

SECTION

PWC

POWER WINDOW CONTROL SYSTEM

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## PRECAUTIONS

< PRECAUTION >

### PRECAUTION

#### PRECAUTIONS

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

INFOID:0000000010257116

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. 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 Battery Terminal

INFOID:0000000010257118

- 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.

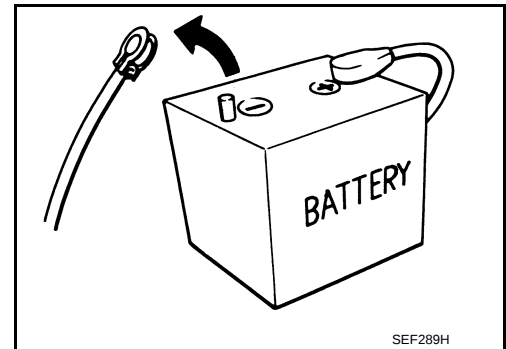
##### **NOTE:**

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.



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# PREPARATION

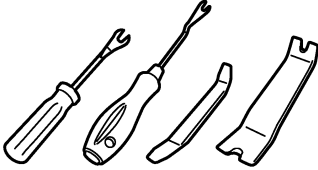
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## PREPARATION

### PREPARATION

#### Commercial Service Tools

INFOID:0000000010257119

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

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# COMPONENT PARTS

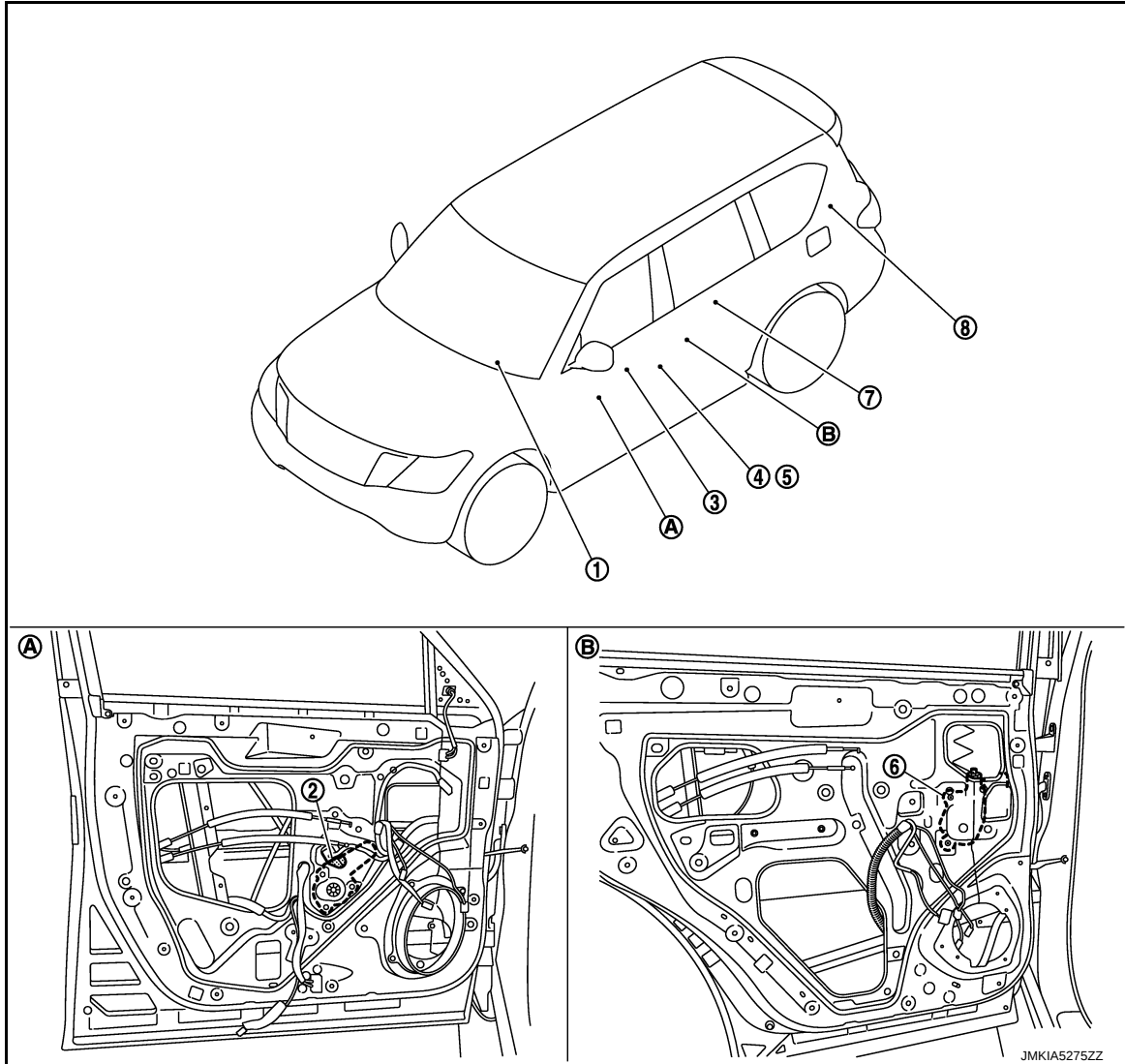
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## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

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- |                                                                                            |                                                                                                                    |                               |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 1. BCM<br>Refer to <a href="#">BCS-4, "BODY CONTROL SYSTEM : Component Parts Location"</a> | 2. Front power window motor (driver side)                                                                          | 3. Power window main switch   |
| 4. Front door lock assembly (driver side) (door key cylinder switch)                       | 5. Front door switch (driver side)                                                                                 | 6. Rear power window motor LH |
| 7. Rear power window switch LH                                                             | 8. Remote keyless entry receiver<br>Refer to <a href="#">DLK-12, "DOOR LOCK SYSTEM : Component Parts Location"</a> |                               |
| A. View with front door finisher removed                                                   | B. View with rear door finisher removed                                                                            |                               |

## COMPONENT PARTS

< SYSTEM DESCRIPTION >

### Component Description

INFOID:0000000010257121

| Component                                           | Function                                                                                                                                                                                                                                              |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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)          | <ul style="list-style-type: none"><li>Controls anti-pinch operation of power window.</li><li>Controls power window motor of passenger door.</li></ul>                                                                                                 |
| Rear power window switch                            | <ul style="list-style-type: none"><li>Controls anti-pinch operation of power window.</li><li>Controls power window motor of rear right and left doors.</li></ul>                                                                                      |
| Power window motor                                  | <ul style="list-style-type: none"><li>Integrates the encoder and window motor.</li><li>Starts operating with signals from each power window switch.</li><li>Transmits power window motor rotation as a pulse signal to power window switch.</li></ul> |
| Remote keyless entry receiver                       | Receives lock/unlock signal from the intelligent key, and then transmits to BCM.                                                                                                                                                                      |
| Front door lock assembly (door key cylinder switch) | Transmits operation condition of door key cylinder switch to power window main switch.                                                                                                                                                                |
| Front door switch (driver side/passenger side)      | Front door open/close condition and transmits to BCM.                                                                                                                                                                                                 |

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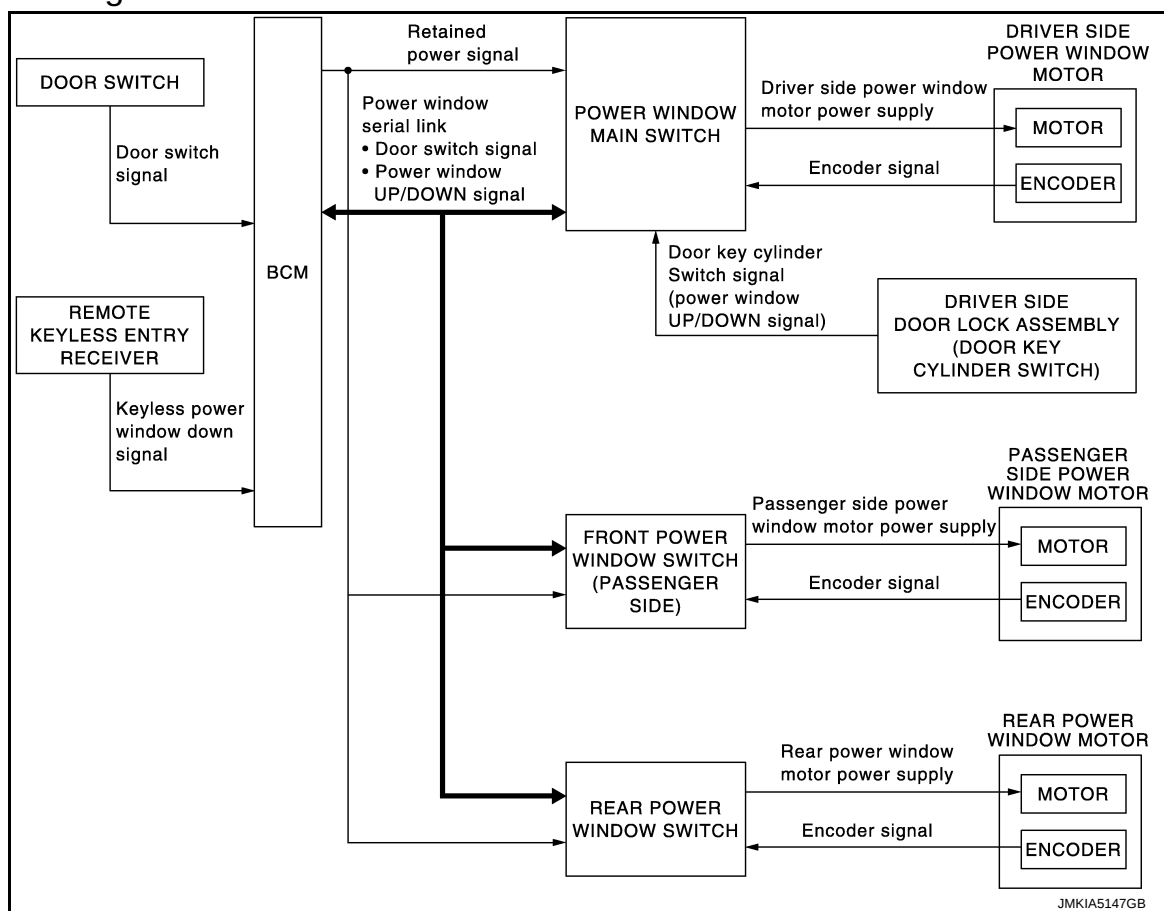
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# SYSTEM

< SYSTEM DESCRIPTION >

## SYSTEM

### System Diagram



### System Description

INFOID:000000010257123

#### POWER WINDOW OPERATION

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

#### POWER WINDOW AUTO-OPERATION

- AUTO-UP/DOWN operation can be performed when each power window motor turns to AUTO.
- Encoder continues detecting the movement of power window motor and output the encoder pulse signal to power window switch while power window motor is operating.
- Power window switch reads the changes of encoder signal and stops AUTO operation when door glass is at fully opened/closed position.
- Power window motor is operable in case encoder is malfunctioning.
- AUTO function does not operate if encoder is malfunctioning.

#### POWER WINDOW SERIAL LINK

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

# SYSTEM

## < SYSTEM DESCRIPTION >

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

- Keyless power window down signal
- Door switch signal

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

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

### RETAINED POWER OPERATION

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

Retained Power Function Cancel Conditions

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

### POWER WINDOW LOCK FUNCTION

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

### ANTI-PINCH OPERATION

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

Operation Condition

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

#### **NOTE:**

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

### DOOR KEY CYLINDER SWITCH OPERATION

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

Operation Condition

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

### KEYLESS POWER WINDOW DOWN FUNCTION

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

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

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

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

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# SYSTEM

## < SYSTEM DESCRIPTION >

Keyless power window down operation function can be changed by "PW DOWN SET" in "WORK SUPPORT" mode of "INTELLIGENT KEY" of "BCM" using CONSULT. Refer to [DLK-43, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

## Fail-safe

INFOID:0000000010257124

### FAIL-SAFE CONTROL

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

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

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

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

When fail-safe control is activated, perform the initialization procedure to recover. However, if a malfunction is still detected in power window switch, the fail-safe control is activated again.

# DIAGNOSIS SYSTEM (BCM)

## < SYSTEM DESCRIPTION >

### DIAGNOSIS SYSTEM (BCM)

#### COMMON ITEM

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

INFOID:0000000011449273

#### 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. Refer to <a href="#">BCS-58, "DTC Index"</a> .                                                         |
| 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 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                       | ×              |              |             |
| IVIS                                                                                               | IMMU                      | ×              | ×            | ×           |
| Interior room lamp battery saver                                                                   | BATTERY SAVER             | ×              | ×            | ×           |
| Back door                                                                                          | TRUNK                     |                | ×            |             |
| Vehicle security system                                                                            | THEFT ALM                 | ×              | ×            | ×           |
| RAP system                                                                                         | RETAINED PWR              |                | ×            |             |
| Signal buffer system                                                                               | SIGNAL BUFFER             |                | ×            | ×           |
| —                                                                                                  | AIR PRESSURE MONITOR*     | ×              | ×            | ×           |

\*: This item is indicated, but not used.

