# SECTION PWC

# POWER WINDOW CONTROL SYSTEM

## CONTENTS

### COUPE

# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORK FLOW

### Work Flow

INFOID:0000000007624983

DETAILED FLOW

#### 1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much malfunction information (conditions and environment when the malfunction occurs) 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 conditions when the symptoms occur.

>> GO TO 3.

#### 3.IDENTIFY THE MALFUNCTIONING SYSTEM WITH “SYMPTOM DIAGNOSIS”

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

>> GO TO 4.

#### 4.IDENTIFY THE MALFUNCTIONING PARTS WITH “COMPONENT DIAGNOSIS”

Diagnose with “Component diagnosis” of the applicable system.

>> GO TO 5.

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

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

#### 6.FINAL CHECK

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

Are the malfunctions corrected?

YES >> INSPECTION END
NO >> GO TO 3.

# INSPECTION AND ADJUSTMENT

## ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:0000000007624984

When the battery negative terminal is disconnected, the initialization is necessary.
If any of the following operations are performed, the initialization is necessary as well as when the negative battery terminal is disconnected.
- Power supply to the power window switch or power window motor is cut off by removal of battery terminal or if the battery fuse is blown.
- Disconnection and connection of power window 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 or door glass run.

The following specified operations cannot be performed under the non initialized condition.
- Auto-up operation
- Anti-pinch function
- Key cylinder switch power window function
- Automatic window adjusting function
- Auto-up, manual-up does not operate when door is open

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000007624985

#### INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or more.
2. Door switch is OFF (close).
3. Turn ignition switch ON.
4. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open.)
5. Continue pulling the power window switch AUTO-UP. Even after glass stops at the fully closed position, keep pulling the switch for 3 seconds or more.
6. Initializing procedure is completed.
7. Inspect anti-pinch function.

**CAUTION:**
**When initialization is not complete, power window UP does not operate while door is open.**

#### CHECK ANTI-PINCH FUNCTION

1. Fully open the door window.
2. Place a piece of wood near the fully closed position.
3. Close door glass completely with AUTO-UP.

- Check that glass lowers for approximately 150 mm (5.9 in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

**CAUTION:**
- **Never check with hands and other part of body because they may be pinched. Never get pinched.**
- **Check that AUTO-UP operates before inspection when system initialization is performed.**
- **Perform initial setting when auto-up operation or anti-pinch function does not operate normally.**
- **Finish initial setting. Otherwise, next operation cannot be performed.**

1. **Auto-up operation**
2. **Anti-pinch function**
3. **Key cylinder switch power window function**
4. **Automatic window adjusting function**
5. **Auto-up, manual-up does not operate when door is open**

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000007624986

When the control unit is replaced, the initialization is necessary.
If any of the following operations are performed, the initialization is necessary and the control unit must be disconnected.
- Power supply to the power window switch or power window motor is cut off by removal of battery terminal or if the battery fuse is blown.
- Disconnection and connection of power window 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 or door glass run.

The following specified operations cannot be performed under the non initialized condition.
- Auto-up operation
- Anti-pinch function
- Key cylinder switch power window function
- Automatic window adjusting function
- Auto-up, manual-up does not operate when door is open

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000007624987

### INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or more.
2. Door switch is OFF (close).
3. Turn ignition switch ON.
4. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open.)
5. Continue pulling the power window switch AUTO-UP. Even after glass stops at the fully closed position, keep pulling the switch for 3 seconds or more.
6. Initializing procedure is completed.
7. Inspect anti-pinch function.

**CAUTION:**
**When initialization is not complete, power window UP does not operate while door is open.**

### CHECK ANTI-PINCH FUNCTION

1. Fully open the door window.
2. Place a piece of wood near the fully closed position.
3. Close door glass completely with AUTO-UP.

- Check that glass lowers for approximately 150 mm (5.9 in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window switch while lowering.

**CAUTION:**
- **Never check with hands and other part of body because they may be pinched. Never get pinched.**
- **Check that AUTO-UP operates before inspection when system initialization is performed.**
- **Perform initial setting when auto-up operation or anti-pinch function does not operate normally.**
- **Finish initial setting. Otherwise, next operation cannot be performed.**

1. **Auto-up operation**
2. **Anti-pinch function**
3. **Key cylinder switch power window function**
4. **Automatic window adjusting function**
5. **Auto-up, manual-up does not operate when door is open**

# SYSTEM DESCRIPTION

## POWER WINDOW SYSTEM

### System Diagram

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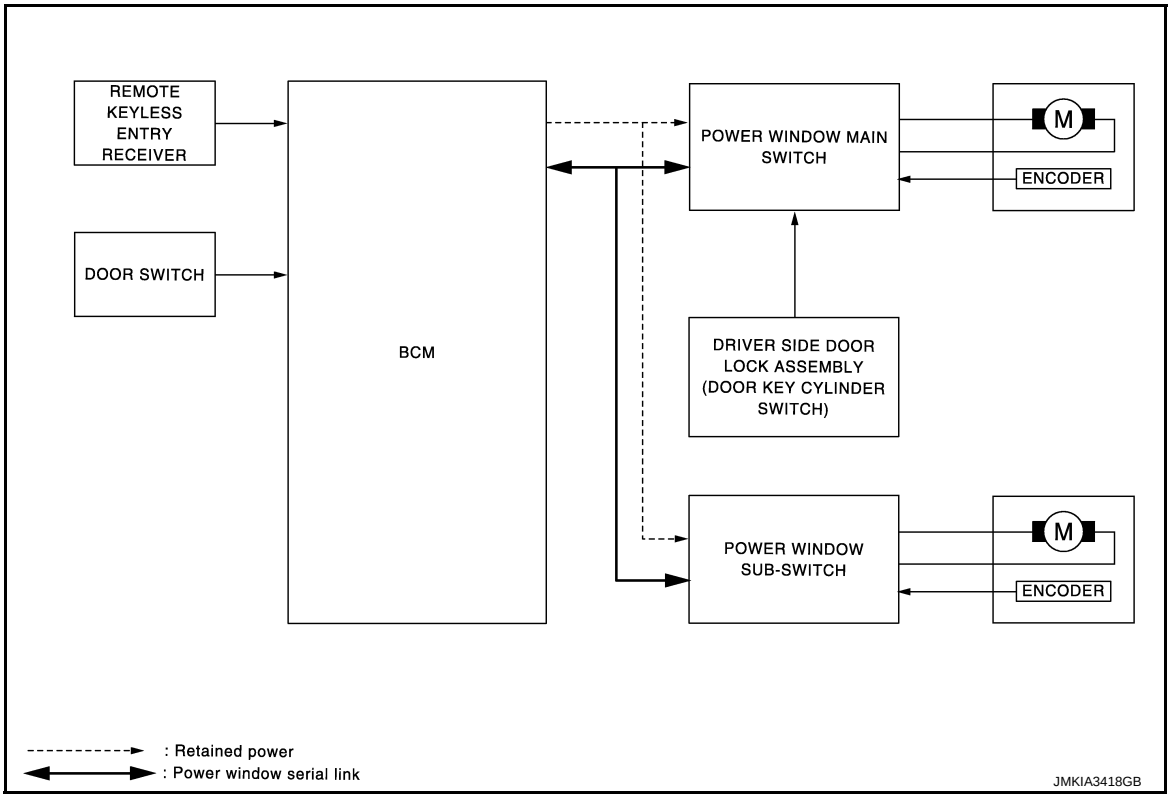



### System Description

INFOID:0000000007624989

POWER WINDOW SYSTEM

- Power window system is activated by power window switch operation when ignition switch is turned ON and during the retained power operation, after ignition switch turned OFF.
- Power window main switch can open/close all windows.
- Power window sub-switch can open/close the passenger side windows.
- AUTO operation can be activated by operating the power window switch once.
- It transmits and receives the signal between BCM and power window main switch or power window sub switch, via serial communication.
- When pressing power window lock switch, operation other than power window main switch becomes impossible.
- When detecting the pinching resistance of foreign materials, etc. during power window AUTO UP operation, it lowers door glass to the specified value.
- When opening driver side or passenger side door while door glass is being fully closed, it lowers door glass of the door a little from the closed position. When closing the door, it return door glass to the fully closed position.
- All power windows open or close when Intelligent Key unlock button is pressed for 3seconds.
- Hold the door key cylinder to the UNLOCK direction for 1 second or more to OPEN all power windows when ignition switch OFF.

POWER WINDOW AUTO-OPERATION

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

## POWER WINDOW SERIAL LINK

Power window main switch, power window sub-switch and BCM transmit and receive the signal by power window serial link.
The under mentioned signal is transmitted from BCM to power window main switch.
- Driver side door switch signal.
- Keyless power window down signal.
- Retained power operation signal.

The under mentioned signal is transmitted from BCM to power window sub-switch.
- Passenger side door switch signal.
- Keyless power window down signal.
- Retained power operation signal.

The following signal is transmitted from power window main switch to power window sub-switch.
- Passenger side door window operation signal.
- Power window lock signal.
- Power window control by key cylinder switch signal.

## RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate for 45 seconds after ignition switch turns OFF.
RETAINED POWER FUNCTION CANCEL CONDITIONS
- Front door CLOSED (door switch OFF) → OPEN (door switch ON).
- When ignition switch turns ON again.
- When timer times out. (45 seconds)

## POWER WINDOW LOCK FUNCTION

Switch operation other than power window main switch is prohibited when power window lock switch is ON. Power window main switch does not operate any power window other than driver power window.

## ANTI-PINCH FUNCTION

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

## AUTOMATIC WINDOW ADJUSTING FUNCTION

When the driver/passenger door(s) is open, the window of the opened door is lowered approximately 10 mm (0.39 in).
When the door is closed, the window is raised to the fully closed position.
Automatic window adjusting function system (opening operation) does not operate when the following item occurs.
- The window is 10 mm (0.39 in) or more open from the fully closed position.

Automatic window adjusting function system (closing operation) does not operate when the following item occurs.
- The automatic window adjusting function system (opening operation) operation.

## DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Hold the door key cylinder to the LOCK or UNLOCK position for 1 second or more to OPEN or CLOSE all power windows when ignition switch is OFF. In addition, it stops when the key position is NEUTRAL when operating.
OPERATION CONDITION
- Ignition switch OFF.
- Hold door key cylinder to the LOCK position for 1 second or more to perform CLOSE operation of the door glass.

- Hold door key cylinder in the UNLOCK position for 1 second 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 pressed and held 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 function stops when the following operations are performed.

- When the unlock button is pressed and held for 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 activates, keyless power window down function cannot be operated.

Keyless power window down operation mode can be changed by “PW DOWN SET” mode in “WORK SUPPORT”. Refer to DLK-42, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)".

**NOTE:**

Use CONSULT to change settings.

MODE 1 (3 sec) / MODE 2 (OFF) / MODE 3 (5 sec)

## POWER CONSUMPTION CONTROL SYSTEM

Power window switch incorporates a power consumption control function that reduces the power consumption according the vehicle status.

LOW POWER CONSUMPTION MODE

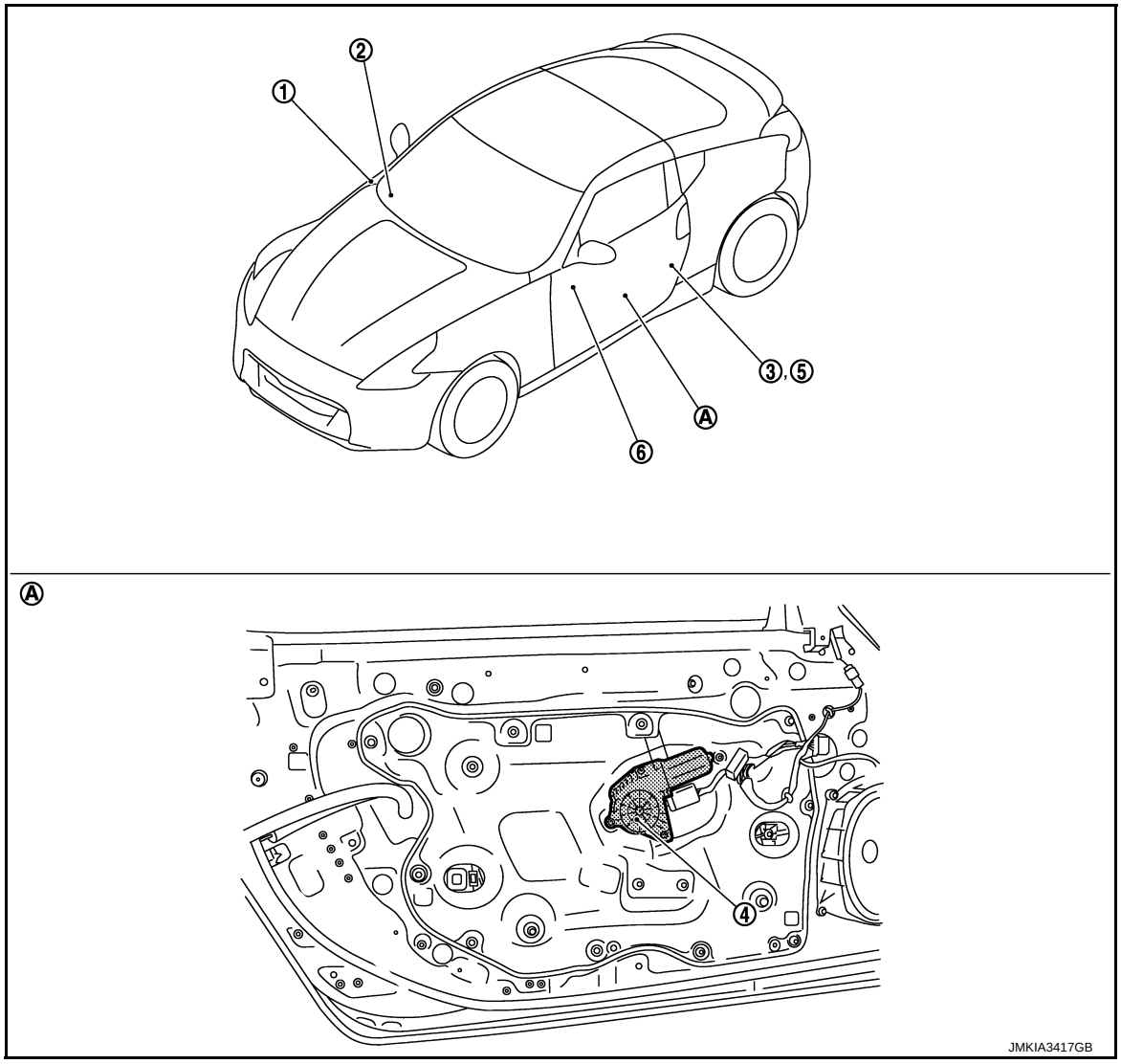
- Ignition switch OFF.
- Power window main switch and power window sub-switch do not receive a signal from serial link.
- Power window motor does not move.

If any of the following conditions are satisfied, the low power consumption mode is released.

- Ignition switch ON.
- When door key cylinder switch signal is received.
- When the signal is received from serial link.
- When door open/close signal is received.
- When power window switch door lock is operated.

## Component Parts Location

INFOID:0000000007624990




1. BCM M118, M119, M122, M123 BCS-9, "Component Parts Location"
2. Remote keyless entry receiver M104 DLK-16, "INTELLIGENT KEY SYSTEM : Component Parts Location"
3. Driver side door lock assembly (door key cylinder switch) D15
4. Driver side power window motor D10
5. Driver side door switch B16
6. Power window main switch D8

A. View with door finisher removed

## Component Description

INFOID:0000000007624991

| Component | Function |
|---|---|
| BCM | • Supplies power to power window switches.<br>• Controls retained power function |
| Power window main switch | • Directly controls all power window motors in all doors.<br>• Controls anti-pinch operation of power window. |
| Power window sub-switch | • Controls anti-pinch operation of power window.<br>• Controls power window motor of passenger door. |
| Power window motor | • Integrates the encoder and window motor.<br>• Starts operating with signals from each power window switch.<br>• Transmits power window motor rotation as a pulse signal to power window switch. |

| Component | Function |
|---|---|
| Driver side door lock assembly (door key cylinder switch) | Transmits operation condition of key cylinder switch to power window main switch. |
| Remote keyless entry receiver | Receives lock/unlock signal from intelligent key, and then transmits to BCM. |
| Door switch | Detects door open/close condition and transmits to BCM. |

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

INFOID:0000000007774249

#### APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode | Function Description |
|---|---|
| Work Support | Changes the setting for each system function. |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. |
| Data Monitor | The BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Ecu Identification | The BCM part number is displayed. |
| Configuration | • Read and save the vehicle specification.<br>• Write the vehicle specification when replacing BCM. |

#### SYSTEM APPLICATION
BCM can perform the following functions for each system.
**NOTE:**
It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|---|---|---|---|---|
| | | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp timer | INT LAMP | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | × | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| — | AIR CONDITONER* | | | |
| • Intelligent Key system<br>• Engine start system | INTELLIGENT KEY | × | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| NVIS - NATS | IMMU | | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door/Trunk lid open | TRUNK | | × | × |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | TPMS (AIR PRESSURE MONITOR) | × | × | × |

**NOTE:**

*: This item is displayed, but is not used.

#### FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

| 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 supply 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” (Except emergency stop operation) |
| | 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”* |
| | OFF | | Power supply position is “OFF” (Ignition switch OFF) |
| | 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<br>• The number is 0 when a malfunction is detected now.<br>• The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON.<br>• The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | |

**NOTE:**
*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.
- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

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

## RETAINED PWR

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

INFOID:0000000007624993

Data monitor

| 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. |

# DTC/CIRCUIT DIAGNOSIS

## POWER SUPPLY AND GROUND CIRCUIT

### BCM

### BCM : Diagnosis Procedure

INFOID:0000000007624994

#### 1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

| Terminal No. | Signal name | Fuse and fusible link No. |
|---|---|---|
| 1 | Battery power supply | K (40A) |
| 11 | | 10 (10A) |

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.
NO >> GO TO 2.

#### 2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check voltage between BCM harness connector and ground.

| (+) | | (–) | Voltage (Approx.) |
|---|---|---|---|
| BCM | | | |
| Connector | Terminal | | |
| M118 | 1 | Ground | Battery voltage |
| M119 | 11 | | |

Is the measurement value normal?

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

#### 3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M119 | 13 | | Existed |

Does continuity exist?

YES >> INSPECTION END
NO >> Repair harness or connector.

## POWER WINDOW MAIN SWITCH

### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000007624995

#### 1.CHECK POWER SUPPLY CIRCUIT 1

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.

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Power window main switch | | | |
| Connector | Terminal | | |
| D8 | 1 | Ground | 12 |
| | 10 | | |

Is the measurement value within the specification?

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

## 2.CHECK POWER SUPPLY CIRCUIT 2

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 | |
| M118 | 2 | D8 | 1 | Existed |
| | 3 | | 10 | |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M118 | 2 | | Not existed |
| | 3 | | |

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".
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 | | |
| D8 | 15 | | Existed |

Is the inspection result normal?

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

# POWER WINDOW SUB-SWITCH

## POWER WINDOW SUB-SWITCH : Diagnosis Procedure

INFOID:0000000007624996

## 1.CHECK POWER SUPPLY CIRCUIT 1

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

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Power window sub-switch | | | |
| Connector | Terminal | | |
| D38 | 10 | Ground | 12 |

Is the measurement value within the specification?

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

## 2. CHECK POWER SUPPLY CIRCUIT 2

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

| BCM | | Power window sub-switch | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M118 | 2 | D38 | 10 | Existed |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M118 | 2 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".
NO >> Repair or replace harness.

## 3. CHECK GROUND CIRCUIT

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

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 11 | | Existed |

Is the inspection result normal?

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

# POWER WINDOW MOTOR
## DRIVER SIDE

### DRIVER SIDE : Description

INFOID:0000000007624997

Door glass moves UP/DOWN by receiving the signal from power window main switch.

### DRIVER SIDE : Component Function Check

INFOID:0000000007624998

#### 1.CHECK POWER WINDOW MOTOR CIRCUIT

Check driver side power window motor operation with power window main switch.

Is the inspection result normal?

YES >> Driver side power window motor is OK.
NO >> Refer to PWC-20, "DRIVER SIDE : Diagnosis Procedure".

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007624999

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

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

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Driver side power window motor | | | | | |
| Connector | Terminal | | | | |
| D10 | 6 | Ground | Power window main switch | UP | 12 |
| | | | | DOWN | 0 |
| | 3 | | | UP | 0 |
| | | | | DOWN | 12 |

Is the measurement value within the specification?

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

#### 2.CHECK POWER WINDOW MOTOR

Check driver side power window motor.
Refer to PWC-21, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver side power window motor. Refer to GW-23, "Removal and Installation".

#### 3.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 driver side power window motor harness connector.

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 8 | D10 | 6 | Existed |
| | 11 | | 3 | |

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 8 | | Not existed |
| | 11 | | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-89, "Removal and Installation".
NO >> Repair or replace harness.

### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

## DRIVER SIDE : Component Inspection

INFOID:0000000007625000

### COMPONENT INSPECTION

### 1. CHECK DRIVER SIDE POWER WINDOW MOTOR

1. Turn ignition switch OFF.
2. Disconnect driver side power window motor connector.
3. Check motor operation by connecting the battery voltage directly to driver side power window motor connector.

| Driver side power window motor connector | Terminal | | Motor operation |
|---|---|---|---|
| | (+) | (–) | |
| D10 | 3 | 6 | DOWN |
| | 6 | 3 | UP |

Is the inspection result normal?

YES >> Driver side power window motor is OK.
NO >> Replace driver side power window motor. Refer to GW-23, "Removal and Installation".

# PASSENGER SIDE

## PASSENGER SIDE : Description

INFOID:0000000007625001

Door glass moves UP/DOWN by receiving the signal power window main switch or power window sub-switch .

## PASSENGER SIDE : Component Function Check

INFOID:0000000007625002

### 1. CHECK POWER WINDOW MOTOR CIRCUIT

Check passenger side power window motor operation with power window main switch or power window sub switch.

Is the inspection result normal?

YES >> Passenger side power window motor is OK.
NO >> Refer to PWC-21, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625003

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

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

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Passenger side power window motor | | | | | |
| Connector | Terminal | | | | |
| D40 | 6 | Ground | Power window sub-switch | UP | 12 |
| | | | | DOWN | 0 |
| | 3 | | | UP | 0 |
| | | | | DOWN | 12 |

Is the measurement value within the specification?

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

## 2.CHECK PASSENGER SIDE POWER WINDOW MOTOR

Check passenger side power window motor.
Refer to PWC-22, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace passenger side power window motor. Refer to GW-23, "Removal and Installation".

## 3.CHECK POWER WINDOW MOTOR CIRCUIT

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 9 | D40 | 3 | Existed |
| | 8 | | 6 | |

4. Check continuity between power window sub-switch connector and ground.

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 8 | | Not existed |
| | 9 | | |

Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-89, "Removal and Installation".
NO >> Repair or replace harness.

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# PASSENGER SIDE : Component Inspection

INFOID:0000000007625004

## COMPONENT INSPECTION

### 1.CHECK PASSENGER SIDE POWER WINDOW MOTOR

1. Turn ignition switch OFF.
2. Disconnect passenger side power window motor connector.
3. Check motor operation by connecting the battery voltage directly to passenger side power window motor connector.

| Passenger side power window motor connector | Terminal | | Motor condition |
|---|---|---|---|
| | (+) | (–) | |
| D40 | 3 | 6 | DOWN |
| | 6 | 3 | UP |

Is the inspection result normal?

YES >> Passenger side power window motor is OK.
NO >> Replace passenger side power window motor. Refer to GW-23, "Removal and Installation".

# ENCODER
## DRIVER SIDE

### DRIVER SIDE : Description

INFOID:0000000007625005

Detects condition of the driver side power window motor operation and transmits to power window main switch as the pulse signal.

### DRIVER SIDE : Component Function Check

INFOID:0000000007625006

#### 1.CHECK ENCODER OPERATION

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

Is the inspection result normal?

YES >> Encoder operation is OK.
NO >> Refer to PWC-24, "DRIVER SIDE : Diagnosis Procedure".

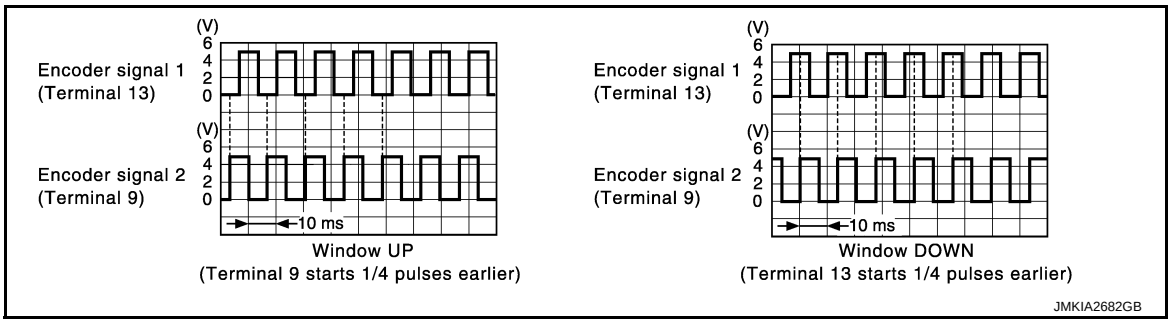
### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625007

#### 1.CHECK ENCODER OPERATION

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

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| Power window main switch | | | |
| Connector | Terminal | | |
| D8 | 9 | Ground | Refer to the following signal |
| | 13 | | |




Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-89, "Removal and Installation".
NO >> GO TO 2.

#### 2.CHECK ENCODER SIGNAL CIRCUIT

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

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 9 | D10 | 5 | Existed |
| | 13 | | 2 | |

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 9 | | Not existed |
| | 13 | | |

Is the inspection result normal?

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

## 3. CHECK ENCODER POWER SUPPLY CIRCUIT 1

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

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Driver side power window motor | | | |
| Connector | Terminal | | |
| D10 | 4 | Ground | 12 |

Is the measurement value within the specification?

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

## 4. CHECK ENCODER POWER SUPPLY CIRCUIT 2

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

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 5 | D10 | 4 | Existed |

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 5 | | Not existed |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-89, "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 driver side power window motor harness connector.

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 14 | D10 | 1 | Existed |

Is the inspection result normal?

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

## 6. CHECK GROUND CIRCUIT 2

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 14 | | Existed |

Is the inspection result normal?

YES >> Replace driver side power window motor. Refer to PWC-89, "Removal and Installation".
NO >> Replace power window main switch. Refer to PWC-89, "Removal and Installation".

# PASSENGER SIDE

## PASSENGER SIDE : Description

INFOID:0000000007625008

Detects condition of the passenger side power window motor operation and transmits to power window sub-switch as the pulse signal.

## PASSENGER SIDE : Component Function Check

INFOID:0000000007625009

### 1.CHECK ENCODER OPERATION

Check that passenger side door glass performs AUTO open operation normally with power window main switch or power window sub-switch.

Is the inspection result normal?

YES >> Encoder operation is OK.
NO >> Refer to PWC-26, "PASSENGER SIDE : Diagnosis Procedure".

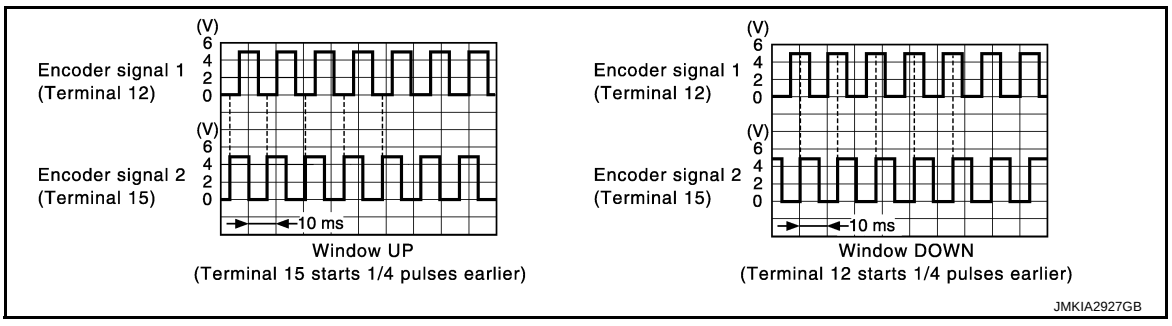
## PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625010

### 1.CHECK ENCODER SIGNAL

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

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| Power window sub-switch | | | |
| Connector | Terminal | | |
| D38 | 12 | Ground | Refer to the following signal |
| | 15 | | |




Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-89, "Removal and Installation".
NO >> GO TO 2.

### 2.CHECK ENCODER SIGNAL CIRCUIT

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 12 | D40 | 2 | Existed |
| | 15 | | 5 | |

4. Check continuity between power window sub-switch connector and ground.

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 12 | | Not existed |
| | 15 | | |

Is the inspection result normal?

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

## 3. CHECK ENCODER POWER SUPPLY CIRCUIT 1

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

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Passenger side power window motor | | | |
| Connector | Terminal | | |
| D40 | 4 | Ground | 12 |

Is the measurement value within the specification?

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

## 4. CHECK ENCODER POWER SUPPLY CIRCUIT 2

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 4 | D40 | 4 | Existed |

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

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 4 | | Not existed |

Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-89, "Removal and Installation".
NO >> Repair or replace harness.

## 5. CHECK GROUND CIRCUIT 1

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 3 | D40 | 1 | Existed |

Is the inspection result normal?

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

## 6. CHECK GROUND CIRCUIT 2

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

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 3 | | Existed |

Is the inspection result normal?

YES >> Replace passenger side power window motor. Refer to PWC-89, "Removal and Installation".
NO >> Replace power window sub-switch. Refer to PWC-89, "Removal and Installation".

# POWER WINDOW SERIAL LINK
## POWER WINDOW MAIN SWITCH

### POWER WINDOW MAIN SWITCH : Description

INFOID:0000000007625011

Power window main switch, power window sub-switch and BCM transmit and receive the signal by power window serial link.
The signal mentioned below is transmitted from BCM to power window main switch, power window sub-switch.
- Keyless power window down signal

The signal mentioned below is transmitted from power window main switch to power window sub-switch.
- Front passenger side door window operation signal
- Power window control by key cylinder switch signal
- Power window lock switch signal
- Retained power operation signal

### POWER WINDOW MAIN SWITCH : Component Function Check

INFOID:0000000007625012

#### 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 toDLK-40, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK) (For Coupe)".

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

Is the inspection result normal?

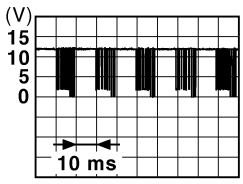
YES >> Power window serial link is OK.
NO >> Refer to PWC-29, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000007625013

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

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

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| Power window main switch | | | |
| Connector | Terminal | | |
| D8 | 12 | Ground |  |



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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.

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Power window main switch | | | |
| Connector | Terminal | | |
| D8 | 12 | Ground | 12 |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-89, "Removal and Installation".
NO >> GO TO 3.

## 3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

| BCM | | Power window main switch | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M123 | 132 | D8 | 12 | Existed |

4. Check continuity between BCM connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M123 | 132 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Removal and Installation".
NO >> Repair or replace harness.

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# POWER WINDOW SUB-SWITCH

## POWER WINDOW SUB-SWITCH : Description

INFOID:0000000007625014

Power window main switch, power window sub-switch and BCM transmit and receive the signal by power window serial link.
The signal mentioned below is transmitted from BCM to power window main switch, power window sub-switch.

- Keyless power window down signal

The signal mentioned below is transmitted from power window main switch to power window sub-switch.

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

## POWER WINDOW SUB-SWITCH : Component Function Check

INFOID:0000000007625015

## 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 toDLK-40, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK) (For Coupe)" .

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

Is the inspection result normal?

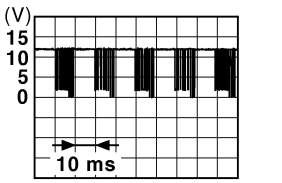
YES >> Power window serial link is OK.
NO >> Refer to PWC-31, "POWER WINDOW SUB-SWITCH : Diagnosis Procedure".

## POWER WINDOW SUB-SWITCH : Diagnosis Procedure

INFOID:0000000007625016

### 1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check signal between power window sub-switch harness connector and ground.

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| Power window sub-switch | | | |
| Connector | Terminal | | |
| D38 | 16 | Ground |  |



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Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-89, "Removal and Installation".
NO >> GO TO 2.

### 2.CHECK POWER WINDOW SERIAL LINK SIGNAL

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

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Power window sub-switch | | | |
| Connector | Terminal | | |
| D38 | 16 | Ground | 12 |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-89, "Removal and Installation".
NO >> GO TO 3.

### 3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

| BCM | | Power window sub-switch | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M123 | 132 | D38 | 16 | Existed |

4. Check continuity between BCM connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M123 | 132 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Removal and Installation".
NO >> Repair or replace harness.

