  |                 |
|----------------|--|-----------------|
| Connector No.  |  | M77             |
| Connector Name |  | WIRE TO WIRE    |
| Connector Type |  | TH80FW-4S16-TM4 |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | L             | -                           |
| 4            | V             | -                           |
| 5            | W             | -                           |
| 6            | P             | -                           |
| 9            | R             | -                           |
| 10           | R             | -                           |

|     |    |   |
|-----|----|---|
| 54  | LG | - |
| 55  | BR | - |
| 56  | P  | - |
| 57  | R  | - |
| 58  | L  | - |
| 59  | S  | - |
| 60  | P  | - |
| 61  | LG | - |
| 62  | G  | - |
| 63  | GR | - |
| 64  | V  | - |
| 65  | R  | - |
| 66  | R  | - |
| 67  | R  | - |
| 68  | R  | - |
| 69  | R  | - |
| 70  | R  | - |
| 71  | R  | - |
| 72  | GR | - |
| 73  | G  | - |
| 74  | W  | - |
| 75  | W  | - |
| 76  | W  | - |
| 77  | W  | - |
| 78  | LG | - |
| 79  | V  | - |
| 80  | LG | - |
| 81  | P  | - |
| 82  | G  | - |
| 83  | G  | - |
| 84  | G  | - |
| 85  | BR | - |
| 86  | LG | - |
| 87  | LG | - |
| 88  | LG | - |
| 89  | W  | - |
| 90  | LG | - |
| 91  | GR | - |
| 92  | BR | - |
| 93  | Y  | - |
| 94  | Y  | - |
| 95  | Y  | - |
| 96  | L  | - |
| 97  | GR | - |
| 98  | G  | - |
| 99  | W  | - |
| 100 | LG | - |

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# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

WorkFlow

INFOID:000000009753786

DETAILED FLOW

#### 1.OBTAIN INFORMATION ABOUT SYMPTOM

---

Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred) as much 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 and then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 4.

#### 4.IDENTIFY THE 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.

Are the malfunctions corrected?

YES >> INSPECTION END

NO >> GO TO 3.

# ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

## ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

### Description

INFOID:000000009753787

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:000000009753788

#### 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

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## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

< BASIC INSPECTION >

---

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

#### Description

INFOID:000000009753789

When the control unit 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:000000009753790

#### 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

< BASIC INSPECTION >

## SYSTEM INITIALIZATION

### Description

INFOID:000000009753791

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:000000009753792

#### 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

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# CHECK ANTI-PINCH FUNCTION

< BASIC INSPECTION >

---

## CHECK ANTI-PINCH FUNCTION

### Description

INFOID:000000009753793

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:000000009753794

#### 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

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## DTC/CIRCUIT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT

#### POWER WINDOW MAIN SWITCH

#### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:000000009753795

#### 1. CHECK POWER WINDOW MAIN SWITCH 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) |
|-----------|----------|--------|-----------------|-----|-------------|
| Connector | Terminal |        |                 |     |             |
| D35       | 10       | Ground | Ignition switch | ON  | 9 - 16      |
| D36       | 18       |        |                 | OFF |             |

Is the inspection result normal?

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

#### 2. CHECK POWER WINDOW MAIN SWITCH POWER SUPPLY CIRCUIT

1. 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 |            |
| M69 (M66) | 68 (67)  | D35                      | 10       | Existed    |
|           | 69 (66)  | D36                      | 18       |            |

4. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M69 (M66) | 68 (67)  |        | Not existed |
|           | 69 (66)  |        |             |

(): Without Intelligent Key

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-90. "Removal and Installation"](#) (with Intelligent Key) or [BCS-157. "Removal and Installation"](#) (without Intelligent Key).

- NO >> Repair or replace harness.

#### 3. CHECK POWER WINDOW MAIN SWITCH 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 |        |            |
| D35                      | 1        |        | Existed    |

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Repair or replace harness.

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

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

INFOID:000000009753796

#### 1. CHECK FRONT POWER WINDOW SWITCH (PASSENGER SIDE) 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 | Ground | 9 – 16      |
| D10  | 1        |        |             |

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

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

1. Turn 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 |            |
| M69 (M66) | 68 (67)  | D10  | 1        | Existed    |

4. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M69 (M66) | 68 (67)  |        | Not existed |

(): Without Intelligent Key

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-90, "Removal and Installation"](#) (with Intelligent Key) or [BCS-157, "Removal and Installation"](#) (without Intelligent Key).