#### FREEZE FRAME DATA (FFD)

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

# DIAGNOSIS SYSTEM (BCM)

## < SYSTEM DESCRIPTION >

| CONSULT screen item | Indication/Unit | Description                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                        |
|---------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Vehicle Speed       | km/h            | Vehicle speed of the moment a particular DTC is detected                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                        |
| Odo/Trip Meter      | km              | Total mileage (Odometer value) of the moment a particular DTC is detected                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                        |
| Vehicle Condition   | SLEEP>LOCK      | Power position status of the moment a particular DTC is detected                                                                                                                                                                                                                                                                                                                                                           | While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")              |
|                     | SLEEP>OFF       |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)              |
|                     | LOCK>ACC        |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "LOCK" to "ACC"                                                               |
|                     | ACC>ON          |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "ACC" to "IGN"                                                                |
|                     | RUN>ACC         |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) |
|                     | CRANK>RUN       |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)                   |
|                     | RUN>URGENT      |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "RUN" to "ACC" (Emergency stop operation)                                     |
|                     | ACC>OFF         |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "ACC" to "OFF"                                                                |
|                     | OFF>LOCK        |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "OFF" to "LOCK"                                                               |
|                     | OFF>ACC         |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "OFF" to "ACC"                                                                |
|                     | ON>CRANK        |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning power supply position from "IGN" to "CRANKING"                                                           |
|                     | OFF>SLEEP       |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode              |
|                     | LOCK>SLEEP      |                                                                                                                                                                                                                                                                                                                                                                                                                            | While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode             |
|                     | LOCK            |                                                                                                                                                                                                                                                                                                                                                                                                                            | Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)                                         |
|                     | OFF             |                                                                                                                                                                                                                                                                                                                                                                                                                            | Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)                                        |
|                     | ACC             |                                                                                                                                                                                                                                                                                                                                                                                                                            | Power supply position is "ACC" (Ignition switch ACC)                                                                   |
|                     | ON              |                                                                                                                                                                                                                                                                                                                                                                                                                            | Power supply position is "IGN" (Ignition switch ON with engine stopped)                                                |
|                     | ENGINE RUN      |                                                                                                                                                                                                                                                                                                                                                                                                                            | Power supply position is "RUN" (Ignition switch ON with engine running)                                                |
|                     | CRANKING        |                                                                                                                                                                                                                                                                                                                                                                                                                            | Power supply position is "CRANKING" (At engine cranking)                                                               |
| IGN Counter         | 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> |                                                                                                                        |

## RETAIND PWR

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

INFOID:0000000010257126

#### Data monitor

#### NOTE:

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

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000010257127

| ECU | Reference                                               |
|-----|---------------------------------------------------------|
| BCM | <a href="#">BCS-35, "Reference Value"</a>               |
|     | <a href="#">BCS-56, "Fail-safe"</a>                     |
|     | <a href="#">BCS-57, "DTC Inspection Priority Chart"</a> |
|     | <a href="#">BCS-58, "DTC Index"</a>                     |

# POWER WINDOW MAIN SWITCH

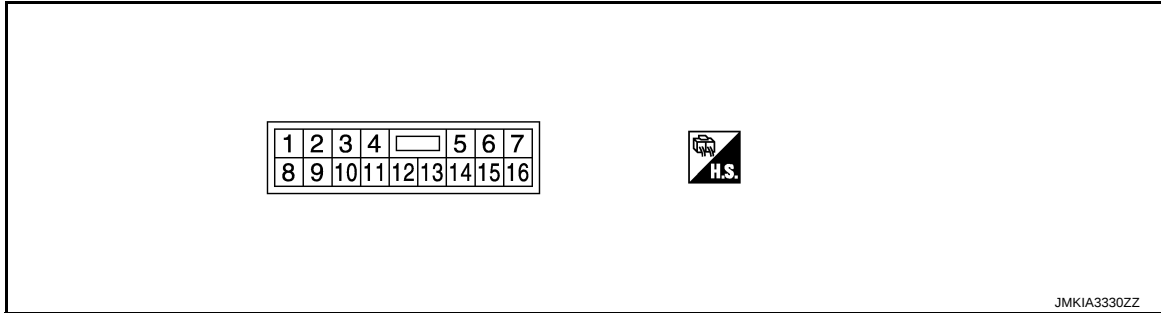
< ECU DIAGNOSIS INFORMATION >

## POWER WINDOW MAIN SWITCH

### Reference Value

INFOID:000000010257128

### TERMINAL LAYOUT



### PHYSICAL VALUES

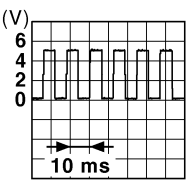
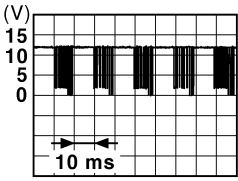
#### POWER WINDOW MAIN SWITCH

| Terminal No.<br>(wire color) |        | Description                                           |                  | Condition                                                                                    | Voltage [V]<br>(Approx.) |
|------------------------------|--------|-------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------|--------------------------|
| +                            | -      | Signal name                                           | Input/<br>Output |                                                                                              |                          |
| 3<br>(G/R)                   | Ground | Encoder power supply                                  | Output           | When ignition switch ON<br>or power window timer op-<br>erates.                              | 12                       |
| 4<br>(W)                     | Ground | Battery power supply                                  | Input            | —                                                                                            | 12                       |
| 5<br>(G)                     | Ground | Front driver side power win-<br>dow motor DOWN signal | Output           | When front LH switch in<br>power window main<br>switch is<br>operated DOWN                   | 12                       |
| 6<br>(L)                     | Ground | Front driver side power win-<br>dow motor UP signal   | Output           | When front LH switch in<br>power window main<br>switch is<br>operated UP                     | 12                       |
| 7<br>(B)                     | Ground | Ground                                                | —                | —                                                                                            | 0                        |
| 9<br>(Y)                     | Ground | Retained power signal                                 | Input            | IGN SW ON                                                                                    | 12                       |
|                              |        |                                                       |                  | Within 45 second after ig-<br>nition switch is turned to<br>OFF                              | 12                       |
|                              |        |                                                       |                  | When driver side or pas-<br>senger side door is<br>opened during retained<br>power operation | 0                        |
| 10<br>(W/B)                  | Ground | Encoder ground                                        | —                | —                                                                                            | 0                        |
| 11<br>(G/Y)                  | Ground | Encoder pulse signal 1                                | Input            | When power window mo-<br>tor operates.                                                       |                          |

JMKIA0070GB

# POWER WINDOW MAIN SWITCH

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description                             |                  | Condition                                  | Voltage [V]<br>(Approx.)                                                            |
|------------------------------|--------|-----------------------------------------|------------------|--------------------------------------------|-------------------------------------------------------------------------------------|
| +                            | -      | Signal name                             | Input/<br>Output |                                            |                                                                                     |
| 12<br>(G/W)                  | Ground | Encoder pulse signal 2                  | Input            | When power window motor operates.          |  |
| 13<br>(V)                    | Ground | Power window serial link                | Input/<br>Output | IGN SW ON or power window timer operating. |  |
| 15<br>(R)                    | Ground | Door key cylinder switch LOCK signal    | Input            | Key position (Neutral →Locked)             | 5 → 0                                                                               |
| 16<br>(W)                    | Ground | Door key cylinder switch UN-LOCK signal | Input            | Key position (Neutral →Unlocked)           | 5 → 0                                                                               |

## Fail-safe

INFOID:0000000011449269

## FAIL-SAFE CONTROL

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

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

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

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

When fail-safe control is activated, perform the initialization procedure to recover. However, if a malfunction is still detected in power window switch, the fail-safe control is activated again.

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

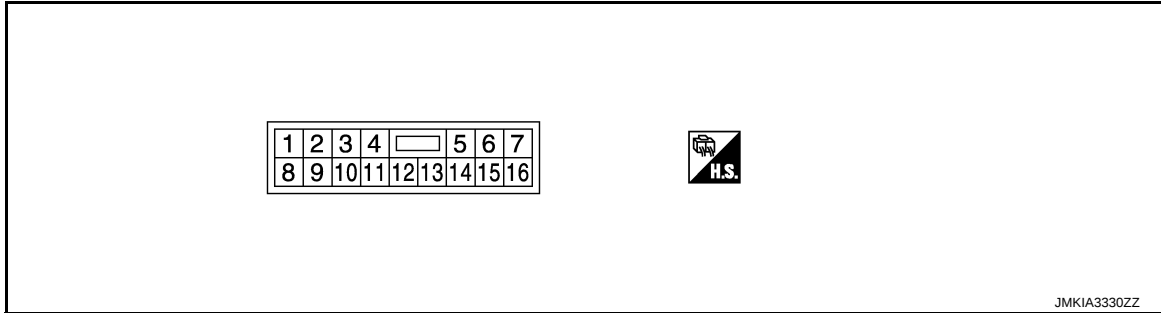
< ECU DIAGNOSIS INFORMATION >

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

### Reference Value

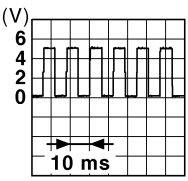
INFOID:000000010257130

### TERMINAL LAYOUT



### PHYSICAL VALUES

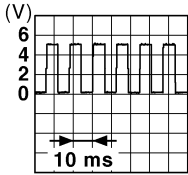
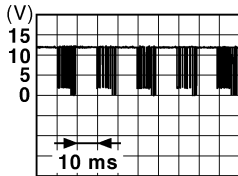
#### FRONT POWER WINDOW SWITCH

| Terminal No.<br>(wire color) |        | Description                       |                  | Condition                                                 | Voltage [V]<br>(Approx.)                                                              |
|------------------------------|--------|-----------------------------------|------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------|
| +                            | -      | Signal name                       | Input/<br>Output |                                                           |                                                                                       |
| 3<br>(W/B)                   | Ground | Encoder ground                    | —                | —                                                         | 0                                                                                     |
| 4<br>(G/R)                   | Ground | Encoder power supply              | Output           | When ignition switch ON or<br>power window timer operates | 12                                                                                    |
| 8<br>(L)                     | Ground | Power window motor<br>UP signal   | Output           | When power window motor is<br>operated UP                 | 12                                                                                    |
| 9<br>(G)                     | Ground | Power window motor<br>DOWN signal | Output           | When power window motor is<br>operated DOWN               | 12                                                                                    |
| 10<br>(W)                    | Ground | Battery power supply              | Input            | —                                                         | 12                                                                                    |
| 11<br>(B)                    | Ground | Ground                            | —                | —                                                         | 0                                                                                     |
| 12<br>(G/Y)                  | Ground | Encoder pulse signal 1            | Input            | When power window motor<br>operates                       |  |

JMKIA0070GB

# FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description              |                  | Condition                                              | Voltage [V]<br>(Approx.)                                                                           |
|------------------------------|--------|--------------------------|------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| +                            | -      | Signal name              | Input/<br>Output |                                                        |                                                                                                    |
| 15<br>(G/W)                  | Ground | Encoder pulse signal 2   | Input            | When power window motor operates                       | <br>JMKIA0070GB |
| 16<br>(V)                    | Ground | Power window serial link | Input/<br>Output | When ignition switch ON or power window timer operates | <br>JPMIA0013GB |

## Fail-safe

INFOID:0000000011449270

### FAIL-SAFE CONTROL

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

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

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

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

When fail-safe control is activated, perform the initialization procedure to recover. However, if a malfunction is still detected in power window switch, the fail-safe control is activated again.

# REAR POWER WINDOW SWITCH LH

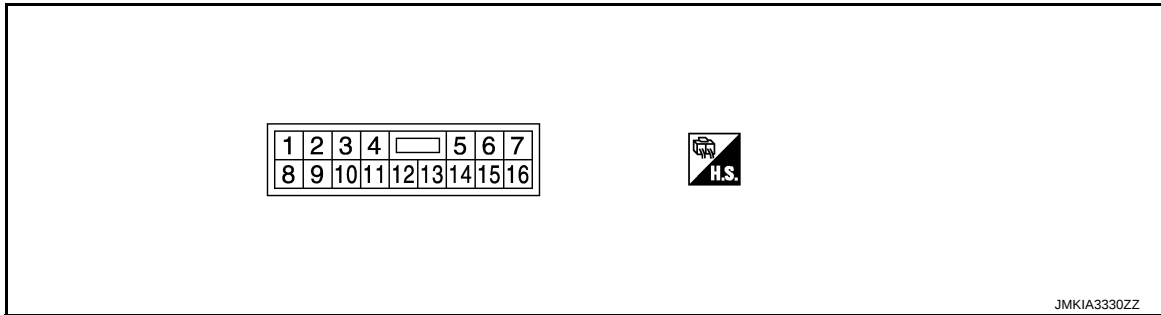
< ECU DIAGNOSIS INFORMATION >

## REAR POWER WINDOW SWITCH LH

### Reference Value

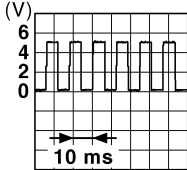
INFOID:000000010257132

### TERMINAL LAYOUT



### PHYSICAL VALUES

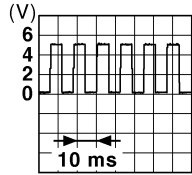
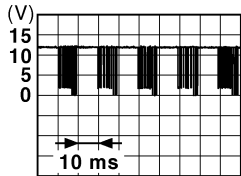
#### REAR POWER WINDOW SWITCH

| Terminal No.<br>(wire color) |        | Description                    |                  | Condition                                              | Voltage [V]<br>(Approx.)                                                              |
|------------------------------|--------|--------------------------------|------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|
| +                            | -      | Signal name                    | Input/<br>Output |                                                        |                                                                                       |
| 3<br>(SB)                    | Ground | Encoder ground                 | —                | —                                                      | 0                                                                                     |
| 4<br>(LG)                    | Ground | Encoder power supply           | Output           | When ignition switch ON or power window timer operates | 12                                                                                    |
| 8<br>(Y)                     | Ground | Power window motor UP signal   | Output           | When power window motor is operated UP                 | 12                                                                                    |
| 9<br>(G)                     | Ground | Power window motor DOWN signal | Output           | When power window motor is operated DOWN               | 12                                                                                    |
| 10<br>(W)                    | Ground | Battery power supply           | Input            | —                                                      | 12                                                                                    |
| 11<br>(B)                    | Ground | Ground                         | —                | —                                                      | 0                                                                                     |
| 12<br>(BR)                   | Ground | Encoder pulse signal 1         | Input            | When power window motor operates                       |  |

JMKIA0070GB

# REAR POWER WINDOW SWITCH LH

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description              |                  | Condition                                              | Voltage [V]<br>(Approx.)                                                                           |
|------------------------------|--------|--------------------------|------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| +                            | -      | Signal name              | Input/<br>Output |                                                        |                                                                                                    |
| 15<br>(L)                    | Ground | Encoder pulse signal 2   | Input            | When power window motor operates.                      | <br>JMKIA0070GB |
| 16<br>(V)                    | Ground | Power window serial link | Input/<br>Output | When ignition switch ON or power window timer operates | <br>JPMIA0013GB |

## Fail-safe

INFOID:0000000011449271

### FAIL-SAFE CONTROL

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

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

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

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

When fail-safe control is activated, perform the initialization procedure to recover. However, if a malfunction is still detected in power window switch, the fail-safe control is activated again.