# ECU DIAGNOSIS INFORMATION

## BCM (BODY CONTROL MODULE)

### Reference Value

INFOID:0000000007806687

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

| Monitor Item | Condition | Value/Status |
|---|---|---|
| FR WIPER HI | Other than front wiper switch HI | Off |
| | Front wiper switch HI | On |
| FR WIPER LOW | Other than front wiper switch LO | Off |
| | Front wiper switch LO | On |
| FR WASHER SW | Front washer switch OFF | Off |
| | Front washer switch ON | On |
| FR WIPER INT | Other than front wiper switch INT | Off |
| | Front wiper switch INT | On |
| FR WIPER STOP | Front wiper is not in STOP position | Off |
| | Front wiper is in STOP position | On |
| INT VOLUME | Wiper intermittent dial is in a dial position 1 - 7 | Wiper intermittent dial position |
| TURN SIGNAL R | Other than turn signal switch RH | Off |
| | Turn signal switch RH | On |
| TURN SIGNAL L | Other than turn signal switch LH | Off |
| | Turn signal switch LH | On |
| TAIL LAMP SW | Other than lighting switch 1ST and 2ND | Off |
| | Lighting switch 1ST or 2ND | On |
| HI BEAM SW | Other than lighting switch HI | Off |
| | Lighting switch HI | On |
| HEAD LAMP SW 1 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| HEAD LAMP SW 2 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| PASSING SW | Other than lighting switch PASS | Off |
| | Lighting switch PASS | On |
| AUTO LIGHT SW | Other than lighting switch AUTO | Off |
| | Lighting switch AUTO | On |
| FR FOG SW | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| RR FOG SW | Rear fog lamp switch OFF | Off |
| | Rear fog lamp switch ON | On |
| DOOR SW-DR | Driver door closed | Off |
| | Driver door opened | On |
| DOOR SW-AS | Passenger door closed | Off |
| | Passenger door opened | On |
| DOOR SW-RR | **NOTE:**<br>The item is indicated, but not monitored. | Off |

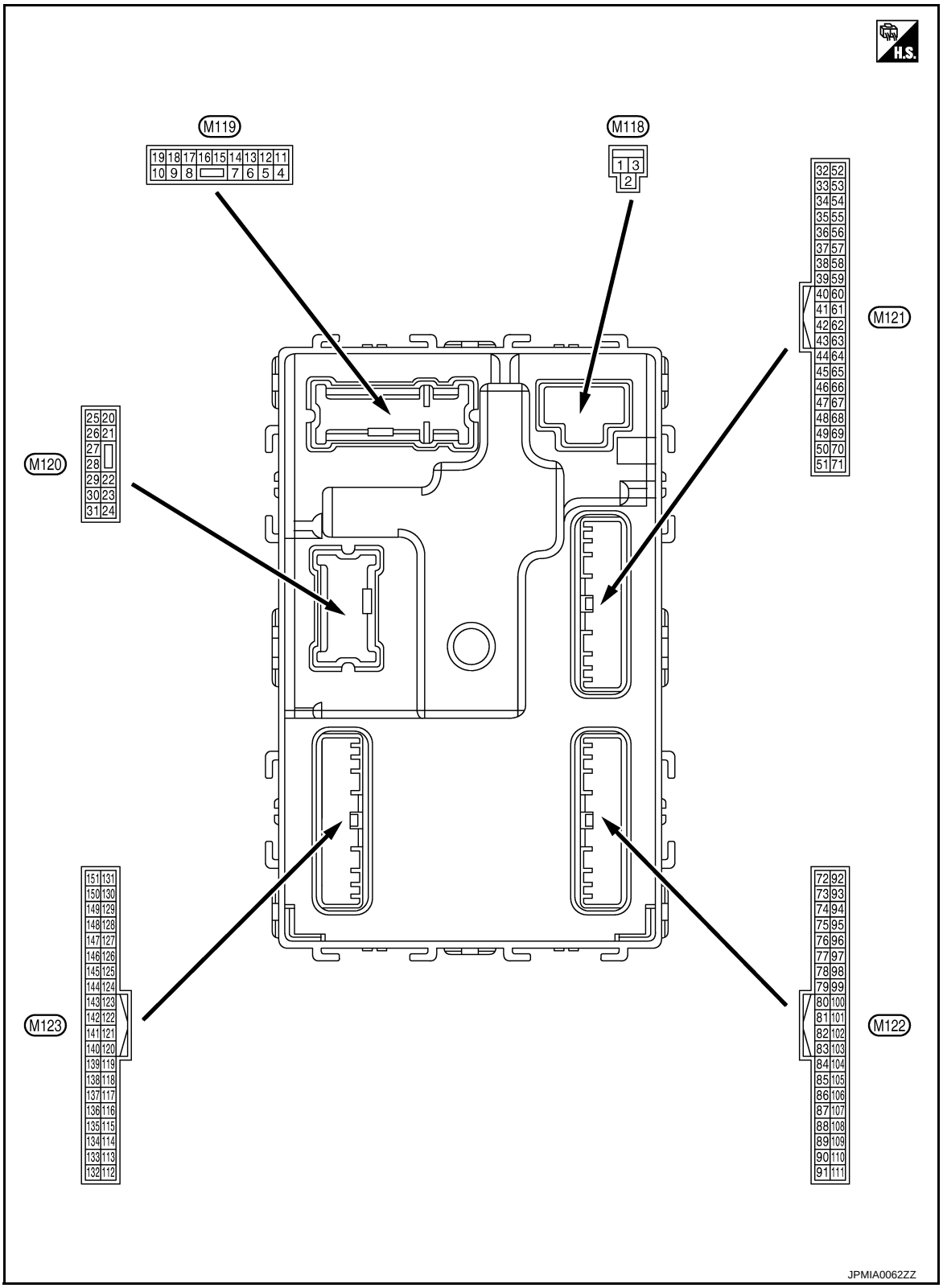
| Monitor Item | Condition | Value/Status |
|---|---|---|
| DOOR SW-RL | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| DOOR SW-BK | • Back door closed (Coupe models)<br>• Trunk lid closed (Roadster models) | Off |
| | • Back door opened (Coupe models)<br>• Trunk lid opened (Roadster models) | On |
| CDL LOCK SW | Other than door lock and unlock switch LOCK | Off |
| | Door lock and unlock switch LOCK | On |
| CDL UNLOCK SW | Other than door lock and unlock switch UNLOCK | Off |
| | Door lock and unlock switch UNLOCK | On |
| KEY CYL LK-SW | Other than driver door key cylinder LOCK position | Off |
| | Driver door key cylinder LOCK position | On |
| KEY CYL UN-SW | Other than driver door key cylinder UNLOCK position | Off |
| | Driver door key cylinder UNLOCK position | On |
| KEY CYL SW-TR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| HAZARD SW | Hazard switch is OFF | Off |
| | Hazard switch is ON | On |
| REAR DEF SW<br>**NOTE:**<br>For models with NAVI this item is not monitored. | Rear window defogger switch OFF | Off |
| | Rear window defogger switch ON | On |
| H/L WASH SW | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| TR CANCEL SW | Trunk lid opener cancel switch OFF | Off |
| | Trunk lid opener cancel switch ON | On |
| TR/BD OPEN SW | • Back door opener switch OFF (Coupe models)<br>• Trunk lid opener switch OFF (Roadster models) | Off |
| | • While the back door opener switch is turned ON (Coupe models)<br>• While the trunk lid opener switch is turned ON (Roadster models) | On |
| TRNK/HAT MNTR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| RKE-LOCK | LOCK button of the Intelligent Key is not pressed | Off |
| | LOCK button of the Intelligent Key is pressed | On |
| RKE-UNLOCK | UNLOCK button of the Intelligent Key is not pressed | Off |
| | UNLOCK button of the Intelligent Key is pressed | On |
| RKE-TR/BD<br>**NOTE:**<br>For Coupe models this item is not monitored. | TRUNK OPEN button of the Intelligent Key is not pressed | Off |
| | TRUNK OPEN of the Intelligent Key is pressed | On |
| RKE-PANIC | PANIC button of the Intelligent Key is not pressed | Off |
| | PANIC button of the Intelligent Key is pressed | On |
| RKE-P/W OPEN | UNLOCK button of the Intelligent Key is not pressed | Off |
| | UNLOCK button of the Intelligent Key is pressed and held | On |
| RKE-MODE CHG | LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously | Off |
| | LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously | On |

| Monitor Item | Condition | Value/Status |
|---|---|---|
| OPTICAL SENSOR | Bright outside of the vehicle | Close to 5 V |
| | Dark outside of the vehicle | Close to 0 V |
| REQ SW -DR | Driver door request switch is not pressed | Off |
| | Driver door request switch is pressed | On |
| REQ SW -AS | Passenger door request switch is not pressed | Off |
| | Passenger door request switch is pressed | On |
| REQ SW -RR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| REQ SW -RL | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| REQ SW -BD/TR | • Back door request switch is not pressed (Coupe models)<br>• Trunk lid door request switch is not pressed (Roadster models) | Off |
| | • Back door request switch is pressed (Coupe models)<br>• Trunk lid door request switch is pressed (Roadster models) | On |
| PUSH SW | Push-button ignition switch (push switch) is not pressed | Off |
| | Push-button ignition switch (push switch) is pressed | On |
| IGN RLY2 -F/B | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| ACC RLY -F/B | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| CLUCH SW<br>**NOTE:**<br>For A/T models this item is not monitored. | The clutch pedal is not depressed | Off |
| | The clutch pedal is depressed | On |
| BRAKE SW 1 | The brake pedal is depressed when No. 7 fuse is blown | Off |
| | The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal | On |
| BRAKE SW 2 | The brake pedal is not depressed | Off |
| | The brake pedal is depressed | On |
| DETE/CANCL SW<br>**NOTE:**<br>For M/T models with Synchro-Rev Match mode this item is not monitored. | • Selector lever in P position (A/T models)<br>• The clutch pedal is depressed (M/T models without SynchroRev Match mode) | Off |
| | • Selector lever in any position other than P (A/T models)<br>• The clutch pedal is not depressed (M/T models without SynchroRev Match mode) | On |
| SFT PN/N SW<br>**NOTE:**<br>For roadster M/T models and coupe M/T models without SynchroRev Match mode this item is not monitored. | • Selector lever in any position other than P and N (A/T models)<br>• Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode) | Off |
| | • Selector lever in P or N position (A/T models)<br>• Control lever in neutral position (Coupe M/T models with SynchroRev Match mode) | On |
| S/L -LOCK | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L -UNLOCK | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L RELAY-F/B | **NOTE:**<br>The item is indicated but not monitored. | Off |
| UNLK SEN -DR | Driver door is unlocked | Off |
| | Driver door is locked | On |
| PUSH SW -IPDM | Push-button ignition switch (push-switch) is not pressed | Off |
| | Push-button ignition switch (push-switch) is pressed | On |

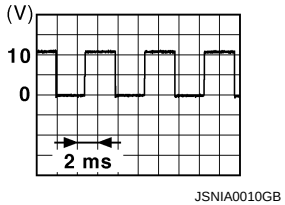
| Monitor Item | Condition | Value/Status |
|---|---|---|
| IGN RLY1 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| DETE SW -IPDM | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT PN -IPDM | • Selector lever in any position other than P and N (A/T models)<br>• The clutch pedal is not depressed (M/T models) | Off |
| | • Selector lever in P or N position (A/T models)<br>• The clutch pedal is depressed (M/T models) | On |
| SFT P -MET | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT N -MET | Selector lever in any position other than N | Off |
| | Selector lever in N position | On |
| ENGINE STATE | Engine stopped | Stop |
| | While the engine stalls | Stall |
| | At engine cranking | Crank |
| | Engine running | Run |
| S/L LOCK-IPDM | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L UNLK-IPDM | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L RELAY-REQ | **NOTE:**<br>The item is indicated but not monitored. | Off |
| VEH SPEED 1 | While driving | Equivalent to speedometer reading |
| VEH SPEED 2 | While driving | Equivalent to speedometer reading |
| DOOR STAT-DR | Driver door is locked | LOCK |
| | Wait with selective UNLOCK operation (60 seconds) | READY |
| | Driver door is unlocked | UNLOCK |
| DOOR STAT-AS | Passenger door is locked | LOCK |
| | Wait with selective UNLOCK operation (60 seconds) | READY |
| | Passenger door is unlocked | UNLOCK |
| ID OK FLAG | Driver side door is open after ignition switch is turned OFF<br>(Shift position is in the P position) | Reset |
| | Ignition switch ON | Set |
| PRMT ENG STRT | The engine start is prohibited | Reset |
| | The engine start is permitted | Set |
| PRMT RKE STRT | **NOTE:**<br>The item is indicated, but not monitored. | Reset |
| KEY SW -SLOT | The Intelligent Key is not inserted into key slot | Off |
| | The Intelligent Key is inserted into key slot | On |
| RKE OPE COUN1 | During the operation of the Intelligent Key | Operation frequency of the Intelligent Key |
| RKE OPE COUN2 | During the operation of the Intelligent Key | Operation frequency of the Intelligent Key |

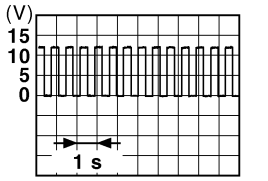
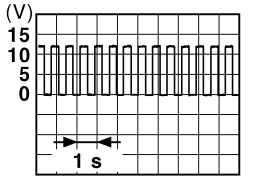
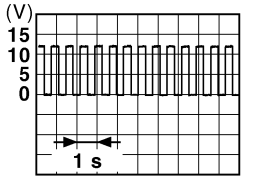
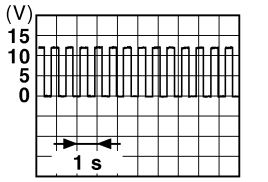
| Monitor Item | Condition | Value/Status |
|---|---|---|
| CONFRM ID ALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done |
| CONFIRM ID4 | The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the fourth key ID registered to BCM. | Done |
| CONFIRM ID3 | The key ID that the key slot receives is not recognized by the third key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the third key ID registered to BCM. | Done |
| CONFIRM ID2 | The key ID that the key slot receives is not recognized by the second key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the second key ID registered to BCM. | Done |
| CONFIRM ID1 | The key ID that the key slot receives is not recognized by the first key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the first key ID registered to BCM. | Done |
| TP 4 | The ID of fourth Intelligent Key is not registered to BCM | Yet |
| | The ID of fourth Intelligent Key is registered to BCM | Done |
| TP 3 | The ID of third Intelligent Key is not registered to BCM | Yet |
| | The ID of third Intelligent Key is registered to BCM | Done |
| TP 2 | The ID of second Intelligent Key is not registered to BCM | Yet |
| | The ID of second Intelligent Key is registered to BCM | Done |
| TP 1 | The ID of first Intelligent Key is not registered to BCM | Yet |
| | The ID of first Intelligent Key is registered to BCM | Done |
| AIR PRESS FL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front LH tire |
| AIR PRESS FR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front RH tire |
| AIR PRESS RR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear RH tire |
| AIR PRESS RL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear LH tire |
| ID REGST FL1 | ID of front LH tire transmitter is registered | Done |
| | ID of front LH tire transmitter is not registered | Yet |
| ID REGST FR1 | ID of front RH tire transmitter is registered | Done |
| | ID of front RH tire transmitter is not registered | Yet |
| ID REGST RR1 | ID of rear RH tire transmitter is registered | Done |
| | ID of rear RH tire transmitter is not registered | Yet |
| ID REGST RL1 | ID of rear LH tire transmitter is registered | Done |
| | ID of rear LH tire transmitter is not registered | Yet |
| WARNING LAMP | Tire pressure indicator OFF | Off |
| | Tire pressure indicator ON | On |
| BUZZER | Tire pressure warning alarm is not sounding | Off |
| | Tire pressure warning alarm is sounding | On |

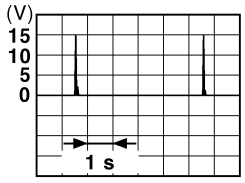
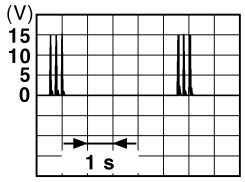
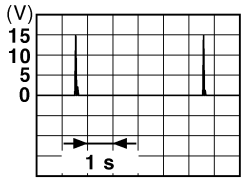
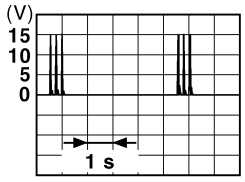
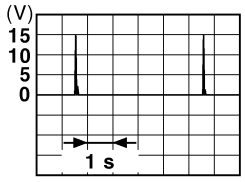
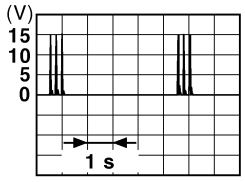
TERMINAL LAYOUT

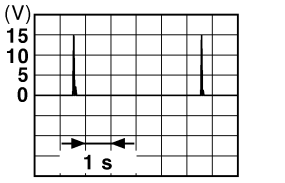
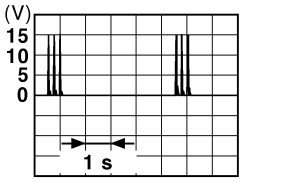
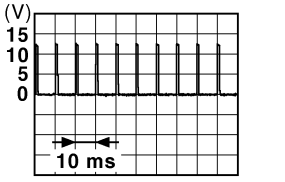
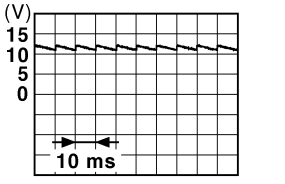


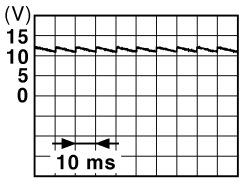
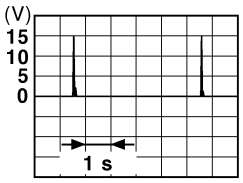
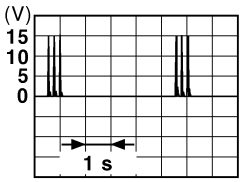
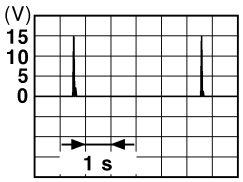
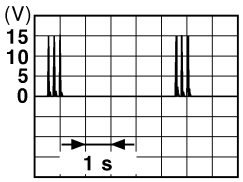

PHYSICAL VALUES

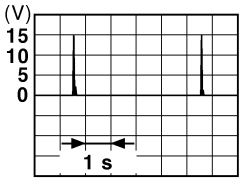
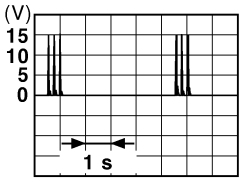
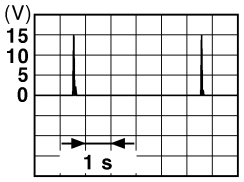
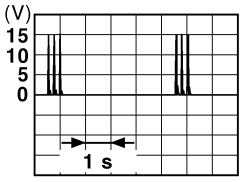
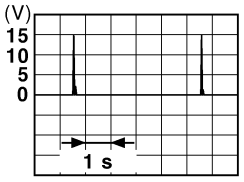
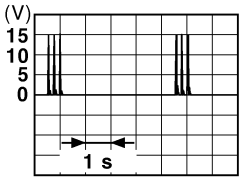
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (W) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | 12 V |
| 3 (Y) | Ground | P/W power supply (IGN) | Output | Ignition switch ON | | 12 V |
| 4 (R) | Ground | Interior room lamp power supply | Output | Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply) | | 0 V |
| | | | | Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply) | | 12 V |
| 5 (G) | Ground | Passenger door UNLOCK | Output | Passenger door | UNLOCK (Actuator is activated) | 12 V |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 8 (V) | Ground | All doors, fuel lid LOCK | Output | All doors, fuel lid | LOCK (Actuator is activated) | 12 V |
| | | | | | Other than LOCK (Actuator is not activated) | 0 V |
| 9 (G) | Ground | Driver door, fuel lid UNLOCK | Output | Driver door, fuel lid | UNLOCK (Actuator is activated) | 12 V |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 11 (BR) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 13 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 14 (R) | Ground | Push-button ignition switch illumination ground | Output | Tail lamp | OFF | 0 V |
| | | | | | ON | **NOTE:** When the illumination brightening/dimming level is in the neutral position.   JSNIA0010GB |
| 15 (Y) | Ground | ACC indicator lamp | Output | Ignition switch | OFF (LOCK indicator is not illuminated) | Battery voltage |
| | | | | | ACC | 0 V |

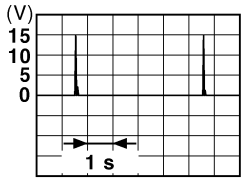
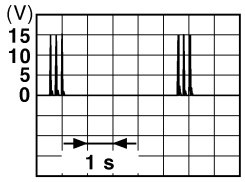
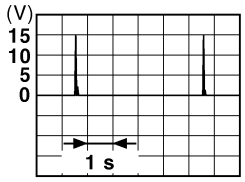
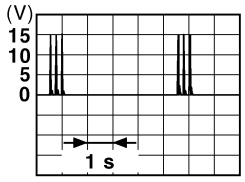
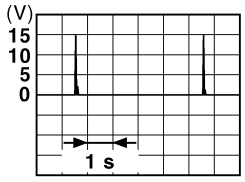
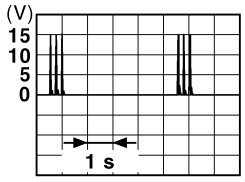
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 17 (W) | Ground | Turn signal RH (Front and side) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch RH |  PKID0926E 6.5 V |
| 18 (O) | Ground | Turn signal LH (Front and side) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch LH |  PKID0926E 6.5 V |
| 19 (P) | Ground | Interior room lamp control | Output | Interior room lamp | OFF | 12 V |
| | | | | | ON | 0 V |
| 20 (V) | Ground | Turn signal RH (Rear) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch RH |  PKID0926E 6.5 V |
| 23 (L)*1 (Y)*2 | Ground | Back door/Trunk lid open | Output | Back door/ Trunk lid | OPEN (Back door/Trunk lid opener actuator is activated) | 12 V |
| | | | | | Other than OPEN (Back door/Trunk lid opener actuator is not activated) | 0 V |
| 24*8 (O) | Ground | Rear fog lamp | Output | Rear fog lamp | OFF | 0 V |
| | | | | | ON | 12 V |
| 25 (LG) | Ground | Turn signal LH (Rear) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch LH |  PKID0926E 6.5 V |
| 30 (R) | Ground | Luggage room/Trunk room lamp | Output | Luggage room/ Trunk room lamp | ON | 0 V |
| | | | | | OFF | 12 V |

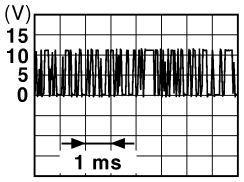
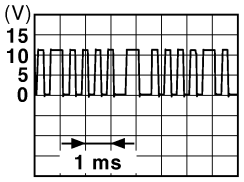
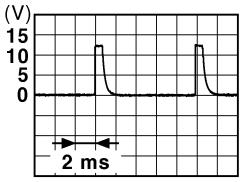
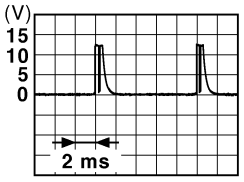
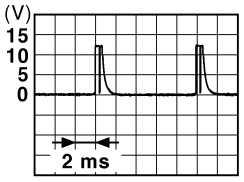
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 34 (G) | Ground | Luggage room/Trunk room antenna (–) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 35 (R) | Ground | Luggage room/Trunk room antenna (+) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 38 (B) | Ground | Rear bumper antenna (–) | Output | When the back door/trunk lid door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |

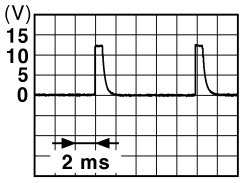
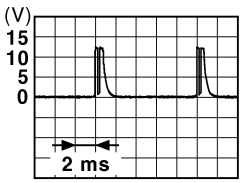
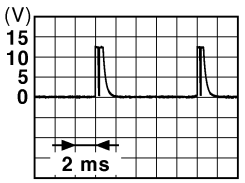
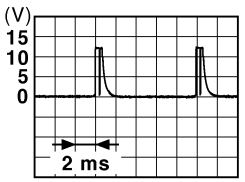
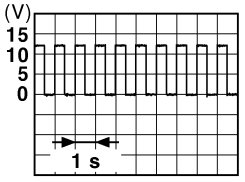
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 39 (W) | Ground | Rear bumper antenna (+) | Output | When the back door/trunk lid door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 47 (V) | Ground | Ignition relay (IPDM E/R) control | Output | Ignition switch | OFF or ACC | 12 V |
| | | | | | ON | 0 V |
| 52 (SB) | Ground | Starter relay control | Output | Ignition switch ON (A/T models) | When selector lever is in P or N position | 12 V |
| | | | | | When selector lever is not in P or N position | 0 V |
| | | | | Ignition switch ON (M/T models) | When the clutch pedal is depressed | Battery voltage |
| | | | | | When the clutch pedal is not depressed | 0 V |
| 60 (BR) | Ground | Push-button ignition switch (Push switch) | Input | Push-button ignition switch (push switch) | Pressed | 0 V |
| | | | | | Not pressed | Battery voltage |
| 61 (W) | Ground | Back door/Trunk Lid door request switch | Input | Back door/ Trunk lid door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB<br>1.0 V |
| 64 (G) | Ground | Intelligent Key warning buzzer | Output | Intelligent Key warning buzzer | Sounding | 0 V |
| | | | | | Not sounding | 12 V |
| 66 (R) | Ground | Back door/Trunk room lamp switch | Input | Back door/ Trunk room lamp switch | OFF (Door close) |  JPMIA0011GB<br>11.8 V |
| | | | | | ON (Door open) | 0 V |

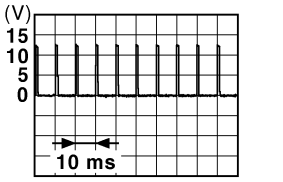
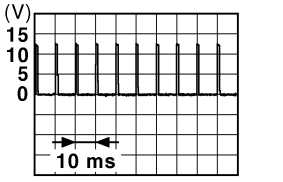
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 67 (GR) | Ground | Back door/Trunk lid opener switch | Input | Back door/ Trunk lid opener switch | Pressed | 0 V |
| | | | | | Not pressed |  JPMIA0011GB<br>11.8 V |
| 72 (L) | Ground | Room antenna 2 (–) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 73 (P) | Ground | Room antenna 2 (+) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |

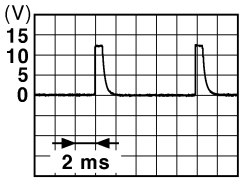
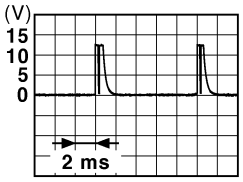
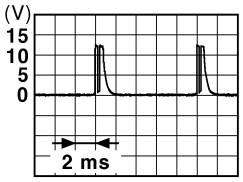
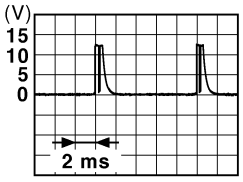
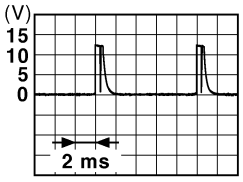
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 74 (SB) | Ground | Passenger door antenna (–) | Output | When the passenger door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 75 (BR) | Ground | Passenger door antenna (+) | Output | When the passenger door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 76 (V) | Ground | Driver door antenna (–) | Output | When the driver door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |

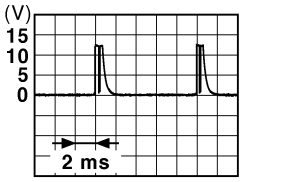
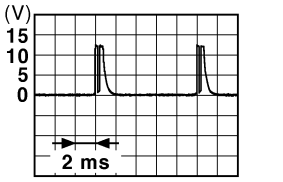
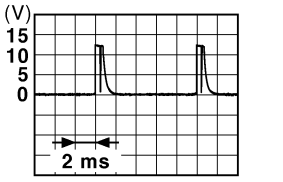
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 77 (LG) | Ground | Driver door antenna (+) | Output | When the driver door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 78*2 (L) | Ground | Room antenna 1 (–) (Instrument panel) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 79*2 (R) | Ground | Room antenna 1 (+) (Instrument panel) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |

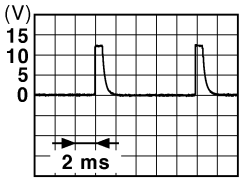
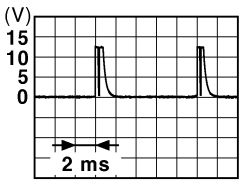
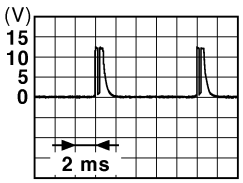
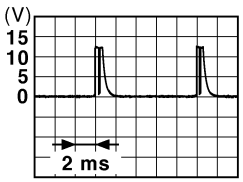
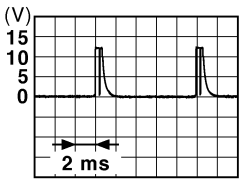
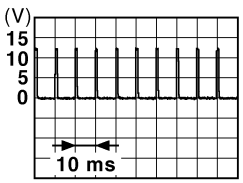
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 80 (GR) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent Key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 81 (W) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent Key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 82 (R) | Ground | Ignition relay [Fuse block (J/B)] control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | 12 V |
| 83 (GR) | Ground | Remote keyless entry receiver (front) communication | Input/ Output | During waiting | |  JMKIA0064GB |
| | | | | When operating either button on the Intelligent Key | |  JMKIA0065GB |
| 87 (BR) | Ground | Combination switch INPUT 5 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Rear fog lamp switch ON (Wiper intermittent dial 4) |  JPMIA0038GB 1.3 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 2<br>• Wiper intermittent dial 6<br>• Wiper intermittent dial 7 |  JPMIA0040GB 1.3 V |

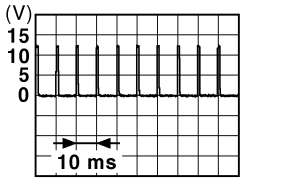
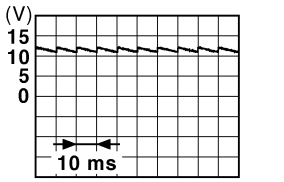
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 88 (V) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch HI (Wiper intermittent dial 4) |  JPMIA0036GB 1.3 V |
| | | | | | Lighting switch 2ND (Wiper intermittent dial 4) |  JPMIA0037GB 1.3 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 2<br>• Wiper intermittent dial 3 |  JPMIA0040GB 1.3 V |
| 90 (P) | Ground | CAN-L | Input/ Output | — | | — |
| 91 (L) | Ground | CAN-H | Input/ Output | — | | — |
| 92 (LG) | Ground | Key slot illumination | Output | Key slot illumination | OFF | 0 V |
| | | | | | Blinking |  JPMIA0015GB 6.5 V |
| | | | | | ON | 12 V |
| 93 (V) | Ground | ON indicator lamp | Output | Ignition switch | OFF (LOCK indicator is not illuminated) | Battery voltage |
| | | | | | ON | 0 V |

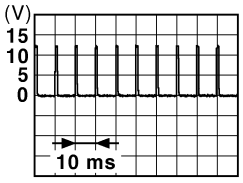
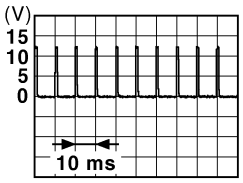
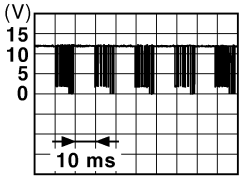
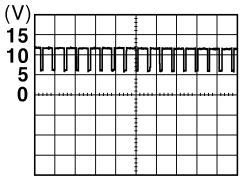
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 95 (O) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 12 V |
| 96*3 (Y) | Ground | A/T shift selector (Detention switch) power supply | Output | — | | 12 V |
| 99*6 (R) | Ground | Selector lever P position switch (A/T models) | Input | Selector lever | P position | 0 V |
| | | | | | Any position other than P | 12 V |
| | | Clutch pedal position switch (M/T models without SynchroRev Match mode) | | Clutch pedal position switch | OFF (Clutch pedal is depressed) | 0 V |
| | | | | | ON (Clutch pedal is not depressed) | Battery voltage |
| 100 (GR) | Ground | Passenger door request switch | Input | Passenger door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB 1.0 V |
| 101 (Y) | Ground | Driver door request switch | Input | Driver door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB 1.0 V |
| 102 (O) | Ground | Blower fan motor relay control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | 12 V |
| 103 (LG) | Ground | Remote keyless entry receiver (front) power supply | Output | Ignition switch OFF | | 12 V |

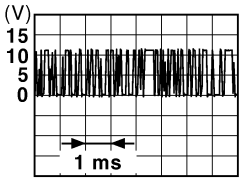
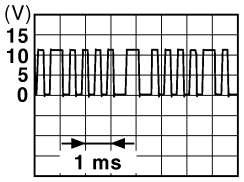
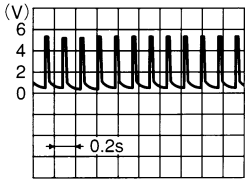
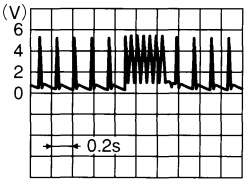
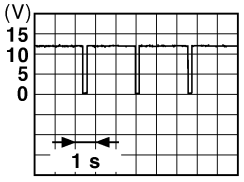
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 107 (LG) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB<br>1.4 V |
| | | | | | Turn signal switch LH |  JPMIA0037GB<br>1.3 V |
| | | | | | Turn signal switch RH |  JPMIA0036GB<br>1.3 V |
| | | | | | Front wiper switch LO |  JPMIA0038GB<br>1.3 V |
| | | | | | Front washer switch ON |  JPMIA0039GB<br>1.3 V |

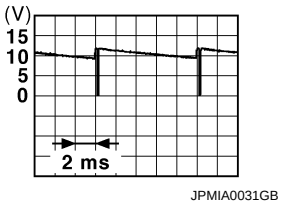
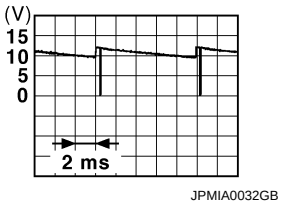
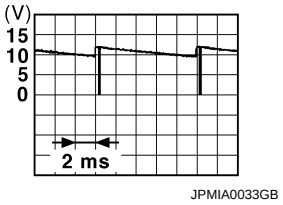
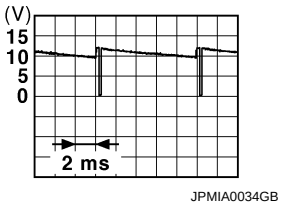
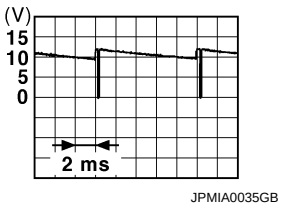
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 108 (R) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch AUTO (Wiper intermittent dial 4) |  JPMIA0038GB 1.3 V |
| | | | | | Lighting switch 1ST (Wiper intermittent dial 4) |  JPMIA0036GB 1.3 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 5<br>• Wiper intermittent dial 6 |  JPMIA0039GB 1.3 V |