NO >> Repair or replace harness.

## REAR POWER WINDOW SWITCH

### REAR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:000000009753797

#### 1. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY

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

| (+)                      |          | (-)    | Voltage (V) |
|--------------------------|----------|--------|-------------|
| Rear power window switch |          |        |             |
| Connector                | Terminal | Ground | 9 – 16      |
| LH                       | D63      |        |             |
| RH                       | D43      |        |             |

# POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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

### 2. CHECK REAR POWER WINDOW SWITCH POWER SUPPLY CIRCUIT

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

| BCM       |          | Rear power window switch |          | Continuity   |
|-----------|----------|--------------------------|----------|--------------|
| Connector | Terminal | Connector                | Terminal |              |
| M69 (M66) | 68 (67)  | LH                       | D63      | 1<br>Existed |
|           |          | RH                       | D43      |              |

4. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M69 (M66) | 68 (67)  |        | Not existed |

( ): Without Intelligent Key

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-90, "Removal and Installation"](#) (with Intelligent Key) or [BCS-157, "Removal and Installation"](#) (without Intelligent Key).  
 NO >> Repair or replace harness.

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PWC

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

### Component Function Check

INFOID:000000009753798

#### 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-32, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009753799

#### 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.

| (+)  |          | (-)    | Condition                                 | Voltage (V) |        |
|--|----------|--------|---|-------------|--------|
| Front power window switch (passenger side) |          |        |   |             |        |
| Connector                                  | Terminal | Ground | Power window main switch (passenger side) | NEUTRAL     |        |
| D10  | 2        |        |   | UP          | 0 – 1  |
|  | 3        |        |   | NEUTRAL     | 9 – 16 |
|  |          |        |   | DOWN        | 0 – 1  |
|  |          |        | DOWN                                      | 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.

| Front power window switch (passenger side) |          | Power window main switch |          | Continuity |
|--|----------|--------------------------|----------|------------|
| Connector                                  | Terminal | Connector                | Terminal |            |
| D10  | 2        | D35                      | 16       | Existed    |
|  | 3        |                          | 2        |            |

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

| Front power window switch (passenger side) |          | Ground | Continuity  |
|--|----------|--------|-------------|
| Connector                                  | Terminal |        |             |
| D10  | 2        |        | Not existed |
|  | 3        |        |             |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-55, "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-33, "Component Inspection"](#).

Is the inspection result normal?

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

## < DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 4.  
NO >> Replace front power window switch (passenger side).

### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-46. "Intermittent Incident"](#).

>> INSPECTION END

## Component Inspection

INFOID:000000009753800

### 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                                   |   |           |            |
| 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 front power window switch (passenger side).

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PWC

# REAR POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## REAR POWER WINDOW SWITCH

### Component Function Check

INFOID:000000009753801

#### 1. CHECK FUNCTION

Check rear power window motor operation with rear power window switch.

Is the inspection result normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:000000009753802

#### 1. CHECK REAR POWER WINDOW SWITCH INPUT SIGNAL

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

| (+)                      |          |   | (-)    | Condition                               | Voltage (V) |        |
|--------------------------|----------|---|--------|---|-------------|--------|
| Rear power window switch |          |   |        |   |             |        |
| Connector                | Terminal |   |        |   |             |        |
| LH                       | D63      | 2 | Ground | Power window main switch (rear LH side) | NEUTRAL     | 0 – 1  |
|                          |          |   |        |   | UP          | 9 – 16 |
|                          |          | 3 |        |   | NEUTRAL     | 0 – 1  |
|                          |          |   |        |   | DOWN        | 9 – 16 |
| RH                       | D43      | 2 |        | Power window main switch (rear 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 REAR POWER WINDOW SWITCH CIRCUIT

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

| Rear power window switch |          |   | Power window main switch |          | Continuity |
|--------------------------|----------|---|--------------------------|----------|------------|
| Connector                | Terminal |   | Connector                | Terminal |            |
| LH                       | D63      | 2 | D35                      | 9        | Existed    |
|                          |          | 3 |                          | 8        |            |
| RH                       | D43      | 2 |                          | 7        |            |
|                          |          | 3 |                          | 6        |            |

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

# REAR POWER WINDOW SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| Rear power window switch |     | Terminal | Ground | Continuity  |
|--------------------------|-----|----------|--------|-------------|
| Connector                |     |          |        | Not existed |
| LH                       | D63 | 2        | Ground | Not existed |
|                          |     | 3        |        |             |
| RH                       | D43 | 2        |        |             |
|                          |     | 3        |        |             |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-55, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3.CHECK REAR POWER WINDOW SWITCH

Check rear power window switch.