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

PWC

# REAR POWER WINDOW SWITCH RH

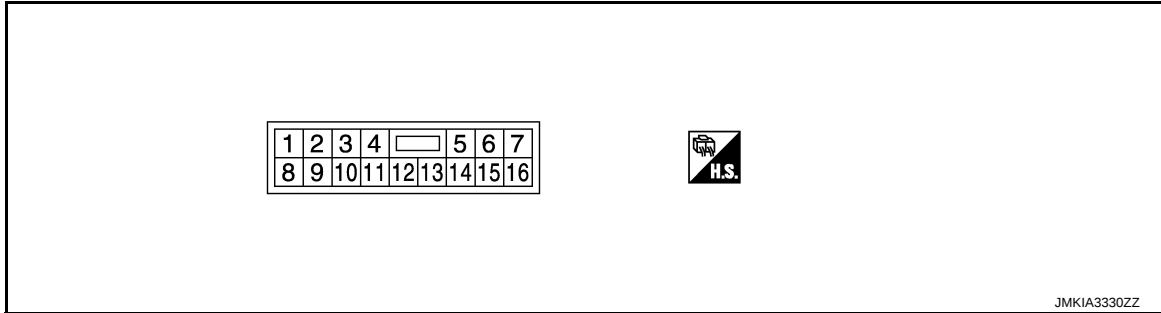
< ECU DIAGNOSIS INFORMATION >

## REAR POWER WINDOW SWITCH RH

Reference Value

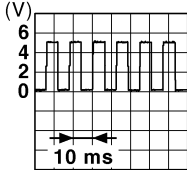
INFOID:000000010257134

### TERMINAL LAYOUT



### PHYSICAL VALUES

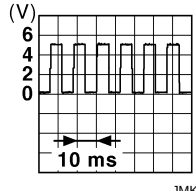
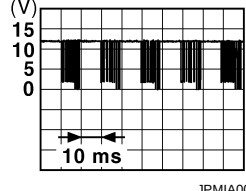
#### REAR POWER WINDOW SWITCH

| Terminal No.<br>(wire color) |        | Description                    |                  | Condition                                              | Voltage [V]<br>(Approx.)                                                              |
|------------------------------|--------|--------------------------------|------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|
| +                            | -      | Signal name                    | Input/<br>Output |                                                        |                                                                                       |
| 3<br>(P)                     | Ground | Encoder ground                 | —                | —                                                      | 0                                                                                     |
| 4<br>(Y)                     | Ground | Encoder power supply           | Output           | When ignition switch ON or power window timer operates | 12                                                                                    |
| 8<br>(W/R)                   | Ground | Power window motor UP signal   | Output           | When power window motor is operated UP                 | 12                                                                                    |
| 9<br>(R)                     | Ground | Power window motor DOWN signal | Output           | When power window motor is operated DOWN               | 12                                                                                    |
| 10<br>(W)                    | Ground | Battery power supply           | Input            | —                                                      | 12                                                                                    |
| 11<br>(B)                    | Ground | Ground                         | —                | —                                                      | 0                                                                                     |
| 12<br>(O)                    | Ground | Encoder pulse signal 1         | Input            | When power window motor operates                       |  |

JMKIA0070GB

# REAR POWER WINDOW SWITCH RH

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description              |                  | Condition                                              | Voltage [V]<br>(Approx.)                                                            |
|------------------------------|--------|--------------------------|------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------|
| +                            | -      | Signal name              | Input/<br>Output |                                                        |                                                                                     |
| 15<br>(G)                    | Ground | Encoder pulse signal 2   | Input            | When power window motor operates.                      |  |
| 16<br>(V)                    | Ground | Power window serial link | Input/<br>Output | When ignition switch ON or power window timer operates |  |

## Fail-safe

INFOID:0000000011449272

### FAIL-SAFE CONTROL

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

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

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

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

When fail-safe control is activated, perform the initialization procedure to recover. However, if a malfunction is still detected in power window switch, the fail-safe control is activated again.

# POWER WINDOW SYSTEM

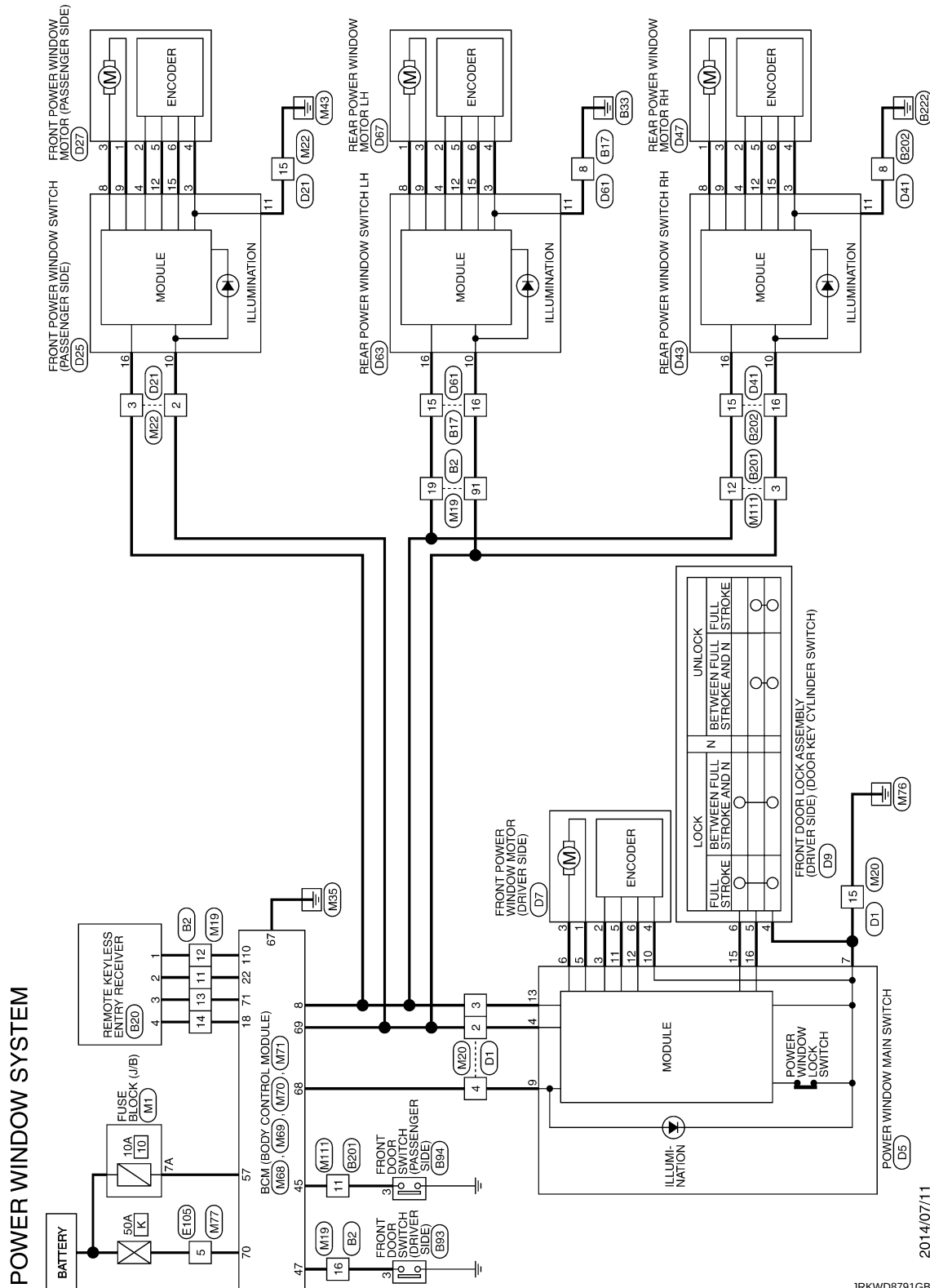
< WIRING DIAGRAM >

## WIRING DIAGRAM

### POWER WINDOW SYSTEM

#### Wiring Diagram

INFOID:0000000010257136



2014/07/11

JRKWD8791GB

# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

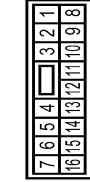
|                |                 |
|----------------|-----------------|
| Connector No.  | B2              |
| Connector Name | WIRE TO WIRE    |
| Connector Type | TH80MW-C516-TM4 |



|     |        |   |
|-----|--------|---|
| 43  | V/W    | - |
| 44  | LG/B   | - |
| 46  | B      | - |
| 47  | BR     | - |
| 49  | GR     | - |
| 50  | R/B    | - |
| 51  | W/R    | - |
| 52  | BR/Y   | - |
| 53  | O/B    | - |
| 54  | G/O    | - |
| 55  | R/B    | - |
| 56  | LG/R   | - |
| 57  | GR/R   | - |
| 58  | Y/G    | - |
| 59  | V/W    | - |
| 60  | R      | - |
| 63  | B      | - |
| 64  | R      | - |
| 65  | W      | - |
| 66  | G      | - |
| 67  | SHIELD | - |
| 69  | LG/B   | - |
| 70  | P/L    | - |
| 71  | L      | - |
| 72  | R      | - |
| 77  | Y/B    | - |
| 78  | Y/L    | - |
| 79  | Y      | - |
| 80  | W/R    | - |
| 81  | Y/L    | - |
| 84  | L/O    | - |
| 86  | O      | - |
| 87  | W/R    | - |
| 88  | O      | - |
| 89  | W/L    | - |
| 90  | GR/L   | - |
| 91  | W      | - |
| 92  | O      | - |
| 94  | W/R    | - |
| 96  | L/W    | - |
| 97  | R      | - |
| 98  | V      | - |
| 99  | L/W    | - |
| 100 | P/B    | - |

|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 2            | L             | -                           |
| 3            | BR            | -                           |
| 5            | R/W           | -                           |
| 6            | L             | -                           |
| 7            | V             | -                           |
| 9            | G             | -                           |
| 11           | W/B           | -                           |
| 12           | BR            | -                           |
| 13           | G/R           | -                           |
| 14           | B/Y           | -                           |
| 15           | W/R           | -                           |
| 16           | GR/R          | -                           |
| 18           | G/W           | -                           |
| 19           | V             | -                           |
| 20           | W/G           | -                           |
| 21           | B/W           | -                           |
| 22           | V             | -                           |
| 24           | G             | -                           |
| 25           | O             | -                           |
| 26           | Y             | -                           |
| 27           | L/O           | -                           |
| 28           | Y/R           | -                           |
| 29           | L             | -                           |
| 30           | R             | -                           |
| 31           | G/Y           | -                           |
| 32           | B/SB          | -                           |
| 33           | LG/R          | -                           |
| 34           | BR/W          | -                           |
| 35           | GR/R          | -                           |
| 36           | SB            | -                           |
| 37           | LG            | -                           |
| 38           | L             | -                           |
| 39           | P             | -                           |
| 40           | W/G           | -                           |
| 41           | O             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | B17          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS    |



|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 1            | W/R           | -                           |
| 3            | G             | -                           |
| 5            | R             | -                           |
| 6            | L/O           | -                           |
| 7            | O             | -                           |
| 8            | B             | -                           |
| 9            | L             | -                           |
| 10           | R/Y           | -                           |
| 15           | V             | -                           |
| 16           | W             | -                           |

|                |                               |
|----------------|-------------------------------|
| Connector No.  | B20                           |
| Connector Name | REMOTE KEYLESS ENTRY RECEIVER |
| Connector Type | TK04FW                        |



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

|                |                                 |
|----------------|---------------------------------|
| Connector No.  | B93                             |
| Connector Name | FRONT DOOR SWITCH (DRIVER SIDE) |
| Connector Type | TH04FW-NH                       |



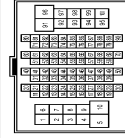
|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 3            | GR/R          | DOOR SW DR                  |

|                |                                    |
|----------------|------------------------------------|
| Connector No.  | B94                                |
| Connector Name | FRONT DOOR SWITCH (PASSENGER SIDE) |
| Connector Type | TH04FW-NH                          |



|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 3            | W             | DOOR SW AS                  |

|                |                 |
|----------------|-----------------|
| Connector No.  | B201            |
| Connector Name | WIRE TO WIRE    |
| Connector Type | TH80MW-C516-TM4 |



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PWC

# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R/B           | -                           |
| 2            | G             | -                           |
| 3            | W             | -                           |
| 5            | W/B           | -                           |
| 6            | L/Y           | -                           |
| 7            | R             | -                           |
| 8            | G/R           | -                           |
| 9            | GR/R          | -                           |
| 11           | W             | -                           |
| 12           | Y             | -                           |
| 13           | L/O           | -                           |
| 16           | GR/L          | -                           |
| 17           | R/G           | -                           |
| 18           | R/Y           | -                           |
| 19           | L/Y           | -                           |
| 20           | G/Y           | -                           |
| 21           | R             | -                           |
| 22           | GR            | -                           |
| 27           | L/W           | -                           |
| 29           | W             | -                           |
| 30           | R/L           | -                           |
| 31           | Y/L           | -                           |
| 32           | W/R           | -                           |
| 33           | W/G           | -                           |
| 34           | L/R           | -                           |
| 36           | G             | -                           |
| 37           | V             | -                           |
| 38           | SHIELD        | -                           |
| 39           | P/B           | -                           |
| 40           | W/R           | -                           |
| 41           | R             | -                           |
| 42           | L             | -                           |
| 43           | B/W           | -                           |
| 44           | L             | -                           |
| 45           | P             | -                           |
| 46           | SHIELD        | -                           |
| 47           | R             | -                           |
| 48           | W             | -                           |
| 48           | SHIELD        | -                           |
| 50           | V             | -                           |
| 51           | L/B           | -                           |
| 52           | L/R           | -                           |
| 53           | SB            | -                           |
| 54           | V/W           | -                           |
| 59           | L             | -                           |
| 60           | GR            | -                           |
| 61           | P/L           | -                           |
| 62           | B/SB          | -                           |

|     |        |   |
|-----|--------|---|
| 63  | R/Y    | - |
| 64  | BR     | - |
| 70  | O      | - |
| 71  | W      | - |
| 72  | SHIELD | - |
| 73  | B      | - |
| 74  | R      | - |
| 75  | G      | - |
| 76  | Y      | - |
| 77  | SB     | - |
| 78  | LG     | - |
| 78  | R/B    | - |
| 80  | W/B    | - |
| 93  | Y      | - |
| 94  | L      | - |
| 95  | L/R    | - |
| 96  | R      | - |
| 97  | W      | - |
| 98  | V      | - |
| 99  | L/W    | - |
| 100 | W      | - |