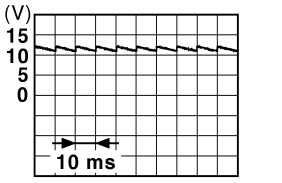
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 109 (Y) | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch PASS |  JPMIA0037GB 1.3 V |
| | | | | | Lighting switch 2ND |  JPMIA0036GB 1.3 V |
| | | | | | Front wiper switch INT |  JPMIA0038GB 1.3 V |
| | | | | | Front wiper switch HI |  JPMIA0040GB 1.3 V |
| 110 (P) | Ground | Hazard switch | Input | Hazard switch | ON | 0 V |
| | | | | | OFF |  JPMIA0012GB 1.1 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 113 (O) | Ground | Optical sensor | Input | Ignition switch ON | When bright outside of the vehicle | Close to 5 V |
| | | | | | When dark outside of the vehicle | Close to 0 V |
| 114*4 (R) | Ground | Clutch interlock switch | Input | Clutch interlock switch | OFF (Clutch pedal is not depressed) | 0 V |
| | | | | | ON (Clutch pedal is depressed) | Battery voltage |
| 115*9 (O) | — | — | — | — | | — |
| 116 (SB) | Ground | Stop lamp switch 1 | Input | — | | Battery voltage |
| 118 (P) | Ground | Stop lamp switch 2 | Input | Stop lamp switch | OFF (Brake pedal is not depressed) | 0 V |
| | | | | | ON (Brake pedal is depressed) | Battery voltage |
| 119 (SB) | Ground | Driver side door lock assembly (Unlock sensor) | Input | Driver door | LOCK status (Unlock sensor switch OFF) |  JPMIA0012GB 1.1 V |
| | | | | | UNLOCK status (Unlock switch sensor ON) | 0 V |
| 121 (R) | Ground | Key slot switch | Input | When the Intelligent Key is inserted into key slot | | 12 V |
| | | | | When the Intelligent Key is not inserted into key slot | | 0 V |
| 123 (W) | Ground | IGN feedback | Input | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 124 (LG) | Ground | Passenger door switch | Input | Passenger door switch | OFF (Door close) |  JPMIA0011GB 11.8 V |
| | | | | | ON (Door open) | 0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 129*2 (O) | Ground | Trunk lid opener cancel switch | Input | Trunk lid opener cancel switch | CANCEL |  JPMIA0012GB<br>1.1 V |
| | | | | | ON | 0 V |
| 130*7 (L) | Ground | Rear window defogger switch | Input | Ignition switch ON | Rear window defogger switch OFF |  JPMIA0012GB<br>1.1 V |
| | | | | | Rear window defogger switch ON | 0 V |
| 132 (Y)*1 (V)*2 | Ground | Power window switch and soft top control unit communication | Input/ Output | Ignition switch ON | |  JPMIA0013GB<br>10.2 V |
| | | | | Ignition switch OFF or ACC | | 12 V |
| 133 (G) | Ground | Push-button ignition switch illumination | Output | Push-button ignition switch illumination | ON (Tail lamps OFF) | 9.5 V |
| | | | | | ON (Tail lamps ON) | **NOTE:**<br>The pulse width of this wave is varied by the illumination brightening/dimming level.<br>  JPMIA0159GB |
| | | | | | OFF | 0 V |
| 134 (GR) | Ground | LOCK indicator lamp | Output | LOCK indicator lamp | OFF | Battery voltage |
| | | | | | ON | 0 V |
| 137 (P) | Ground | Receiver and sensor ground | Input | Ignition switch ON | | 0 V |
| 138 (V) | Ground | Receiver and sensor power supply | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 5.0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 139 (L) | Ground | Tire pressure receiver communication | Input/ Output | Ignition switch OFF (Remote keyless entry receiver communication) | During waiting |  JMKIA0064GB |
| | | | | | When operating either button on the Intelligent Key |  JMKIA0065GB |
| | | | | Ignition switch ON (Tire pressure receiver communication) | Standby state |  OCC3881D |
| | | | | | When receiving the signal from the transmitter |  OCC3880D |
| 140*5 (G) | Ground | Selector lever P/N position (A/T models) | Input | Selector lever | P or N position | 12 V |
| | | | | | Except P and N positions | 0 V |
| | | Park/neutral position switch (Coupe M/T models with Synchro-Rev Match mode) | | Ignition switch ON | Control lever in neutral position | Battery voltage |
| | | | | | Control lever in any position other than neutral | 0 V |
| 141 (Y) | Ground | Security indicator lamp | Output | Security indicator lamp | ON | 0 V |
| | | | | | Blinking |  JPMIA0014GB<br>11.3 V |
| | | | | | OFF | 12 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 142 (O) | Ground | Combination switch OUTPUT 5 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Lighting switch 1ST |  JPMIA0031GB 10.7 V |
| | | | | | Lighting switch HI | |
| | | | | | Lighting switch 2ND | |
| | | | | | Turn signal switch RH | |
| 143 (P) | Ground | Combination switch OUTPUT 1 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) | 0 V |
| | | | | | Front wiper switch HI (Wiper intermittent dial 4) |  JPMIA0032GB 10.7 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 2<br>• Wiper intermittent dial 3<br>• Wiper intermittent dial 6<br>• Wiper intermittent dial 7 | |
| 144 (G) | Ground | Combination switch OUTPUT 2 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) | 0 V |
| | | | | | Front washer switch ON (Wiper intermittent dial 4) |  JPMIA0033GB 10.7 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 5<br>• Wiper intermittent dial 6 | |
| 145 (L) | Ground | Combination switch OUTPUT 3 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Front wiper switch INT |  JPMIA0034GB 10.7 V |
| | | | | | Front wiper switch LO | |
| | | | | | Lighting switch AUTO | |
| | | | | | Rear fog lamp switch ON | |
| 146 (SB) | Ground | Combination switch OUTPUT 4 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Lighting switch 2ND |  JPMIA0035GB 10.7 V |
| | | | | | Lighting switch PASS | |
| | | | | | Turn signal switch LH | |

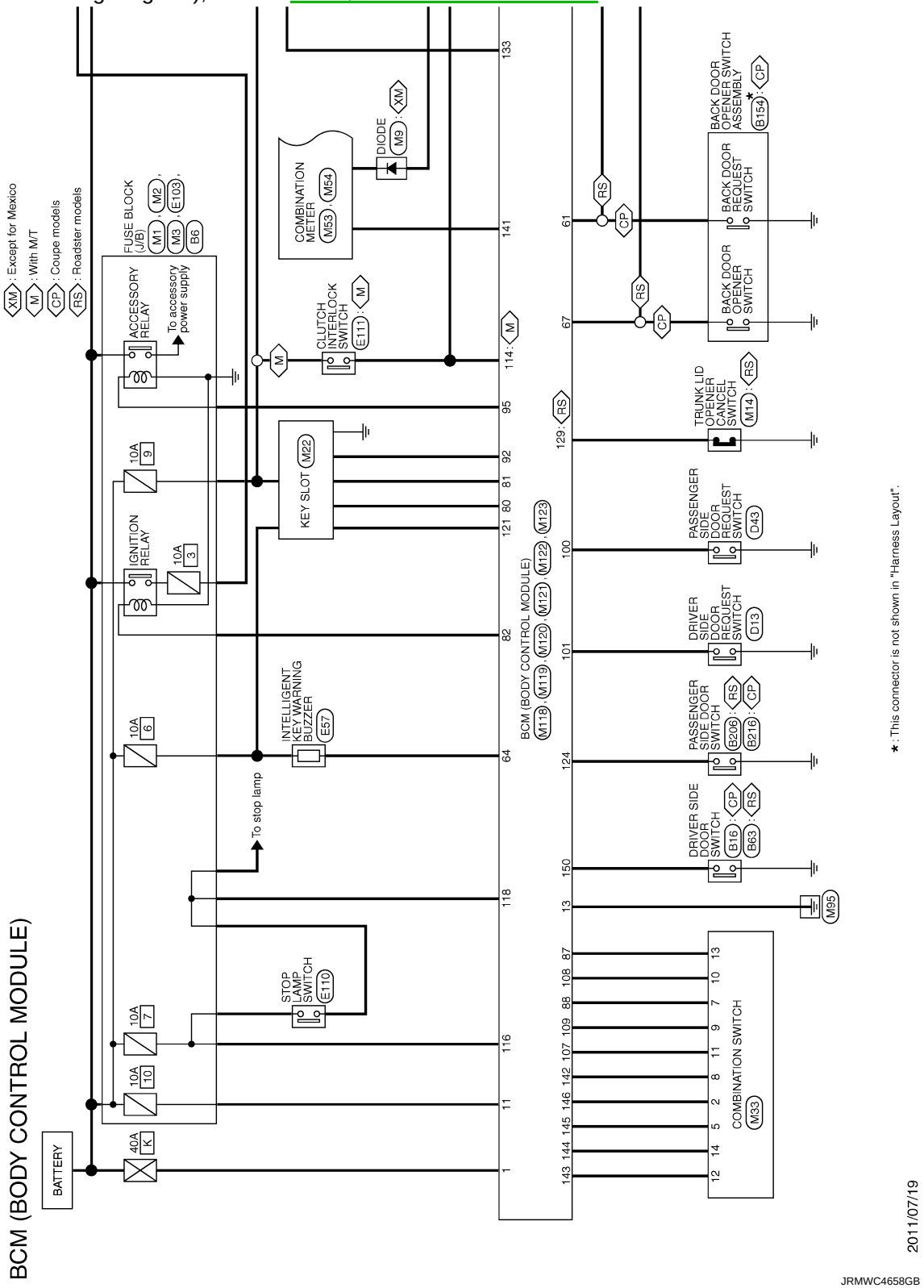
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 150 (GR) | Ground | Driver door switch | Input | Driver door switch | OFF (Door close) |  JPMIA0011GB 11.8 V |
| | | | | | ON (Door open) | 0 V |
| 151 (G) | Ground | Rear window defogger relay control | Output | Rear window defogger | Active | 0 V |
| | | | | | Not activated | Battery voltage |

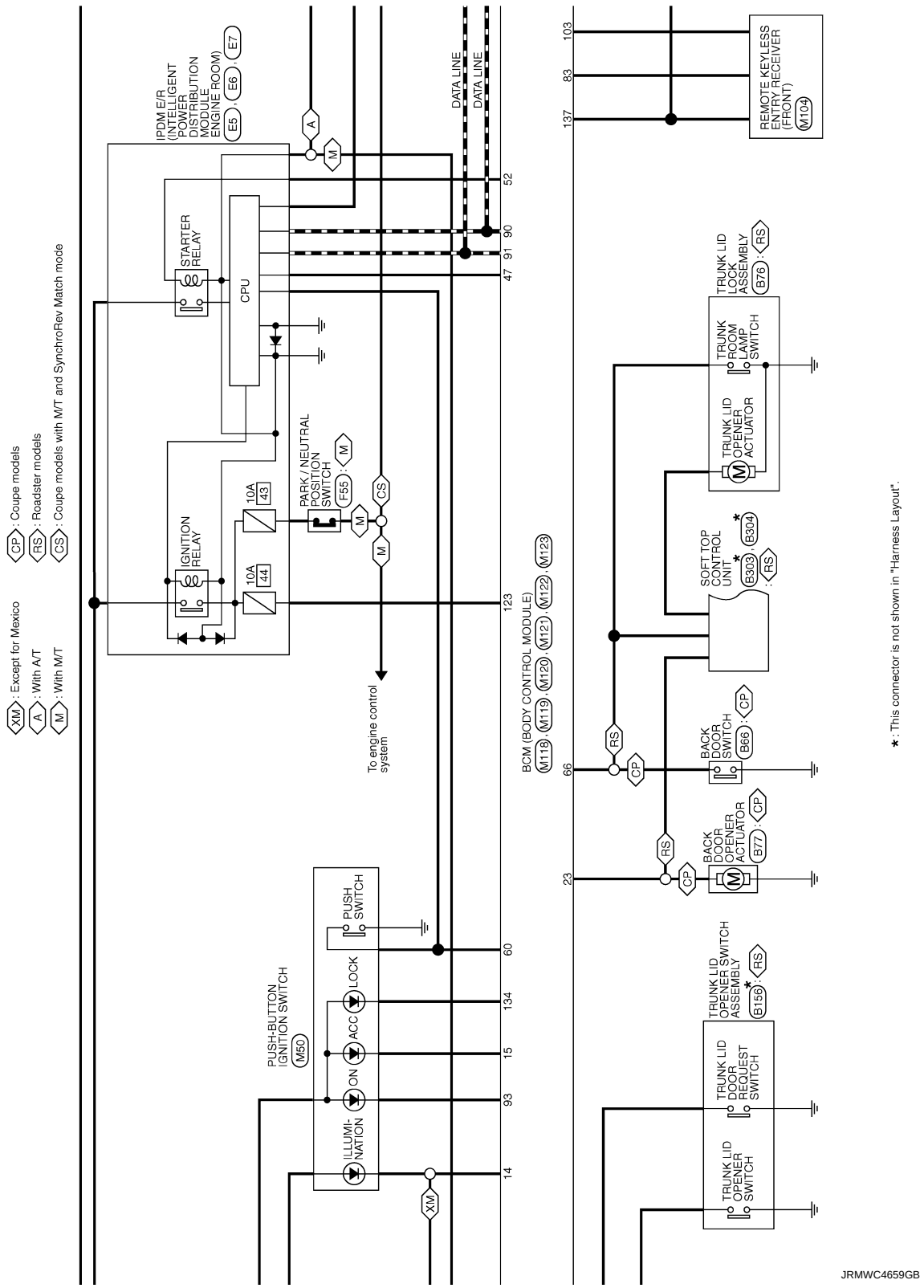
*1: Coupe models
*2: Roadster models
*3: A/T models
*4: M/T models
*5: With A/T or coupe models with M/T and SynchroRev Match mode
*6: With A/T or with M/T without SynchroRev Match mode
*7: Without NAVI
*8: With rear fog lamp
*9: BCM does not use this terminal for control.

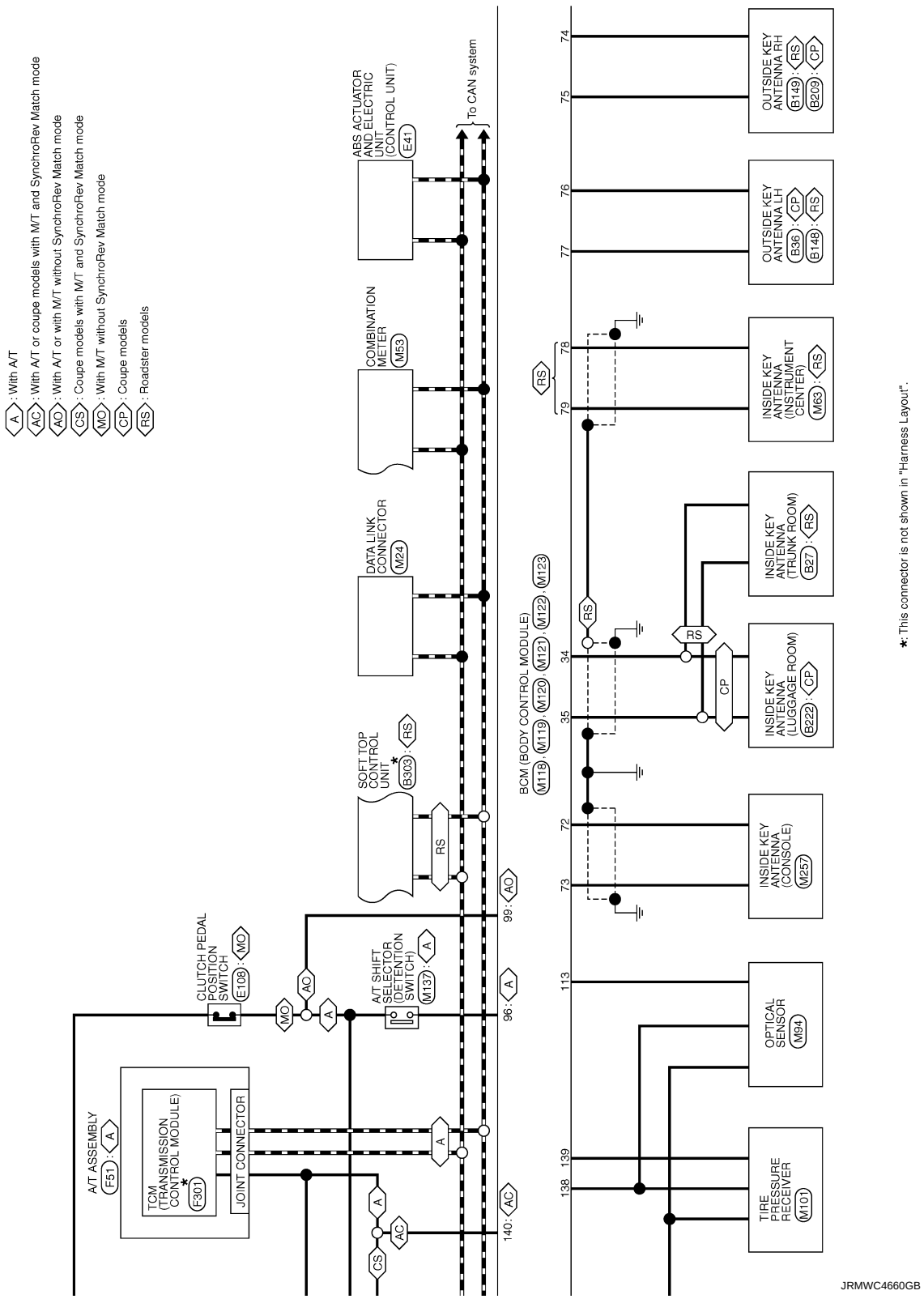
## Wiring Diagram - BCM -

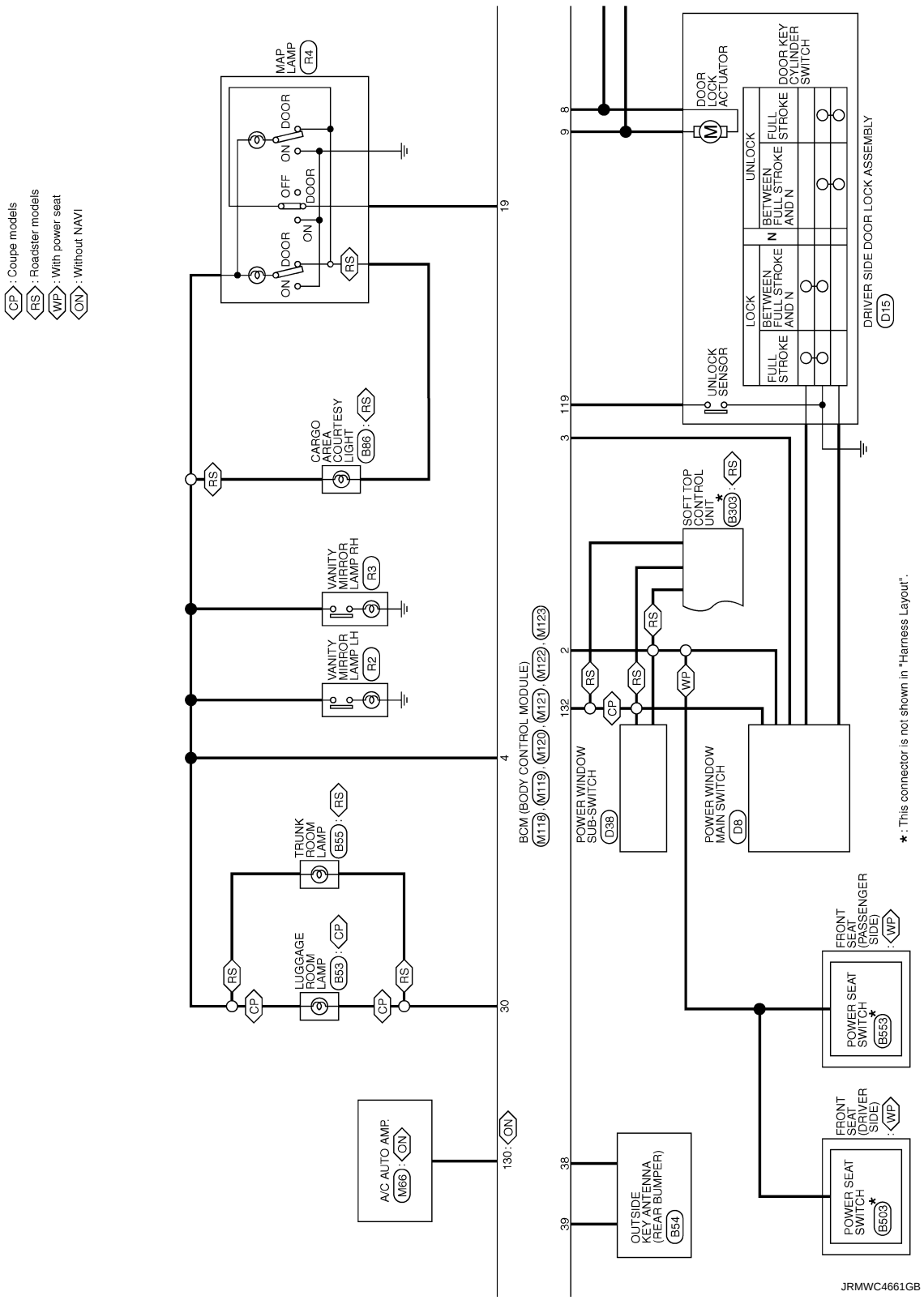
INFOID:0000000007806688

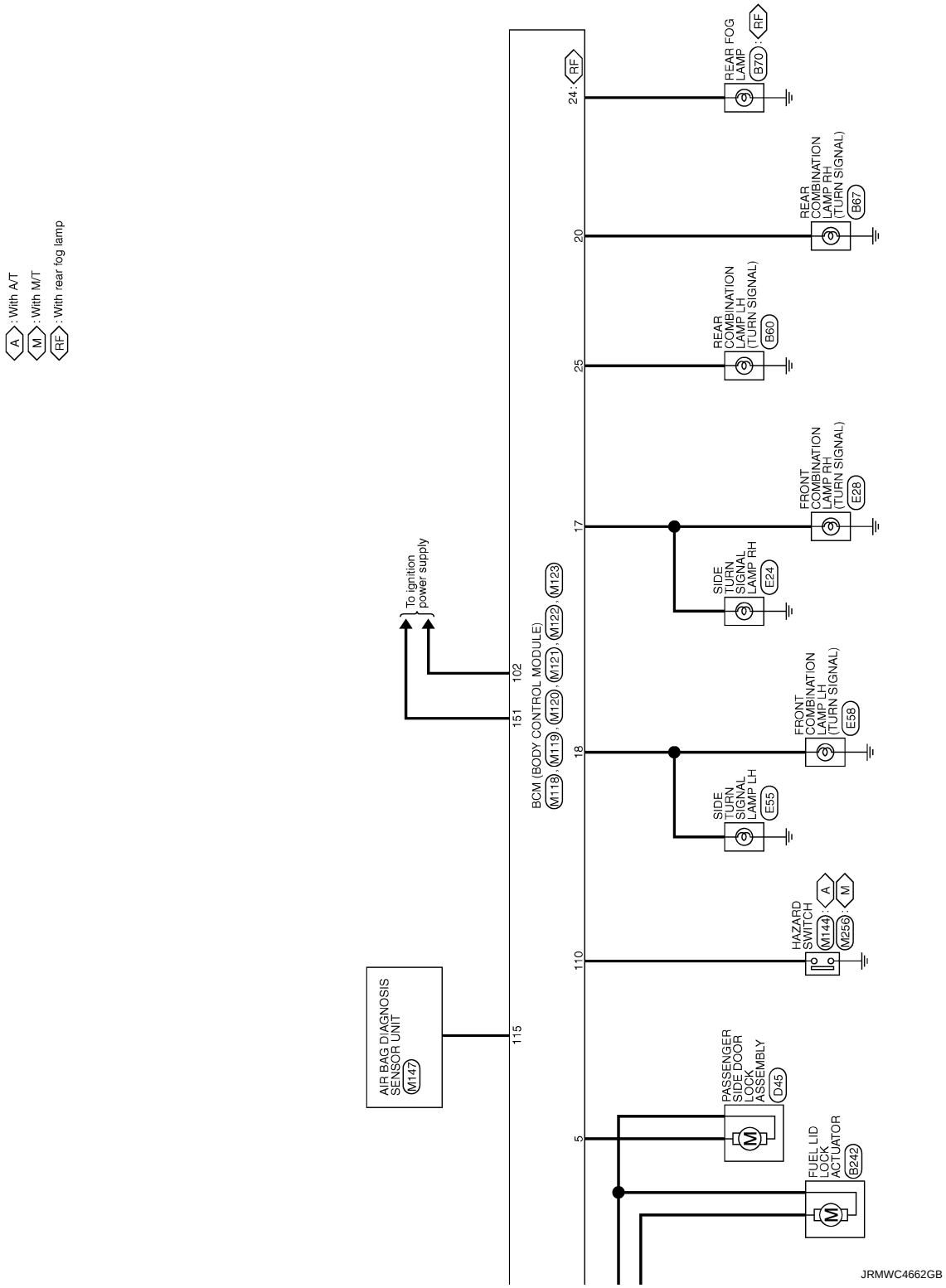
For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".




IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5 E6 E7
STARTER RELAY
CPU
IGNITION RELAY
10A 43
10A 44
PARK / NEUTRAL POSITION SWITCH F55
DATA LINE
DATA LINE
To engine control system
BCM (BODY CONTROL MODULE) M118 M119 M120 M121 M122 M123
PUSH-BUTTON IGNITION SWITCH M50
PUSH SWITCH
LOCK
ACC
ON
ILLUMI-NATION
REMOTE KEYLESS ENTRY RECEIVER (FRONT) M104
TRUNK LID LOCK ASSEMBLY B76
TRUNK ROOM LAMP SWITCH
TRUNK LID OPENER ACTUATOR
SOFT TOP CONTROL UNIT B303 B304
BACK DOOR SWITCH B66
BACK DOOR OPENER ACTUATOR B77
TRUNK LID OPENER SWITCH ASSEMBLY B156
TRUNK LID DOOR REQUEST SWITCH
TRUNK LID OPENER SWITCH
CP : Coupe models
RS : Roadster models
CS : Coupe models with M/T and SynchroRev Match mode
XM : Except for Mexico
A : With A/T
M : With M/T
★: This connector is not shown in "Harness Layout".
JRMWC4659GB


A : With A/T
AC : With A/T or coupe models with M/T and SynchroRev Match mode
AO : With A/T or with M/T without SynchroRev Match mode
CS : Coupe models with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
CP : Coupe models
RS : Roadster models
To CAN system
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
COMBINATION METER M53
DATA LINK CONNECTOR M24
SOFT TOP CONTROL UNIT * B303
CLUTCH PEDAL POSITION SWITCH E108
A/T SHIFT SELECTOR (DETENTION SWITCH) M137
A/T ASSEMBLY F51
TCM (TRANSMISSION CONTROL MODULE) * F301
JOINT CONNECTOR
99 : AO
96 : A
140 : AC
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
OUTSIDE KEY ANTENNA RH B149 RS B209 CP
OUTSIDE KEY ANTENNA LH B36 CP B148 RS
INSIDE KEY ANTENNA (INSTRUMENT CENTER) M63 RS
INSIDE KEY ANTENNA (TRUNK ROOM) B27 RS
INSIDE KEY ANTENNA (LUGGAGE ROOM) B222 CP
INSIDE KEY ANTENNA (CONSOLE) M257
OPTICAL SENSOR M94
TIRE PRESSURE RECEIVER M101
* : This connector is not shown in "Harness Layout".
JRMWC4660GB


CP : Coupe models
RS : Roadster models
WP : With power seat
ON : Without NAVI
MAP LAMP R4
DOOR
ON
OFF
DOOR
ON
DOOR
ON
RS
CARGO AREA COURTESY LIGHT B86 : RS
VANITY MIRROR LAMP RH R3
VANITY MIRROR LAMP LH R2
TRUNK ROOM LAMP B55 : RS
LUGGAGE ROOM LAMP B53 : CP
A/C AUTO AMP. M66 : ON
BCM (BODY CONTROL MODULE)
M118 M119 M120 M121 M122 M123
19
4
30
130 : ON
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
LOCK
FULL STROKE
BETWEEN FULL STROKE AND N
DRIVER SIDE DOOR LOCK ASSEMBLY D15
8
9
119
3
SOFT TOP CONTROL UNIT* B303 : RS
2
132
POWER WINDOW SUB-SWITCH D38
POWER WINDOW MAIN SWITCH D8
38
39
OUTSIDE KEY ANTENNA (REAR BUMPER) B54
FRONT SEAT (PASSENGER SIDE) : WP
POWER SEAT SWITCH* B553
FRONT SEAT (DRIVER SIDE) : WP
POWER SEAT SWITCH* B503
*: This connector is not shown in "Harness Layout".
JRMWC4661GB




## Fail-safe

*INFOID:0000000007806689*

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

| Display contents of CONSULT | Fail-safe | Cancellation |
|---|---|---|
| B2190: NATS ANTENNA AMP | Inhibit engine cranking | Erase DTC |
| B2191: DIFFERENCE OF KEY | Inhibit engine cranking | Erase DTC |
| B2192: ID DISCORD BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2193: CHAIN OF BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2195: ANTI SCANNING | Inhibit engine cranking | Ignition switch ON → OFF |
| B2560: STARTER CONT RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent<br>• Starter control relay signal<br>• Starter relay status signal |
| B2608: STARTER RELAY | Inhibit engine cranking | 500 ms after the following signal communication status becomes consistent<br>• Starter motor relay control signal<br>• Starter relay status signal (CAN) |
| B260A: IGNITION RELAY | Inhibit engine cranking | 500 ms after the following conditions are fulfilled<br>• IGN relay (IPDM E/R) control signal: OFF (Battery voltage)<br>• Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)<br>• Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) |
| B260F: ENG STATE SIG LOST | Maintains the power supply position attained at the time of DTC detection | When any of the following conditions are fulfilled<br>• Power position changes to ACC<br>• Receives engine status signal (CAN) |
| B2617: STARTER RELAY CIRC | Inhibit engine cranking | 1 second after the starter motor relay control inside BCM becomes normal |
| B2618: BCM | Inhibit engine cranking | 1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal |
| B261E: VEHICLE TYPE | Inhibit engine cranking | BCM initialization |
| B26E8: CLUTCH SW | Inhibit engine cranking | When any of the following BCM recognition conditions are fulfilled<br>• Status 1<br>- Clutch switch signal (CAN from ECM): ON<br>- Clutch interlock switch signal: OFF (0 V)<br>• Status 2<br>- Clutch switch signal (CAN from ECM): OFF<br>- Clutch interlock switch signal: ON (Battery voltage) |

## DTC Inspection Priority Chart

INFOID:0000000007806690

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

| Priority | DTC |
|---|---|
| 1 | B2562: LOW VOLTAGE |
| 2 | • U1000: CAN COMM CIRCUIT<br>• U1010: CONTROL UNIT (CAN) |
| 3 | • B2190: NATS ANTENNA AMP<br>• B2191: DIFFERENCE OF KEY<br>• B2192: ID DISCORD BCM-ECM<br>• B2193: CHAIN OF BCM-ECM<br>• B2195: ANTI SCANNING |

| Priority | DTC |
|---|---|
| 4 | • B2553: IGNITION RELAY<br>• B2555: STOP LAMP<br>• B2556: PUSH-BTN IGN SW<br>• B2557: VEHICLE SPEED<br>• B2560: STARTER CONT RELAY<br>• B2601: SHIFT POSITION<br>• B2602: SHIFT POSITION<br>• B2603: SHIFT POSI STATUS<br>• B2604: PNP SW<br>• B2605: PNP SW<br>• B2608: STARTER RELAY<br>• B260A: IGNITION RELAY<br>• B260F: ENG STATE SIG LOST<br>• B2614: BCM<br>• B2615: BCM<br>• B2616: BCM<br>• B2617: BCM<br>• B2618: BCM<br>• B261A: PUSH-BTN IGN SW<br>• B261E: VEHICLE TYPE<br>• B26E8: CLUTCH SW<br>• B26EA: KEY REGISTRATION<br>• C1729: VHCL SPEED SIG ERR<br>• U0415: VEHICLE SPEED SIG |
| 5 | • C1704: LOW PRESSURE FL<br>• C1705: LOW PRESSURE FR<br>• C1706: LOW PRESSURE RR<br>• C1707: LOW PRESSURE RL<br>• C1708: [NO DATA] FL<br>• C1709: [NO DATA] FR<br>• C1710: [NO DATA] RR<br>• C1711: [NO DATA] RL<br>• C1716: [PRESSDATA ERR] FL<br>• C1717: [PRESSDATA ERR] FR<br>• C1718: [PRESSDATA ERR] RR<br>• C1719: [PRESSDATA ERR] RL<br>• C1734: CONTROL UNIT |
| 6 | • B2621: INSIDE ANTENNA<br>• B2622: INSIDE ANTENNA<br>• B2623: INSIDE ANTENNA |

## DTC Index

INFOID:0000000007806691

**NOTE:**
The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-19, "COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)".

| CONSULT display | Fail-safe | Freeze Frame Data<br>•Vehicle Speed<br>•Odo/Trip Meter<br>•Vehicle condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference |
|---|---|---|---|---|---|
| No DTC is detected. further testing may be required. | — | — | — | — | — |
| U1000: CAN COMM CIRCUIT | — | — | — | — | BCS-46 |
| U1010: CONTROL UNIT (CAN) | — | — | — | — | BCS-47 |
| U0415: VEHICLE SPEED SIG | — | — | — | — | BCS-48 |

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference |
|---|---|---|---|---|---|
| B2190: NATS ANTENNA AMP | × | — | — | — | SEC-42 |
| B2191: DIFFERENCE OF KEY | × | — | — | — | SEC-45 |
| B2192: ID DISCORD BCM-ECM | × | — | — | — | SEC-46 |
| B2193: CHAIN OF BCM-ECM | × | — | — | — | SEC-48 |
| B2195: ANTI SCANNING | × | — | — | — | SEC-49 |
| B2553: IGNITION RELAY | — | × | — | — | PCS-48 |
| B2555: STOP LAMP | — | × | — | — | SEC-50 |
| B2556: PUSH-BTN IGN SW | — | × | × | — | SEC-52 |
| B2557: VEHICLE SPEED | × | × | × | — | SEC-54 |
| B2560: STARTER CONT RELAY | × | × | × | — | SEC-55 |
| B2562: LOW VOLTAGE | — | × | — | — | BCS-49 |
| B2601: SHIFT POSITION | × | × | × | — | SEC-56 |
| B2602: SHIFT POSITION | × | × | × | — | SEC-59 |
| B2603: SHIFT POSI STATUS | × | × | × | — | SEC-62 |
| B2604: PNP SW | × | × | × | — | SEC-65 |
| B2605: PNP SW | × | × | × | — | SEC-67 |
| B2608: STARTER RELAY | × | × | × | — | SEC-69 |
| B260A: IGNITION RELAY | × | × | × | — | PCS-50 |
| B260F: ENG STATE SIG LOST | × | × | × | — | SEC-71 |
| B2614: BCM | — | × | × | — | PCS-52 |
| B2615: BCM | — | × | × | — | PCS-55 |
| B2616: BCM | — | × | × | — | PCS-58 |
| B2617: BCM | × | × | × | — | SEC-75 |
| B2618: BCM | × | × | × | — | PCS-61 |
| B261A: PUSH-BTN IGN SW | — | × | × | — | PCS-62 |
| B261E: VEHICLE TYPE | × | × | × (Turn ON for 15 seconds) | — | SEC-78 |
| B2621: INSIDE ANTENNA | — | × | — | — | DLK-228 |
| B2622: INSIDE ANTENNA | — | × | — | — | •DLK-59 (Coupe) •DLK-230 (Roadster) |
| B2623: INSIDE ANTENNA | — | × | — | — | •DLK-61 (Coupe) •DLK-232 (Roadster) |
| B26E8: CLUTCH SW | × | × | × | — | SEC-72 |
| B26EA: KEY REGISTRATION | — | × | × (Turn ON for 15 seconds) | — | SEC-74 |
| C1704: LOW PRESSURE FL | — | — | — | × | WT-20 |
| C1705: LOW PRESSURE FR | — | — | — | × | |
| C1706: LOW PRESSURE RR | — | — | — | × | |
| C1707: LOW PRESSURE RL | — | — | — | × | |