Refer to [PWC-35, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace rear power window switch.

### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-46, "Intermittent Incident"](#).

>> INSPECTION END

## Component Inspection

INFOID:000000009753803

### 1.CHECK REAR POWER WINDOW SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear power window switch.

# POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## POWER WINDOW MOTOR DRIVER SIDE

### DRIVER SIDE : Component Function Check

INFOID:000000009753804

#### 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-36. "DRIVER SIDE : Diagnosis Procedure"](#).

### DRIVER SIDE : Diagnosis Procedure

INFOID:000000009753805

#### 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 |        |  |             |       |
| D37                                    | 2        | Ground | Power window main switch (driver side) | NEUTRAL     | 0 – 1 |
|  |          |        | UP                                     | 9 – 16      |       |
|  | 3        |        | NEUTRAL                                | 0 – 1       |       |
|  |          |        | DOWN                                   | 9 – 16      |       |

Is the inspection result normal?

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

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 |            |
| D37                                    | 2        | D35                      | 17       | Existed    |
|  | 3        |                          | 19       |            |

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

| Front power window motor (driver side) |          | Ground | Continuity  |
|--|----------|--------|-------------|
| Connector                              | Terminal |        |             |
| D37                                    | 2        |        | Not existed |
|  | 3        |        |             |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-55. "Removal and Installation"](#).

NO >> Repair or replace harness.

## PASSENGER SIDE

# POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## PASSENGER SIDE : Component Function Check

INFOID:000000009753806

### 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-37, "PASSENGER SIDE : Diagnosis Procedure"](#).

## PASSENGER SIDE : Diagnosis Procedure

INFOID:000000009753807

### 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) |
|-----------|----------|--------|-----------|-------------|
| Connector | Terminal |        |           |             |
| D16       | 1        | Ground | NEUTRAL   | 0 - 1       |
|           | 3        |        | UP        | 9 - 16      |
|           |          |        | NEUTRAL   | 0 - 1       |
|           |          |        | DOWN      | 9 - 16      |

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 |            |
| D16                                       | 1        | D10  | 5        | Existed    |
|   | 3        |  | 4        |            |

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

| Front power window motor (passenger side) |          | Ground | Continuity  |
|---|----------|--------|-------------|
| Connector                                 | Terminal |        |             |
| D16                                       | 1        |        | Not existed |
|   | 3        |        |             |

Is the inspection result normal?

- YES >> Replace front power window switch (passenger side).  
 NO >> Repair or replace harness.

## REAR LH

## REAR LH : Component Function Check

INFOID:000000009753808

### 1. CHECK FUNCTION

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

- YES >> INSPECTION END  
 NO >> Refer to [PWC-38. "REAR LH : Diagnosis Procedure"](#).

## REAR LH : Diagnosis Procedure

INFOID:000000009753809

### 1. CHECK REAR POWER WINDOW MOTOR LH INPUT SIGNAL

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

| (+)       |          | (-)    | Condition | Voltage (V) |
|-----------|----------|--------|-----------|-------------|
| Connector | Terminal |        |           |             |
| D67       | 1        | Ground | NEUTRAL   | 0 – 1       |
|           |          |        | DOWN      | 9 – 16      |
|           | 3        |        | NEUTRAL   | 0 – 1       |
|           |          |        | UP        | 9 – 16      |

Is the inspection result normal?

- YES >> Replace rear power window motor LH.  
 NO >> GO TO 2.