|                |              |
|----------------|--------------|
| Connector No.  | B202         |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS    |



|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 7  | 6  | 5  | 4  | 3  | 2  | 1  |
| 16 | 15 | 14 | 13 | 12 | 11 | 10 |
| 9  | 8  | 7  | 6  | 5  | 4  | 3  |
| 2  | 1  | 0  | 9  | 8  | 7  | 6  |

| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W/R           | -                           |
| 2            | R             | -                           |
| 5            | G             | -                           |
| 6            | L             | -                           |
| 7            | R             | -                           |
| 8            | B             | -                           |
| 9            | V             | -                           |
| 10           | L             | -                           |
| 15           | V             | -                           |
| 16           | W             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | D1           |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH4DFW-CS15  |



|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 |
| 9  | 8  | 7  | 6  | 5  | 4  | 3  | 2  | 1  | 0  | 9  | 8  | 7  | 6  | 5  | 4  |
| 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 |

| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | V             | -                           |
| 2            | W             | -                           |
| 3            | V             | -                           |
| 4            | Y             | -                           |
| 5            | LG/R          | -                           |
| 6            | BR/W          | -                           |
| 8            | V             | -                           |
| 9            | G             | -                           |
| 10           | L             | -                           |
| 12           | B/Y           | -                           |
| 13           | Y             | -                           |
| 14           | R             | -                           |
| 15           | B             | -                           |
| 16           | GR/R          | -                           |
| 17           | R/W           | -                           |
| 18           | B             | -                           |
| 19           | R             | -                           |
| 20           | P             | -                           |
| 21           | SHIELD        | -                           |
| 22           | V             | -                           |
| 23           | P/B           | -                           |
| 24           | L/O           | -                           |
| 25           | BR/W          | -                           |
| 26           | W/R           | -                           |
| 27           | V             | -                           |
| 28           | W/G           | -                           |
| 29           | Y/G           | -                           |
| 30           | O/L           | -                           |
| 31           | GR/B          | -                           |
| 32           | BR            | -                           |
| 33           | V/W           | -                           |
| 34           | R             | -                           |
| 35           | W             | -                           |
| 36           | G/O           | -                           |
| 37           | BR/Y          | -                           |
| 38           | SB            | -                           |

|                |                          |
|----------------|--------------------------|
| Connector No.  | D5                       |
| Connector Name | POWER WINDOW MAIN SWITCH |
| Connector Type | NS16FW-CS                |



|    |    |    |    |    |
|----|----|----|----|----|
| 3  | 4  | 5  | 6  | 7  |
| 9  | 10 | 11 | 12 | 13 |
| 15 | 16 | 17 | 18 | 19 |
| 21 | 22 | 23 | 24 | 25 |

| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3            | G/R           | -                           |
| 4            | W             | -                           |
| 5            | G             | -                           |
| 6            | L             | -                           |
| 7            | B             | -                           |
| 9            | Y             | -                           |
| 10           | W/B           | -                           |
| 11           | G/Y           | -                           |
| 12           | G/W           | -                           |
| 13           | V             | -                           |
| 15           | R             | -                           |
| 16           | W             | -                           |

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# POWER WINDOW SYSTEM

< WIRING DIAGRAM >

## POWER WINDOW SYSTEM

|                |                                        |
|----------------|----------------------------------------|
| Connector No.  | D7                                     |
| Connector Name | FRONT POWER WINDOW MOTOR (DRIVER SIDE) |
| Connector Type | RS06FG                                 |



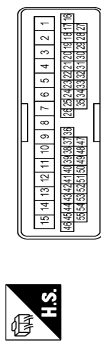
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | G             | -                           |
| 2            | G/R           | -                           |
| 3            | L             | -                           |
| 4            | W/B           | -                           |
| 5            | G/Y           | -                           |
| 6            | G/W           | -                           |

|                |                                        |
|----------------|----------------------------------------|
| Connector No.  | D9                                     |
| Connector Name | FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) |
| Connector Type | ED0FGY-RS                              |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R             | -                           |
| 2            | V             | -                           |
| 3            | W/G           | -                           |
| 4            | B             | -                           |
| 5            | W             | -                           |
| 6            | R             | -                           |

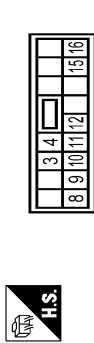
|                |              |
|----------------|--------------|
| Connector No.  | D21          |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH40FW-CS15  |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | G             | -                           |
| 2            | W             | -                           |
| 3            | V             | -                           |
| 5            | P/L           | -                           |
| 6            | L/R           | -                           |
| 8            | L/W           | -                           |
| 9            | G/Y           | -                           |
| 10           | L             | -                           |
| 12           | B/Y           | -                           |
| 13           | L             | -                           |
| 14           | R             | -                           |
| 15           | B             | -                           |
| 16           | Y/G           | -                           |
| 17           | Y/L           | -                           |
| 18           | B/W           | -                           |
| 19           | R             | -                           |
| 20           | P             | -                           |
| 22           | Y/R           | -                           |
| 23           | L/G/B         | -                           |
| 24           | L/O           | -                           |
| 25           | R/W           | -                           |
| 26           | W/R           | -                           |
| 27           | SHIELD        | -                           |
| 36           | G/O           | -                           |
| 37           | Y/B           | -                           |
| 38           | V             | -                           |
| 39           | W/L           | -                           |
| 40           | L/O           | -                           |
| 44           | GR/L          | -                           |
| 45           | G             | -                           |
| 46           | W             | -                           |
| 47           | L/G           | -                           |
| 48           | L/R           | -                           |
| 49           | Y             | -                           |
| 50           | R/B           | -                           |
| 53           | SHIELD        | -                           |

|    |   |   |
|----|---|---|
| 54 | B | - |
| 55 | R | - |

|                |                                            |
|----------------|--------------------------------------------|
| Connector No.  | D25                                        |
| Connector Name | FRONT POWER WINDOW SWITCH (PASSENGER SIDE) |
| Connector Type | NS16FW-CS                                  |



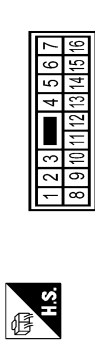
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3            | W/B           | -                           |
| 4            | G/R           | -                           |
| 8            | L             | -                           |
| 9            | G             | -                           |
| 10           | W             | -                           |
| 11           | B             | -                           |
| 12           | G/Y           | -                           |
| 15           | G/W           | -                           |
| 16           | V             | -                           |

|                |                                           |
|----------------|-------------------------------------------|
| Connector No.  | D27                                       |
| Connector Name | FRONT POWER WINDOW MOTOR (PASSENGER SIDE) |
| Connector Type | RS06FG                                    |



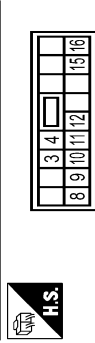
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | G             | -                           |
| 2            | G/R           | -                           |
| 3            | L             | -                           |
| 4            | W/B           | -                           |
| 5            | G/Y           | -                           |
| 6            | G/W           | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | D41          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS    |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W/R           | -                           |
| 3            | R             | -                           |
| 5            | G             | -                           |
| 6            | L             | -                           |
| 7            | R             | -                           |
| 8            | B             | -                           |
| 9            | V             | -                           |
| 10           | L             | -                           |
| 15           | V             | -                           |
| 16           | W             | -                           |

|                |                             |
|----------------|-----------------------------|
| Connector No.  | D43                         |
| Connector Name | REAR POWER WINDOW SWITCH RH |
| Connector Type | NS16FW-CS                   |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3            | P             | -                           |
| 4            | Y             | -                           |
| 8            | W/R           | -                           |
| 9            | R             | -                           |
| 10           | W             | -                           |
| 11           | B             | -                           |
| 12           | O             | -                           |
| 15           | G             | -                           |
| 16           | V             | -                           |

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# POWER WINDOW SYSTEM

## < WIRING DIAGRAM >

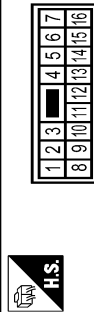
### POWER WINDOW SYSTEM

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|----------------|----------------------------|
| Connector No.  | D47                        |
| Connector Name | REAR POWER WINDOW MOTOR RH |
| Connector Type | RS08FG                     |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W/R           | -                           |
| 2            | Y             | -                           |
| 3            | R             | -                           |
| 4            | P             | -                           |
| 5            | O             | -                           |
| 6            | G             | -                           |

|                |              |
|----------------|--------------|
| Connector No.  | D61          |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS18MW-CS    |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | W/R           | -                           |
| 3            | G             | -                           |
| 5            | R             | -                           |
| 6            | L/O           | -                           |
| 7            | O             | -                           |
| 8            | B             | -                           |
| 9            | L             | -                           |
| 10           | R/Y           | -                           |
| 15           | V             | -                           |
| 16           | W             | -                           |

|                |                             |
|----------------|-----------------------------|
| Connector No.  | D63                         |
| Connector Name | REAR POWER WINDOW SWITCH LH |
| Connector Type | NS16FW-CS                   |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3            | SB            | -                           |
| 4            | LG            | -                           |
| 8            | Y             | -                           |
| 9            | G             | -                           |
| 10           | W             | -                           |
| 11           | B             | -                           |
| 12           | BR            | -                           |
| 15           | L             | -                           |
| 16           | V             | -                           |

|                |                            |
|----------------|----------------------------|
| Connector No.  | D67                        |
| Connector Name | REAR POWER WINDOW MOTOR LH |
| Connector Type | RS06FG                     |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | Y             | -                           |
| 2            | LG            | -                           |
| 3            | G             | -                           |
| 4            | SB            | -                           |
| 5            | BR            | -                           |
| 6            | L             | -                           |

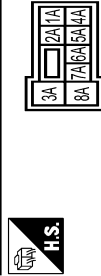
|                |                 |
|----------------|-----------------|
| Connector No.  | E105            |
| Connector Name | WIRE TO WIRE    |
| Connector Type | TH80MW-CS16-TM4 |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | L             | -                           |
| 2            | L/W           | -                           |
| 3            | R/B           | -                           |
| 4            | L             | -                           |
| 5            | Y             | -                           |
| 7            | W/G           | -                           |
| 8            | P/B           | -                           |
| 9            | W/B           | -                           |
| 10           | G             | -                           |
| 11           | L             | -                           |
| 12           | P             | -                           |
| 13           | P/B           | -                           |
| 14           | BR            | -                           |
| 15           | L/B           | -                           |
| 16           | SB            | -                           |
| 18           | BR            | -                           |
| 19           | Y/G           | -                           |
| 20           | BR/Y          | -                           |
| 21           | Y/V           | -                           |
| 22           | L             | -                           |
| 23           | Y             | -                           |
| 24           | L/W           | -                           |
| 28           | O             | -                           |
| 29           | R/W           | -                           |
| 30           | L/B           | -                           |
| 31           | Y             | -                           |
| 32           | GR/R          | -                           |
| 34           | Y             | -                           |
| 35           | R             | -                           |
| 36           | B/R           | -                           |
| 37           | G/Y           | -                           |
| 38           | G             | -                           |
| 40           | SB            | -                           |
| 41           | W/R           | -                           |
| 42           | R             | -                           |
| 43           | V             | -                           |

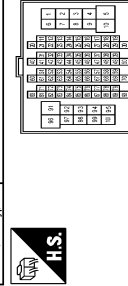
|     |      |   |
|-----|------|---|
| 54  | GR/L | - |
| 91  | BR   | - |
| 92  | L/W  | - |
| 94  | Y/B  | - |
| 95  | G/R  | - |
| 97  | R    | - |
| 98  | G/B  | - |
| 100 | W/R  | - |

|                |                  |
|----------------|------------------|
| Connector No.  | M1               |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS08FW-M2        |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1A           | Y             | -                           |
| 2A           | GR            | -                           |
| 3A           | W             | -                           |
| 4A           | Y/G           | -                           |
| 5A           | V             | -                           |
| 6A           | L/W           | -                           |
| 7A           | LG            | -                           |
| 8A           | W             | -                           |

|                |                 |
|----------------|-----------------|
| Connector No.  | M19             |
| Connector Name | WIRE TO WIRE    |
| Connector Type | TH80FW-CS16-TM4 |



JRKWD8795GB

# POWER WINDOW SYSTEM

## < WIRING DIAGRAM >

### POWER WINDOW SYSTEM

| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2            | L             | -                           |
| 3            | BR            | -                           |
| 5            | R/W           | -                           |
| 6            | W             | -                           |
| 7            | V             | -                           |
| 9            | G             | -                           |
| 11           | W/B           | -                           |
| 12           | BR            | -                           |
| 13           | G/R           | -                           |
| 14           | B/Y           | -                           |
| 15           | W/R           | -                           |
| 16           | GR/R          | -                           |
| 18           | G/W           | -                           |
| 19           | V             | -                           |
| 20           | W/G           | -                           |
| 21           | B/W           | -                           |
| 22           | V             | -                           |
| 24           | G             | -                           |
| 25           | O             | -                           |
| 26           | Y             | -                           |
| 27           | L             | -                           |
| 28           | Y             | -                           |
| 29           | L             | -                           |
| 30           | R             | -                           |
| 31           | G/Y           | -                           |
| 32           | B/SB          | -                           |
| 33           | LG/R          | -                           |
| 34           | BR/W          | -                           |
| 35           | GR/R          | -                           |
| 36           | SB            | -                           |
| 37           | LG            | -                           |
| 38           | L             | -                           |
| 39           | P             | -                           |
| 40           | W/G           | -                           |
| 41           | O             | -                           |
| 43           | V/W           | -                           |
| 44           | LG/B          | -                           |
| 46           | B             | -                           |
| 47           | BR/W          | -                           |
| 49           | GR            | -                           |
| 50           | R/B           | -                           |
| 51           | W/R           | -                           |
| 52           | BR/Y          | -                           |
| 53           | O/B           | -                           |
| 54           | G/O           | -                           |
| 55           | R/B           | -                           |
| 56           | LG/R          | -                           |
| 57           | GR/R          | -                           |