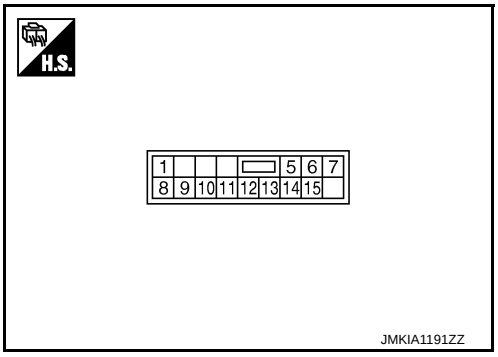
| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference |
|---|---|---|---|---|---|
| C1708: [NO DATA] FL | — | — | — | × | WT-22 |
| C1709: [NO DATA] FR | — | — | — | × | |
| C1710: [NO DATA] RR | — | — | — | × | |
| C1711: [NO DATA] RL | — | — | — | × | |
| C1716: [PRESSDATA ERR] FL | — | — | — | × | WT-25 |
| C1717: [PRESSDATA ERR] FR | — | — | — | × | |
| C1718: [PRESSDATA ERR] RR | — | — | — | × | |
| C1719: [PRESSDATA ERR] RL | — | — | — | × | |
| C1729: VHCL SPEED SIG ERR | — | — | — | × | WT-27 |
| C1734: CONTROL UNIT | — | — | — | × | WT-29 |

# POWER WINDOW MAIN SWITCH

## Reference Value

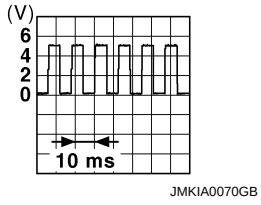
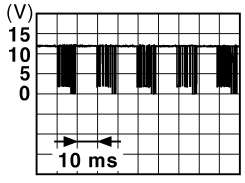
INFOID:0000000007625022

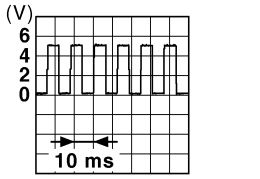
### TERMINAL LAYOUT




### PHYSICAL VALUES

POWER WINDOW MAIN SWITCH

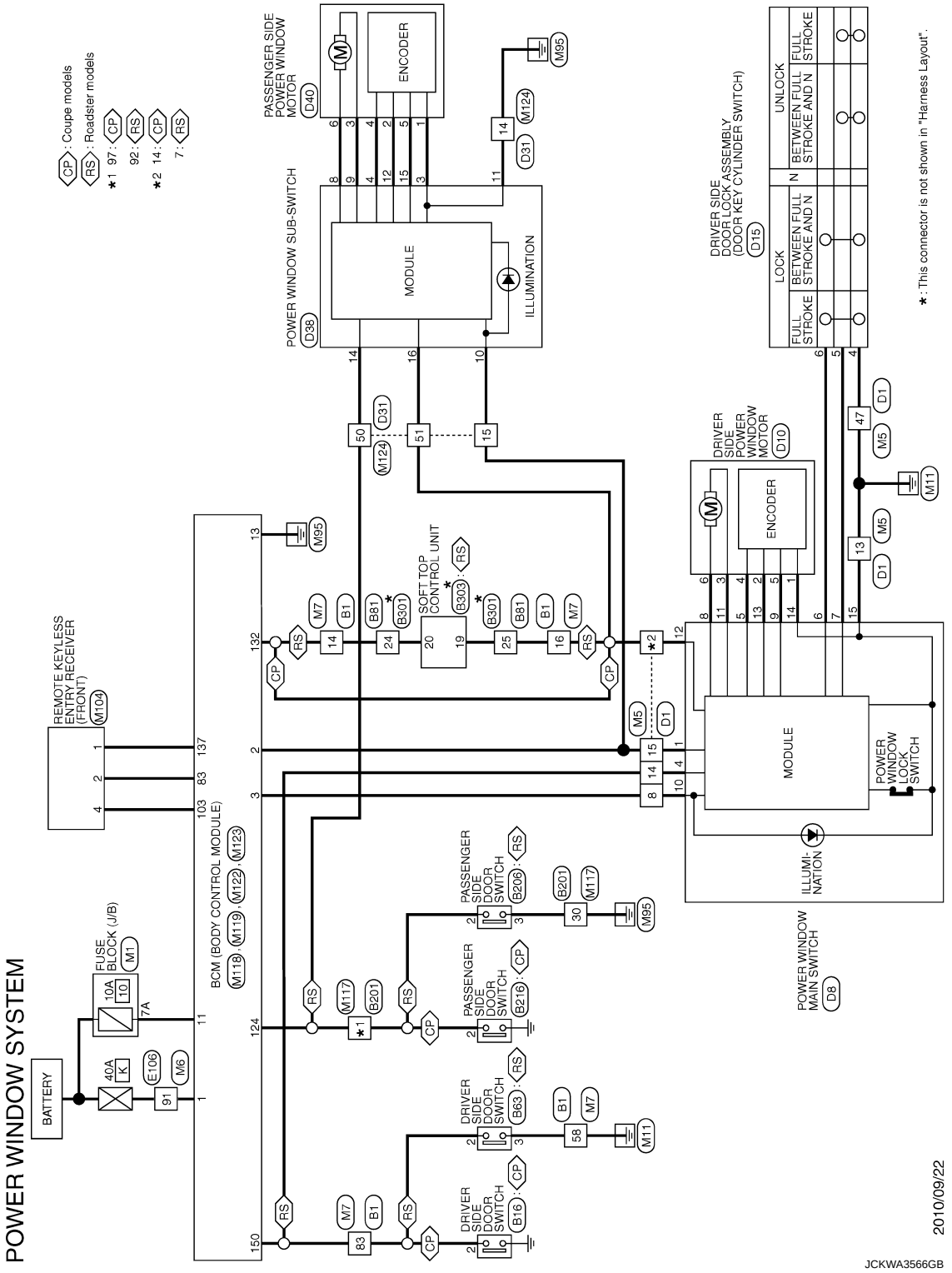
| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 1 (W) | Ground | Battery power supply | Input | — | 12 |
| 5 (BG) | Ground | Encoder power supply | Output | When ignition switch ON or automatic window adjusting operates | 12 |
| 6 (GR) | Ground | Door key cylinder switch LOCK signal | Input | Key position (Neutral → Locked) | 5 → 0 |
| 7 (V) | Ground | Door key cylinder switch UNLOCK signal | Input | Key position (Neutral → Unlocked) | 5 → 0 |
| 8 (L) | Ground | Driver side power window motor UP signal | Output | When power window main switch (Driver side) is operated UP | 12 |
| 9 (LG) | Ground | Encoder pulse signal 2 | Input | When power window motor operates |   JMKIA0070GB |
| 10 (Y) | Ground | Ignition switch power signal | Input | IGN SW ON | 12 |
| | | | | IGN SW OFF | 0 |
| 11 (BR) | Ground | Driver side power window motor DOWN signal | Output | When power window main switch (Driver side) is operated DOWN | 12 |
| 12 (SB) | Ground | Power window serial link | Input/ Output | Ignition switch ON |   JPMIA0013GB |

| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 13 (R) | Ground | Encoder pulse signal 1 | Input | When power window motor operates |  JMKIA0070GB |
| 14 (G) | Ground | Encoder ground | — | — | 0 |
| 15 (B) | Ground | Ground | — | — | 0 |

## Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007625023

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




## Fail-Safe

INFOID:0000000007625024

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 signals 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 sensor malfunction | When both pulse signal 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 indicating that the 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 the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN. |
| Glass recognition position malfunction 2 | When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN. |

In fail-safe control, the system changes to a non-initialized condition and the following functions do not operate.
- AUTO UP operation
- Anti-pinch function
- Automatic window adjusting function

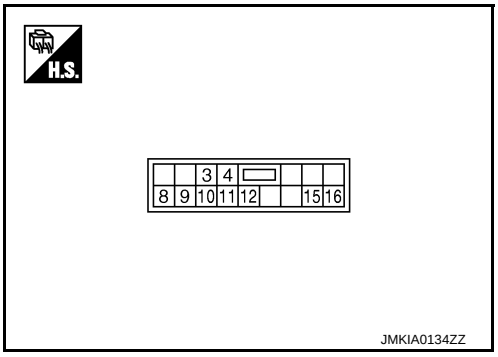
When fail-safe control is activated, perform initializing operation to recover. If a malfunction is detected in power window switch, fail-safe control is activated again.

# POWER WINDOW SUB-SWITCH

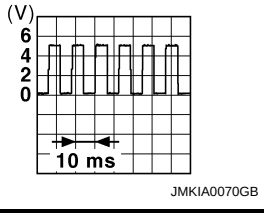
## Reference Value

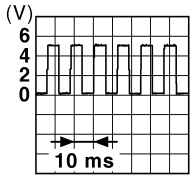
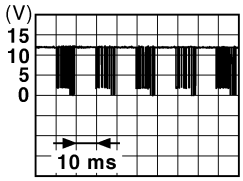
INFOID:0000000007625025

### TERMINAL LAYOUT




### PHYSICAL VALUES

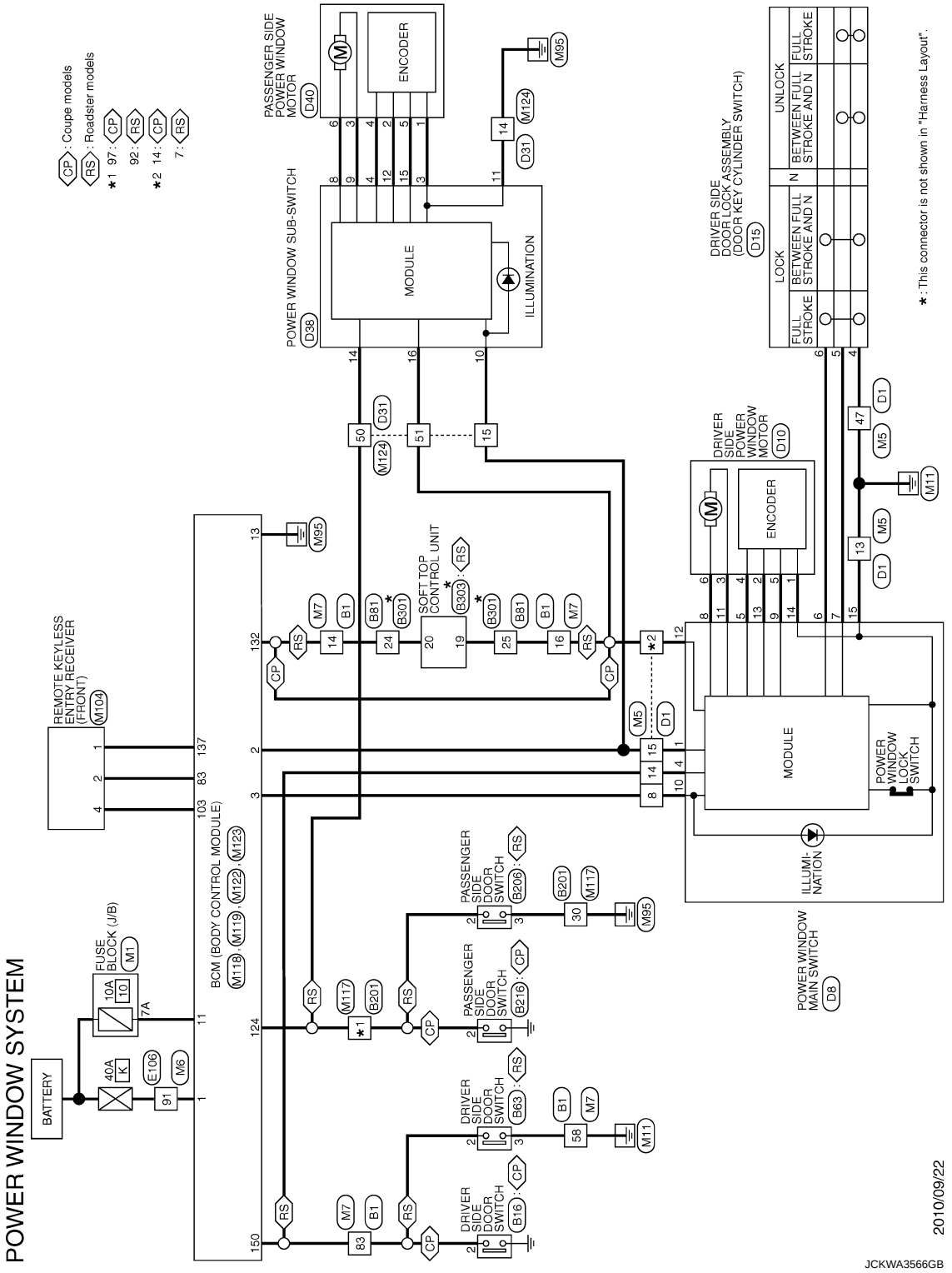
| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 3 (G) | Ground | Encoder ground | — | — | 0 |
| 4 (BG) | Ground | Encoder power supply | Output | When ignition switch ON or automatic window operates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

| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 15 (LG) | Ground | Encoder pulse signal 2 | Input | When power window motor operates |  JMKIA0070GB |
| 16 (Y) | Ground | Power window serial link | Input/ Output | Ignition switch ON |  JPMIA0013GB |

## Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007806693

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




## Fail-Safe

INFOID:0000000007625027

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 signals 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 sensor malfunction | When both pulse signal 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 indicating that the 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 the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN. |
| Glass recognition position malfunction 2 | When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN. |

In fail-safe control, the system changes to a non-initialized condition and the following functions do not operate.
- Automatic window adjusting function
- Anti-pinch function
- Automatic window adjusting function

When fail-safe control is activated, perform initializing operation to recover. If a malfunction is detected in power window switch, fail-safe control is activated again.

# SYMPTOM DIAGNOSIS

## POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

### Description

INFOID:0000000007625028

All power windows do not operate via power window main switch and power window sub-switch.

### Diagnosis Procedure

INFOID:0000000007625029

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

Check BCM power supply and ground circuit.
Refer to PWC-17, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

# DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

## Description

INFOID:0000000007625030

Driver side power window does not operate using power window main switch.

## Diagnosis Procedure

INFOID:0000000007625031

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

Check power window main switch power supply and ground circuit.
Refer to PWC-17, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

Is the inspection result normal?

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

### 2.CHECK DRIVER SIDE POWER WINDOW MOTOR

Check driver side power window motor.
Refer to PWC-20, "DRIVER SIDE : Component Function Check".

Is the measurement value within the specification?

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-44, "Intermittent Incident".
NO >> GO TO 1.

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

## WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Description

INFOID:0000000007625032

Passenger side power window operates using power window sub-switch but does not operate using power window main switch.

## WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000007625033

### 1.CHECK POWER WINDOW SUB-SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window sub-switch power supply and ground circuit.
Refer to PWC-18, "POWER WINDOW SUB-SWITCH : Diagnosis Procedure".

Is the inspection result normal?

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

### 2.CHECK POWER WINDOW SUB-SWITCH SERIAL LINK CIRCUIT

Check power window sub-switch serial link circuit.
Refer to PWC-30, "POWER WINDOW SUB-SWITCH : 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-44, "Intermittent Incident".
NO >> GO TO 1.

# WHEN POWER WINDOW SUB-SWITCH IS OPERATED

## WHEN POWER WINDOW SUB-SWITCH IS OPERATED : Description

INFOID:0000000007625034

Passenger side power window operates using power window main switch but not using power window sub-switch.

## WHEN POWER WINDOW SUB-SWITCH IS OPERATED : Diagnosis Procedure

INFOID:0000000007625035

### 1.CHECK POWER WINDOW SUB-SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window sub-switch power supply and ground circuit.
Refer to PWC-18, "POWER WINDOW SUB-SWITCH : Diagnosis Procedure".

Is the inspection result normal?

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

### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

# WITH BOTH POWER WINDOW MAIN SWITCH AND POWER WINDOW SUB-SWITCH

## WITH BOTH POWER WINDOW MAIN SWITCH AND POWER WINDOW SUB-

## SWITCH : Description

INFOID:0000000007625036

Passenger side power window operates using power window main switch and power window sub-switch.

## WITH BOTH POWER WINDOW MAIN SWITCH AND POWER WINDOW SUB-SWITCH : Diagnosis Procedure

INFOID:0000000007625037

### 1.CHECK PASSENGER SIDE POWER WINDOW MOTOR

Check passenger side power window motor.
Refer to PWC-21, "PASSENGER 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-44, "Intermittent Incident".
NO >> GO TO 1.

# ANTI-PINCH FUNCTION DOES NOT OPERATE

## DRIVER SIDE

### DRIVER SIDE : Description

INFOID:0000000007625038

Anti-pinch function does not operate when power window up operated.

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625039

#### 1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PWC-79, "DRIVER SIDE : Diagnosis Procedure".

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

## PASSENGER SIDE

### PASSENGER SIDE : Description

INFOID:0000000007625040

Anit-pinch function does not operate when power window up operated.

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625041

#### 1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PWC-79, "PASSENGER SIDE : Diagnosis Procedure".

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

# AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY

## DRIVER SIDE

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625042

**1.** PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.
Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

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-24, "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-44, "Intermittent Incident".
NO >> GO TO 1.

## PASSENGER SIDE

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625043

**1.** PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.
Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

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-26, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

## Description

INFOID:0000000007625044

Retained power function does not operate after ignition switch turns OFF.

## Diagnosis Procedure

INFOID:0000000007625045

### 1.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-63, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

## Description

INFOID:0000000007625046

Power window does not operate when locking or unlocking a door using door key cylinder.

## Diagnosis Procedure

INFOID:0000000007625047

### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.
Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

Is the inspection result normal?

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

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

Check driver side door lock assembly (door key cylinder switch).
Refer to DLK-74, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

## Description

INFOID:0000000007625048

Power window down does not operate when pressing unlock button on Intelligent Key.

## Diagnosis Procedure

INFOID:0000000007625049

### 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-107, "Diagnosis Procedure".

### 2.CHECK POWER WINDOW OPERATION

Check power window operation.

Does power window operate up/down using power window main switch?

YES >> GO TO 3.
NO >> Refer to DLK-107, "Diagnosis Procedure".

### 3.CHECK “PW DOWN SET” SETTING IN “WORK SUPPORT”

Check “PW DOWN SET” setting in “WORK SUPPORT”.
Refer to DLK-42, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)".

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-44, "Intermittent Incident".
NO >> GO TO 1.

# POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

## Diagnosis Procedure

INFOID:0000000007625050

### 1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to PWC-89, "Removal and Installation".

# POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

## DRIVER SIDE

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625051

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to PWC-89, "Removal and Installation".

## PASSENGER SIDE

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625052

1. REPLACE POWER WINDOW SUB-SWITCH

Replace power window sub-switch.

>> Refer to PWC-89, "Removal and Installation".

# AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT OPERATE DRIVER SIDE

## DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625053

### 1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PWC-79, "DRIVER SIDE : Diagnosis Procedure".

### 2.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

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

### 3.CHECK POWER WINDOW SERIAL LINK (POWER WINDOW MAIN SWITCH)

Check power window serial link (power window main switch)
Refer to PWC-29, "POWER WINDOW MAIN SWITCH : Component Function Check"

Is the 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-44, "Intermittent Incident".
NO >> GO TO 1.

# PASSENGER SIDE

## PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625054

### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.
Refer to PWC-7, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

Is the inspection result normal?

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

### 2.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

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

### 3.CHECK POWER WINDOW SERIAL LINK (POWER WINDOW SUB-SWITCH)

Check power window serial link (power window sub-switch)
Refer to PWC-30, "POWER WINDOW SUB-SWITCH : Component Function Check"

Is the 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-44, "Intermittent Incident".
NO >> GO TO 1.

# PRECAUTION

## PRECAUTIONS

## FOR USA AND CANADA

### FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000007625055

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

**WARNING:**

**Always observe the following items for preventing accidental activation.**

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

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

**WARNING:**

**Always observe the following items for preventing accidental activation.**

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

### FOR USA AND CANADA : Service

INFOID:0000000007625056

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more.
  For approximately 3 minutes after the battery negative terminal is removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until 3 minutes or more elapse.
- Diagnosis sensor unit must always be installed with their arrow marks “⇐” pointing towards the front of the vehicle for normal operation. Also check diagnosis sensor unit for cracks, deformities, or rust before installation and replace if necessary.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Perform self-diagnosis to check entire SRS for normal function after replacing any components.
- After air bag inflates, the front instrument panel assembly must be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

### FOR USA AND CANADA : Precaution for Battery Service

INFOID:0000000007625057

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the

window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

## FOR MEXICO

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

INFOID:0000000007625058

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.**

### FOR MEXICO : Service

INFOID:0000000007625059

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more.
  For approximately 3 minutes after the battery negative terminal is removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until 3 minutes or more elapse.
- Diagnosis sensor unit must always be installed with their arrow marks “⇐” pointing towards the front of the vehicle for normal operation. Also check diagnosis sensor unit for cracks, deformities, or rust before installation and replace if necessary.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Perform self-diagnosis to check entire SRS for normal function after replacing any components.
- After air bag inflates, the front instrument panel assembly must be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

### FOR MEXICO : Precaution for Battery Service

INFOID:0000000007625060

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

# REMOVAL AND INSTALLATION

## POWER WINDOW MAIN SWITCH

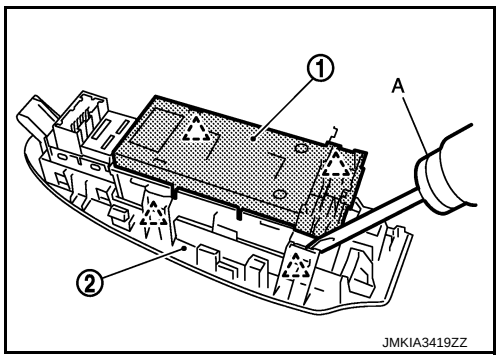
### Removal and Installation

INFOID:0000000007625061

REMOVAL

1. Remove the power window main switch finisher (2).
   Refer to INT-15, "Removal and Installation".
2. Power window main switch (1) is removed from power window main switch finisher (2) using flat-bladed screw driver (A) etc.

: Pawl




**CAUTION:**
**Never fold the pawl of power window main switch finisher.**
**NOTE:**
The same procedure is also performed for power window sub-switch.

INSTALLATION

Install in the reverse order of removal.
**NOTE:**
Power window main switch is replaced or is removed it is necessary to do the initialization procedure.
Refer to PWC-8, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORK FLOW

### WorkFlow

INFOID:0000000007625062

DETAILED FLOW

#### 1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

#### 2.CHECK FOR DTC

1. Check DTC for BCM.
2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (Print them out with CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related service bulletins for information.

Is any symptom described and any DTC detected?

Symptom is described, DTC is displayed>>SRC-332, "DTC Index".
Symptom is described, DTC is not displayed>>GO TO 3.

#### 3.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 4.

#### 4.IDENTIFY THE MALFUNCTIONING SYSTEM WITH “SYMPTOM DIAGNOSIS”

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

>> GO TO 5.

#### 5.IDENTIFY THE MALFUNCTIONING PARTS WITH “COMPONENT DIAGNOSIS”

Perform the diagnosis with “Component diagnosis” of the applicable system.

>> GO TO 6.

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

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

#### 7.FINAL CHECK

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

Are the malfunctions corrected?

YES >> INSPECTION END
NO >> GO TO 4.

# INSPECTION AND ADJUSTMENT

## ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:0000000007625063

Initial setting is necessary when battery terminal is removed.

**CAUTION:**

**The following specified operations are not performed under the non-initialized condition.**

- **Auto-up operation**
- **Anti-pinch function**
- **Automatic window adjusting function**
- **Key cylinder switch power window function**
- **Power window UP operation while door is open**

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000007625064

INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or more.
2. Close door (door switch OFF).
3. Turn ignition switch ON.
4. Close roof.
5. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open.)
6. Pull up and hold power window switch. Even after glass stops at the fully closed position, keep pulling the switch for 3 seconds or more.
7. Inspect anti-pinch function.

**CAUTION:**

**When initialization is not complete, power window UP does not operate while door is open.**

CHECK ANTI-PINCH FUNCTION

1. Fully open the door window.
2. Place a piece of wood near fully closed position.
3. Close door glass completely with AUTO-UP.

- Check that glass lowers for approximately 150 mm (5.9in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

**CAUTION:**

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

1. **Auto-up operation**
2. **Anti-pinch function**
3. **Automatic window adjusting function**
4. **Key cylinder switch power window function**
5. **Power window UP operation while door is open**

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000007625065

Initial setting is necessary when replacing power window main switch.

**CAUTION:**

**The following specified operations are not performed under the non-initialized condition.**

- **Auto-up operation**
- **Anti-pinch function**
- **Automatic window adjusting function**
- **Key cylinder switch power window function**

- **Power window UP operation while door is open**

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000007625066

### INITIALIZATION PROCEDURE

1. Disconnect battery negative terminal or power window switch connector. Reconnect it after a minute or more.
2. Close door (door switch OFF).
3. Turn ignition switch ON.
4. Close roof.
5. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open.)
6. Pull up and hold power window switch. Even after glass stops at the fully closed position, keep pulling the switch for 3 seconds or more.
7. Inspect anti-pinch function.

**CAUTION:**

**When initialization is not complete, power window UP does not operate while door is open.**

### CHECK ANTI-PINCH FUNCTION

1. Fully open the door window.
2. Place a piece of wood near fully closed position.
3. Close door glass completely with AUTO-UP.

- Check that glass lowers for approximately 150 mm (5.9in) without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

**CAUTION:**

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

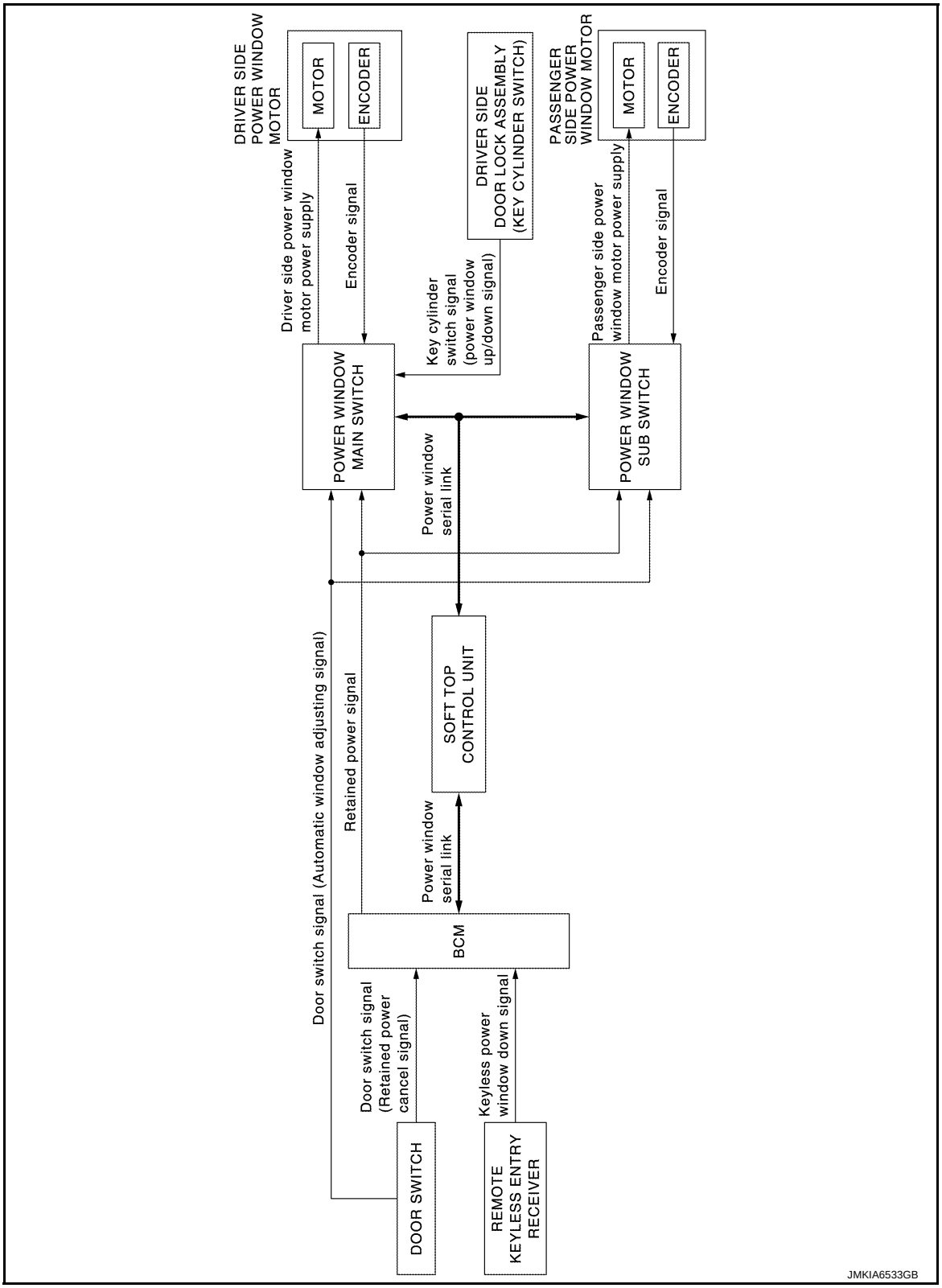
1. **Auto-up operation**
2. **Anti-pinch function**
3. **Automatic window adjusting function**
4. **Key cylinder switch power window function**
5. **Power window UP operation while door is open**

# SYSTEM DESCRIPTION

## POWER WINDOW SYSTEM

### System Diagram

INFOID:0000000007625067




### System Description

INFOID:0000000007625068

POWER WINDOW SYSTEM

- Power window system is activated by power window switch operation when ignition switch is turned ON and during the retained power operation, after ignition switch turned OFF.
- Power window main switch can open/close all windows.
- Power window sub-switch can open/close the passenger side window.
- AUTO operation can be activated by operating the power window switch once.
- It transmits and receives the signal between soft top control unit and power window main switch or power window sub switch, via serial communication.
- When pressing power window lock switch, operation other than power window main switch becomes impossible.
- When detecting the pinching resistance of foreign materials, etc. during power window AUTO UP operation, it lowers door glass to the specified value.
- When opening driver side or passenger side door while door glass is being fully closed, it lowers door glass of the door a little from the closed position. When closing the door, it return door glass to the fully closed position.
- All power windows open or close when Intelligent Key unlock button is pressed for 3seconds.
- Hold the door key cylinder to the UNLOCK direction for 1 second or more to OPEN all power windows when ignition switch OFF.
- Power window system operation links with soft top system to RF-16, "SOFT TOP SYSTEM : System Description".

## POWER WINDOW AUTO-OPERATION

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

## POWER WINDOW SERIAL LINK

Power window main switch, power window sub-switch, soft top control unit, and BCM transmit and receive the signal by power window serial link.
The under mentioned signal is transmitted from BCM to soft top control unit.

- Keyless power window down signal

The under mentioned signal is transmitted from soft top control unit to power window switch.

- Soft top operation signal (front power window down signal, front power window up operation prohibition signal)
- Keyless power window down signal

The under mentioned signal is transmitted from power window main switch to power window sub-switch.

- Passenger side door window operation signal
- Power window control by key cylinder switch signal
- Retained power operation signal
- Power window lock signal

The under mentioned signal is transmitted from power window main switch to BCM via soft top control unit.

- Power window control by key cylinder switch signal
- Power window lock signal
- Door lock/unlock switch signal

## RETAINED POWER OPERATION

Retained power operation is an additional power supply function that enables power window system to operate for 45 seconds after ignition switch turns OFF.
RETAINED POWER FUNCTION CANCEL CONDITIONS

- Front door CLOSED (door switch OFF) → OPEN (door switch ON).
- When ignition switch turns ON again.
- When timer times out. (45 seconds)

## POWER WINDOW LOCK FUNCTION

Switch operation other than power window main switch is prohibited when power window lock switch is ON. Power window main switch does not operate any power window other than driver power window.

## ANTI-PINCH FUNCTION

- The anti-pinch function detects foreign matter being pinched in the door glass, during AUTO-UP operation, and lowers the door glass 150 mm (5.9in).

- Encoder continues detecting the movement of power window motor and transmits to power window switch as the encoder pulse signal while power window motor is operating.
- Resistance is applied to the power window motor rotation that changes the frequency of encoder pulse signal if foreign material is trapped in the door glass.
- Power window switch controls to lower the door glass for 150 mm (5.9in) 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.

## AUTOMATIC WINDOW ADJUSTING FUNCTION

When the driver/passenger door(s) is open, the window of the opened door is lowered approximately 10 mm (0.39 in).
When the door is closed, the window is raised to the fully closed position.
Automatic window adjusting function system (opening operation) does not operate when the following item occurs.
The window is 10 mm (0.39 in) or more open from the fully closed position.

## DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Hold the door key cylinder to the LOCK or UNLOCK position for 1 second or more to OPEN or CLOSE all power windows when ignition switch is OFF. In addition, the windows stop the operation when the key position is NEUTRAL when operating.
OPERATION CONDITION
- Ignition switch OFF.
- Hold door key cylinder to the LOCK position for 1 second or more to perform CLOSE operation of the door glass.
- Hold door key cylinder to the UNLOCK position for 1 second 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 pressed and held 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 function stops when the following operations are performed.
- When the ignition switch is turned ON while the power window opening is operated.
- When the unlock button is released.

While retained power operation activates, keyless power window down function cannot be operated.
Keyless power window down operation mode can be changed by “PW DOWN SET” mode in “WORK SUPPORT”. Refer to DLK-208, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Roadster)".