### 2. CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

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

| Rear power window motor LH |          | Rear power window switch LH |          | Continuity |
|----------------------------|----------|-----------------------------|----------|------------|
| Connector                  | Terminal | Connector                   | Terminal |            |
| D67                        | 1        | D63                         | 4        | Existed    |
|                            | 3        |                             | 5        |            |

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

| Rear power window motor LH |          | Ground | Continuity  |
|----------------------------|----------|--------|-------------|
| Connector                  | Terminal |        |             |
| D67                        | 1        |        | Not existed |
|                            | 3        |        |             |

Is the inspection result normal?

- YES >> Replace rear power window switch LH.  
 NO >> Repair or replace harness.

## REAR RH

### REAR RH : Component Function Check

INFOID:000000009753810

#### 1. CHECK FUNCTION

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

Is the inspection result normal?

- YES >> INSPECTION END

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

NO >> Refer to [PWC-39. "REAR RH : Diagnosis Procedure"](#).

### REAR RH : Diagnosis Procedure

INFOID:000000009753811

#### 1. CHECK REAR POWER WINDOW MOTOR RH INPUT SIGNAL

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

| (+)                        |          | (-)    | Condition                   | Voltage (V) |        |
|----------------------------|----------|--------|-----------------------------|-------------|--------|
| Rear power window motor RH |          |        |                             |             |        |
| Connector                  | Terminal |        |                             |             |        |
| D47                        | 1        | Ground | Rear power window switch RH | NEUTRAL     | 0 - 1  |
|                            |          |        |                             | DOWN        | 9 - 16 |
|                            | 3        |        |                             | NEUTRAL     | 0 - 1  |
|                            |          |        |                             | UP          | 9 - 16 |

Is the inspection result normal?

- YES >> Replace rear power window motor RH.  
 NO >> GO TO 2.

#### 2. CHECK REAR POWER WINDOW MOTOR RH CIRCUIT

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

| Rear power window motor RH |          | Rear power window switch RH |          | Continuity |
|----------------------------|----------|-----------------------------|----------|------------|
| Connector                  | Terminal | Connector                   | Terminal |            |
| D47                        | 1        | D43                         | 4        | Existed    |
|                            | 3        |                             | 5        |            |

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

| Rear power window motor RH |          | Ground | Continuity  |
|----------------------------|----------|--------|-------------|
| Connector                  | Terminal |        |             |
| D47                        | 1        |        | Not existed |
|                            | 3        |        |             |

Is the inspection result normal?

- YES >> Replace rear power window switch RH.  
 NO >> Repair or replace harness.

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# ENCODER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## ENCODER CIRCUIT

### Component Function Check

INFOID:000000009753812

#### 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-40, "Diagnosis Procedure"](#).

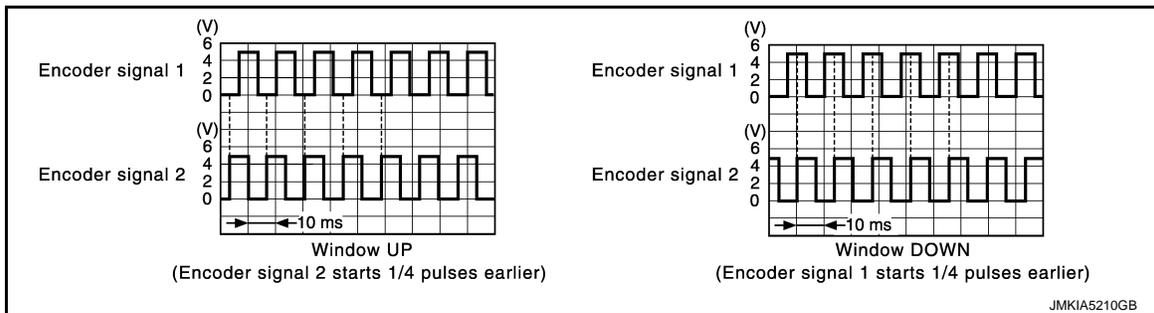
### Diagnosis Procedure

INFOID:000000009753813

#### 1.CHECK ENCODER PULSE SIGNAL

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

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



Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-55, "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 |            |
| D35                      | 4        | D37                                    | 5        | Existed    |
|                          | 5        |  | 4        |            |

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

| Power window main switch |          | Ground | Continuity  |
|--------------------------|----------|--------|-------------|
| Connector                | Terminal |        |             |
| D35                      | 4        |        | Not existed |
|                          | 5        |        |             |

Is the inspection result normal?