|     |        |   |
|-----|--------|---|
| 58  | Y/G    | - |
| 59  | V/W    | - |
| 60  | R      | - |
| 63  | B      | - |
| 64  | R      | - |
| 65  | W      | - |
| 66  | G      | - |
| 67  | SHIELD | - |
| 68  | LG/B   | - |
| 70  | P/L    | - |
| 71  | L      | - |
| 72  | R      | - |
| 77  | Y/B    | - |
| 78  | Y/L    | - |
| 79  | Y      | - |
| 80  | W/R    | - |
| 81  | Y/L    | - |
| 84  | L/O    | - |
| 86  | O      | - |
| 87  | W/R    | - |
| 88  | O      | - |
| 89  | W/L    | - |
| 90  | GR/L   | - |
| 91  | W      | - |
| 92  | G      | - |
| 94  | W/R    | - |
| 96  | L/W    | - |
| 97  | R      | - |
| 98  | V      | - |
| 99  | L/W    | - |
| 100 | P/B    | - |

|                |              |
|----------------|--------------|
| Connector No.  | M20          |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH40MM-CSI5  |



|              |      |                             |
|--------------|------|-----------------------------|
| Terminal No. | Wire | Signal Name [Specification] |
| 1            | V    | -                           |
| 2            | W    | -                           |
| 3            | V    | -                           |

|    |        |   |
|----|--------|---|
| 4  | Y      | - |
| 5  | LG/R   | - |
| 6  | BR/W   | - |
| 8  | V      | - |
| 9  | G      | - |
| 10 | L      | - |
| 12 | B/Y    | - |
| 13 | Y      | - |
| 14 | R      | - |
| 15 | B      | - |
| 16 | GR/R   | - |
| 17 | V/W    | - |
| 18 | B      | - |
| 19 | R      | - |
| 20 | P      | - |
| 21 | SHIELD | - |
| 22 | V      | - |
| 23 | P/B    | - |
| 24 | L/O    | - |
| 25 | BR/W   | - |
| 26 | W/R    | - |
| 27 | V      | - |
| 28 | W/G    | - |
| 29 | Y/G    | - |
| 30 | O/L    | - |
| 31 | GR/B   | - |
| 32 | BR     | - |
| 33 | V/W    | - |
| 34 | R      | - |
| 35 | W      | - |
| 36 | G/O    | - |
| 37 | BR/Y   | - |
| 38 | SB     | - |
| 39 | W/L    | - |
| 40 | L/W    | - |
| 41 | Y/G    | - |
| 42 | P/L    | - |
| 43 | LG     | - |
| 44 | GR     | - |
| 45 | SHIELD | - |
| 46 | W      | - |
| 47 | LG     | - |
| 48 | G/W    | - |
| 49 | Y      | - |
| 50 | L/Y    | - |
| 51 | GR/R   | - |
| 52 | LG/B   | - |
| 53 | G      | - |
| 54 | B      | - |
| 55 | R      | - |

|                |              |
|----------------|--------------|
| Connector No.  | M22          |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH40MM-CSI5  |



|              |               |                             |
|--------------|---------------|-----------------------------|
| Terminal No. | Color Of Wire | Signal Name [Specification] |
| 1            | G             | -                           |
| 2            | W             | -                           |
| 3            | V             | -                           |
| 5            | P/L           | -                           |
| 6            | L/R           | -                           |
| 8            | L/W           | -                           |
| 9            | G/Y           | -                           |
| 10           | L             | -                           |
| 12           | B/Y           | -                           |
| 13           | L             | -                           |
| 14           | R             | -                           |
| 15           | B             | -                           |
| 16           | Y/G           | -                           |
| 17           | Y/L           | -                           |
| 18           | B/W           | -                           |
| 19           | R             | -                           |
| 20           | P             | -                           |
| 22           | Y/R           | -                           |
| 23           | LG/B          | -                           |
| 24           | L/W           | -                           |
| 25           | W/R           | -                           |
| 26           | W/R           | -                           |
| 27           | SHIELD        | -                           |
| 28           | G/O           | -                           |
| 37           | Y/B           | -                           |
| 38           | V             | -                           |
| 39           | W/L           | -                           |
| 40           | L/O           | -                           |
| 44           | GR            | -                           |
| 45           | G             | -                           |
| 46           | W             | -                           |
| 47           | LG            | -                           |
| 48           | L/R           | -                           |
| 49           | Y             | -                           |
| 50           | R/B           | -                           |
| 53           | SHIELD        | -                           |

JRKWD8796GB

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## < WIRING DIAGRAM >

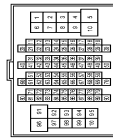
|     |     |   |
|-----|-----|---|
| 99  | L/W | - |
| 100 | W   | - |

|    |        |   |
|----|--------|---|
| 22 | OR     | - |
| 23 | L/O    | - |
| 24 | SB     | - |
| 25 | VL     | - |
| 26 | W/L    | - |
| 27 | W/R    | - |
| 28 | W/G    | - |
| 29 | L/R    | - |
| 30 | Y      | - |
| 31 | SHIELD | - |
| 32 | 7/B    | - |
| 33 | W/R    | - |
| 34 | L      | - |
| 35 | L/W    | - |
| 36 | B/W    | - |
| 37 | L      | - |
| 38 | SHIELD | - |
| 39 | W      | - |
| 40 | SHIELD | - |
| 41 | O/L    | - |
| 42 | SB     | - |
| 43 | V/W    | - |
| 44 | GR     | - |
| 45 | L      | - |
| 46 | 7/L    | - |
| 47 | B/SB   | - |
| 48 | RG7    | - |
| 49 | BR     | - |
| 50 | O      | - |
| 51 | W/L    | - |
| 52 | SHIELD | - |
| 53 | B      | - |
| 54 | R      | - |
| 55 | Y      | - |
| 56 | SB     | - |
| 57 | LG     | - |
| 58 | R/B    | - |
| 59 | W/B    | - |
| 60 | Y      | - |
| 61 | L/R    | - |
| 62 | R      | - |
| 63 | W      | - |

## POWER WINDOW SYSTEM

| 34  | Y    | — |
|-----|------|---|
| 35  | R    | — |
| 36  | B/O  | — |
| 37  | G/Y  | — |
| 38  | G    | — |
| 39  | —    | — |
| 40  | SB   | — |
| 41  | W/R  | — |
| 42  | R    | — |
| 43  | V    | — |
| 44  | GR/L | — |
| 54  | BR   | — |
| 91  | —    | — |
| 92  | L/W  | — |
| 94  | Y/B  | — |
| 95  | L/R  | — |
| 97  | R    | — |
| 98  | O/L  | — |
| 100 | W/B  | — |

|                |                 |
|----------------|-----------------|
| Connector No.  | M111            |
| Connector Name | WIRE TO WIRE    |
| Connector Type | TH80EW-CS16-TM4 |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R/B           | -                           |
| 2            | G             | -                           |
| 3            | W/R           | -                           |
| 5            | W/B           | -                           |
| 6            | L/Y           | -                           |
| 7            | R             | -                           |
| 8            | G/R           | -                           |
| 9            | GR/R          | -                           |
| 11           | W             | -                           |
| 12           | V             | -                           |
| 13           | Y             | -                           |
| 16           | L/O           | -                           |
| 17           | GR/L          | -                           |
| 18           | R/G           | -                           |
| 19           | L/Y           | -                           |
| 20           | G/Y           | -                           |

JRKWD8798GB

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

#### Work Flow

INFOID:0000000010257137

#### DETAILED FLOW

##### 1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

##### 2.REPRODUCE THE MALFUNCTION INFORMATION

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

>> GO TO 3.

##### 3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

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

>> GO TO 4.

##### 4.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

Perform the diagnosis with "Component diagnosis" of the applicable system.

>> GO TO 5.

##### 5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

##### 6.FINAL CHECK

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

Is the malfunctioning part repaired or replaced?

YES >> Trouble diagnosis is completed.  
NO >> GO TO 3.

## ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

< BASIC INSPECTION >

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

#### Description

INFOID:0000000010257138

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:0000000010257139

#### 1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [PWC-33. "Work Procedure"](#).

>> GO TO 2.

#### 2.CHECK ANTI-PINCH FUNCTION

Check anti-pinch function. Refer to [PWC-34. "Work Procedure"](#).

>> END

PWC

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

< BASIC INSPECTION >

---

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

#### Description

INFOID:0000000010257140

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:0000000010257141

#### 1.SYSTEM INITIALIZATION

---

Perform system initialization. Refer to [PWC-33. "Work Procedure"](#).

>> GO TO 2.

#### 2.CHECK ANTI-PINCH FUNCTION

---

Check anti-pinch function. Refer to [PWC-34. "Work Procedure"](#).

>> END

# SYSTEM INITIALIZATION

< BASIC INSPECTION >

## SYSTEM INITIALIZATION

### Description

INFOID:0000000010257142

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

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

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

- Auto-up operation
- Anti-pinch function

### Work Procedure

INFOID:0000000010257143

#### 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-34, "Work Procedure"](#).

>> END

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PWC

# CHECK ANTI-PINCH FUNCTION

< BASIC INSPECTION >

## CHECK ANTI-PINCH FUNCTION

---

### Description

INFOID:0000000010257144

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

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

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

- Auto-up operation
- Anti-pinch function

### Work Procedure

INFOID:0000000010257145

#### 1. CHECK ANTI-PINCH FUNCTION

---

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

#### **CAUTION:**

- **Perform initial setting when AUTO-UP operation or anti-pinch function does not operate normally.**
- **Check that AUTO-UP operates before inspection when system initialization is performed.**
- **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:0000000010257146

#### 1.CHECK POWER SUPPLY

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

| (+)                      |          | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------|----------|--------|--------------------------|
| Power window main switch |          |        |                          |
| Connector                | Terminal |        |                          |
| D5                       | 9        | Ground | 12                       |
|                          | 4        |        |                          |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2.CHECK POWER SUPPLY CIRCUIT

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

| BCM       |          | Power window main switch |          | Continuity |
|-----------|----------|--------------------------|----------|------------|
| Connector | Terminal | Connector                | Terminal |            |
| M70       | 68       | D5                       | 9        | Existed    |
|           | 69       |                          | 4        |            |

4. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M70       | 68       |        | Not existed |
|           | 69       |        |             |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-95. "Removal and Installation"](#).

NO >> Repair or replace harness.

#### 3.CHECK GROUND CIRCUIT

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

| Power window main switch |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| D5                       | 7        |        | Existed    |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### 4.CHECK INTERMITTENT INCIDENT

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Refer to [GI-43, "Intermittent Incident"](#).

>> INSPECTION END

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

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

INFOID:0000000010257147

#### 1.CHECK POWER SUPPLY

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

| (+)                                           |          | (-)    | Voltage (V)<br>(Approx.) |
|-----------------------------------------------|----------|--------|--------------------------|
| Front power window switch<br>(passenger side) |          |        |                          |
| Connector                                     | Terminal |        |                          |
| D25                                           | 10       | Ground | 12                       |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2.CHECK POWER SUPPLY CIRCUIT

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

| BCM       |          | Front power window switch<br>(passenger side) |          | Continuity |
|-----------|----------|-----------------------------------------------|----------|------------|
| Connector | Terminal | Connector                                     | Terminal |            |
| M70       | 69       | D25                                           | 10       | Existed    |

3. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M70       | 69       |        | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-95, "Removal and Installation"](#).

NO >> Repair or replace harness.

#### 3.CHECK GROUND CIRCUIT

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

| Front power window switch<br>(passenger side) |          | Ground | Continuity |
|-----------------------------------------------|----------|--------|------------|
| Connector                                     | Terminal |        |            |
| D25                                           | 11       |        | Existed    |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-43, "Intermittent Incident"](#).

# POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

## REAR POWER WINDOW SWITCH

### REAR POWER WINDOW SWITCH : Diagnosis Procedure

INFOID:0000000010257148

#### 1.CHECK POWER SUPPLY

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

| (+)                      |     | Terminal | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------|-----|----------|--------|--------------------------|
| Rear power window switch |     |          |        |                          |
| Connector                |     |          |        |                          |
| LH                       | D63 | 10       | Ground | 12                       |
| RH                       | D43 |          |        |                          |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2.CHECK POWER SUPPLY CIRCUIT

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

| BCM       |          | Rear power window switch |          | Continuity    |
|-----------|----------|--------------------------|----------|---------------|
| Connector | Terminal | Connector                | Terminal |               |
| M70       | 69       | LH                       | D63      | 10<br>Existed |
|           |          | RH                       | D43      |               |

4. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M70       | 69       |        | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-95. "Removal and Installation"](#).

NO >> Repair or replace harness.

#### 3.CHECK GROUND CIRCUIT

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

| Rear power window switch |     | Terminal | Ground | Continuity |
|--------------------------|-----|----------|--------|------------|
| Connector                |     |          |        |            |
| LH                       | D63 | 11       |        | Existed    |
| RH                       | D43 |          |        |            |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-43. "Intermittent Incident"](#).

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## POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

---

>> INSPECTION END

# POWER WINDOW MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## POWER WINDOW MOTOR DRIVER SIDE

### DRIVER SIDE : Component Function Check

INFOID:0000000010257149

#### 1.CHECK POWER WINDOW MOTOR CIRCUIT

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

Is the inspection result normal?

- YES >> Front power window motor (driver side) is OK.  
NO >> Refer to [PWC-39, "DRIVER SIDE : Diagnosis Procedure"](#).

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000010257150

#### 1.CHECK FRONT POWER WINDOW MOTOR INPUT SIGNAL

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

| (+) Front power window motor (driver side) |          | (-)    | Condition                |      | Voltage (V)<br>(Approx.) |
|--------------------------------------------|----------|--------|--------------------------|------|--------------------------|
| Connector                                  | Terminal |        |                          |      |                          |
| D7                                         | 3        | Ground | Power window main switch | UP   | 12                       |
|                                            |          |        |                          | DOWN | 0                        |
|                                            | 1        |        |                          | UP   | 0                        |
|                                            |          |        |                          | DOWN | 12                       |

Is the inspection result normal?

- YES >> Replace front power window motor (driver side). Refer to [GW-22, "Removal and Installation"](#).  
NO >> GO TO 2.

#### 2.CHECK POWER WINDOW MOTOR CIRCUIT

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

| Power window main switch |          | Front power window motor (driver side) |          | Continuity |
|--------------------------|----------|----------------------------------------|----------|------------|
| Connector                | Terminal | Connector                              | Terminal |            |
| D5                       | 6        | D7                                     | 3        | Existed    |
|                          | 5        |                                        | 1        |            |

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

| Power window main switch |          | Ground | Continuity  |
|--------------------------|----------|--------|-------------|
| Connector                | Terminal |        |             |
| D5                       | 6        |        | Not existed |
|                          | 5        |        |             |

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).  
NO >> Repair or replace harness.