**NOTE:**
Use CONSULT to change settings.
MODE 1 (3 sec) / MODE 2 (OFF) / MODE 3 (5 sec)

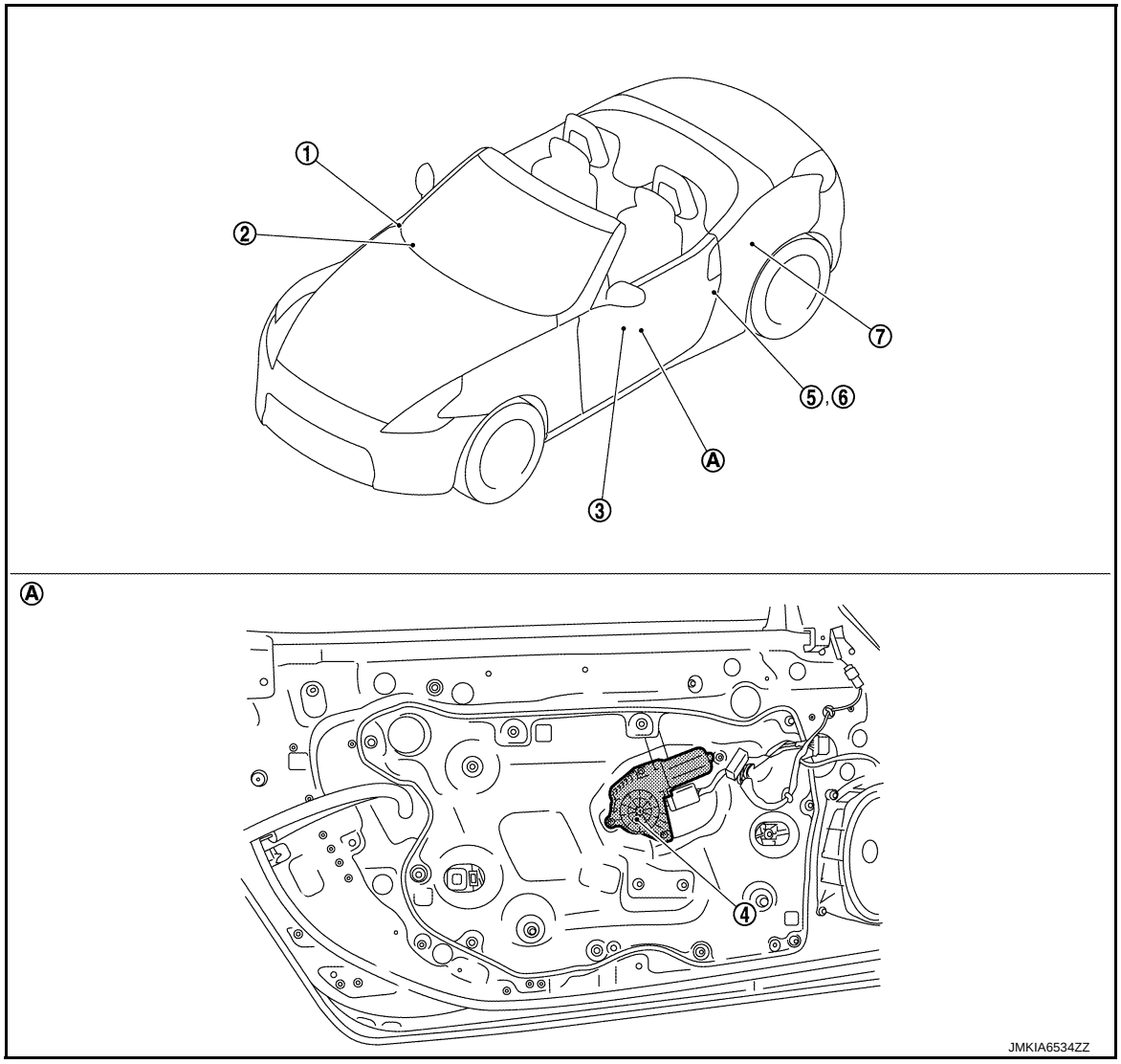
## POWER CONSUMPTION CONTROL SYSTEM

Power window switch incorporates a power consumption control function that reduces the power consumption according to the vehicle status.
LOW POWER CONSUMPTION MODE
- Ignition switch OFF.
- Power window main switch and power window sub-switch do not receive a signal from serial link.
- Power window motor does not move.

If any of the following conditions are satisfied, the low power consumption mode is released.
- Ignition switch ON.
- When door key cylinder switch signal is received.
- When the signal is received from serial link.
- When door open/close signal is received.
- When power window switch door lock is operated.

## Component Parts Location

INFOID:0000000007625069




1. BCM
   BCS-9, "Component Parts Location"
2. Remote keyless entry receiver
   DLK-182, "DOOR LOCK : Component Parts Location"
3. Power window main switch
4. Driver side power window motor
5. Driver side door lock assembly (door key cylinder switch)
6. Driver side door switch
7. Soft top control unit
   BCS-9, "Component Parts Location"

A. View with door finisher removed

## Component Description

INFOID:0000000007625070

| Component | Function |
|---|---|
| BCM | • Supplies power to power window switches.<br>• Controls retained power function |
| Power window main switch | • Directly controls all power window motors in all doors.<br>• Controls anti-pinch operation of power window. |
| Power window sub-switch | • Controls anti-pinch operation of power window.<br>• Controls power window motor of passenger door. |

| Component | Function |
|---|---|
| Driver side power window motor | • Integrates the encoder and window motor.<br>• Starts operating with signals from power window main switch.<br>• Transmits power window motor rotation as a pulse signal to power window switch. |
| Passenger side power window motor | • Integrates the encoder and window motor.<br>• Starts operating with signals from power window main switch & power window sub-switch.<br>• Transmits power window motor rotation as a pulse signal to power window switch. |
| Driver side door lock assembly (door key cylinder switch) | Transmits operation condition of key cylinder switch to power window main switch. |
| Remote keyless entry receiver | Receives lock/unlock signal from intelligent key and then transmits to BCM. |
| Door switch | • Detects door open/close condition and transmits to BCM.<br>• Door switch signal is directly received by power window switch and is used for the automatic window adjusting function. |
| Soft top control unit | Controls power window when opening/closing soft top. |
| Door key cylinder switch | Power window main switch detects condition of the door key cylinder switch and transmits to BCM as the LOCK or UNLOCK signals. |

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

INFOID:0000000007774233

#### APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode | Function Description |
|---|---|
| Work Support | Changes the setting for each system function. |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. |
| Data Monitor | The BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Ecu Identification | The BCM part number is displayed. |
| Configuration | • Read and save the vehicle specification.<br>• Write the vehicle specification when replacing BCM. |

#### SYSTEM APPLICATION
BCM can perform the following functions for each system.
**NOTE:**
It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|---|---|---|---|---|
| | | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp timer | INT LAMP | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | × | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| — | AIR CONDITONER* | | | |
| • Intelligent Key system<br>• Engine start system | INTELLIGENT KEY | × | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| NVIS - NATS | IMMU | | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door/Trunk lid open | TRUNK | | × | × |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | TPMS (AIR PRESSURE MONITOR) | × | × | × |

**NOTE:**
*: This item is displayed, but is not used.

#### FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

| 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 supply 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” (Except emergency stop operation) |
| | 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”* |
| | OFF | | Power supply position is “OFF” (Ignition switch OFF) |
| | 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<br>• The number is 0 when a malfunction is detected now.<br>• The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON.<br>• The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | |

**NOTE:**
*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.
- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

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

## RETAINED PWR

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

INFOID:0000000007625072

Data monitor

| 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. |

# DTC/CIRCUIT DIAGNOSIS

## POWER SUPPLY AND GROUND CIRCUIT

### BCM

### BCM : Diagnosis Procedure

INFOID:0000000007625073

#### 1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

| Terminal No. | Signal name | Fuse and fusible link No. |
|---|---|---|
| 1 | Battery power supply | K (40A) |
| 11 | | 10 (10A) |

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.
NO >> GO TO 2.

#### 2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check voltage between BCM harness connector and ground.

| (+) | | (–) | Voltage (Approx.) |
|---|---|---|---|
| BCM | | | |
| Connector | Terminal | | |
| M118 | 1 | Ground | Battery voltage |
| M119 | 11 | | |

Is the measurement value normal?

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

#### 3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M119 | 13 | | Existed |

Does continuity exist?

YES >> INSPECTION END
NO >> Repair harness or connector.

## POWER WINDOW MAIN SWITCH

### POWER WINDOW MAIN SWITCH : Diagnosis Procedure

INFOID:0000000007625074

#### 1.CHECK POWER SUPPLY CIRCUIT

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.

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Power window main switch | | | |
| Connector | Terminal | | |
| D8 | 1 | Ground | 12 |
| | 10 | | |

Is the measurement value within the specification?

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

## 2.CHECK HARNESS CONTINUTY

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 | |
| M118 | 2 | D8 | 1 | Existed |
| | 3 | | 10 | |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M118 | 2 | | Not existed |
| | 3 | | |

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".
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 | | |
| D8 | 15 | | Existed |

Is the inspection result normal?

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

# POWER WINDOW SUB-SWITCH

## POWER WINDOW SUB-SWITCH : Diagnosis Procedure

INFOID:0000000007625075

## 1.CHECK POWER SUPPLY CIRCUIT

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

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Power window sub-switch | | | |
| Connector | Terminal | | |
| D38 | 10 | Ground | 12 |

Is the measurement value within the specification?

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

## 2. CHECK HARNESS CONTINUTY

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

| BCM | | Power window sub-switch | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M118 | 2 | D38 | 10 | Existed |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M118 | 2 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Exploded View".
NO >> Repair or replace harness.

## 3. CHECK GROUND CIRCUIT

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

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 11 | | Existed |

Is the inspection result normal?

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

# POWER WINDOW MOTOR
## DRIVER SIDE

### DRIVER SIDE : Description

INFOID:0000000007625076

Door glass moves UP/DOWN by receiving the signal from power window main switch.

### DRIVER SIDE : Component Function Check

INFOID:0000000007625077

#### 1.CHECK POWER WINDOW MOTOR CIRCUIT

Check driver side power window motor operation with power window main switch.

Is the inspection result normal?

YES >> Driver side power window motor is OK.
NO >> Refer to PWC-104, "DRIVER SIDE : Diagnosis Procedure".

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625078

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

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

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Driver side power window motor | | | | | |
| Connector | Terminal | | | | |
| D10 | 6 | Ground | Power window main switch | UP | 12 |
| | | | | DOWN | 0 |
| | 3 | | | UP | 0 |
| | | | | DOWN | 12 |

Is the measurement value within the specification?

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

#### 2.CHECK POWER WINDOW MOTOR

Check driver side power window motor.
Refer to PWC-105, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver side power window motor. Refer to GW-23, "Removal and Installation".

#### 3.CHECK HARNESS CONTINUTY

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

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 8 | D10 | 6 | Existed |
| | 11 | | 3 | |

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 8 | | Not existed |
| | 11 | | |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-181, "Removal and Installation".
NO >> Repair or replace harness.

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# DRIVER SIDE : Component Inspection

INFOID:0000000007625079

## COMPONENT INSPECTION

## 1. CHECK DRIVER SIDE POWER WINDOW MOTOR

1. Turn ignition switch OFF.
2. Disconnect driver side power window motor connector.
3. Check motor operation by connecting the battery voltage directly to driver side power window motor connector.

| Driver side power window motor connector | Terminal | | Motor operation |
|---|---|---|---|
| | (+) | (–) | |
| D10 | 3 | 6 | DOWN |
| | 6 | 3 | UP |

Is the inspection result normal?

YES >> Driver side power window motor is OK.
NO >> Replace driver side power window motor. Refer to GW-23, "Removal and Installation".

# PASSENGER SIDE

# PASSENGER SIDE : Description

INFOID:0000000007625080

Door glass moves UP/DOWN by receiving the signal power window main switch or power window sub-switch .

# PASSENGER SIDE : Component Function Check

INFOID:0000000007625081

## 1. CHECK POWER WINDOW MOTOR CIRCUIT

Check passenger side power window motor operation with power window main switch or power window sub switch.

Is the inspection result normal?

YES >> Passenger side power window motor is OK.
NO >> Refer to PWC-105, "PASSENGER SIDE : Diagnosis Procedure".

# PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625082

## 1. CHECK PASSENGER SIDE POWER WINDOW MOTOR INPUT SIGNAL

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

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Passenger side power window motor | | | | | |
| Connector | Terminal | | | | |
| D40 | 6 | Ground | Power window sub-switch | UP | 12 |
| | | | | DOWN | 0 |
| | 3 | | | UP | 0 |
| | | | | DOWN | 12 |

Is the measurement value within the specification?

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

## 2.CHECK PASSENGER SIDE POWER WINDOW MOTOR

Check passenger side power window motor.
Refer to PWC-106, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace passenger side power window motor. Refer to GW-23, "Removal and Installation".

## 3.CHECK HARNESS CONTINUTY

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 9 | D40 | 3 | Existed |
| | 8 | | 6 | |

4. Check continuity between power window sub-switch connector and ground.

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 8 | | Not existed |
| | 9 | | |

Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-181, "Removal and Installation".
NO >> Repair or replace harness.

## 4.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# PASSENGER SIDE : Component Inspection

INFOID:0000000007625083

## COMPONENT INSPECTION

### 1.CHECK PASSENGER SIDE POWER WINDOW MOTOR

1. Turn ignition switch OFF.
2. Disconnect passenger side power window motor connector.
3. Check motor operation by connecting the battery voltage directly to passenger side power window motor connector.

| Passenger side power window motor connector | Terminal | | Motor condition |
|---|---|---|---|
| | (+) | (–) | |
| D40 | 3 | 6 | DOWN |
| | 6 | 3 | UP |

Is the inspection result normal?

YES >> Passenger side power window motor is OK.
NO >> Replace passenger side power window motor. Refer to GW-23, "Removal and Installation".

# ENCODER
## DRIVER SIDE

### DRIVER SIDE : Description

INFOID:0000000007625084

Detects condition of the driver side power window motor operation and transmits to power window main switch as the pulse signal.

### DRIVER SIDE : Component Function Check

INFOID:0000000007625085

#### 1.CHECK ENCODER OPERATION

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

Is the inspection result normal?

YES >> Encoder operation is OK.
NO >> Refer to PWC-108, "DRIVER SIDE : Diagnosis Procedure".

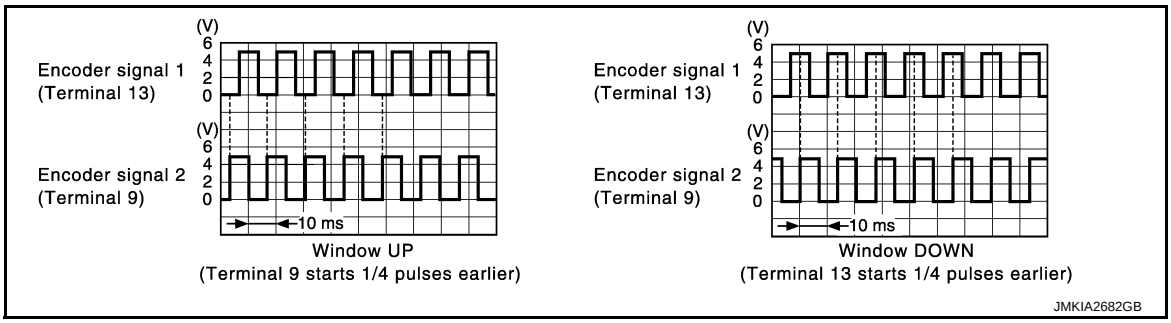
### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625086

#### 1.CHECK ENCODER OPERATION

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

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| Power window main switch | | | |
| Connector | Terminal | | |
| D8 | 9 | Ground | Refer to the following signal |
| | 13 | | |




Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-181, "Removal and Installation".
NO >> GO TO 2.

#### 2.CHECK ENCODER SIGNAL CIRCUIT

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

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 9 | D10 | 5 | Existed |
| | 13 | | 2 | |

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 9 | | Not existed |
| | 13 | | |

Is the inspection result normal?

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

## 3. CHECK ENCODER POWER SUPPLY CIRCUIT

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

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Driver side power window motor | | | |
| Connector | Terminal | | |
| D10 | 4 | Ground | 12 |

Is the measurement value within the specification?

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

## 4. CHECK HARNESS CONTINUTY

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

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 5 | D10 | 4 | Existed |

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 5 | | Not existed |

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-181, "Removal and Installation".
NO >> Repair or replace harness.

## 5. CHECK GROUND CIRCUIT

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

| Power window main switch | | Driver side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 14 | D10 | 1 | Existed |

Is the inspection result normal?

YES >> Replace driver side power window motor. Refer to PWC-181, "Removal and Installation".
NO >> Repair or replace harness.

# PASSENGER SIDE

## PASSENGER SIDE : Description

INFOID:0000000007625087

Detects condition of the passenger side power window motor operation and transmits to power window sub-switch as the pulse signal.

## PASSENGER SIDE : Component Function Check

INFOID:0000000007625088

### 1.CHECK ENCODER OPERATION

Check that passenger side door glass performs AUTO open operation normally with power window main switch or power window sub-switch.

Is the inspection result normal?

YES >> Encoder operation is OK.
NO >> Refer to PWC-110, "PASSENGER SIDE : Diagnosis Procedure".

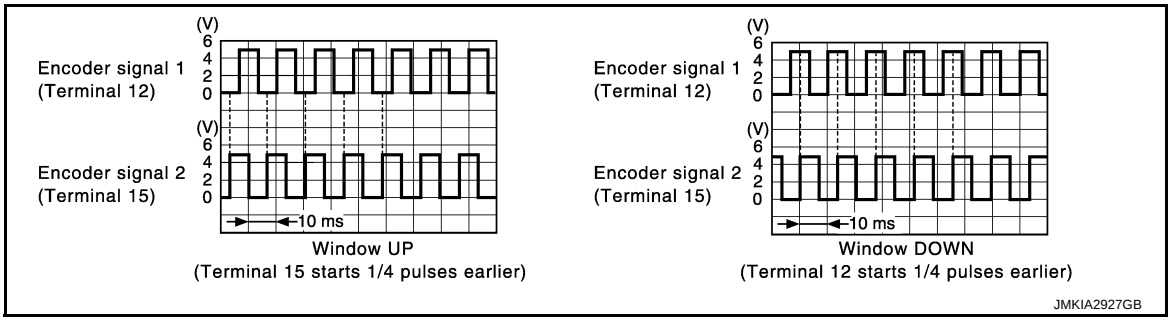
## PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625089

### 1.CHECK ENCODER SIGNAL

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

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| Power window sub-switch | | | |
| Connector | Terminal | | |
| D38 | 12 | Ground | Refer to the following signal |
| | 15 | | |




Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-181, "Removal and Installation".
NO >> GO TO 2.

### 2.CHECK ENCODER SIGNAL CIRCUIT

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 12 | D40 | 2 | Existed |
| | 15 | | 5 | |

4. Check continuity between power window sub-switch connector and ground.

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 12 | | Not existed |
| | 15 | | |

Is the inspection result normal?

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

## 3. CHECK ENCODER POWER SUPPLY CIRCUIT

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

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Passenger side power window motor | | | |
| Connector | Terminal | | |
| D40 | 4 | Ground | 12 |

Is the measurement value within the specification?

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

## 4. CHECK HARNESS CONTINUTY

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 4 | D40 | 4 | Existed |

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

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 4 | | Not existed |

Is the inspection result normal?

YES >> Replace power window sub-switch. Refer to PWC-181, "Removal and Installation".
NO >> Repair or replace harness.

## 5. CHECK GROUND CIRCUIT

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

| Power window sub-switch | | Passenger side power window motor | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 3 | D40 | 1 | Existed |

Is the inspection result normal?

YES >> Replace passenger side power window motor. Refer to PWC-181, "Removal and Installation".
NO >> Repair or replace harness.

# DOOR SWITCH CIRCUIT
## DRIVER SIDE
### DRIVER SIDE : Description

INFOID:0000000007625090

Detects door open/closed condition.

### DRIVER SIDE : Component Function Check

INFOID:0000000007625091

#### 1.CHECK FUNCTION

Check automatic window adjusting function.

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to PWC-112, "DRIVER SIDE : Diagnosis Procedure".

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625092

#### 1.CHECK DOOR SWITCH

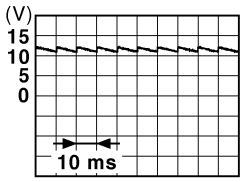
Check door switch.Refer to DLK-234, "Component Function Check".

Is the inspection result normal?

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

#### 2.CHECK DOOR SWITCH INPUT SIGNAL

Check voltage between driver side power window main switch harness connector and ground.

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Driver side power window main switch | | | |
| Connector | Terminal | | |
| D8 | 4 | Ground |  |



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Is the inspection result normal?

YES >> Replace power window main switch.Refer to PWC-181, "Removal and Installation".
NO >> GO TO 3.

#### 3.CHECK DOOR SWITCH CIRCUIT

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

| Power window main switch | | Driver side door switch | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D8 | 4 | B63 | 2 | Existed |

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

| Power window main switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D8 | 4 | | Not existed |

Is the inspection result normal?

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

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# PASSENGER SIDE

## PASSENGER SIDE : Description

INFOID:0000000007625093

Detects door open/closed condition.

## PASSENGER SIDE : Component Function Check

INFOID:0000000007625094

## 1. CHECK FUNCTION

Check automatic window adjusting function.

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to PWC-113, "PASSENGER SIDE : Diagnosis Procedure".

## PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625095

## 1. CHECK DOOR SWITCH

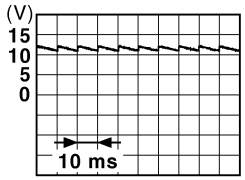
Check door switch.Refer to DLK-234, "Component Function Check".

Is the inspection result normal?

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

## 2. CHECK DOOR SWITCH INPUT SIGNAL

Check voltage between power window sub-switch harness connector and ground.

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Power window sub-switch | | | |
| Connector | Terminal | | |
| D38 | 14 | Ground |  |



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Is the inspection result normal?

YES >> Replace power window sub-switch.Refer to PWC-181, "Removal and Installation".
NO >> GO TO 3.

## 3. CHECK DOOR SWITCH CIRCUIT

1. Disconnect passenger side door switch connector.
2. Check continuity between passenger side door switch harness connector and power window sub-switch harness connector.

| Power window sub-switch | | Passenger side door switch | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D38 | 14 | B206 | 2 | Existed |

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

| Power window sub-switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D38 | 14 | | Not existed |

Is the inspection result normal?

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

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# ECU DIAGNOSIS INFORMATION

## BCM (BODY CONTROL MODULE)

### Reference Value

INFOID:0000000007774234

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

| Monitor Item | Condition | Value/Status |
|---|---|---|
| FR WIPER HI | Other than front wiper switch HI | Off |
| | Front wiper switch HI | On |
| FR WIPER LOW | Other than front wiper switch LO | Off |
| | Front wiper switch LO | On |
| FR WASHER SW | Front washer switch OFF | Off |
| | Front washer switch ON | On |
| FR WIPER INT | Other than front wiper switch INT | Off |
| | Front wiper switch INT | On |
| FR WIPER STOP | Front wiper is not in STOP position | Off |
| | Front wiper is in STOP position | On |
| INT VOLUME | Wiper intermittent dial is in a dial position 1 - 7 | Wiper intermittent dial position |
| TURN SIGNAL R | Other than turn signal switch RH | Off |
| | Turn signal switch RH | On |
| TURN SIGNAL L | Other than turn signal switch LH | Off |
| | Turn signal switch LH | On |
| TAIL LAMP SW | Other than lighting switch 1ST and 2ND | Off |
| | Lighting switch 1ST or 2ND | On |
| HI BEAM SW | Other than lighting switch HI | Off |
| | Lighting switch HI | On |
| HEAD LAMP SW 1 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| HEAD LAMP SW 2 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| PASSING SW | Other than lighting switch PASS | Off |
| | Lighting switch PASS | On |
| AUTO LIGHT SW | Other than lighting switch AUTO | Off |
| | Lighting switch AUTO | On |
| FR FOG SW | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| RR FOG SW | Rear fog lamp switch OFF | Off |
| | Rear fog lamp switch ON | On |
| DOOR SW-DR | Driver door closed | Off |
| | Driver door opened | On |
| DOOR SW-AS | Passenger door closed | Off |
| | Passenger door opened | On |
| DOOR SW-RR | **NOTE:**<br>The item is indicated, but not monitored. | Off |

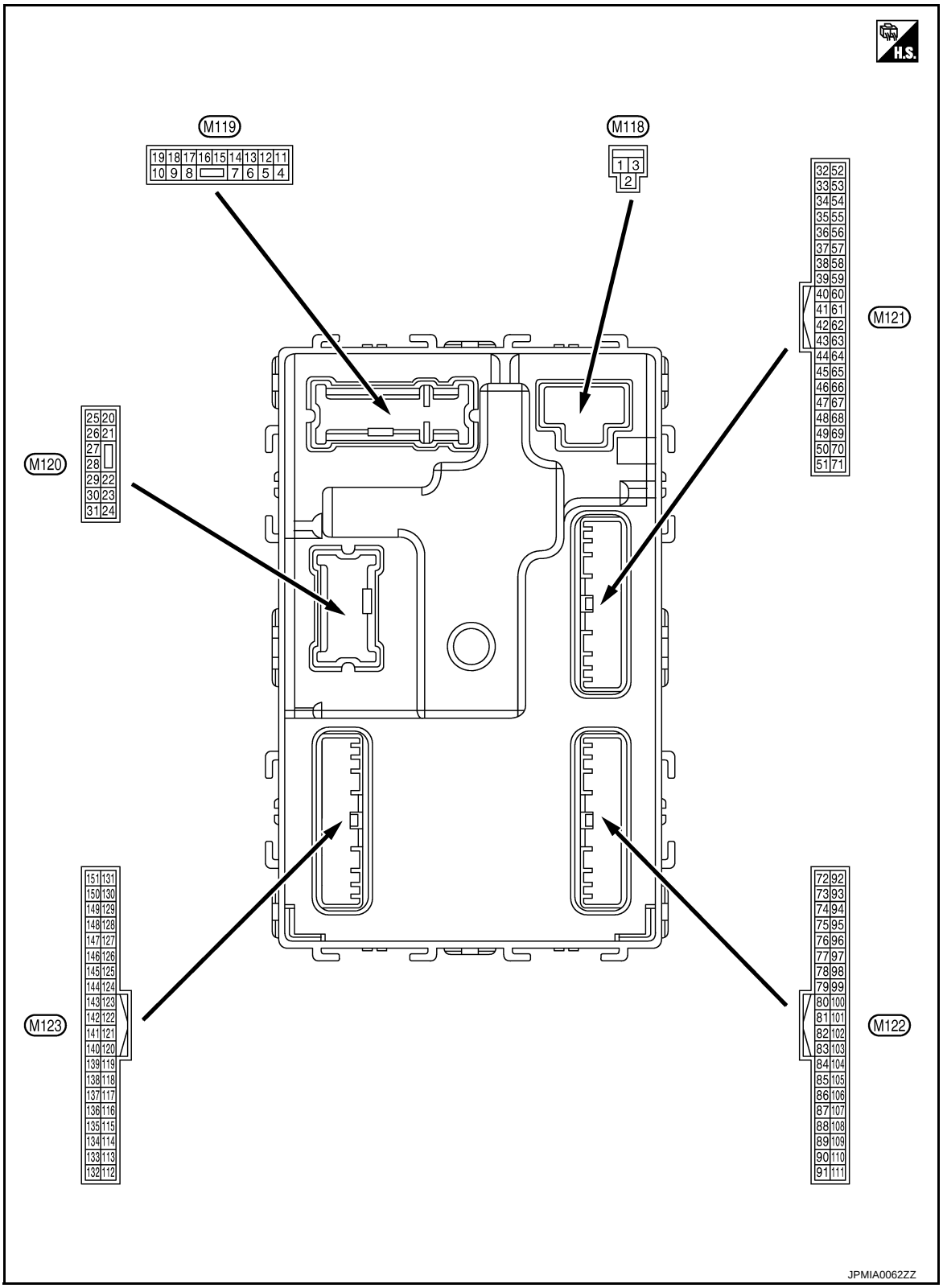
| Monitor Item | Condition | Value/Status |
|---|---|---|
| DOOR SW-RL | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| DOOR SW-BK | • Back door closed (Coupe models)<br>• Trunk lid closed (Roadster models) | Off |
| | • Back door opened (Coupe models)<br>• Trunk lid opened (Roadster models) | On |
| CDL LOCK SW | Other than door lock and unlock switch LOCK | Off |
| | Door lock and unlock switch LOCK | On |
| CDL UNLOCK SW | Other than door lock and unlock switch UNLOCK | Off |
| | Door lock and unlock switch UNLOCK | On |
| KEY CYL LK-SW | Other than driver door key cylinder LOCK position | Off |
| | Driver door key cylinder LOCK position | On |
| KEY CYL UN-SW | Other than driver door key cylinder UNLOCK position | Off |
| | Driver door key cylinder UNLOCK position | On |
| KEY CYL SW-TR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| HAZARD SW | Hazard switch is OFF | Off |
| | Hazard switch is ON | On |
| REAR DEF SW<br>**NOTE:**<br>For models with NAVI this item is not monitored. | Rear window defogger switch OFF | Off |
| | Rear window defogger switch ON | On |
| H/L WASH SW | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| TR CANCEL SW | Trunk lid opener cancel switch OFF | Off |
| | Trunk lid opener cancel switch ON | On |
| TR/BD OPEN SW | • Back door opener switch OFF (Coupe models)<br>• Trunk lid opener switch OFF (Roadster models) | Off |
| | • While the back door opener switch is turned ON (Coupe models)<br>• While the trunk lid opener switch is turned ON (Roadster models) | On |
| TRNK/HAT MNTR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| RKE-LOCK | LOCK button of the Intelligent Key is not pressed | Off |
| | LOCK button of the Intelligent Key is pressed | On |
| RKE-UNLOCK | UNLOCK button of the Intelligent Key is not pressed | Off |
| | UNLOCK button of the Intelligent Key is pressed | On |
| RKE-TR/BD<br>**NOTE:**<br>For Coupe models this item is not monitored. | TRUNK OPEN button of the Intelligent Key is not pressed | Off |
| | TRUNK OPEN of the Intelligent Key is pressed | On |
| RKE-PANIC | PANIC button of the Intelligent Key is not pressed | Off |
| | PANIC button of the Intelligent Key is pressed | On |
| RKE-P/W OPEN | UNLOCK button of the Intelligent Key is not pressed | Off |
| | UNLOCK button of the Intelligent Key is pressed and held | On |
| RKE-MODE CHG | LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously | Off |
| | LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously | On |

| Monitor Item | Condition | Value/Status |
|---|---|---|
| OPTICAL SENSOR | Bright outside of the vehicle | Close to 5 V |
| | Dark outside of the vehicle | Close to 0 V |
| REQ SW -DR | Driver door request switch is not pressed | Off |
| | Driver door request switch is pressed | On |
| REQ SW -AS | Passenger door request switch is not pressed | Off |
| | Passenger door request switch is pressed | On |
| REQ SW -RR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| REQ SW -RL | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| REQ SW -BD/TR | • Back door request switch is not pressed (Coupe models)<br>• Trunk lid door request switch is not pressed (Roadster models) | Off |
| | • Back door request switch is pressed (Coupe models)<br>• Trunk lid door request switch is pressed (Roadster models) | On |
| PUSH SW | Push-button ignition switch (push switch) is not pressed | Off |
| | Push-button ignition switch (push switch) is pressed | On |
| IGN RLY2 -F/B | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| ACC RLY -F/B | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| CLUCH SW<br>**NOTE:**<br>For A/T models this item is not monitored. | The clutch pedal is not depressed | Off |
| | The clutch pedal is depressed | On |
| BRAKE SW 1 | The brake pedal is depressed when No. 7 fuse is blown | Off |
| | The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal | On |
| BRAKE SW 2 | The brake pedal is not depressed | Off |
| | The brake pedal is depressed | On |
| DETE/CANCL SW<br>**NOTE:**<br>For M/T models with Synchro-Rev Match mode this item is not monitored. | • Selector lever in P position (A/T models)<br>• The clutch pedal is depressed (M/T models without SynchroRev Match mode) | Off |
| | • Selector lever in any position other than P (A/T models)<br>• The clutch pedal is not depressed (M/T models without SynchroRev Match mode) | On |
| SFT PN/N SW<br>**NOTE:**<br>For roadster M/T models and coupe M/T models without SynchroRev Match mode this item is not monitored. | • Selector lever in any position other than P and N (A/T models)<br>• Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode) | Off |
| | • Selector lever in P or N position (A/T models)<br>• Control lever in neutral position (Coupe M/T models with SynchroRev Match mode) | On |
| S/L -LOCK | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L -UNLOCK | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L RELAY-F/B | **NOTE:**<br>The item is indicated but not monitored. | Off |
| UNLK SEN -DR | Driver door is unlocked | Off |
| | Driver door is locked | On |
| PUSH SW -IPDM | Push-button ignition switch (push-switch) is not pressed | Off |
| | Push-button ignition switch (push-switch) is pressed | On |

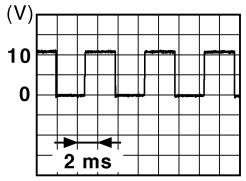
| Monitor Item | Condition | Value/Status |
|---|---|---|
| IGN RLY1 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| DETE SW -IPDM | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT PN -IPDM | • Selector lever in any position other than P and N (A/T models)<br>• The clutch pedal is not depressed (M/T models) | Off |
| | • Selector lever in P or N position (A/T models)<br>• The clutch pedal is depressed (M/T models) | On |
| SFT P -MET | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT N -MET | Selector lever in any position other than N | Off |
| | Selector lever in N position | On |
| ENGINE STATE | Engine stopped | Stop |
| | While the engine stalls | Stall |
| | At engine cranking | Crank |
| | Engine running | Run |
| S/L LOCK-IPDM | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L UNLK-IPDM | **NOTE:**<br>The item is indicated but not monitored. | Off |
| S/L RELAY-REQ | **NOTE:**<br>The item is indicated but not monitored. | Off |
| VEH SPEED 1 | While driving | Equivalent to speedometer reading |
| VEH SPEED 2 | While driving | Equivalent to speedometer reading |
| DOOR STAT-DR | Driver door is locked | LOCK |
| | Wait with selective UNLOCK operation (60 seconds) | READY |
| | Driver door is unlocked | UNLOCK |
| DOOR STAT-AS | Passenger door is locked | LOCK |
| | Wait with selective UNLOCK operation (60 seconds) | READY |
| | Passenger door is unlocked | UNLOCK |
| ID OK FLAG | Driver side door is open after ignition switch is turned OFF<br>(Shift position is in the P position) | Reset |
| | Ignition switch ON | Set |
| PRMT ENG STRT | The engine start is prohibited | Reset |
| | The engine start is permitted | Set |
| PRMT RKE STRT | **NOTE:**<br>The item is indicated, but not monitored. | Reset |
| KEY SW -SLOT | The Intelligent Key is not inserted into key slot | Off |
| | The Intelligent Key is inserted into key slot | On |
| RKE OPE COUN1 | During the operation of the Intelligent Key | Operation frequency of the Intelligent Key |
| RKE OPE COUN2 | During the operation of the Intelligent Key | Operation frequency of the Intelligent Key |