# ENCODER CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

- 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 |        |             |
| D37                                    | 1        | 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 |            |
| D35                      | 14       | D37                                    | 1        | Existed    |

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

| Power window main switch |          | Ground | Continuity  |
|--------------------------|----------|--------|-------------|
| Connector                | Terminal |        |             |
| D35                      | 14       |        | Not existed |

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-55. "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 |            |
| D35                      | 12       | D37                                    | 6        | Existed    |

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

| Power window main switch |          | Ground | Continuity  |
|--------------------------|----------|--------|-------------|
| Connector                | Terminal |        |             |
| D35                      | 12       |        | 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.

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## ENCODER CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

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

| Power window main switch |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| D35                      | 12       |        | Existed    |

Is the inspection result normal?

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

NO >> Replace power window main switch. Refer to [PWC-55, "Removal and Installation"](#).

# NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

NONE OF THE POWER WINDOWS CAN BE OPERATED USING ANY SWITCH

### Diagnosis Procedure

INFOID:000000009753814

#### 1. CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Check BCM power supply and ground circuit. Refer to the following.

- With Intelligent Key: Refer to [BCS-83, "Diagnosis Procedure"](#).
- Without Intelligent Key: Refer to [BCS-150, "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. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-46, "Intermittent Incident"](#).

NO >> GO TO 1.

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PWC

# DRIVER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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## DRIVER SIDE POWER WINDOW DOES NOT OPERATE

### Diagnosis Procedure

INFOID:000000009753815

#### 1. CHECK FRONT POWER WINDOW MOTOR (DRIVER SIDE)

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Check front power window motor (driver side).

Refer to [PWC-36, "DRIVER SIDE : 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-46, "Intermittent Incident"](#).

NO >> GO TO 1.

# FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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

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

INFOID:000000009753816

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

Check front power window switch (passenger side).  
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 FRONT POWER WINDOW MOTOR (PASSENGER SIDE)

Check front power window motor (passenger side).  
Refer to [PWC-37, "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

### 3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-46, "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:000000009753817

### 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 SWITCH (PASSENGER SIDE)

Check front power window switch (passenger side).  
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-46, "Intermittent Incident"](#).

NO >> GO TO 1.

## WHEN POWER WINDOW MAIN SWITCH IS OPERATED

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PWC

# FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

---

INFOID:000000009753818

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

---

Check front power window switch (passenger side).

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-46. "Intermittent Incident"](#).

NO >> GO TO 1.

# REAR LH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

REAR LH SIDE POWER WINDOW DOES NOT OPERATE  
WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED

A

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

INFOID:000000009753819

## 1.CHECK REAR POWER WINDOW SWITCH LH

B

Check rear power window switch LH.  
Refer to [PWC-34, "Component Function Check"](#).

C

Is the inspection result normal?

D

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

E

## 2.CHECK REAR POWER WINDOW MOTOR LH

Check rear power window motor LH.  
Refer to [PWC-37, "REAR LH : Component Function Check"](#).

F

Is the inspection result normal?

G

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

## 3.CONFIRM THE OPERATION

Confirm the operation again.

H

Is the result normal?

- YES >> Check intermittent incident. Refer to [GI-46, "Intermittent Incident"](#).
- NO >> GO TO 1.

I

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED : Diagnosis Procedure

INFOID:000000009753820

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

PWC

Check rear power window switch LH power supply and ground circuit.  
Refer to [PWC-30, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

L

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

## 2.CHECK REAR POWER WINDOW SWITCH LH

M

Check rear power window switch LH.  
Refer to [PWC-34, "Component Function Check"](#).

Is the inspection result normal?

N

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

## 3.CONFIRM THE OPERATION

Confirm the operation again.

O

Is the result normal?

P

- YES >> Check intermittent incident. Refer to [GI-46, "Intermittent Incident"](#).
- NO >> GO TO 1.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

# REAR LH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

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INFOID:000000009753821

## 1. CHECK REAR POWER WINDOW SWITCH LH

---

Check rear power window switch LH.

Refer to [PWC-34. "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-46. "Intermittent Incident"](#).

NO >> GO TO 1.