### PASSENGER SIDE

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

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

### PASSENGER SIDE : Component Function Check

INFOID:000000010257151

#### 1. CHECK POWER WINDOW MOTOR CIRCUIT

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

Is the inspection result normal?

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

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

### PASSENGER SIDE : Diagnosis Procedure

INFOID:000000010257152

#### 1. CHECK FRONT POWER WINDOW MOTOR 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.

| (+) Front power window motor (passenger side) |          | (-)    | Condition                                  |      | Voltage (V) (Approx.) |
|-----------------------------------------------|----------|--------|--------------------------------------------|------|-----------------------|
| Connector                                     | Terminal |        |                                            |      |                       |
| D27                                           | 3        | Ground | Front power window switch (passenger side) | UP   | 12                    |
|                                               |          |        |                                            | DOWN | 0                     |
|                                               | 1        |        |                                            | UP   | 0                     |
|                                               |          |        |                                            | DOWN | 12                    |

Is the inspection result normal?

YES >> Replace front power window motor (passenger side). Refer to [GW-22, "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK POWER WINDOW MOTOR CIRCUIT

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

| Front power window switch (passenger side) |          | Front power window motor (passenger side) |          | Continuity |
|--------------------------------------------|----------|-------------------------------------------|----------|------------|
| Connector                                  | Terminal | Connector                                 | Terminal |            |
| D25                                        | 8        | D27                                       | 3        | Existed    |
|                                            | 9        |                                           | 1        |            |

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

| Front power window switch (passenger side) |          | Ground | Continuity  |
|--------------------------------------------|----------|--------|-------------|
| Connector                                  | Terminal |        |             |
| D25                                        | 8        |        | Not existed |
|                                            | 9        |        |             |

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-73, "Removal and Installation"](#).

NO >> Repair or replace harness.

### REAR LH

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

### REAR LH : Component Function Check

INFOID:000000010257153

#### 1.CHECK POWER WINDOW MOTOR CIRCUIT

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

Is the inspection result normal?

- YES >> Rear power window motor LH is OK.  
NO >> Refer to [PWC-41, "REAR LH : Diagnosis Procedure"](#).

### REAR LH : Diagnosis Procedure

INFOID:000000010257154

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

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

| (+) Rear power window motor LH |          | (-)    | Condition                   |      | Voltage (V)<br>(Approx.) |
|--------------------------------|----------|--------|-----------------------------|------|--------------------------|
| Connector                      | Terminal |        |                             |      |                          |
| D67                            | 1        | Ground | Rear power window switch LH | UP   | 12                       |
|                                |          |        |                             | DOWN | 0                        |
|                                | 3        |        |                             | UP   | 0                        |
|                                |          |        |                             | DOWN | 12                       |

Is the inspection result normal?

- YES >> Replace rear power window motor LH. Refer to [GW-27, "Removal and Installation"](#).  
NO >> GO TO 2.

#### 2.CHECK POWER WINDOW MOTOR CIRCUIT

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

| Rear power window switch LH |          | Rear power window motor LH |          | Continuity |
|-----------------------------|----------|----------------------------|----------|------------|
| Connector                   | Terminal | Connector                  | Terminal |            |
| D63                         | 8        | D67                        | 1        | Existed    |
|                             | 9        |                            | 3        |            |

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

| Rear power window switch LH |          | Ground | Continuity  |
|-----------------------------|----------|--------|-------------|
| Connector                   | Terminal |        |             |
| D63                         | 8        |        | Not existed |
|                             | 9        |        |             |

Is the inspection result normal?

- YES >> Replace rear power window switch LH. Refer to [PWC-73, "Removal and Installation"](#).  
NO >> Repair or replace harness.

### REAR RH

### REAR RH : Component Function Check

INFOID:000000010257155

#### 1. CHECK POWER WINDOW MOTOR CIRCUIT

# POWER WINDOW MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

- YES >> Rear power window motor RH is OK.  
NO >> Refer to [PWC-42, "REAR RH : Diagnosis Procedure"](#).

## REAR RH : Diagnosis Procedure

INFOID:0000000010257156

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

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

| (+) Rear power window motor RH |          | (−)    | Condition                   |      | Voltage (V)<br>(Approx.) |
|--------------------------------|----------|--------|-----------------------------|------|--------------------------|
| Connector                      | Terminal |        |                             |      |                          |
| D47                            | 1        | Ground | Rear power window switch RH | UP   | 12                       |
|                                |          |        |                             | DOWN | 0                        |
|                                | 3        |        |                             | UP   | 0                        |
|                                |          |        |                             | DOWN | 12                       |

Is the inspection result normal?

- YES >> Replace rear power window motor RH. Refer to [GW-27, "Removal and Installation"](#).  
NO >> GO TO 2.

### 2. CHECK POWER WINDOW MOTOR CIRCUIT

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

| Rear power window switch RH |          | Rear power window motor RH |          | Continuity |
|-----------------------------|----------|----------------------------|----------|------------|
| Connector                   | Terminal | Connector                  | Terminal |            |
| D43                         | 8        | D47                        | 1        | Existed    |
|                             | 9        |                            | 3        |            |

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

| Rear power window switch RH |          | Ground | Continuity  |
|-----------------------------|----------|--------|-------------|
| Connector                   | Terminal |        |             |
| D43                         | 8        |        | Not existed |
|                             | 9        |        |             |

Is the inspection result normal?

- YES >> Replace rear power window switch RH. Refer to [PWC-73, "Removal and Installation"](#).  
NO >> Repair or replace harness.

# ENCODER

< DTC/CIRCUIT DIAGNOSIS >

## ENCODER DRIVER SIDE

### DRIVER SIDE : Component Function Check

INFOID:0000000010257157

#### 1.CHECK ENCODER

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

Is the inspection result normal?

- YES >> Encoder is OK.  
NO >> Refer to [PWC-43, "DRIVER SIDE : Diagnosis Procedure"](#).

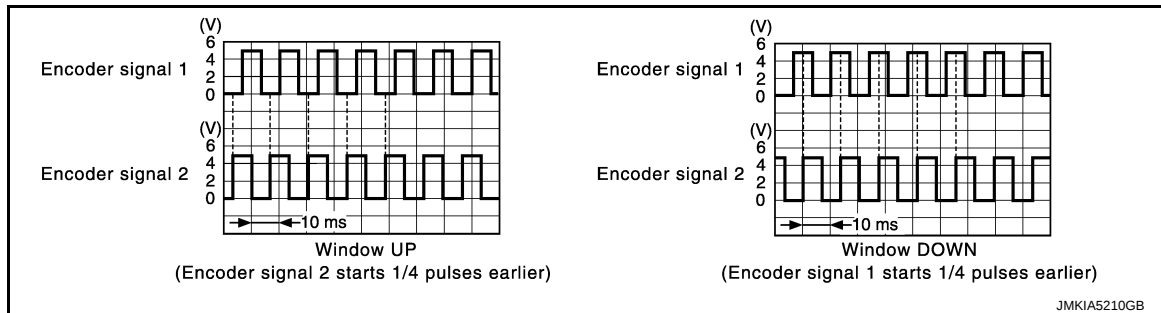
### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000010257158

#### 1.CHECK ENCODER SIGNAL

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

| Signal name      | (+)                      |          | (-)    | Signal<br>(Reference value) |
|------------------|--------------------------|----------|--------|-----------------------------|
|                  | Power window main switch |          |        |                             |
|                  | Connector                | Terminal |        |                             |
| Encoder signal 1 | D5                       | 11       | Ground | Refer to following signal   |
| Encoder signal 2 |                          | 12       |        |                             |



Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).  
NO >> GO TO 2.

#### 2.CHECK ENCODER SIGNAL CIRCUIT

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

| Power window main switch |          | Front power window motor<br>(driver side) |          | Continuity |
|--------------------------|----------|-------------------------------------------|----------|------------|
| Connector                | Terminal | Connector                                 | Terminal |            |
| D5                       | 11       | D7                                        | 5        | Existed    |
|                          | 12       |                                           | 6        |            |

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

## ENCODER

### < DTC/CIRCUIT DIAGNOSIS >

| Power window main switch |          | Ground | Continuity  |
|--------------------------|----------|--------|-------------|
| Connector                | Terminal |        |             |
| D5                       | 11       |        | Not existed |
|                          | 12       |        |             |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3.CHECK ENCODER POWER SUPPLY

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

| (+)                                    |          | (-)    | Voltage (V)<br>(Approx.) |
|----------------------------------------|----------|--------|--------------------------|
| Front power window motor (driver side) |          |        |                          |
| Connector                              | Terminal |        |                          |
| D7                                     | 2        | Ground | 12                       |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4.CHECK ENCODER POWER SUPPLY CIRCUIT

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

| Power window main switch |          | Front power window motor (driver side) |          | Continuity |
|--------------------------|----------|----------------------------------------|----------|------------|
| Connector                | Terminal | Connector                              | Terminal |            |
| D5                       | 3        | D7                                     | 2        | Existed    |

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

| Power window main switch |          | Ground | Continuity  |
|--------------------------|----------|--------|-------------|
| Connector                | Terminal |        |             |
| D5                       | 3        |        | Not existed |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-73. "Removal and Installation"](#).

NO >> Repair or replace harness.

### 5.CHECK GROUND CIRCUIT 1

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

| Power window main switch |          | Front power window motor (driver side) |          | Continuity |
|--------------------------|----------|----------------------------------------|----------|------------|
| Connector                | Terminal | Connector                              | Terminal |            |
| D5                       | 10       | D7                                     | 4        | Existed    |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

### 6.CHECK GROUND CIRCUIT 2

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

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

| Power window main switch |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| D5                       | 10       |        | Existed    |

Is the inspection result normal?

YES >> Replace front power window motor (driver side). Refer to [GW-22, "Removal and Installation"](#).

NO >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).

## PASSENGER SIDE

### PASSENGER SIDE : Component Function Check

INFOID:0000000010257159

#### 1.CHECK ENCODER

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

Is the inspection result normal?

YES >> Encoder is OK.

NO >> Refer to [PWC-45, "PASSENGER SIDE : Diagnosis Procedure"](#).

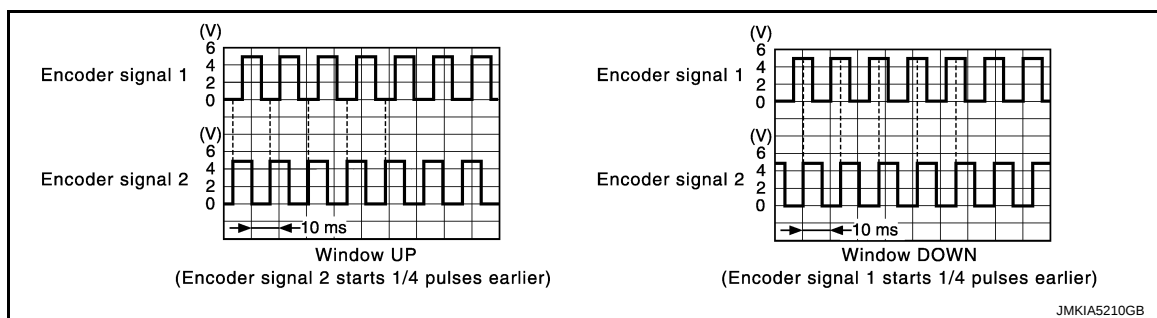
### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000010257160

#### 1.CHECK ENCODER SIGNAL

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

| Signal name      | (+) Front power window switch (passenger side) |          | (-)    | Signal (Reference value)  |
|------------------|------------------------------------------------|----------|--------|---------------------------|
|                  | Connector                                      | Terminal |        |                           |
|                  | D25                                            | 12       |        |                           |
| Encoder signal 1 | D25                                            | 12       | Ground | Refer to following signal |
| Encoder signal 2 |                                                | 15       |        |                           |



Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-73, "Removal and Installation"](#).

NO >> GO TO 2.

#### 2.CHECK ENCODER SIGNAL CIRCUIT

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

## ENCODER

### < DTC/CIRCUIT DIAGNOSIS >

| Front power window switch (passenger side) |          | Front power window motor (passenger side) |          | Continuity |
|--------------------------------------------|----------|-------------------------------------------|----------|------------|
| Connector                                  | Terminal | Connector                                 | Terminal |            |
| D25                                        | 12       | D27                                       | 5        | Existed    |
|                                            | 15       |                                           | 6        |            |

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

| Front power window switch (passenger side) |          | Ground | Continuity  |
|--------------------------------------------|----------|--------|-------------|
| Connector                                  | Terminal |        |             |
| D25                                        | 12       |        | Not existed |
|                                            | 15       |        |             |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3.CHECK ENCODER POWER SUPPLY

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

| (+) Front power window motor (passenger side) |          | (-)    | Voltage (V)<br>(Approx.) |
|-----------------------------------------------|----------|--------|--------------------------|
| Connector                                     | Terminal |        |                          |
| D27                                           | 2        | Ground | 12                       |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4.CHECK ENCODER POWER SUPPLY CIRCUIT

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

| Front power window switch (passenger side) |          | Front power window motor (passenger side) |          | Continuity |
|--------------------------------------------|----------|-------------------------------------------|----------|------------|
| Connector                                  | Terminal | Connector                                 | Terminal |            |
| D25                                        | 4        | D27                                       | 2        | Existed    |

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

| Front power window switch (passenger side) |          | Ground | Continuity  |
|--------------------------------------------|----------|--------|-------------|
| Connector                                  | Terminal |        |             |
| D25                                        | 4        |        | Not existed |

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-73, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 5.CHECK GROUND CIRCUIT 1

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

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

| Front power window switch (passenger side) |          | Front power window motor (passenger side) |          | Continuity |
|--------------------------------------------|----------|-------------------------------------------|----------|------------|
| Connector                                  | Terminal | Connector                                 | Terminal |            |
| D25                                        | 3        | D27                                       | 4        | Existed    |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

## 6.CHECK GROUND CIRCUIT 2

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

| Front power window switch (passenger side) |          | Ground | Continuity |
|--------------------------------------------|----------|--------|------------|
| Connector                                  | Terminal |        |            |
| D25                                        | 3        |        | Existed    |

Is the inspection result normal?

YES >> Replace front power window motor (passenger side). Refer to [GW-22, "Removal and Installation"](#).