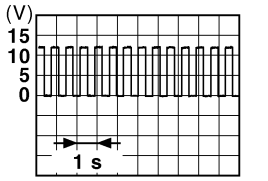
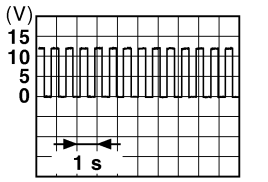
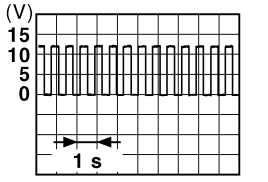
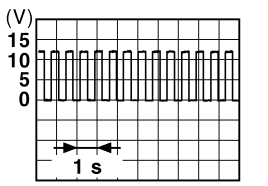
| Monitor Item | Condition | Value/Status |
|---|---|---|
| CONFRM ID ALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done |
| CONFIRM ID4 | The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the fourth key ID registered to BCM. | Done |
| CONFIRM ID3 | The key ID that the key slot receives is not recognized by the third key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the third key ID registered to BCM. | Done |
| CONFIRM ID2 | The key ID that the key slot receives is not recognized by the second key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the second key ID registered to BCM. | Done |
| CONFIRM ID1 | The key ID that the key slot receives is not recognized by the first key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the first key ID registered to BCM. | Done |
| TP 4 | The ID of fourth Intelligent Key is not registered to BCM | Yet |
| | The ID of fourth Intelligent Key is registered to BCM | Done |
| TP 3 | The ID of third Intelligent Key is not registered to BCM | Yet |
| | The ID of third Intelligent Key is registered to BCM | Done |
| TP 2 | The ID of second Intelligent Key is not registered to BCM | Yet |
| | The ID of second Intelligent Key is registered to BCM | Done |
| TP 1 | The ID of first Intelligent Key is not registered to BCM | Yet |
| | The ID of first Intelligent Key is registered to BCM | Done |
| AIR PRESS FL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front LH tire |
| AIR PRESS FR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front RH tire |
| AIR PRESS RR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear RH tire |
| AIR PRESS RL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear LH tire |
| ID REGST FL1 | ID of front LH tire transmitter is registered | Done |
| | ID of front LH tire transmitter is not registered | Yet |
| ID REGST FR1 | ID of front RH tire transmitter is registered | Done |
| | ID of front RH tire transmitter is not registered | Yet |
| ID REGST RR1 | ID of rear RH tire transmitter is registered | Done |
| | ID of rear RH tire transmitter is not registered | Yet |
| ID REGST RL1 | ID of rear LH tire transmitter is registered | Done |
| | ID of rear LH tire transmitter is not registered | Yet |
| WARNING LAMP | Tire pressure indicator OFF | Off |
| | Tire pressure indicator ON | On |
| BUZZER | Tire pressure warning alarm is not sounding | Off |
| | Tire pressure warning alarm is sounding | On |

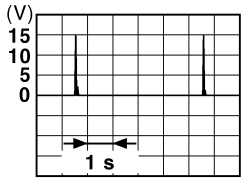
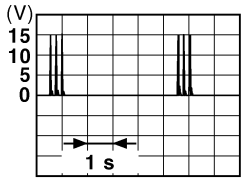
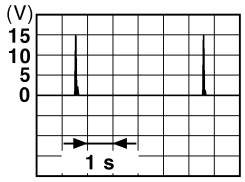
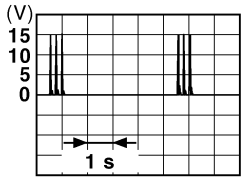
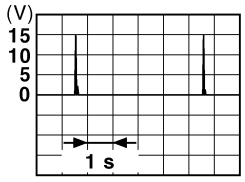
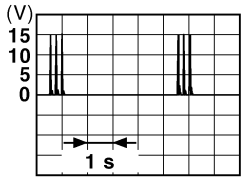
TERMINAL LAYOUT

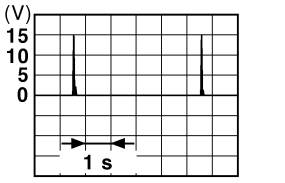
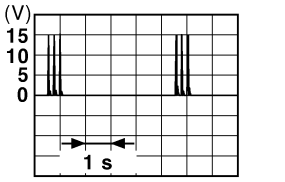
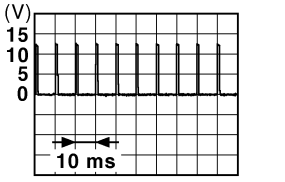
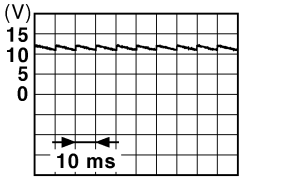


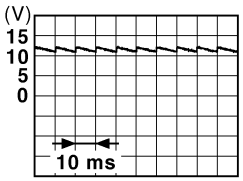
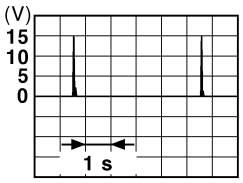
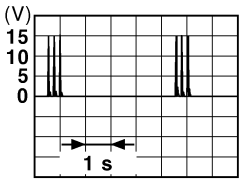
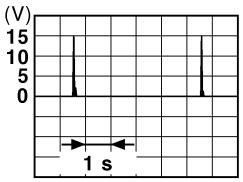
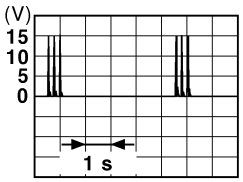

PHYSICAL VALUES

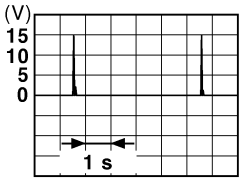
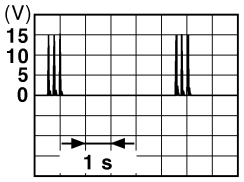
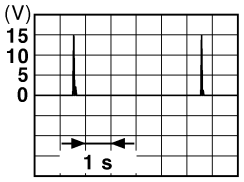
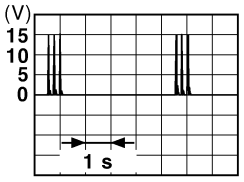
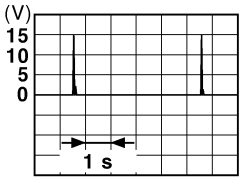
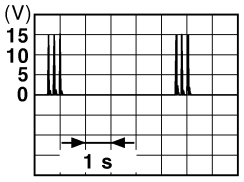
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (W) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | 12 V |
| 3 (Y) | Ground | P/W power supply (IGN) | Output | Ignition switch ON | | 12 V |
| 4 (R) | Ground | Interior room lamp power supply | Output | Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply) | | 0 V |
| | | | | Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply) | | 12 V |
| 5 (G) | Ground | Passenger door UNLOCK | Output | Passenger door | UNLOCK (Actuator is activated) | 12 V |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 8 (V) | Ground | All doors, fuel lid LOCK | Output | All doors, fuel lid | LOCK (Actuator is activated) | 12 V |
| | | | | | Other than LOCK (Actuator is not activated) | 0 V |
| 9 (G) | Ground | Driver door, fuel lid UNLOCK | Output | Driver door, fuel lid | UNLOCK (Actuator is activated) | 12 V |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 11 (BR) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 13 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 14 (R) | Ground | Push-button ignition switch illumination ground | Output | Tail lamp | OFF | 0 V |
| | | | | | ON | **NOTE:** When the illumination brightening/dimming level is in the neutral position.   JSNIA0010GB |
| 15 (Y) | Ground | ACC indicator lamp | Output | Ignition switch | OFF (LOCK indicator is not illuminated) | Battery voltage |
| | | | | | ACC | 0 V |

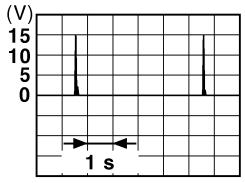
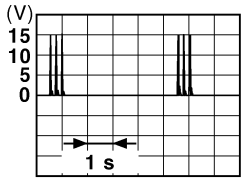
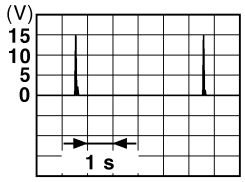
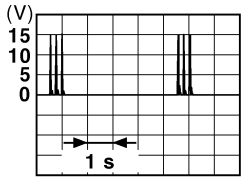
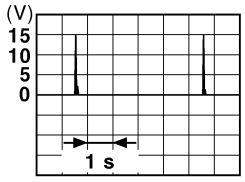
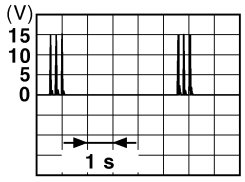
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 17 (W) | Ground | Turn signal RH (Front and side) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch RH |  PKID0926E 6.5 V |
| 18 (O) | Ground | Turn signal LH (Front and side) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch LH |  PKID0926E 6.5 V |
| 19 (P) | Ground | Interior room lamp control | Output | Interior room lamp | OFF | 12 V |
| | | | | | ON | 0 V |
| 20 (V) | Ground | Turn signal RH (Rear) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch RH |  PKID0926E 6.5 V |
| 23 (L)*1 (Y)*2 | Ground | Back door/Trunk lid open | Output | Back door/ Trunk lid | OPEN (Back door/Trunk lid opener actuator is activated) | 12 V |
| | | | | | Other than OPEN (Back door/Trunk lid opener actuator is not activated) | 0 V |
| 24*8 (O) | Ground | Rear fog lamp | Output | Rear fog lamp | OFF | 0 V |
| | | | | | ON | 12 V |
| 25 (LG) | Ground | Turn signal LH (Rear) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch LH |  PKID0926E 6.5 V |
| 30 (R) | Ground | Luggage room/Trunk room lamp | Output | Luggage room/ Trunk room lamp | ON | 0 V |
| | | | | | OFF | 12 V |

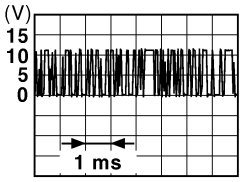
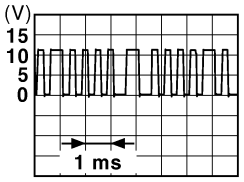
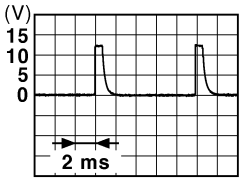
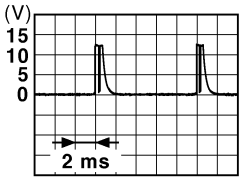
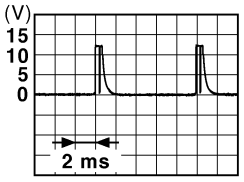
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 34 (G) | Ground | Luggage room/Trunk room antenna (–) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 35 (R) | Ground | Luggage room/Trunk room antenna (+) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 38 (B) | Ground | Rear bumper antenna (–) | Output | When the back door/trunk lid door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |

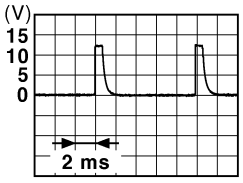
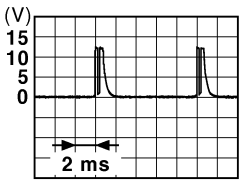
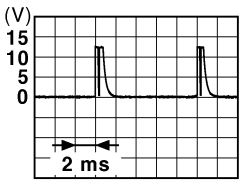
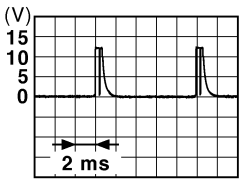
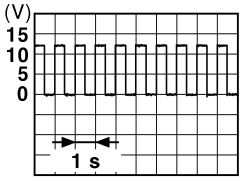
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 39 (W) | Ground | Rear bumper antenna (+) | Output | When the back door/trunk lid door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 47 (V) | Ground | Ignition relay (IPDM E/R) control | Output | Ignition switch | OFF or ACC | 12 V |
| | | | | | ON | 0 V |
| 52 (SB) | Ground | Starter relay control | Output | Ignition switch ON (A/T models) | When selector lever is in P or N position | 12 V |
| | | | | | When selector lever is not in P or N position | 0 V |
| | | | | Ignition switch ON (M/T models) | When the clutch pedal is depressed | Battery voltage |
| | | | | | When the clutch pedal is not depressed | 0 V |
| 60 (BR) | Ground | Push-button ignition switch (Push switch) | Input | Push-button ignition switch (push switch) | Pressed | 0 V |
| | | | | | Not pressed | Battery voltage |
| 61 (W) | Ground | Back door/Trunk Lid door request switch | Input | Back door/ Trunk lid door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB<br>1.0 V |
| 64 (G) | Ground | Intelligent Key warning buzzer | Output | Intelligent Key warning buzzer | Sounding | 0 V |
| | | | | | Not sounding | 12 V |
| 66 (R) | Ground | Back door/Trunk room lamp switch | Input | Back door/ Trunk room lamp switch | OFF (Door close) |  JPMIA0011GB<br>11.8 V |
| | | | | | ON (Door open) | 0 V |

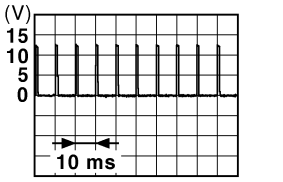
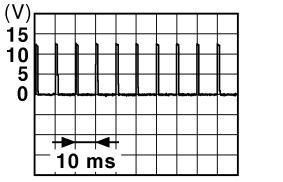
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 67 (GR) | Ground | Back door/Trunk lid opener switch | Input | Back door/ Trunk lid opener switch | Pressed | 0 V |
| | | | | | Not pressed |  JPMIA0011GB 11.8 V |
| 72 (L) | Ground | Room antenna 2 (–) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 73 (P) | Ground | Room antenna 2 (+) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |

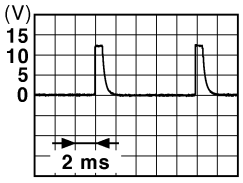
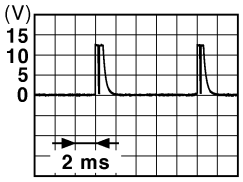
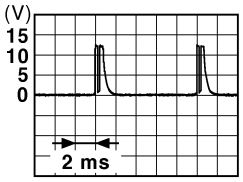
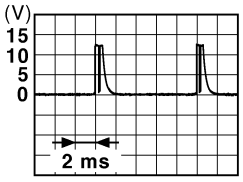
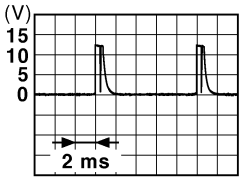
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 74 (SB) | Ground | Passenger door antenna (–) | Output | When the passenger door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 75 (BR) | Ground | Passenger door antenna (+) | Output | When the passenger door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 76 (V) | Ground | Driver door antenna (–) | Output | When the driver door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |

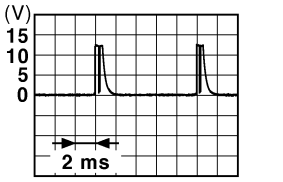
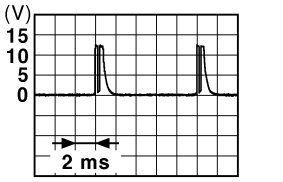
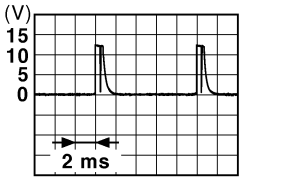
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 77 (LG) | Ground | Driver door antenna (+) | Output | When the driver door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 78*2 (L) | Ground | Room antenna 1 (–) (Instrument panel) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 79*2 (R) | Ground | Room antenna 1 (+) (Instrument panel) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |

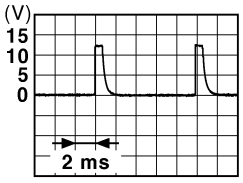
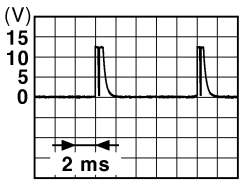
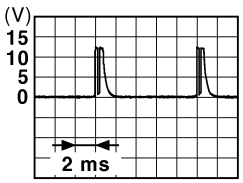
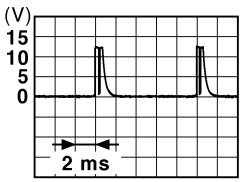
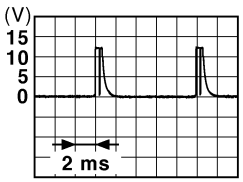
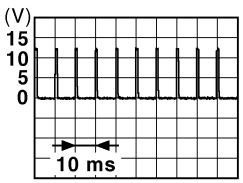
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 80 (GR) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent Key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 81 (W) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent Key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 82 (R) | Ground | Ignition relay [Fuse block (J/B)] control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | 12 V |
| 83 (GR) | Ground | Remote keyless entry receiver (front) communication | Input/ Output | During waiting | |  JMKIA0064GB |
| | | | | When operating either button on the Intelligent Key | |  JMKIA0065GB |
| 87 (BR) | Ground | Combination switch INPUT 5 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Rear fog lamp switch ON (Wiper intermittent dial 4) |  JPMIA0038GB 1.3 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 2<br>• Wiper intermittent dial 6<br>• Wiper intermittent dial 7 |  JPMIA0040GB 1.3 V |

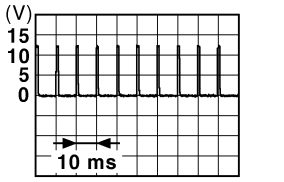
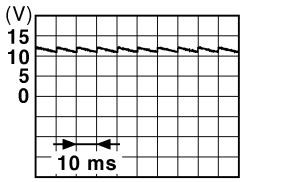
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 88 (V) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch HI (Wiper intermittent dial 4) |  JPMIA0036GB 1.3 V |
| | | | | | Lighting switch 2ND (Wiper intermittent dial 4) |  JPMIA0037GB 1.3 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 2<br>• Wiper intermittent dial 3 |  JPMIA0040GB 1.3 V |
| 90 (P) | Ground | CAN-L | Input/ Output | — | | — |
| 91 (L) | Ground | CAN-H | Input/ Output | — | | — |
| 92 (LG) | Ground | Key slot illumination | Output | Key slot illumination | OFF | 0 V |
| | | | | | Blinking |  JPMIA0015GB 6.5 V |
| | | | | | ON | 12 V |
| 93 (V) | Ground | ON indicator lamp | Output | Ignition switch | OFF (LOCK indicator is not illuminated) | Battery voltage |
| | | | | | ON | 0 V |

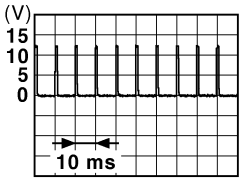
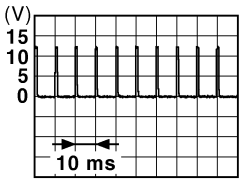
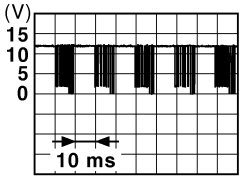
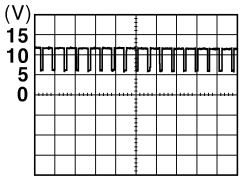
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 95 (O) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 12 V |
| 96*3 (Y) | Ground | A/T shift selector (Detention switch) power supply | Output | — | | 12 V |
| 99*6 (R) | Ground | Selector lever P position switch (A/T models) | Input | Selector lever | P position | 0 V |
| | | | | | Any position other than P | 12 V |
| | | Clutch pedal position switch (M/T models without SynchroRev Match mode) | | Clutch pedal position switch | OFF (Clutch pedal is depressed) | 0 V |
| | | | | | ON (Clutch pedal is not depressed) | Battery voltage |
| 100 (GR) | Ground | Passenger door request switch | Input | Passenger door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB 1.0 V |
| 101 (Y) | Ground | Driver door request switch | Input | Driver door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB 1.0 V |
| 102 (O) | Ground | Blower fan motor relay control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | 12 V |
| 103 (LG) | Ground | Remote keyless entry receiver (front) power supply | Output | Ignition switch OFF | | 12 V |

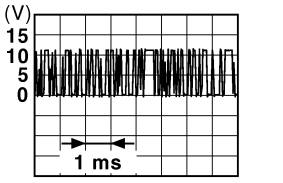
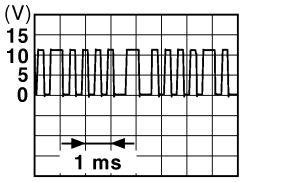
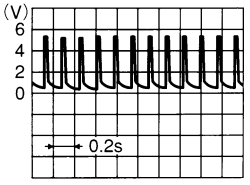
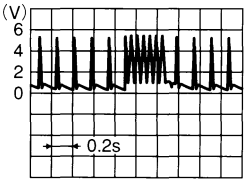
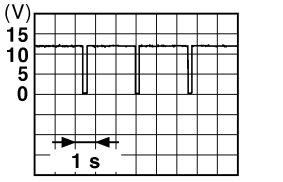
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 107 (LG) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB 1.4 V |
| | | | | | Turn signal switch LH |  JPMIA0037GB 1.3 V |
| | | | | | Turn signal switch RH |  JPMIA0036GB 1.3 V |
| | | | | | Front wiper switch LO |  JPMIA0038GB 1.3 V |
| | | | | | Front washer switch ON |  JPMIA0039GB 1.3 V |

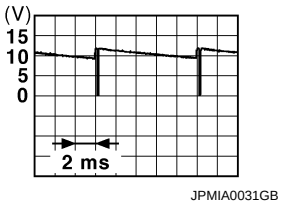
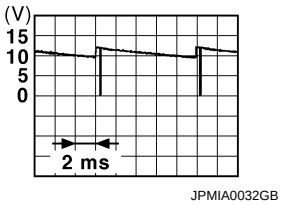
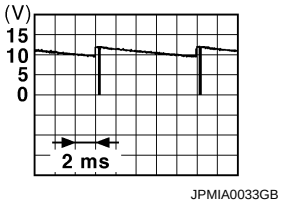
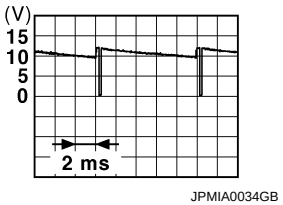
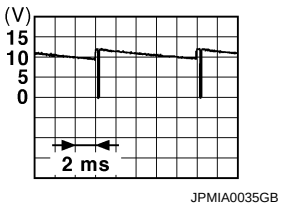
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 108 (R) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch AUTO (Wiper intermittent dial 4) |  JPMIA0038GB 1.3 V |
| | | | | | Lighting switch 1ST (Wiper intermittent dial 4) |  JPMIA0036GB 1.3 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 5<br>• Wiper intermittent dial 6 |  JPMIA0039GB 1.3 V |

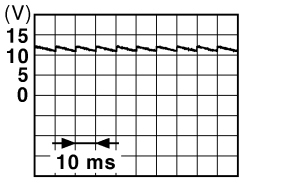
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 109 (Y) | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch PASS |  JPMIA0037GB 1.3 V |
| | | | | | Lighting switch 2ND |  JPMIA0036GB 1.3 V |
| | | | | | Front wiper switch INT |  JPMIA0038GB 1.3 V |
| | | | | | Front wiper switch HI |  JPMIA0040GB 1.3 V |
| 110 (P) | Ground | Hazard switch | Input | Hazard switch | ON | 0 V |
| | | | | | OFF |  JPMIA0012GB 1.1 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 113 (O) | Ground | Optical sensor | Input | Ignition switch ON | When bright outside of the vehicle | Close to 5 V |
| | | | | | When dark outside of the vehicle | Close to 0 V |
| 114*4 (R) | Ground | Clutch interlock switch | Input | Clutch interlock switch | OFF (Clutch pedal is not depressed) | 0 V |
| | | | | | ON (Clutch pedal is depressed) | Battery voltage |
| 115*9 (O) | — | — | — | — | | — |
| 116 (SB) | Ground | Stop lamp switch 1 | Input | — | | Battery voltage |
| 118 (P) | Ground | Stop lamp switch 2 | Input | Stop lamp switch | OFF (Brake pedal is not depressed) | 0 V |
| | | | | | ON (Brake pedal is depressed) | Battery voltage |
| 119 (SB) | Ground | Driver side door lock assembly (Unlock sensor) | Input | Driver door | LOCK status (Unlock sensor switch OFF) |  JPMIA0012GB 1.1 V |
| | | | | | UNLOCK status (Unlock switch sensor ON) | 0 V |
| 121 (R) | Ground | Key slot switch | Input | When the Intelligent Key is inserted into key slot | | 12 V |
| | | | | When the Intelligent Key is not inserted into key slot | | 0 V |
| 123 (W) | Ground | IGN feedback | Input | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 124 (LG) | Ground | Passenger door switch | Input | Passenger door switch | OFF (Door close) |  JPMIA0011GB 11.8 V |
| | | | | | ON (Door open) | 0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 129*2 (O) | Ground | Trunk lid opener cancel switch | Input | Trunk lid opener cancel switch | CANCEL |  JPMIA0012GB<br>1.1 V |
| | | | | | ON | 0 V |
| 130*7 (L) | Ground | Rear window defogger switch | Input | Ignition switch ON | Rear window defogger switch OFF |  JPMIA0012GB<br>1.1 V |
| | | | | | Rear window defogger switch ON | 0 V |
| 132 (Y)*1 (V)*2 | Ground | Power window switch and soft top control unit communication | Input/ Output | Ignition switch ON | |  JPMIA0013GB<br>10.2 V |
| | | | | Ignition switch OFF or ACC | | 12 V |
| 133 (G) | Ground | Push-button ignition switch illumination | Output | Push-button ignition switch illumination | ON (Tail lamps OFF) | 9.5 V |
| | | | | | ON (Tail lamps ON) | **NOTE:**<br>The pulse width of this wave is varied by the illumination brightening/dimming level.<br>  JPMIA0159GB |
| | | | | | OFF | 0 V |
| 134 (GR) | Ground | LOCK indicator lamp | Output | LOCK indicator lamp | OFF | Battery voltage |
| | | | | | ON | 0 V |
| 137 (P) | Ground | Receiver and sensor ground | Input | Ignition switch ON | | 0 V |
| 138 (V) | Ground | Receiver and sensor power supply | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 5.0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 139 (L) | Ground | Tire pressure receiver communication | Input/ Output | Ignition switch OFF (Remote keyless entry receiver communication) | During waiting |  JMKIA0064GB |
| | | | | | When operating either button on the Intelligent Key |  JMKIA0065GB |
| | | | | Ignition switch ON (Tire pressure receiver communication) | Standby state |  OCC3881D |
| | | | | | When receiving the signal from the transmitter |  OCC3880D |
| 140*5 (G) | Ground | Selector lever P/N position (A/T models) | Input | Selector lever | P or N position | 12 V |
| | | | | | Except P and N positions | 0 V |
| | | Park/neutral position switch (Coupe M/T models with Synchro-Rev Match mode) | | Ignition switch ON | Control lever in neutral position | Battery voltage |
| | | | | | Control lever in any position other than neutral | 0 V |
| 141 (Y) | Ground | Security indicator lamp | Output | Security indicator lamp | ON | 0 V |
| | | | | | Blinking |  JPMIA0014GB<br>11.3 V |
| | | | | | OFF | 12 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 142 (O) | Ground | Combination switch OUTPUT 5 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Lighting switch 1ST |  JPMIA0031GB 10.7 V |
| | | | | | Lighting switch HI | |
| | | | | | Lighting switch 2ND | |
| | | | | | Turn signal switch RH | |
| 143 (P) | Ground | Combination switch OUTPUT 1 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) | 0 V |
| | | | | | Front wiper switch HI (Wiper intermittent dial 4) |  JPMIA0032GB 10.7 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 2<br>• Wiper intermittent dial 3<br>• Wiper intermittent dial 6<br>• Wiper intermittent dial 7 | |
| 144 (G) | Ground | Combination switch OUTPUT 2 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) | 0 V |
| | | | | | Front washer switch ON (Wiper intermittent dial 4) |  JPMIA0033GB 10.7 V |
| | | | | | Any of the conditions below with all switches OFF<br>• Wiper intermittent dial 1<br>• Wiper intermittent dial 5<br>• Wiper intermittent dial 6 | |
| 145 (L) | Ground | Combination switch OUTPUT 3 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Front wiper switch INT |  JPMIA0034GB 10.7 V |
| | | | | | Front wiper switch LO | |
| | | | | | Lighting switch AUTO | |
| | | | | | Rear fog lamp switch ON | |
| 146 (SB) | Ground | Combination switch OUTPUT 4 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Lighting switch 2ND |  JPMIA0035GB 10.7 V |
| | | | | | Lighting switch PASS | |
| | | | | | Turn signal switch LH | |

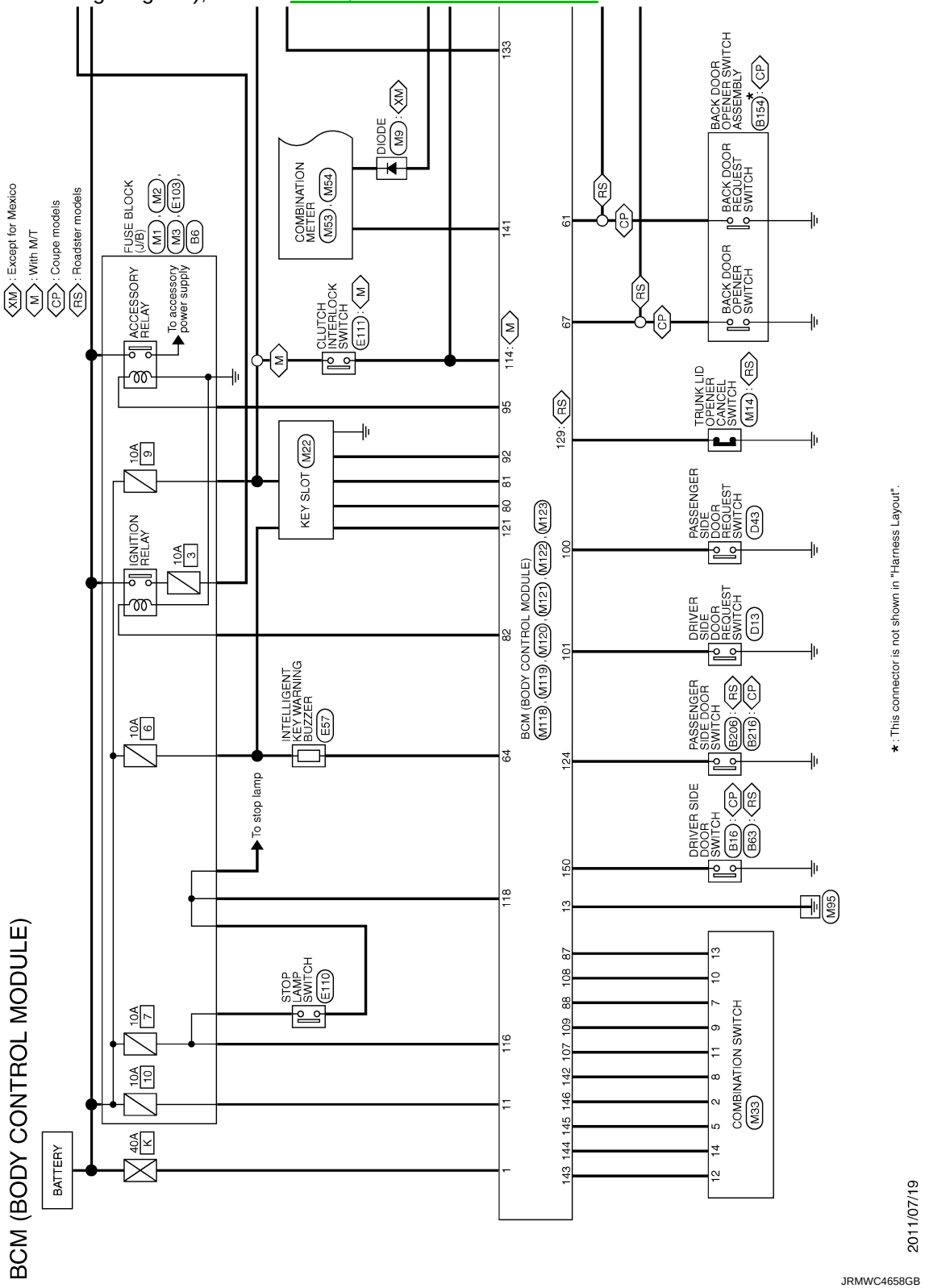
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 150 (GR) | Ground | Driver door switch | Input | Driver door switch | OFF (Door close) |  JPMIA0011GB 11.8 V |
| | | | | | ON (Door open) | 0 V |
| 151 (G) | Ground | Rear window defogger relay control | Output | Rear window defogger | Active | 0 V |
| | | | | | Not activated | Battery voltage |

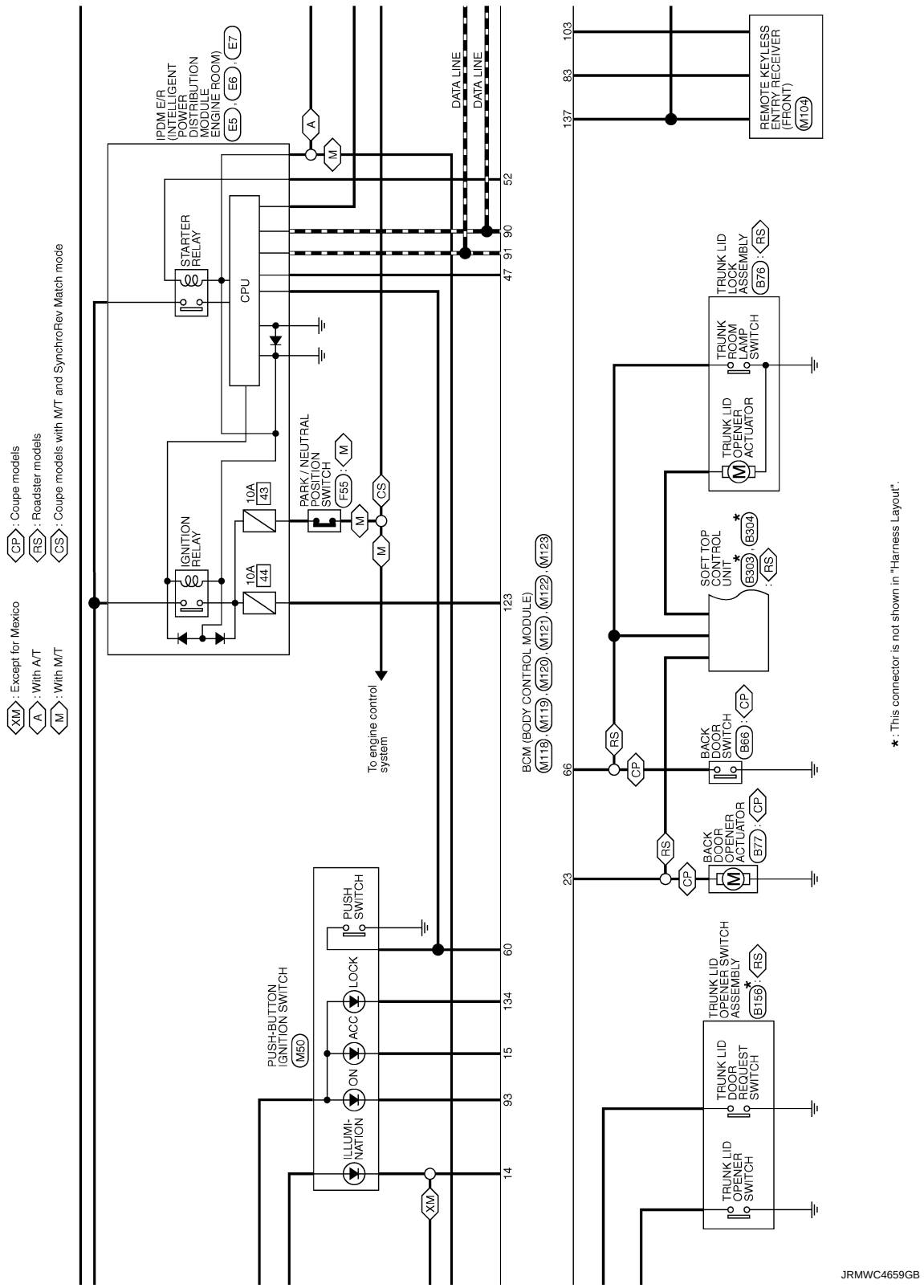
*1: Coupe models
*2: Roadster models
*3: A/T models
*4: M/T models
*5: With A/T or coupe models with M/T and SynchroRev Match mode
*6: With A/T or with M/T without SynchroRev Match mode
*7: Without NAVI
*8: With rear fog lamp
*9: BCM does not use this terminal for control.