# REAR RH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

REAR RH SIDE POWER WINDOW DOES NOT OPERATE  
WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW  
SWITCH RH ARE OPERATED

A

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

INFOID:000000009753822

## 1.CHECK REAR POWER WINDOW SWITCH RH

B

Check rear power window switch RH.  
Refer to [PWC-34, "Component Function Check"](#).

C

Is the inspection result normal?

D

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

E

## 2.CHECK REAR POWER WINDOW MOTOR RH

Check rear power window motor RH.  
Refer to [PWC-38, "REAR RH : Component Function Check"](#).

F

Is the inspection result normal?

G

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

## 3.CONFIRM THE OPERATION

Confirm the operation again.

H

Is the result normal?

- YES >> Check intermittent incident. Refer to [GI-46, "Intermittent Incident"](#).
- NO >> GO TO 1.

I

WHEN REAR POWER WINDOW SWITCH RH IS OPERATED

WHEN REAR POWER WINDOW SWITCH RH IS OPERATED : Diagnosis Procedure

INFOID:000000009753823

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

PWC

Check rear power window switch RH power supply and ground circuit.  
Refer to [PWC-30, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

L

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

## 2.CHECK REAR POWER WINDOW SWITCH RH

M

Check rear power window switch RH.  
Refer to [PWC-34, "Component Function Check"](#).

Is the inspection result normal?

N

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

## 3.CONFIRM THE OPERATION

O

Confirm the operation again.

Is the result normal?

P

- YES >> Check intermittent incident. Refer to [GI-46, "Intermittent Incident"](#).
- NO >> GO TO 1.

WHEN POWER WINDOW MAIN SWITCH IS OPERATED

# REAR RH SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

---

INFOID:000000009753824

## 1. CHECK REAR POWER WINDOW SWITCH RH

---

Check rear power window switch RH.

Refer to [PWC-34. "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-46. "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

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

### Diagnosis Procedure

INFOID:000000009753825

#### 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

Check encoder circuit.

Refer to [PWC-40, "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-46, "Intermittent Incident"](#).

NO >> GO TO 1.

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PWC

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

< SYMPTOM DIAGNOSIS >

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

---

#### Diagnosis Procedure

INFOID:000000009753826

#### 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-51, "Diagnosis Procedure"](#).

#### 2. CONFIRM THE OPERATION

---

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-46, "Intermittent Incident"](#).

NO >> GO TO 1.

# POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

< SYMPTOM DIAGNOSIS >

## POWER WINDOW RETAINED POWER OPERATION DOES NOT OPERATE PROPERLY

### Diagnosis Procedure

INFOID:000000009753827

#### 1. CHECK FRONT DOOR SWITCH

Check front door switch. Refer to the following.

- With Intelligent Key: Refer to [DLK-81, "Component Function Check"](#).
- Without Intelligent Key: Refer to [DLK-220, "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-46, "Intermittent Incident"](#).

NO >> GO TO 1.

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## POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

---

### POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

#### Diagnosis Procedure

INFOID:000000009753828

#### 1. REPLACE POWER WINDOW MAIN SWITCH

---

Replace power window main switch.

>> Refer to [PWC-55. "Removal and Installation"](#).

# POWER WINDOW MAIN SWITCH

< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### POWER WINDOW MAIN SWITCH

#### Removal and Installation

INFOID:000000009753829

#### REMOVAL

1. Remove 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 remover tool (A).

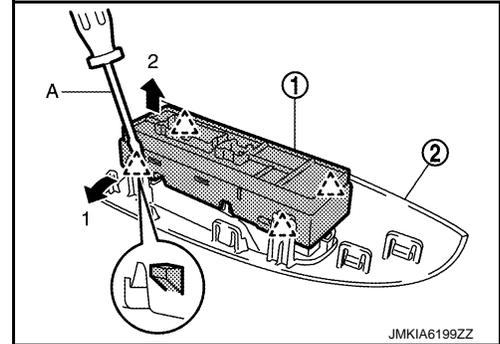
 : Pawl

#### CAUTION:

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

#### NOTE:

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



#### INSTALLATION

Install in the reverse order of removal.

#### NOTE:

If power window main switch is replaced or is removed, it is necessary to perform the initialization procedure. Refer to [PWC-27, "Work Procedure"](#).

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