NO >> Replace front power window switch (passenger side). Refer to [PWC-73, "Removal and Installation"](#).

## REAR LH

## REAR LH : Component Function Check

INFOID:0000000010257161

## 1.CHECK ENCODER OPERATION

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

Is the inspection result normal?

YES >> Encoder operation is OK.

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

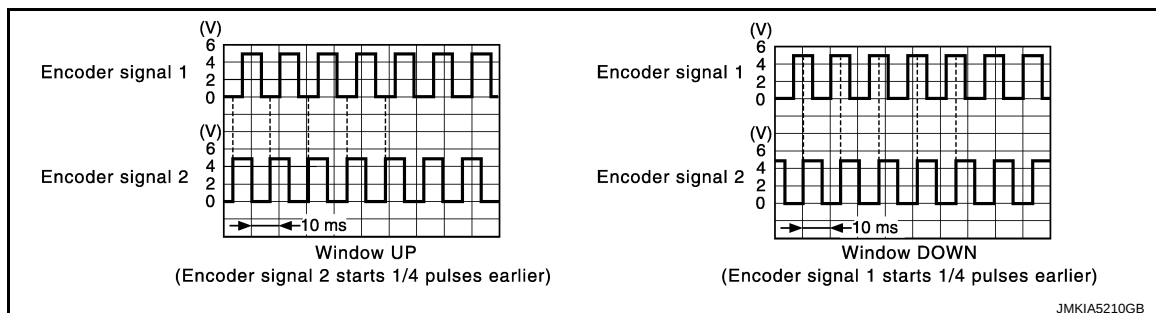
## REAR LH : Diagnosis Procedure

INFOID:0000000010257162

## 1.CHECK ENCODER SIGNAL

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

| Signal name      | (+)                         |          | (−)    | Signal<br>(Reference value) |
|------------------|-----------------------------|----------|--------|-----------------------------|
|                  | Rear power window switch LH |          |        |                             |
|                  | Connector                   | Terminal |        |                             |
| Encoder signal 1 | D63                         | 12       | Ground | Refer to following signal   |
| Encoder signal 2 |                             | 15       |        |                             |



Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to [PWC-73, "Removal and Installation"](#).

## ENCODER

### < DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 2.

#### 2.CHECK ENCODER SIGNAL CIRCUIT

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

| Rear power window switch LH |          | Rear power window motor LH |          | Continuity |
|-----------------------------|----------|----------------------------|----------|------------|
| Connector                   | Terminal | Connector                  | Terminal |            |
| D63                         | 12       | D67                        | 5        | Existed    |
|                             | 15       |                            | 6        |            |

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

| Rear power window switch LH |          | Ground | Continuity  |
|-----------------------------|----------|--------|-------------|
| Connector                   | Terminal |        |             |
| D63                         | 12       |        | Not existed |
|                             | 15       |        |             |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

#### 3.CHECK ENCODER POWER SUPPLY

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

| (+) Rear power window motor LH |          | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------------|----------|--------|--------------------------|
| Connector                      | Terminal |        |                          |
| D67                            | 2        | Ground | 12                       |

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

| Rear power window switch LH |          | Rear power window motor LH |          | Continuity |
|-----------------------------|----------|----------------------------|----------|------------|
| Connector                   | Terminal | Connector                  | Terminal |            |
| D63                         | 4        | D67                        | 2        | Existed    |

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

| Rear power window switch LH |          | Ground | Continuity  |
|-----------------------------|----------|--------|-------------|
| Connector                   | Terminal |        |             |
| D63                         | 4        |        | Not existed |

Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to [PWC-73, "Removal and Installation"](#).

NO >> Repair or replace harness.

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

### 5.CHECK GROUND CIRCUIT 1

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

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

Is the inspection result normal?

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

### 6.CHECK GROUND CIRCUIT 2

1. Connect rear power window switch LH connector.
2. Check continuity between rear power window switch LH connector and ground.

| Rear power window switch LH |          | Ground | Continuity |
|-----------------------------|----------|--------|------------|
| Connector                   | Terminal |        |            |
| D63                         | 3        |        | Existed    |

Is the inspection result normal?

- YES >> Replace rear power window motor LH. Refer to [GW-27, "Removal and Installation"](#).  
NO >> Replace rear power window switch LH. Refer to [PWC-73, "Removal and Installation"](#).

## REAR RH

### REAR RH : Component Function Check

INFOID:0000000010257164

### 1.CHECK ENCODER OPERATION

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

Is the inspection result normal?

- YES >> Encoder operation is OK.  
NO >> Refer to [PWC-49, "REAR RH : Diagnosis Procedure"](#).

### REAR RH : Diagnosis Procedure

INFOID:0000000010257164

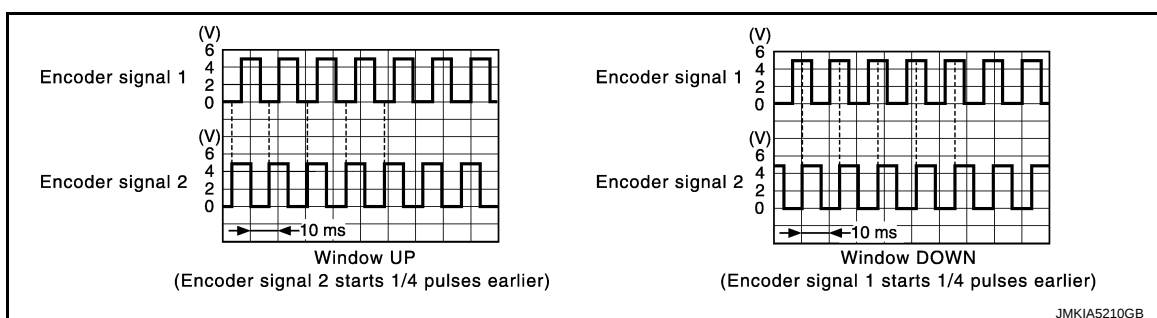
### 1.CHECK ENCODER SIGNAL

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

| Signal name      | (+)                         |          | (−)    | Signal<br>(Reference value) |
|------------------|-----------------------------|----------|--------|-----------------------------|
|                  | Rear power window switch RH |          |        |                             |
|                  | Connector                   | Terminal |        |                             |
| Encoder signal 1 | D43                         | 12       | Ground | Refer to following signal   |
| Encoder signal 2 |                             | 15       |        |                             |

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >



Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to [PWC-73, "Removal and Installation"](#).

NO >> GO TO 2.

## 2.CHECK ENCODER SIGNAL CIRCUIT

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

| Rear power window switch RH |          | Rear power window motor RH |          | Continuity |
|-----------------------------|----------|----------------------------|----------|------------|
| Connector                   | Terminal | Connector                  | Terminal |            |
| D43                         | 12       | D47                        | 5        | Existed    |
|                             | 15       |                            | 6        |            |

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

| Rear power window switch RH |          | Ground | Continuity  |
|-----------------------------|----------|--------|-------------|
| Connector                   | Terminal |        |             |
| D43                         | 12       |        | Not existed |
|                             | 15       |        |             |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK ENCODER POWER SUPPLY

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

| (+)                        |          | (-)    | Voltage (V)<br>(Approx.) |
|----------------------------|----------|--------|--------------------------|
| Rear power window motor RH |          |        |                          |
| Connector                  | Terminal |        |                          |
| D47                        | 2        | Ground | 12                       |

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

# ENCODER

## < DTC/CIRCUIT DIAGNOSIS >

| Rear power window switch RH |          | Rear power window motor RH |          | Continuity |
|-----------------------------|----------|----------------------------|----------|------------|
| Connector                   | Terminal | Connector                  | Terminal |            |
| D43                         | 4        | D47                        | 2        | Existed    |

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

| Rear power window switch RH |          | Ground | Continuity  |
|-----------------------------|----------|--------|-------------|
| Connector                   | Terminal |        |             |
| D43                         | 4        |        | Not existed |

Is the inspection result normal?

YES >> Replace rear power window switch RH. Refer to [PWC-73, "Removal and Installation"](#).

NO >> Repair or replace harness.

## 5.CHECK GROUND CIRCUIT 1

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

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

## 6.CHECK GROUND CIRCUIT 2

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

| Rear power window switch RH |          | Ground | Continuity |
|-----------------------------|----------|--------|------------|
| Connector                   | Terminal |        |            |
| D43                         | 3        |        | Existed    |

Is the inspection result normal?

YES >> Replace rear power window motor RH. Refer to [GW-27, "Removal and Installation"](#).

NO >> Replace rear power window switch RH. Refer to [PWC-73, "Removal and Installation"](#).

PWC

# DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## DOOR KEY CYLINDER SWITCH

### Component Function Check

INFOID:0000000010257165

#### 1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [DLK-41, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

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

Is the inspection result normal?

YES >> Door key cylinder switch is OK.

NO >> Refer to [PWC-52, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:0000000010257166

#### 1.CHECK DOOR KEY CYLINDER SWITCH SIGNAL

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

| (+)                                                               |          | (-)    | Voltage (V)<br>(Approx.) |
|-------------------------------------------------------------------|----------|--------|--------------------------|
| Front door lock assembly (driver side) (door key cylinder switch) |          |        |                          |
| Connector                                                         | Terminal |        |                          |
| D9                                                                | 5        | Ground | 5                        |
|                                                                   | 6        |        |                          |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2.CHECK DOOR KEY CYLINDER SWITCH CIRCUIT

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

| Power window main switch |          | Front door lock assembly (driver side) (door key cylinder switch) |          | Continuity |
|--------------------------|----------|-------------------------------------------------------------------|----------|------------|
| Connector                | Terminal | Connector                                                         | Terminal |            |
| D5                       | 15       | D9                                                                | 6        | Existed    |
|                          | 16       |                                                                   | 5        |            |

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

## DOOR KEY CYLINDER SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

| Power window main switch |          | Ground | Continuity  |
|--------------------------|----------|--------|-------------|
| Connector                | Terminal |        |             |
| D5                       | 15       |        | Not existed |
|                          | 16       |        |             |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

| Front door lock assembly (driver side) (door key cylinder switch) |          | Ground | Continuity |
|-------------------------------------------------------------------|----------|--------|------------|
| Connector                                                         | Terminal |        |            |
| D9                                                                | 4        |        | Existed    |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4.CHECK DOOR KEY CYLINDER SWITCH

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

Refer to [PWC-53, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (driver side) (door key cylinder switch). Refer to [DLK-245, "DOOR LOCK : Removal and Installation"](#).

### 5.CHECK INTERMITTENT INCIDENT

Refer to [GI-43, "Intermittent Incident"](#).

>> INSPECTION END

## Component Inspection

INFOID:0000000010257167

### COMPONENT INSPECTION

#### 1.CHECK DOOR KEY CYLINDER SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side) (door key cylinder switch). Refer to [DLK-245, "DOOR LOCK : Removal and Installation"](#).

# POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

## POWER WINDOW SERIAL LINK

### POWER WINDOW MAIN SWITCH

#### POWER WINDOW MAIN SWITCH : Component Function Check

INFOID:0000000010257168

#### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

##### With CONSULT

Check ("CDL LOCK SW ", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [DLK-41, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

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

Is the inspection result normal?

YES >> Power window serial link is OK.

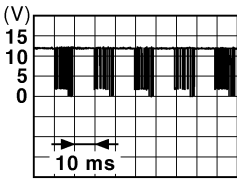
NO >> Refer to [PWC-54, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

#### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000010257169

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

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

| (+) power window main switch |          | (-)    | Signal<br>(Reference value)                                                           |
|------------------------------|----------|--------|---------------------------------------------------------------------------------------|
| Connector                    | Terminal |        |                                                                                       |
| D5                           | 13       | Ground |  |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

#### 2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

| (+) Power window main switch |          | (-)    | Voltage (V)<br>(Approx.) |
|------------------------------|----------|--------|--------------------------|
| Connector                    | Terminal |        |                          |
| D5                           | 13       | Ground | 12                       |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).

## POWER WINDOW SERIAL LINK

### < DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 3.

### 3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

| BCM       |          | Power window main switch |          | Continuity |
|-----------|----------|--------------------------|----------|------------|
| Connector | Terminal | Connector                | Terminal |            |
| M68       | 8        | D5                       | 13       | Existed    |

3. Check continuity between BCM harness connector and ground.

| BCM       |          | Ground | Continuity  |
|-----------|----------|--------|-------------|
| Connector | Terminal |        |             |
| M68       | 8        |        | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-95, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-43, "Intermittent Incident"](#).

>> INSPECTION END

## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

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

INFOID:0000000010257170

### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

#### With CONSULT

Check ("CDL LOCK SW ", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [DLK-41, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

PWC

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

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to [PWC-55, "FRONT POWER WINDOW SWITCH \(PASSENGER SIDE\) : Diagnosis Procedure"](#).

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

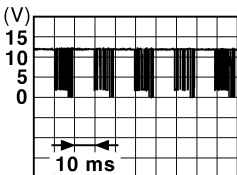
INFOID:0000000010257171

### 1.CHECK POWER WINDOW SWITCH INPUT SIGNAL

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

# POWER WINDOW SERIAL LINK

## < DTC/CIRCUIT DIAGNOSIS >

| (+)                                        |          | (-)    | Signal<br>(Reference value)                                                                            |
|--------------------------------------------|----------|--------|--------------------------------------------------------------------------------------------------------|
| Front power window switch (passenger side) |          |        |                                                                                                        |
| Connector                                  | Terminal |        |                                                                                                        |
| D25                                        | 16       | Ground |  <p>JPMIA0013GB</p> |

Is the inspection result normal?

YES >> Replace front power window switch (passenger side). Refer to [PWC-73, "Removal and Installation"](#).

NO >> GO TO 2.

## 2.CHECK POWER WINDOW SERIAL LINK 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.

| (+)                                        |          | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------------------------|----------|--------|--------------------------|
| Front power window switch (passenger side) |          |        |                          |
| Connector                                  | Terminal |        |                          |
| D25                                        | 16       | Ground | 12                       |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).

NO >> GO TO 3.

## 3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

| Power window main switch |          | Front power window switch (passenger side) |          | Continuity |
|--------------------------|----------|--------------------------------------------|----------|------------|
| Connector                | Terminal | Connector                                  | Terminal |            |
| D5                       | 13       | D25                                        | 16       | Existed    |

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-43, "Intermittent Incident"](#).