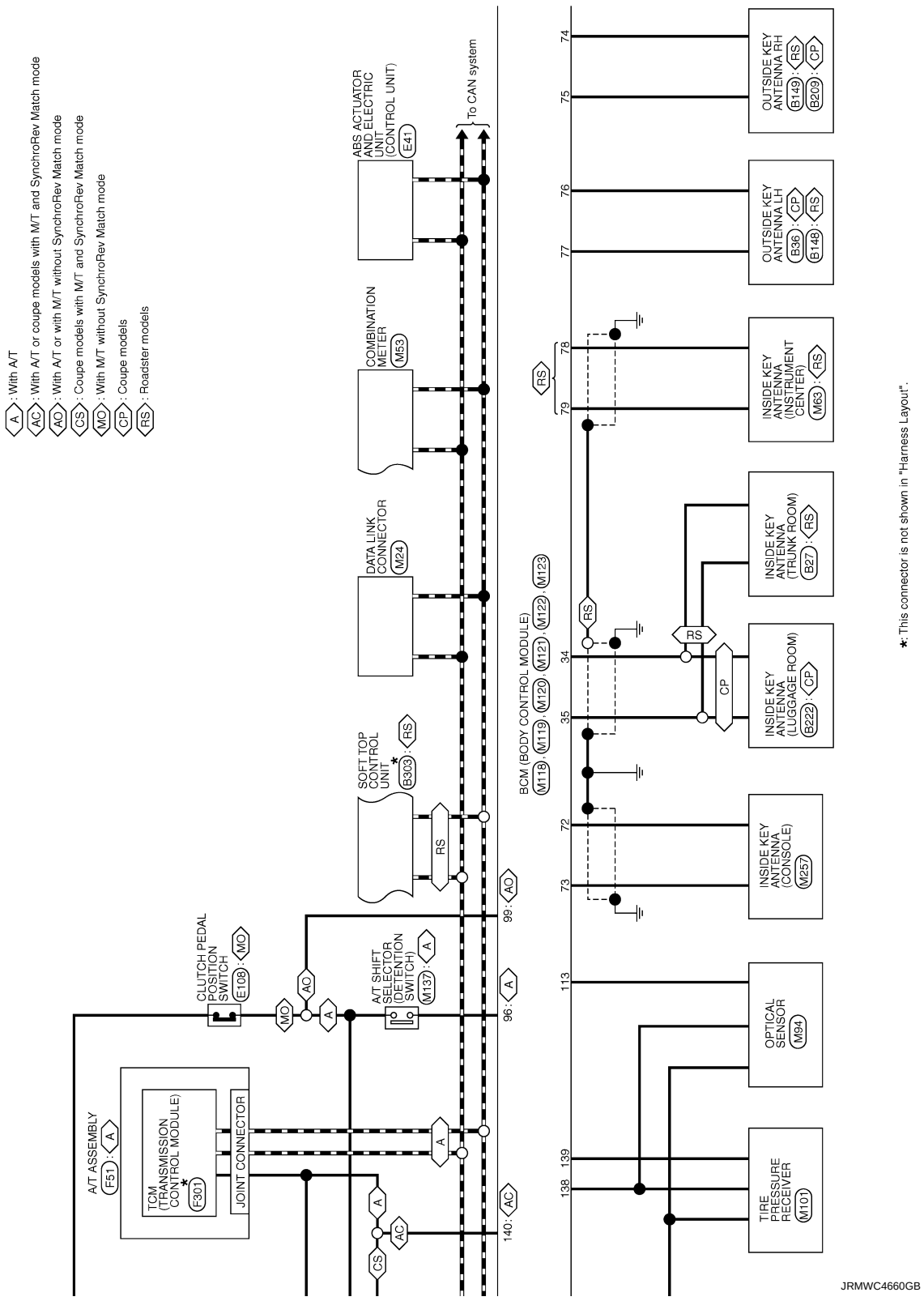
## Wiring Diagram - BCM -

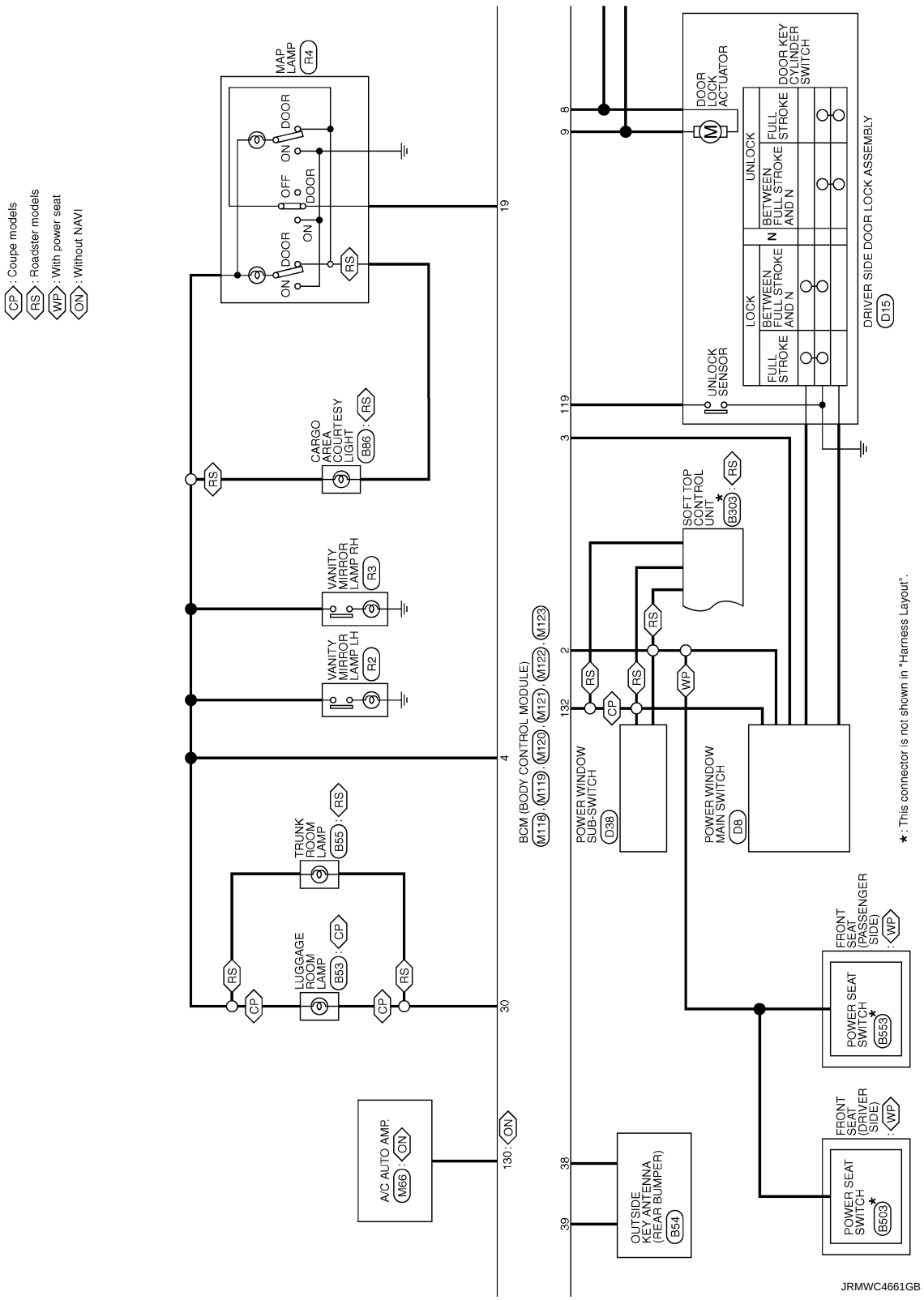
INFOID:0000000007774235

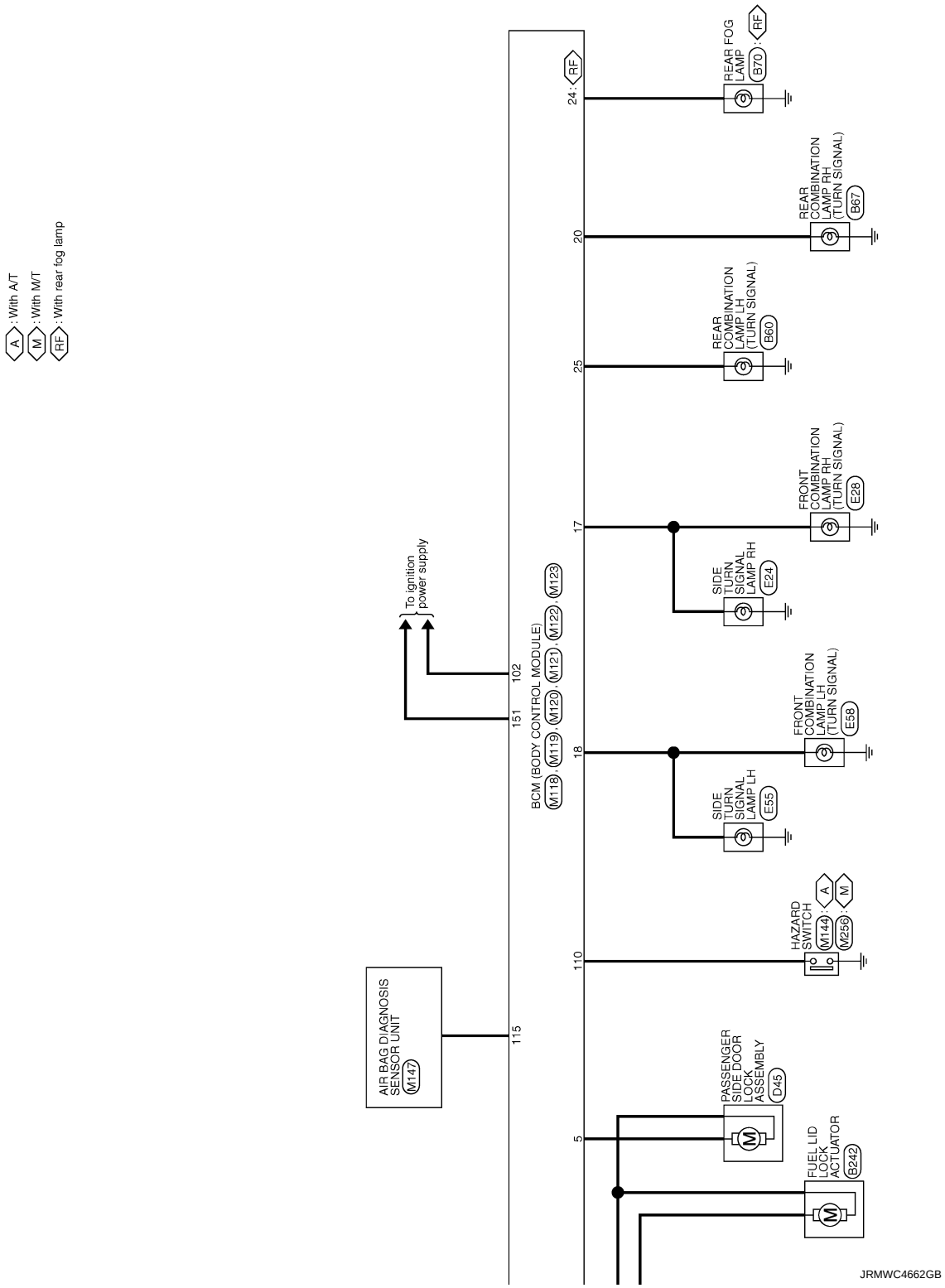
For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".




IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5 E6 E7
STARTER RELAY
CPU
IGNITION RELAY
10A 43
10A 44
PARK / NEUTRAL POSITION SWITCH F55
DATA LINE
DATA LINE
To engine control system
BCM (BODY CONTROL MODULE) M118 M119 M120 M121 M122 M123
PUSH-BUTTON IGNITION SWITCH M50
PUSH SWITCH
LOCK
ACC
ON
ILLUMI-NATION
REMOTE KEYLESS ENTRY RECEIVER (FRONT) M104
TRUNK LID LOCK ASSEMBLY B76
TRUNK ROOM LAMP SWITCH
TRUNK LID OPENER ACTUATOR
SOFT TOP CONTROL UNIT B303 B304
BACK DOOR SWITCH B66
BACK DOOR OPENER ACTUATOR B77
TRUNK LID OPENER SWITCH ASSEMBLY B156
TRUNK LID DOOR REQUEST SWITCH
TRUNK LID OPENER SWITCH
CP : Coupe models
RS : Roadster models
CS : Coupe models with M/T and SynchroRev Match mode
XM : Except for Mexico
A : With A/T
M : With M/T
*: This connector is not shown in "Harness Layout".
JRMWC4659GB


A : With A/T
AC : With A/T or coupe models with M/T and SynchroRev Match mode
AO : With A/T or with M/T without SynchroRev Match mode
CS : Coupe models with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
CP : Coupe models
RS : Roadster models
A/T ASSEMBLY (F51) : A
TCM (TRANSMISSION CONTROL MODULE) (F301)
JOINT CONNECTOR
CLUTCH PEDAL POSITION SWITCH (E108) : MO
A/T SHIFT SELECTOR (DETENTION SWITCH) (M137) : A
SOFT TOP CONTROL UNIT (B303) : RS
DATA LINK CONNECTOR (M24)
COMBINATION METER (M53)
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) (E41)
To CAN system
99 : AO
96 : A
140 : AC
BCM (BODY CONTROL MODULE) (M118), (M119), (M120), (M121), (M122), (M123)
113
138 139
72 73
34 35
74 75 76 77 78 79
TIRE PRESSURE RECEIVER (M101)
OPTICAL SENSOR (M94)
INSIDE KEY ANTENNA (CONSOLE) (M257)
INSIDE KEY ANTENNA (LUGGAGE ROOM) (B222) : CP
INSIDE KEY ANTENNA (TRUNK ROOM) (B27) : RS
INSIDE KEY ANTENNA (INSTRUMENT CENTER) (M63) : RS
OUTSIDE KEY ANTENNA LH (B36) : CP (B148) : RS
OUTSIDE KEY ANTENNA RH (B149) : RS (B209) : CP
*: This connector is not shown in "Harness Layout".
JRMWC4660GB


CP : Coupe models
RS : Roadster models
WP : With power seat
ON : Without NAVI
MAP LAMP R4
DOOR
ON
OFF
DOOR
ON
DOOR
ON
RS
CARGO AREA COURTESY LIGHT B86 : RS
VANITY MIRROR LAMP RH R3
VANITY MIRROR LAMP LH R2
TRUNK ROOM LAMP B55 : RS
LUGGAGE ROOM LAMP B53 : CP
A/C AUTO AMP. M66 : ON
BCM (BODY CONTROL MODULE)
M118 M119 M120 M121 M122 M123
19
4
30
130 : ON
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
LOCK
BETWEEN FULL STROKE AND N
FULL STROKE
DRIVER SIDE DOOR LOCK ASSEMBLY D15
8
9
119
3
SOFT TOP CONTROL UNIT* B303 : RS
2
132
POWER WINDOW SUB-SWITCH D38
POWER WINDOW MAIN SWITCH D8
38
39
OUTSIDE KEY ANTENNA (REAR BUMPER) B54
FRONT SEAT (PASSENGER SIDE) : WP
POWER SEAT SWITCH* B553
FRONT SEAT (DRIVER SIDE) : WP
POWER SEAT SWITCH* B503
*: This connector is not shown in "Harness Layout".
JRMWC4661GB




## Fail-safe

*INFOID:0000000007774236*

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

| Display contents of CONSULT | Fail-safe | Cancellation |
|---|---|---|
| B2190: NATS ANTENNA AMP | Inhibit engine cranking | Erase DTC |
| B2191: DIFFERENCE OF KEY | Inhibit engine cranking | Erase DTC |
| B2192: ID DISCORD BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2193: CHAIN OF BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2195: ANTI SCANNING | Inhibit engine cranking | Ignition switch ON → OFF |
| B2560: STARTER CONT RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent<br>• Starter control relay signal<br>• Starter relay status signal |
| B2608: STARTER RELAY | Inhibit engine cranking | 500 ms after the following signal communication status becomes consistent<br>• Starter motor relay control signal<br>• Starter relay status signal (CAN) |
| B260A: IGNITION RELAY | Inhibit engine cranking | 500 ms after the following conditions are fulfilled<br>• IGN relay (IPDM E/R) control signal: OFF (Battery voltage)<br>• Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)<br>• Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) |
| B260F: ENG STATE SIG LOST | Maintains the power supply position attained at the time of DTC detection | When any of the following conditions are fulfilled<br>• Power position changes to ACC<br>• Receives engine status signal (CAN) |
| B2617: STARTER RELAY CIRC | Inhibit engine cranking | 1 second after the starter motor relay control inside BCM becomes normal |
| B2618: BCM | Inhibit engine cranking | 1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal |
| B261E: VEHICLE TYPE | Inhibit engine cranking | BCM initialization |
| B26E8: CLUTCH SW | Inhibit engine cranking | When any of the following BCM recognition conditions are fulfilled<br>• Status 1<br>- Clutch switch signal (CAN from ECM): ON<br>- Clutch interlock switch signal: OFF (0 V)<br>• Status 2<br>- Clutch switch signal (CAN from ECM): OFF<br>- Clutch interlock switch signal: ON (Battery voltage) |

## DTC Inspection Priority Chart

INFOID:0000000007774237

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

| Priority | DTC |
|---|---|
| 1 | B2562: LOW VOLTAGE |
| 2 | • U1000: CAN COMM CIRCUIT<br>• U1010: CONTROL UNIT (CAN) |
| 3 | • B2190: NATS ANTENNA AMP<br>• B2191: DIFFERENCE OF KEY<br>• B2192: ID DISCORD BCM-ECM<br>• B2193: CHAIN OF BCM-ECM<br>• B2195: ANTI SCANNING |

| Priority | DTC |
|---|---|
| 4 | • B2553: IGNITION RELAY<br>• B2555: STOP LAMP<br>• B2556: PUSH-BTN IGN SW<br>• B2557: VEHICLE SPEED<br>• B2560: STARTER CONT RELAY<br>• B2601: SHIFT POSITION<br>• B2602: SHIFT POSITION<br>• B2603: SHIFT POSI STATUS<br>• B2604: PNP SW<br>• B2605: PNP SW<br>• B2608: STARTER RELAY<br>• B260A: IGNITION RELAY<br>• B260F: ENG STATE SIG LOST<br>• B2614: BCM<br>• B2615: BCM<br>• B2616: BCM<br>• B2617: BCM<br>• B2618: BCM<br>• B261A: PUSH-BTN IGN SW<br>• B261E: VEHICLE TYPE<br>• B26E8: CLUTCH SW<br>• B26EA: KEY REGISTRATION<br>• C1729: VHCL SPEED SIG ERR<br>• U0415: VEHICLE SPEED SIG |
| 5 | • C1704: LOW PRESSURE FL<br>• C1705: LOW PRESSURE FR<br>• C1706: LOW PRESSURE RR<br>• C1707: LOW PRESSURE RL<br>• C1708: [NO DATA] FL<br>• C1709: [NO DATA] FR<br>• C1710: [NO DATA] RR<br>• C1711: [NO DATA] RL<br>• C1716: [PRESSDATA ERR] FL<br>• C1717: [PRESSDATA ERR] FR<br>• C1718: [PRESSDATA ERR] RR<br>• C1719: [PRESSDATA ERR] RL<br>• C1734: CONTROL UNIT |
| 6 | • B2621: INSIDE ANTENNA<br>• B2622: INSIDE ANTENNA<br>• B2623: INSIDE ANTENNA |

## DTC Index

INFOID:0000000007774238

**NOTE:**
The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-19, "COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)".

| CONSULT display | Fail-safe | Freeze Frame Data<br>•Vehicle Speed<br>•Odo/Trip Meter<br>•Vehicle condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference |
|---|---|---|---|---|---|
| No DTC is detected. further testing may be required. | — | — | — | — | — |
| U1000: CAN COMM CIRCUIT | — | — | — | — | BCS-46 |
| U1010: CONTROL UNIT (CAN) | — | — | — | — | BCS-47 |
| U0415: VEHICLE SPEED SIG | — | — | — | — | BCS-48 |

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference |
|---|---|---|---|---|---|
| B2190: NATS ANTENNA AMP | × | — | — | — | SEC-42 |
| B2191: DIFFERENCE OF KEY | × | — | — | — | SEC-45 |
| B2192: ID DISCORD BCM-ECM | × | — | — | — | SEC-46 |
| B2193: CHAIN OF BCM-ECM | × | — | — | — | SEC-48 |
| B2195: ANTI SCANNING | × | — | — | — | SEC-49 |
| B2553: IGNITION RELAY | — | × | — | — | PCS-48 |
| B2555: STOP LAMP | — | × | — | — | SEC-50 |
| B2556: PUSH-BTN IGN SW | — | × | × | — | SEC-52 |
| B2557: VEHICLE SPEED | × | × | × | — | SEC-54 |
| B2560: STARTER CONT RELAY | × | × | × | — | SEC-55 |
| B2562: LOW VOLTAGE | — | × | — | — | BCS-49 |
| B2601: SHIFT POSITION | × | × | × | — | SEC-56 |
| B2602: SHIFT POSITION | × | × | × | — | SEC-59 |
| B2603: SHIFT POSI STATUS | × | × | × | — | SEC-62 |
| B2604: PNP SW | × | × | × | — | SEC-65 |
| B2605: PNP SW | × | × | × | — | SEC-67 |
| B2608: STARTER RELAY | × | × | × | — | SEC-69 |
| B260A: IGNITION RELAY | × | × | × | — | PCS-50 |
| B260F: ENG STATE SIG LOST | × | × | × | — | SEC-71 |
| B2614: BCM | — | × | × | — | PCS-52 |
| B2615: BCM | — | × | × | — | PCS-55 |
| B2616: BCM | — | × | × | — | PCS-58 |
| B2617: BCM | × | × | × | — | SEC-75 |
| B2618: BCM | × | × | × | — | PCS-61 |
| B261A: PUSH-BTN IGN SW | — | × | × | — | PCS-62 |
| B261E: VEHICLE TYPE | × | × | × (Turn ON for 15 seconds) | — | SEC-78 |
| B2621: INSIDE ANTENNA | — | × | — | — | DLK-228 |
| B2622: INSIDE ANTENNA | — | × | — | — | •DLK-59 (Coupe) •DLK-230 (Roadster) |
| B2623: INSIDE ANTENNA | — | × | — | — | •DLK-61 (Coupe) •DLK-232 (Roadster) |
| B26E8: CLUTCH SW | × | × | × | — | SEC-72 |
| B26EA: KEY REGISTRATION | — | × | × (Turn ON for 15 seconds) | — | SEC-74 |
| C1704: LOW PRESSURE FL | — | — | — | × | WT-20 |
| C1705: LOW PRESSURE FR | — | — | — | × | |
| C1706: LOW PRESSURE RR | — | — | — | × | |
| C1707: LOW PRESSURE RL | — | — | — | × | |

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference |
|---|---|---|---|---|---|
| C1708: [NO DATA] FL | — | — | — | × | WT-22 |
| C1709: [NO DATA] FR | — | — | — | × | |
| C1710: [NO DATA] RR | — | — | — | × | |
| C1711: [NO DATA] RL | — | — | — | × | |
| C1716: [PRESSDATA ERR] FL | — | — | — | × | WT-25 |
| C1717: [PRESSDATA ERR] FR | — | — | — | × | |
| C1718: [PRESSDATA ERR] RR | — | — | — | × | |
| C1719: [PRESSDATA ERR] RL | — | — | — | × | |
| C1729: VHCL SPEED SIG ERR | — | — | — | × | WT-27 |
| C1734: CONTROL UNIT | — | — | — | × | WT-29 |

# SOFT TOP CONTROL UNIT

## Reference Value

INFOID:0000000007806694

### VALUES ON THE DIAGNOSIS TOOL

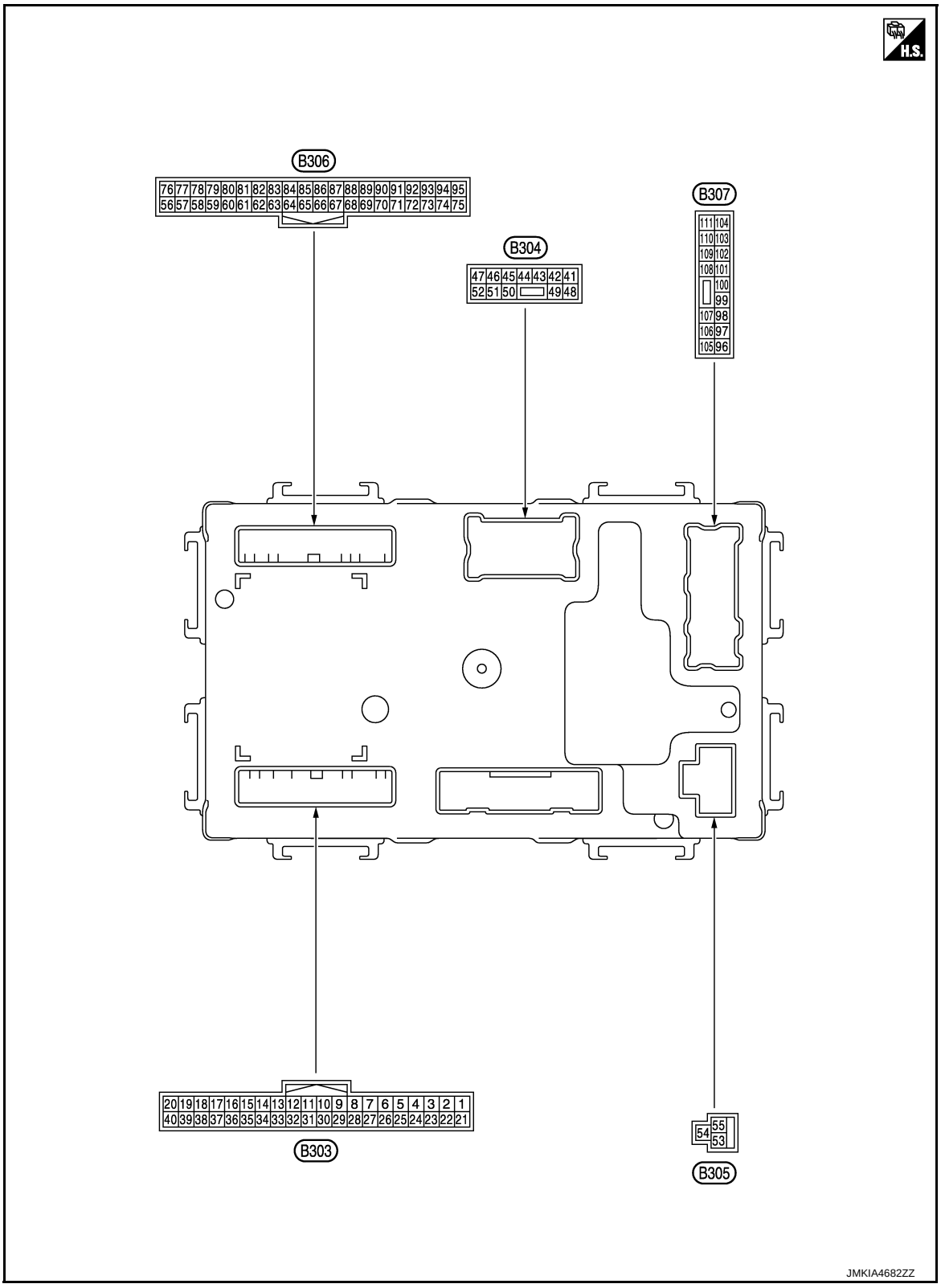
CONSULT MONITOR ITEM

| Monitor Item | Condition | | Status/Value |
|---|---|---|---|
| ROOF LATCHED RH | State of roof lock is in roof latch RH | Lock position | ON |
| | | Other than above | OFF |
| | | Roof striker sensor RH circuit is open or short | NG |
| ROOF LATCHED LH | State of roof lock is in roof latch LH | Lock position | ON |
| | | Other than above | OFF |
| | | Roof striker sensor LH circuit is open or short | NG |
| F/CENTER LOCK | State of roof latch cylinder | Lock | ON |
| | | Other than above | OFF |
| | | Roof latch lock sensor circuit is open or short | NG |
| R/RAIL RAISED LH | State of roof drive cylinder LH | Soft top is close | ON |
| | | Other than above | OFF |
| | | Roof status sensor LH circuit is open or short | NG |
| R/RAIL RAISED RH | State of roof drive cylinder RH | Soft top is close | ON |
| | | Other than above | OFF |
| | | Roof status sensor RH circuit is open or short | NG |
| R/RAIL LOWERED | State of roof drive cylinder LH | Soft top is open | ON |
| | | Other than above | OFF |
| | | Roof status sensor LH circuit is open or short | NG |
| 5TH BOW LOWERED | State of 5th bow drive cylinder LH | 5th bow is close | ON |
| | | Other than above | OFF |
| | | 5th bow status sensor LH circuit is open or short | NG |
| 5TH BOW RAISED | State of 5th bow drive cylinder RH | 5th bow is open | ON |
| | | Other than above | OFF |
| | | 5th bow status sensor RH circuit is open or short | NG |
| S/LID OPEN LH | State of storage lid drive cylinder LH | Storage lid is open | ON |
| | | Other than above | OFF |
| | | Storage lid status sensor LH circuit is open or short | NG |
| S/LID OPEN RH | State of storage lid drive cylinder RH | Storage lid is open | ON |
| | | Other than above | OFF |
| | | Storage lid status sensor RH circuit is open or short | NG |

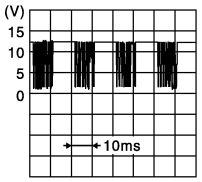
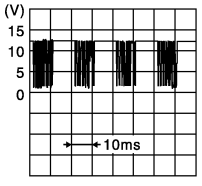
| Monitor Item | Condition | | Status/Value |
|---|---|---|---|
| S/LID CLOSE RH | State of storage lid drive cylinder RH | Storage lid is close | ON |
| | | Other than above | OFF |
| | | Storage lid status sensor RH circuit is open or short | NG |
| 5TH BOW LATCH OP | State of 5th bow latch cylinder | Unlock | ON |
| | | Other than above | OFF |
| | | 5th bow latch open sensor circuit is open or short | NG |
| SWITCHING VALVE 1 | Operation of switching valve 1 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 1 circuit is short | NG |
| SWITCHING VALVE 2 | Operation of switching valve 2 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 2 circuit is short | NG |
| SWITCHING VALVE 3 | Operation of switching valve 3 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 3 circuit is short | NG |
| SWITCHING VALVE 4 | Operation of switching valve 4 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 4 circuit is short | NG |
| SWITCHING VALVE 5 | Operation of switching valve 5 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 5 circuit is short | NG |
| PUMP OUT (RH) | Operation of hydraulic pump motor | Turning clockwise | ON |
| | | Other than above | OFF |
| | | Hydraulic pump motor (RH) circuit is short | NG |
| PUMP OUT (LH) | Operation of hydraulic pump motor | Turning counterclockwise | ON |
| | | Other than above | OFF |
| | | Hydraulic pump motor (LH) circuit is short | NG |
| 5TH BOW LATCH CL | State of 5th bow latch cylinder | Lock | ON |
| | | Other than above | OFF |
| | | 5th bow latch close sensor circuit is open or short | NG |
| ROOF SW (OPEN) | State of roof open/close switch | OPEN operation is in operation | ON |
| | | Other than above | OFF |
| ROOF SW (CLOSE) | State of roof open/close switch | CLOSE operation is in operation | ON |
| | | Other than above | OFF |
| SHIFT R SIGNAL | Shift position | R position | ON |
| | | Other than R position | OFF |
| TRUNK OPEN OUT | Operation of trunk lid opener actuator | OPEN operation is in operation | ON |
| | | Other than above | OFF |
| THER PROTEC PUMP | Thermo protection hydraulic pump | In non-operation | OK |
| | | In operation | NG |
| THER PROTEC RCU | Thermo protection soft top control unit | In non-operation | OK |
| | | In operation | NG |

| Monitor Item | Condition | | Status/Value |
|---|---|---|---|
| PWR COND RCU | Power supply voltage state of soft top control unit | Normal | OK |
| | | Malfunction | NG |
| PWR COND P/W | Power supply voltage state of power window | Normal | OK |
| | | Malfunction | NG |
| LOCAL COMM 1 | State of local communication 1 | Normal | OK |
| | | It is in sleep mode | SLEEP |
| | | Communication error | NG |
| LOCAL COMM 2 | State of local communication 2 | Normal | OK |
| | | It is in sleep mode | SLEEP |
| | | Communication error | NG |
| REAR DEF OUT | Operation of rear window defogger | Roof position is full close | OK |
| | | Other than above | NG |
| 5BOW STRIK LATCH | State of 5th bow latch | 5th bow striker is in 5th bow latch | ON |
| | | Other than above | OFF |
| | | 5th bow striker sensor circuit is open or short | NG |
| P/W OP REQ SW SIG | State of request switch signal | OPEN operation is in operation | ON |
| | | Stop | OFF |
| PROHIBIT P/W UP | Prohibit of power window up | In operation | ON |
| | | In non-operation | OFF |
| IGN ON SIG(BCM) | Power position signal | Ignition switch ON | ON |
| | | Other than above | OFF |
| RF OP REQ SW SIG | State of request switch signal | OPEN operation is in operation | ON |
| | | Stop | OFF |