>> INSPECTION END

REAR POWER WINDOW SWITCH LH

## POWER WINDOW SERIAL LINK

< DTC/CIRCUIT DIAGNOSIS >

### REAR POWER WINDOW SWITCH LH : Component Function Check

INFOID:000000010257172

#### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

##### With CONSULT

Check ("CDL LOCK SW ", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [DLK-41, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

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

Is the inspection result normal?

YES >> Power window serial link is OK.

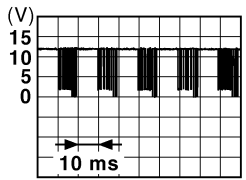
NO >> Refer to [PWC-57, "REAR POWER WINDOW SWITCH LH : Diagnosis Procedure"](#).

### REAR POWER WINDOW SWITCH LH : Diagnosis Procedure

INFOID:000000010257173

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

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

| (+)Rear power window switch LH |          | (-)    | Signal<br>(Reference value)                                                                         |
|--------------------------------|----------|--------|-----------------------------------------------------------------------------------------------------|
| Connector                      | Terminal |        |                                                                                                     |
| D63                            | 16       | Ground | <br>JPMA0013GB |

Is the inspection result normal?

YES >> Replace rear power window switch LH. Refer to [PWC-73, "Removal and Installation"](#).

NO >> GO TO 2.

#### 2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

| (+)Rear power window switch LH |          | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------------|----------|--------|--------------------------|
| Connector                      | Terminal |        |                          |
| D63                            | 16       | Ground | 12                       |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).

NO >> GO TO 3.

#### 3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect power window main switch connector.

## POWER WINDOW SERIAL LINK

### < DTC/CIRCUIT DIAGNOSIS >

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

| Power window main switch |          | Rear power window switch LH |          | Continuity |
|--------------------------|----------|-----------------------------|----------|------------|
| Connector                | Terminal | Connector                   | Terminal |            |
| D5                       | 13       | D63                         | 16       | Existed    |

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-43, "Intermittent Incident"](#).

>> INSPECTION END

## REAR POWER WINDOW SWITCH RH

### REAR POWER WINDOW SWITCH RH : Component Function Check

INFOID:0000000010257174

#### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

##### With CONSULT

Check ("CDL LOCK SW", "CDL UNLOCK SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to [DLK-41, "DOOR LOCK : CONSULT Function \(BCM - DOOR LOCK\)"](#).

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

Is the inspection result normal?

YES >> Power window serial link is OK.

NO >> Refer to [PWC-58, "REAR POWER WINDOW SWITCH RH : Diagnosis Procedure"](#).

### REAR POWER WINDOW SWITCH RH : Diagnosis Procedure

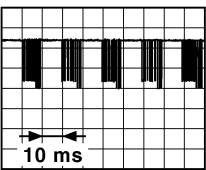
INFOID:0000000010257175

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

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

# POWER WINDOW SERIAL LINK

## < DTC/CIRCUIT DIAGNOSIS >

| (+)<br>Rear power window switch RH |          | (-)    | Signal<br>(Reference value)                                                                                                                                                                                |
|------------------------------------|----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connector                          | Terminal |        |                                                                                                                                                                                                            |
| D43                                | 16       | Ground | <div><div><div>(V)</div><div>15</div><div>10</div><div>5</div><div>0</div></div><div></div><div>JPMIA0013GB</div></div> |

Is the inspection result normal?

- YES >> Replace rear power window switch RH. Refer to [PWC-73, "Removal and Installation"](#).  
 NO >> GO TO 2.

## 2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

| (+)                         |          | (-)    | Voltage (V)<br>(Approx.) |
|-----------------------------|----------|--------|--------------------------|
| Rear power window switch RH |          |        |                          |
| Connector                   | Terminal |        |                          |
| D43                         | 16       | Ground | 12                       |

Is the inspection result normal?

- YES >> Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).  
 NO >> GO TO 3.

## 3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

| Power window main switch |          | Rear power window switch RH |          | Continuity |
|--------------------------|----------|-----------------------------|----------|------------|
| Connector                | Terminal | Connector                   | Terminal |            |
| D5                       | 13       | D43                         | 16       | Existed    |

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

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

Is the inspection result normal?

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

## 4.CHECK INTERMITTENT INCIDENT

Refer to [GI-43, "Intermittent Incident"](#).

>> INSPECTION END

A  
B  
C  
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F  
G  
H  
I  
J  
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O  
P

PWC

# POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### POWER WINDOWS DO NOT OPERATE WITH POWER WINDOW MAIN SWITCH

#### Diagnosis Procedure

INFOID:0000000010257176

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

Check BCM power supply and ground circuit.

[BCS-95, "Removal and Installation"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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

Check power window switch power supply and ground circuit.

Refer to [PWC-35, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3.CHECK POWER WINDOW MAIN SWITCH SERIAL LINK CIRCUIT

Check power window serial link circuit.

Refer to [PWC-54, "POWER WINDOW MAIN SWITCH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

#### 4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

# DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000010257177

#### 1.CHECK DRIVER SIDE POWER WINDOW MOTOR

Check driver side power window motor.

Refer to [PWC-39, "DRIVER SIDE : Component Function Check"](#).

Is the measurement value within the specification?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

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## FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

### FRONT PASSENGER SIDE POWER WINDOW DOES NOT OPERATE WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000010257178

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

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

Refer to [PWC-55. "FRONT POWER WINDOW SWITCH \(PASSENGER SIDE\) : 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-43. "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:0000000010257179

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

Replace front power window switch (passenger side).

Refer to [PWC-73. "Removal and Installation"](#)

>> INSPECTION END

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:0000000010257180

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

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

Refer to [PWC-36. "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 PASSENGER SIDE POWER WINDOW MOTOR CIRCUIT

Check passenger side power window motor circuit.

Refer to [PWC-40. "PASSENGER SIDE : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43. "Intermittent Incident"](#).

NO >> GO TO 1.

## REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

### REAR LH SIDE POWER WINDOW ALONE DOES NOT OPERATE WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000010257181

#### 1.CHECK REAR POWER WINDOW SWITCH LH SERIAL LINK CIRCUIT

Check rear power window switch LH serial link circuit.

Refer to [PWC-57, "REAR POWER WINDOW SWITCH LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

### WHEN REAR POWER WINDOW SWITCH LH IS OPERATED

WHEN REAR POWER WINDOW SWITCH LH IS OPERATED : Diagnosis Procedure

INFOID:0000000010257182

#### 1.REPLACE REAR POWER WINDOW SWITCH LH

Replace rear power window switch LH.

Refer to [PWC-73, "Removal and Installation"](#)

>> INSPECTION END

### WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW SWITCH LH ARE OPERATED

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

INFOID:0000000010257183

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

Check rear power window switch power supply and ground circuit.

Refer to [PWC-37, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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

Check rear power window motor LH.

Refer to [PWC-41, "REAR LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

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## REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

### REAR RH SIDE POWER WINDOW ALONE DOES NOT OPERATE WHEN POWER WINDOW MAIN SWITCH IS OPERATED

WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000010257184

#### 1.CHECK REAR POWER WINDOW SWITCH RH SERIAL LINK CIRCUIT

Check rear power window switch RH serial link circuit.

Refer to [PWC-58, "REAR POWER WINDOW SWITCH RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

WHEN REAR POWER WINDOW SWITCH RH IS OPERATED

WHEN REAR POWER WINDOW SWITCH RH IS OPERATED : Diagnosis Procedure

INFOID:0000000010257185

#### 1.REPLACE REAR POWER WINDOW SWITCH RH

Replace rear power window switch RH.

Refer to [PWC-73, "Removal and Installation"](#)

>> INSPECTION END

WHEN BOTH POWER WINDOW MAIN SWITCH AND REAR POWER WINDOW  
SWITCH RH ARE OPERATED

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

INFOID:0000000010257186

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

Check rear power window switch power supply and ground circuit.

Refer to [PWC-37, "REAR POWER WINDOW SWITCH : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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

Check rear power window motor RH.

Refer to [PWC-41, "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

#### 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

# AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY

< SYMPTOM DIAGNOSIS >

## AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY

### DRIVER SIDE

#### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000010257187

##### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to [PWC-33, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

##### 2.CHECK ENCODER (DRIVER SIDE) CIRCUIT

Check encoder (driver side) circuit.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

##### 3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

### PASSENGER SIDE

#### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000010257188

##### 1.PERFORM INITIALIZAITON PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to [PWC-33, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

##### 2.CHECK ENCODER (PASSENGER SIDE) CIRCUIT

Check encoder (passenger side) circuit.

Refer to [PWC-45, "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-43, "Intermittent Incident"](#).

NO >> GO TO 1.

### REAR LH

#### REAR LH : Diagnosis Procedure

INFOID:0000000010257189

##### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

# AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATE NORMALLY

## < SYMPTOM DIAGNOSIS >

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Refer to [PWC-33, "Work Procedure"](#)

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

## 2. CHECK ENCODER (REAR LH) CIRCUIT

---

Check encoder (rear LH) circuit.

Refer to [PWC-47, "REAR LH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3. CONFIRM THE OPERATION

---

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

## REAR RH

## REAR RH : Diagnosis Procedure

INFOID:0000000010257190

## 1. PERFORM INITIALIZATION PROCEDURE

---

Initialization procedure is performed and operation is confirmed.

Refer to [PWC-33, "Work Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

## 2. CHECK ENCODER (REAR RH) CIRCUIT

---

Check encoder (rear RH) circuit.

Refer to [PWC-49, "REAR RH : Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3. CONFIRM THE OPERATION

---

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

# ANTI-PINCH FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## ANTI-PINCH FUNCTION DOES NOT OPERATE

### Diagnosis Procedure

INFOID:000000010257191

#### 1.CHECK POWER WINDOW AUTO OPERATION

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [PWC-65, "DRIVER SIDE : Diagnosis Procedure"](#) (driver side), [PWC-65, "PASSENGER SIDE : Diagnosis Procedure"](#) (passenger side), [PWC-65, "REAR LH : Diagnosis Procedure"](#) (rear LH), [PWC-66, "REAR RH : Diagnosis Procedure"](#) (rear RH).

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

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# POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

< SYMPTOM DIAGNOSIS >

## POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

### Diagnosis Procedure

INFOID:0000000010257192

#### 1.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-121, "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-43, "Intermittent Incident"](#).

NO >> GO TO 1.

# DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

< SYMPTOM DIAGNOSIS >

## DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

### Diagnosis Procedure

INFOID:000000010257193

#### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.

Refer to [PWC-33, "Work Procedure"](#)

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

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

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

Refer to [PWC-52, "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-43, "Intermittent Incident"](#).

NO >> GO TO 1.

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# KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

---

## KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

### Diagnosis Procedure

INFOID:000000010257194

#### 1.CHECK REMOTE KEYLESS ENTRY FUNCTION

---

Check remote keyless entry function.

Does door lock/unlock with Intelligent key button?

YES >> GO TO 2.

NO >> Refer to [DLK-179, "Diagnosis Procedure"](#).

#### 2.CHECK POWER WINDOW OPERATION

---

Check power window operation.

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

YES >> GO TO 3.

NO >> Refer to [PWC-35, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure"](#).

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

---

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

Refer to [DLK-43, "INTELLIGENT KEY : CONSULT Function \(BCM - INTELLIGENT KEY\)"](#).

Is the inspection result normal?

YES >> GO TO 4.

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

#### 4.CONFIRM THE OPERATION

---

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-43, "Intermittent Incident"](#).

NO >> GO TO 1.

# POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

< SYMPTOM DIAGNOSIS >

## POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

### Diagnosis Procedure

INFOID:0000000010257195

#### 1.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch. Refer to [PWC-73, "Removal and Installation"](#).

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# POWER WINDOW SWITCH DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

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## POWER WINDOW SWITCH DOES NOT ILLUMINATE

### DRIVER SIDE

#### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000010257196

#### 1.REPLACE POWER WINDOW MAIN SWITCH

---

Replace power window main switch.

Refer to [PWC-73, "Removal and Installation"](#).

>> INSPECTION END

### PASSENGER SIDE

#### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000010257197

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

---

Replace front power window switch (passenger side).

Refer to [PWC-73, "Removal and Installation"](#).

>> INSPECTION END

### REAR LH

#### REAR LH : Diagnosis Procedure

INFOID:0000000010257198

#### 1.REPLACE REAR POWER WINDOW SWITCH LH

---

Replace rear power window switch LH.

Refer to [PWC-73, "Removal and Installation"](#).

>> INSPECTION END

### REAR RH

#### REAR RH : Diagnosis Procedure

INFOID:0000000010257199

#### 1.REPLACE REAR POWER WINDOW SWITCH RH

---

Replace rear power window switch RH.

Refer to [PWC-73, "Removal and Installation"](#).

>> INSPECTION END

# POWER WINDOW MAIN SWITCH

< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### POWER WINDOW MAIN SWITCH

#### Removal and Installation

INFOID:0000000010257200

#### REMOVAL

1. Remove the front door finisher.  
Refer to [INT-14, "Removal and Installation"](#).
2. Disconnect power window main switch fixing screws to remove power window main switch.

#### INSTALLATION

Install in the reverse order of removal.

#### NOTE:

When power window main switch is replaced or is removed, it is necessary to do the initialization procedure.  
Refer to [PWC-33, "Work Procedure"](#).

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## FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

< REMOVAL AND INSTALLATION >

---

### FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

#### Removal and Installation

INFOID:0000000010257201

#### REMOVAL

1. Remove the front door finisher.  
Refer to [INT-14, "Removal and Installation"](#).
2. Disconnect front power window switch (passenger side) fixing screws to remove front power window switch (passenger side).

#### INSTALLATION

Install in the reverse order of removal.

# REAR POWER WINDOW SWITCH

< REMOVAL AND INSTALLATION >

## REAR POWER WINDOW SWITCH

### Removal and Installation

INFOID:000000010257202

#### REMOVAL

1. Remove the rear door finisher.  
Refer to [INT-16, "Removal and Installation"](#).
2. Remove rear power window switch finisher from rear door finisher.  
Refer to [INT-16, "Removal and Installation"](#).
3. Disengage pawls of rear power window switch finisher using remover tool to remove rear power window switch.

#### CAUTION:

**Never fold the pawl of rear power window switch finisher.**

#### NOTE:

The same procedure is also performed for rear power window switch LH and RH.

#### INSTALLATION

Install in the reverse order of removal.

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