TERMINAL LAYOUT




PHYSICAL VALUES

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 1 (BR) | Ground | Sensor power supply (Roof striker sensor LH) | Output | [Engine is running] | | 12 V |
| 3 (DG) | Ground | Roof striker sensor RH | Input | [Engine is running]<br>• Roof lock assembly | Hooked | 0.8 V |
| | | | | | Released | 3.0 V |
| 4 (W) | Ground | Roof striker sensor LH | Input | [Engine is running]<br>• Roof lock assembly | Hooked | 0.8 V |
| | | | | | Released | 3.0 V |
| 8 (Y) | Ground | Back up lamp signal | Input | [Ignition switch: ON]<br>• Shift position | R position | Battery voltage |
| | | | | | Other than above | 0 V |
| 9 (SB) | Ground | Power source (Power window) | Input | [Ignition switch: OFF] | | Battery voltage |
| 10 (O) | Ground | Trunk lid open request signal (BCM) | Input | [Ignition switch: ON]<br>• Trunk opener | Operate | 0 V → Battery voltage → 0 V |
| | | | | | Other than above | 0 V |
| 11 (O) | Ground | Roof status signal (Indicator lamp) | Output | [Engine is running]<br>• Soft top indicator lamp | Illuminate | 0 V |
| | | | | | Not illuminate | Battery voltage |
| 12 (SB) | Ground | Roof status signal (Audio) | Output | [Engine is running]<br>• Soft top system | Fully open | 9.5 V |
| | | | | | Other than above | 0 V |
| 14 (L) | Ground | Roof open/close switch (Close) | Input | [Engine is running]<br>• Close switch | Pressed | 0 V |
| | | | | | Released | Battery voltage |
| 15 (LG) | Ground | Roof open/close switch (Open) | Input | [Engine is running]<br>• Open switch | Pressed | 0 V |
| | | | | | Released | Battery voltage |
| 16 (V) | Ground | Trunk room lamp switch | Input | [Ignition switch: ON]<br>• Trunk lid | Open | 0 V |
| | | | | | Other than above | Battery voltage |
| 17 (BG) | Ground | CAN-H | Input/ Output | — | | — |
| 18 (P) | Ground | CAN-L | Input/ Output | — | | — |
| 19 (LG) | Ground | Local communication (Power window) | Input/ Output | — | |  JMKIA4024GB |
| 20 (V) | Ground | Local communication (BCM) | Input/ Output | — | |  JMKIA4024GB |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 21 (BR) | Ground | Sensor power supply (Roof striker sensor RH) | Output | [Engine is running] | | 12 V |
| 29 (DG) | Ground | Ground | — | — | | — |
| 35 (P) | Ground | Ground (Roof open/close switch) | — | — | | — |
| 41 (DG) | Ground | Trunk lid opener actuator | Output | Trunk lid opener | Operate | 0 V → Battery voltage → 0 V |
| | | | | | Stop | 0 V |
| 48 (R) | Ground | Power source (Rear window defogger) | Input | [Engine is running]<br>• Rear window defogger | Active | Battery voltage |
| | | | | | Not active | 0 V |
| 49 (R) | Ground | Power source (Rear window defogger) | Input | [Engine is running]<br>• Rear window defogger | Active | Battery voltage |
| | | | | | Not active | 0 V |
| 53 (R) | Ground | Power source (Roof) | Input | [Engine is running] | | Battery voltage |
| 54 (B) | Ground | Ground (Roof) | — | — | | — |
| 56 (W) | Ground | 5th bow latch close sensor | Input | [Engine is running]<br>• 5th bow latch | Lock | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 57 (G) | Ground | 5th bow latch open sensor | Input | [Engine is running]<br>• 5th bow latch | Unlock | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 58 (LG) | Ground | Storage lid status sensor RH (Open) | Input | [Engine is running]<br>• Storage lid | Full open | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 59 (W) | Ground | Storage lid status sensor RH (Close) | Input | [Engine is running]<br>• Storage lid | Full close | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 60 (DG) | Ground | Storage lid status sensor LH (Open) | Input | [Engine is running]<br>• Storage lid | Full open | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 61 (Y) | Ground | Roof status sensor RH (Close) | Input | [Engine is running]<br>• Soft top | Raised | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 66 (L) | Ground | Roof status sensor LH (Open) | Input | [Engine is running]<br>• Soft top | Lowered | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 68 (P) | Ground | 5th bow status sensor RH | Input | [Engine is running]<br>• 5th bow | Raised | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 69 (V) | Ground | Roof status sensor LH (Close) | Input | [Engine is running]<br>• Soft top | Raised | 0.8 V |
| | | | | | Other than above | 3.0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 70 (O) | Ground | 5th bow status sensor LH | Input | [Engine is running] • 5th bow | Lowered | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 71 (SB) | Ground | Roof latch lock sensor | Input | [Engine is running] • Roof lock assembly | Lock | 0.8 V |
| | | | | | Other than above | 3.0 V |
| 72 (W/R) | Ground | Hydraulic pump temperature sensor | Input | [Engine is running] | | 0 - 4.8 V Output voltage varies with hydraulic pump temperature. |
| 73 (R) | Ground | Hydraulic pump relay 2 ON signal | Input | [Engine is running] • Hydraulic pump motor (Right rotation) | Active | 12 V |
| | | | | | Inactive | 0 V |
| 74 (R/B) | Ground | Hydraulic pump relay 1 ON signal | Input | [Engine is running] • Hydraulic pump motor (Left rotation) | Active | 12 V |
| | | | | | Inactive | 0 V |
| 75 (BR) | Ground | Sensor power supply (Roof status sensor LH//5th bow latch open sensor/5th bow latch close sensor/ 5th bow striker sensor) | Output | [Engine is running] | | 12 V |
| 76 (L) | Ground | 5th bow striker sensor | Input | [Engine is running] • 5th bow striker | Hooked | 0.8 V |
| | | | | | Released | 3.0 V |
| 92 (BG) | Ground | Sensor ground (Hydraulic pump temperature sensor) | — | — | | — |
| 93 (BR) | Ground | Sensor power supply (Roof status sensor RH/Storage lid status sensor RH) | Output | [Engine is running] | | 12 V |
| 94 (BR) | Ground | Sensor power supply (Roof latch lock sensor/5th bow status sensor LH) | Output | [Engine is running] | | 12 V |
| 95 (BR) | Ground | Sensor power supply (Storage lid status sensor/5th bow status sensor RH) | Output | [Engine is running] | | 12 V |
| 96 (W) | Ground | Switching valve 4 | Output | [Engine is running] • Switching valve 4 | Active | 12 V |
| | | | | | Inactive | 0 V |
| 97 (LG) | Ground | Switching valve 3 | Output | [Engine is running] • Switching valve 3 | Active | 12 V |
| | | | | | Inactive | 0 V |
| 98 (L) | Ground | Switching valve 2 | Output | [Engine is running] • Switching valve 2 | Active | 12 V |
| | | | | | Inactive | 0 V |
| 99 (O) | Ground | Switching valve 1 | Output | [Engine is running] • Switching valve 1 | Active | 12 V |
| | | | | | Inactive | 0 V |
| 100 (BR) | Ground | Hydraulic pump relay 2 | Output | [Engine is running] • Hydraulic pump motor (Right rotation) | Active | 12 V |
| | | | | | Inactive | 0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 101 (SB) | Ground | Hydraulic pump relay 1 | Output | [Engine is running]<br>• Hydraulic pump motor (Left rotation) | Active | 12 V |
| | | | | | Inactive | 0 V |
| 102 (P) | Ground | Switching valve 5 | Output | [Engine is running]<br>• Switching valve 5 | Active | 12 V |
| | | | | | Inactive | 0 V |
| 103 (B) | Ground | Hydraulic unit ground | — | — | | — |
| 104 (R) | Ground | Rear window defogger power supply | Output | [Engine is running]<br>• Rear window defogger<br>**NOTE:**<br>Roof is fully closed. | Active | Battery voltage |
| | | | | | Not active | 0 V |
| 111 (R) | Ground | Rear window defogger power supply | Output | [Engine is running]<br>• Rear window defogger<br>**NOTE:**<br>Roof is fully closed. | Active | Battery voltage |
| | | | | | Not active | 0 V |

## Fail-safe

INFOID:0000000007806695

### FAIL-SAFE CONTROL BY DTC

Soft top control unit performs fail-safe control when any of the following DTCs is detected.

| Display contents of CONSULT | | Fail-safe | Cancellation |
|---|---|---|---|
| U1000 | CAN COMM CIRCUIT | Inhibit soft top operation. | Communication is normal. |
| U1010 | CONTROL UNIT (CAN) | Inhibit soft top operation. | Communication is normal. |
| U0140 | LOCAL COMM-1 | Inhibit soft top operation. | Communication is normal. |
| U0215 | LOCAL COMM-2 | Inhibit soft top operation. | Communication is normal. |
| B1701 | ROOF CONTROL UNIT | Inhibit soft top operation. | Replace soft top control unit. |
| B1702 | ROOF CONTROL UNIT | Inhibit soft top operation. | Replace soft top control unit. |
| B1709 | ROOF SWITCH(OPEN) | Inhibit soft top operation. | Detects roof open/close switch (OPEN) is OFF. |
| B170A | ROOF SWITCH(CLOSE) | Inhibit soft top operation. | Detects roof open/close switch (CLOSE) is OFF. |
| B170F | SENSOR POWER SUPPLY | Inhibit soft top operation. | Detects normal value. |
| B171A | HYDRAULIC PMP(LH) | Inhibit soft top operation. | Detects normal value. |
| B171B | HYDRAULIC PMP(RH) | Inhibit soft top operation. | Detects normal value. |
| B171C | SWITCHING VALVE 1 | Inhibit soft top operation. | Detects normal value. |
| B171D | SWITCHING VALVE 2 | Inhibit soft top operation. | Detects normal value. |
| B172C | ROOF STATE SIG(TRUNK)* | Inhibit soft top operation. | Detects normal value. |
| B1731 | HYDRAULIC STATE 1 | Inhibit soft top operation. | Turn ignition switch OFF. |
| B1758 | THERMO PROTECTION | Inhibit soft top operation. | Turn ignition switch OFF and wait at least 5 minutes. |
| B175C | PWR SOURCE(ROOF) | Inhibit soft top operation. | Power source is 11.4 (V) or more for 0.5 second. |
| B175D | PWR SOURCE(ROOF) | Inhibit soft top operation. | Power source is14.5 (V) or more for 4 seconds. |
| B175E | PWR SOURCE(WINDOW) | Inhibit soft top operation and rear power window operation. | Power source (power window) is 9.5 (V) or more. |
| B175F | PWR SOURCE(WINDOW) | Inhibit soft top operation and rear power window operation. | Power source (power window) is 15.5 (V) or more. |
| B1766 | SWITCHING VALVE 3 | Inhibit soft top operation. | Detects normal value. |
| B1767 | SWITCHING VALVE 4 | Inhibit soft top operation. | Detects normal value. |

| Display contents of CONSULT | | Fail-safe | Cancellation |
|---|---|---|---|
| B1768 | SWITCHING VALVE 5 | Inhibit soft top operation. | Detects normal value. |
| B176A | THERMO PROTECTION | Inhibit soft top operation. | Turn ignition switch OFF and wait at least 5 minutes. |
| B176B | ROOF WARNING LAMP | Inhibit soft top operation. | Detects normal value. |
| B176C | STRIKER SENSOR RH | Inhibit soft top operation. | Detects normal value. |
| B176D | STRIKER SENSOR LH | Inhibit soft top operation. | Detects normal value. |
| B176E | ROOF LATCH LOCK SENSOR | Inhibit soft top operation. | Detects normal value. |
| B176F | ROOF STATUS SEN LH | Inhibit soft top operation. | Detects normal value. |
| B1770 | ROOF STATUS SEN RH | Inhibit soft top operation. | Detects normal value. |
| B1771 | ROOF STATUS SEN LH | Inhibit soft top operation. | Detects normal value. |
| B1772 | 5BOW STATUS SEN LH | Inhibit soft top operation. | Detects normal value. |
| B1773 | 5BOW STATUS SEN RH | Inhibit soft top operation. | Detects normal value. |
| B1774 | S/LID STATUS SEN LH | Inhibit soft top operation. | Detects normal value. |
| B1775 | S/LID STATUS SEN RH | Inhibit soft top operation. | Detects normal value. |
| B1776 | S/LID STATUS SEN RH | Inhibit soft top operation. | Detects normal value. |
| B1777 | REAR DEF OUT SIG | Inhibit soft top and rear window defogger operation. | Detects normal value. |
| B1778 | TRUNK OPEN OUT SIG | Inhibit soft top and trunk lid opener actuator operation. | Detects normal value. |
| B1779 | THERMO PROTECTION | Inhibit soft top operation. | Detects normal value. |
| B177A | ROOF STATE INCORRECT | Inhibit soft top operation. | Detects normal value. |
| B177B | ROOF STATE INCORRECT | Inhibit soft top operation. | Detects normal value. |
| B177C | THERMO PROTECTION | Inhibit soft top operation. | Detects normal value. |
| B177D | 5BOW LATCH OPEN SEN | Inhibit soft top operation. | Detects normal value. |
| B177E | 5BOW LATCH CLOSE SEN | Inhibit soft top operation. | Detects normal value. |
| B177F | 5BOW STRIKER SENSOR | Inhibit soft top operation. | Detects normal value. |

*: This item indicates the roof status signal (Audio).

## DTC Inspection Priority Chart

INFOID:0000000007806696

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

| Priority | Display contents of CONSULT | |
|---|---|---|
| 1 | U1000 | CAN COMM CIRCUIT |
| | U1010 | CONTROL UNIT (CAN) |
| | B170F | SENSOR POWER SUPPLY |
| | B175C | PWR SOURCE(ROOF) |
| | B175D | PWR SOURCE(ROOF) |
| | B175E | PWR SOURCE(WINDOW) |
| | B175F | PWR SOURCE(WINDOW) |
| | B1701 | ROOF CONTROL UNIT |
| | B1702 | ROOF CONTROL UNIT |

| Priority | Display contents of CONSULT | |
|---|---|---|
| 2 | B1709 | ROOF SWITCH(OPEN) |
| | B170A | ROOF SWITCH(CLOSE) |
| | B176B | ROOF WARNING LAMP |
| | B176C | STRIKER SENSOR RH |
| | B176D | STRIKER SENSOR LH |
| | B176E | ROOF LATCH LOCK SEN |
| | B176F | ROOF STATUS SEN LH |
| | B1770 | ROOF STATUS SEN RH |
| | B1771 | ROOF STATUS SEN LH |
| | B1772 | 5BOW STATUS SEN LH |
| | B1773 | 5BOW STATUS SEN RH |
| | B1774 | S/LID STATUS SEN LH |
| | B1775 | S/LID STATUS SEN RH |
| | B1776 | S/LID STATUS SEN RH |
| | B177D | 5BOW LATCH OPEN SEN |
| | B177E | 5BOW LATCH CLOSE SEN |
| | B177F | 5BOW STRIKER SENSOR |
| 3 | U0140 | LOCAL COMM-1 |
| | U0215 | LOCAL COMM-2 |
| | B171A | HYDRAULIC PMP(LH) |
| | B171B | HYDRAULIC PMP(RH) |
| | B171C | SWITCHING VALVE 1 |
| | B171D | SWITCHING VALVE 2 |
| | B172C | ROOF STATE SIG(TRUNK)* |
| | B1731 | HYDRAULIC STATE 1 |
| | B1758 | THERMO PROTECTION |
| | B1766 | SWITCHING VALVE 3 |
| | B1767 | SWITCHING VALVE 4 |
| | B1768 | SWITCHING VALVE 5 |
| | B176A | THERMO PROTECTION |
| | B1777 | REAR DEF OUT SIG |
| | B1778 | TRUNK OPEN OUT SIG |
| | B1779 | THERMO PROTECTION |
| | B177A | ROOF STATE INCORRECT |
| | B177B | ROOF STATE INCORRECT |
| | B177C | THERMO PROTECTION |

*: This item indicates the roof status signal (Audio).

## DTC Index

INFOID:0000000007806697

**NOTE:**
For details of Freeze Frame Data, refer to RF-28, "CONSULT Function".

| Display contents of CONSULT | | Fail-safe | Freeze Frame Data | Reference page |
|---|---|---|---|---|
| No DTC is detected. Further testing may be required. | | — | — | — |
| U1000 | CAN COMM CIRCUIT | × | × | RF-59 |

| Display contents of CONSULT | | Fail-safe | Freeze Frame Data | Reference page |
|---|---|---|---|---|
| U1010 | CONTROL UNIT (CAN) | × | × | RF-60 |
| U0140 | LOCAL COMM-1 | × | × | RF-61 |
| U0215 | LOCAL COMM-2 | × | × | RF-62 |
| B1701 | ROOF CONTROL UNIT | × | × | RF-64 |
| B1702 | ROOF CONTROL UNIT | × | × | RF-65 |
| B1709 | ROOF SWITCH-OPEN | × | × | RF-66 |
| B170A | ROOF SWITCH-CLOSE | × | × | RF-68 |
| B170F | SENSOR POWER SUPPLY | × | × | RF-70 |
| B171A | HYDRAULIC PMP(LH) | × | × | RF-73 |
| B171B | HYDRAULIC PMP(RH) | × | × | RF-76 |
| B171C | SWITCHING VALVE 1 | × | × | RF-79 |
| B171D | SWITCHING VALVE 2 | × | × | RF-81 |
| B172C | ROOF STATE SIG(TRUNK)* | × | × | RF-83 |
| B1731 | HYDRAULIC STATE 1 | × | × | RF-85 |
| B1758 | THERMO PROTECTION | × | × | RF-86 |
| B175C | PWR SOURCE(ROOF) | × | × | RF-87 |
| B175D | PWR SOURCE(ROOF) | × | × | RF-88 |
| B175E | PWR SOURCE(WINDOW) | × | × | RF-89 |
| B175F | PWR SOURCE(WINDOW) | × | × | RF-91 |
| B1766 | SWITCHING VALVE 3 | × | × | RF-93 |
| B1767 | SWITCHING VALVE 4 | × | × | RF-95 |
| B1768 | SWITCHING VALVE 5 | × | × | RF-97 |
| B176A | THERMO PROTECTION | × | × | RF-99 |
| B176B | ROOF WARNING LAMP | × | × | RF-100 |
| B176C | STRIKER SENSOR RH | × | × | RF-102 |
| B176D | STRIKER SENSOR LH | × | × | RF-104 |
| B176E | ROOF LATCH LOCK SEN | × | × | RF-106 |
| B176F | ROOF STATUS SEN LH | × | × | RF-108 |
| B1770 | ROOF STATUS SEN RH | × | × | RF-110 |
| B1771 | ROOF STATUS SEN LH | × | × | RF-112 |
| B1772 | 5BOW STATUS SEN LH | × | × | RF-114 |
| B1773 | 5BOW STATUS SEN RH | × | × | RF-116 |
| B1774 | S/LID STATUS SEN LH | × | × | RF-118 |
| B1775 | S/LID STATUS SEN RH | × | × | RF-120 |
| B1776 | S/LID STATUS SEN RH | × | × | RF-122 |
| B1777 | REAR DEF OUT SIG | × | × | RF-124 |
| B1778 | TRUNK OPEN OUT SIG | × | × | RF-125 |
| B1779 | THERMO PROTECTION | × | × | RF-127 |
| B177A | ROOF STATE INCORRECT | × | × | RF-129 |
| B177B | ROOF STATE INCORRECT | × | × | RF-130 |
| B177C | THERMO PROTECTION | × | × | RF-131 |
| B177D | 5BOW LATCH OPEN SEN | × | × | RF-132 |
| B177E | 5BOW LATCH CLOSE SEN | × | × | RF-134 |
| B177F | 5BOW STRIKER SENSOR | × | × | RF-136 |

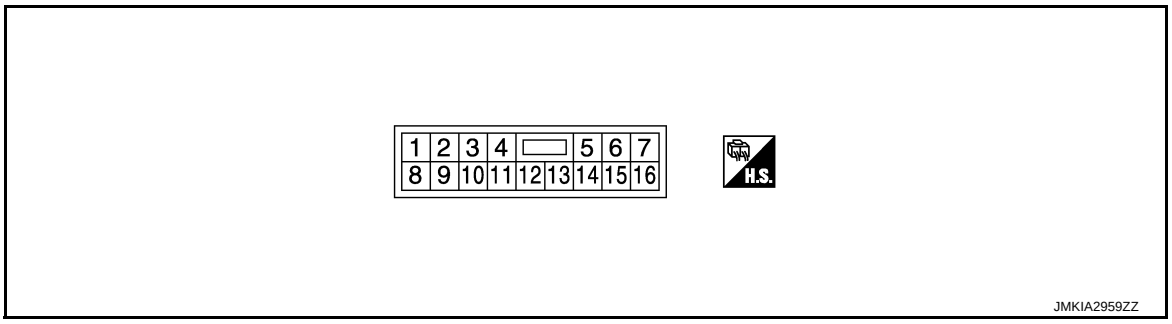
*: This item indicates the roof status signal (Audio).

# POWER WINDOW MAIN SWITCH

## Reference Value

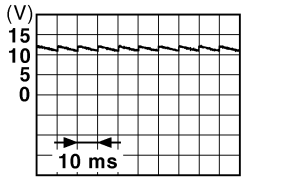
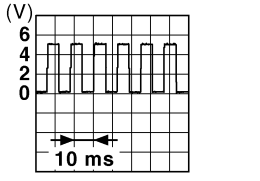
INFOID:0000000007625105

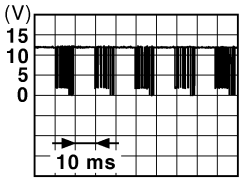
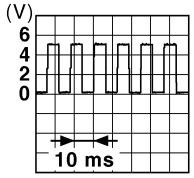
### TERMINAL LAYOUT




### PHYSICAL VALUES

#### POWER WINDOW MAIN SWITCH

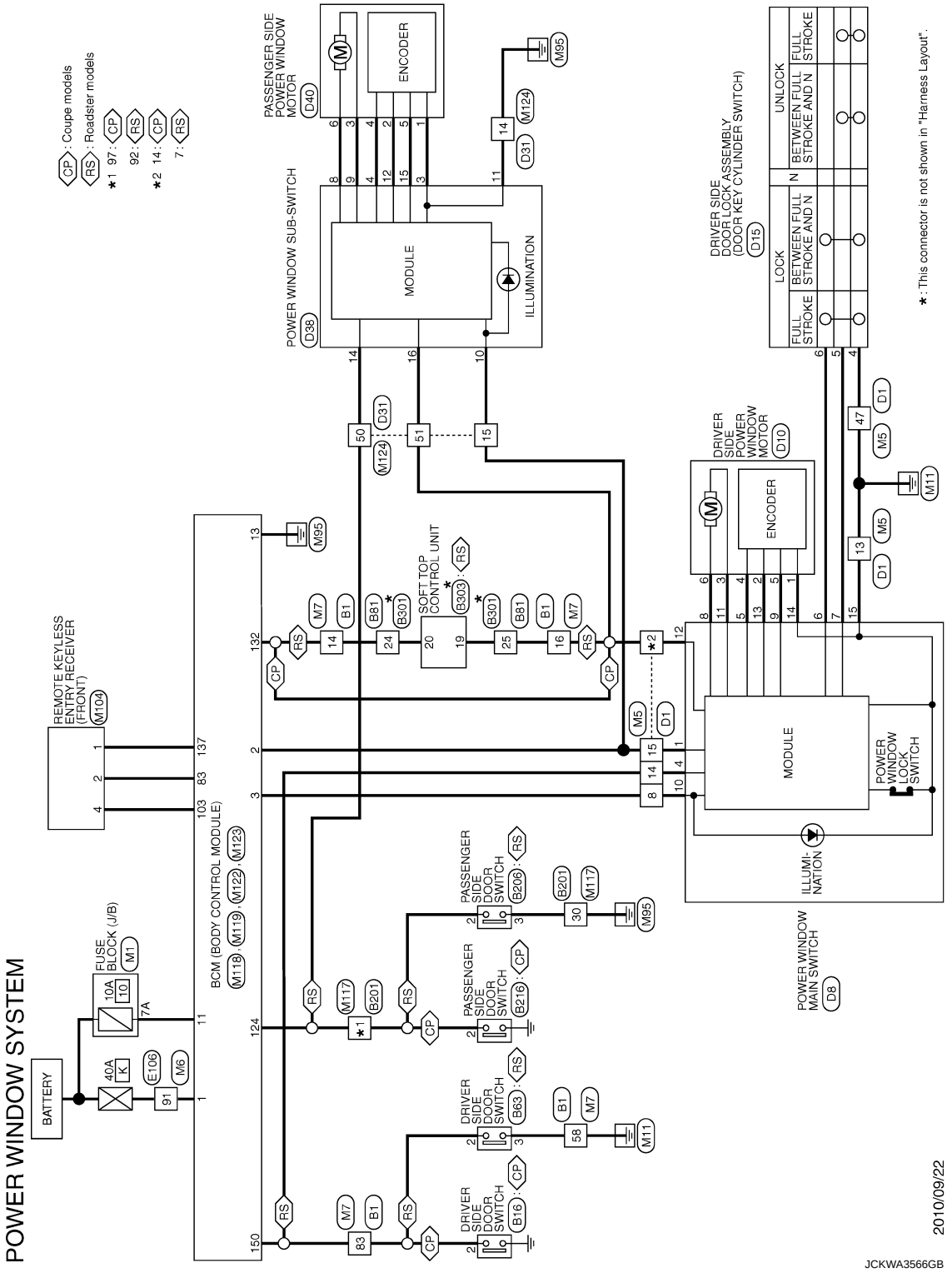
| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 1 (W) | Ground | Battery power supply | Input | — | 12 |
| 4 (Y) | Ground | Driver side door switch | Input | OFF (Door close) |  JPMIA0011GB |
| | | | | ON (Door open) | 0 |
| 5 (BG) | Ground | Encoder power supply | Output | When ignition switch ON or automatic window adjusting operates | 12 |
| 6 (GR) | Ground | Door key cylinder switch LOCK signal | Input | Key position (Neutral → Locked) | 5 → 0 |
| 7 (V) | Ground | Door key cylinder switch UNLOCK signal | Input | Key position (Neutral → Unlocked) | 5 → 0 |
| 8 (L) | Ground | Driver side power window motor UP signal | Output | When power window main switch (Driver side) is operated UP | 12 |
| 9 (LG) | Ground | Encoder pulse signal 2 | Input | When power window motor operates |  JMKIA0070GB |
| 10 (Y) | Ground | Ignition switch power signal | Input | IGN SW ON | 12 |
| | | | | IGN SW OFF | 0 |

| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 11 (BR) | Ground | Driver side power window motor DOWN signal | Output | When power window main switch (Driver side) is operated DOWN | 12 |
| 12 (Y) | Ground | Power window serial link | Input/ Output | Ignition switch ON |  JPMIA0013GB |
| 13 (R) | Ground | Encoder pulse signal 1 | Input | When power window motor operates |  JMKIA0070GB |
| 14 (G) | Ground | Encoder ground | — | — | 0 |
| 15 (B) | Ground | Ground | — | — | 0 |

## Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007806698

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




## Fail-Safe

INFOID:0000000007625107

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 signals 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 sensor malfunction | When both pulse signal 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 indicating that the 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 the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN. |
| Glass recognition position malfunction 2 | When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN. |

It changes to condition before initialization and the following functions do not operate when switched to fail-safe control.
- Auto-up operation
- Anti-pinch function
- Automatic window adjusting function
- Retained power operation

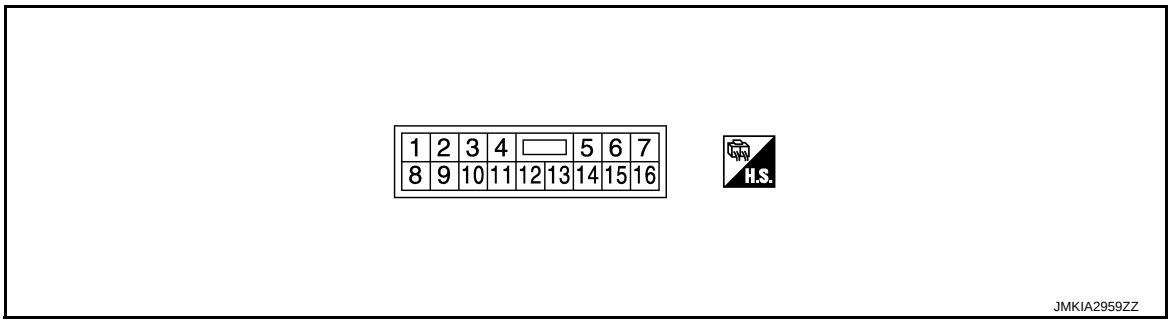
Perform initial operation to recover when switched to fail-safe mode. However, it switches back to fail-safe control when malfunction is found in power window switch or in motor.

# POWER WINDOW SUB-SWITCH

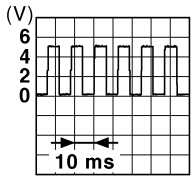
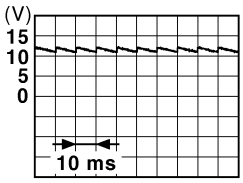
## Reference Value

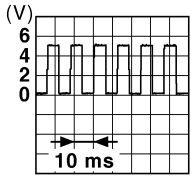
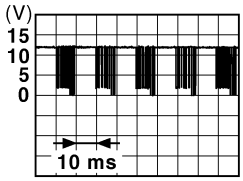
INFOID:0000000007625108

### TERMINAL LAYOUT




### PHYSICAL VALUES

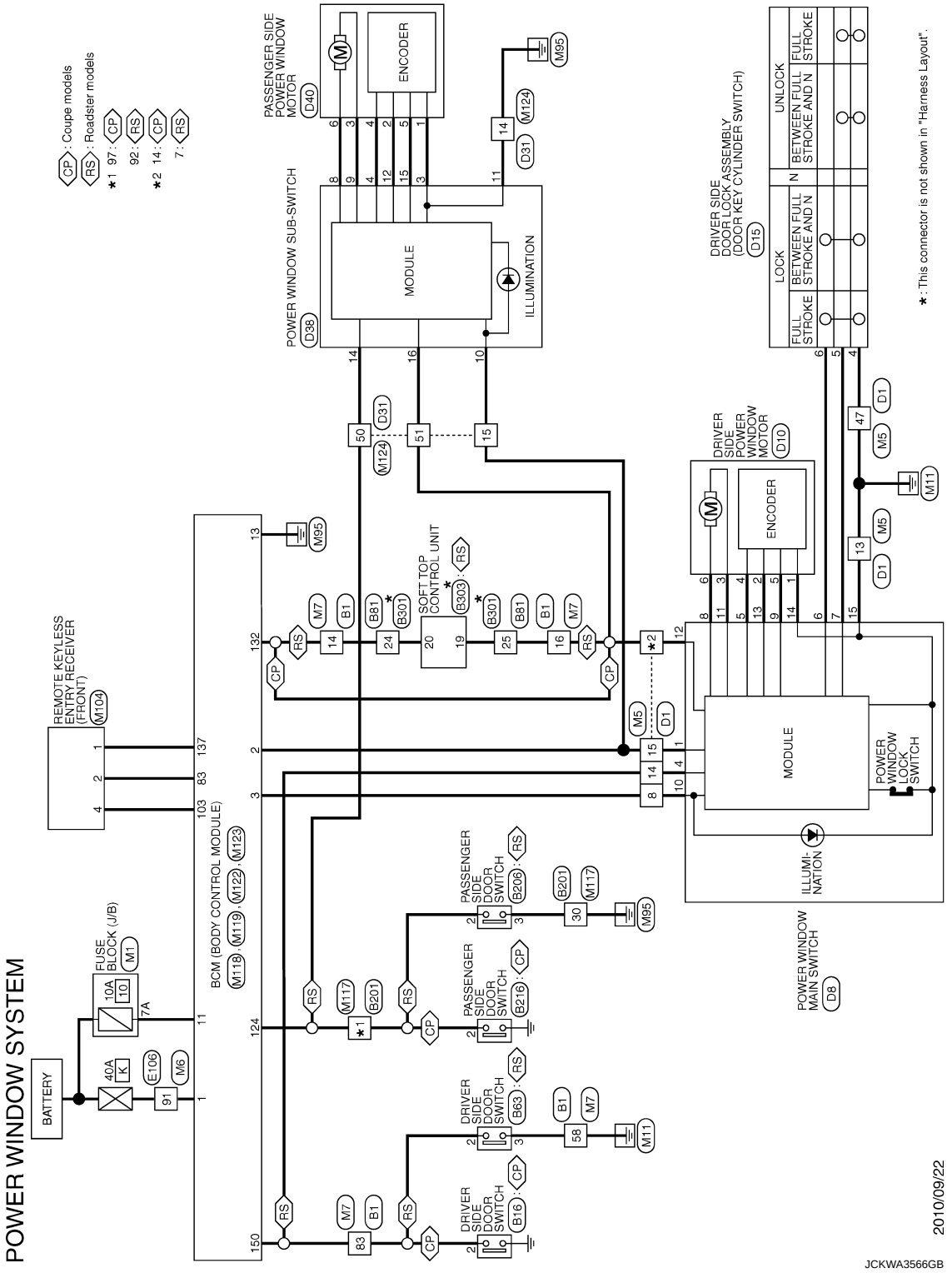
| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 3 (G) | Ground | Encoder ground | — | — | 0 |
| 4 (BG) | Ground | Encoder power supply | Output | When ignition switch ON or automatic window operates adjusting | 12 |
| 8 (L) | Ground | Power window motor UP signal | Output | When power window motor is operated UP | 12 |
| 9 (BR) | Ground | Power window motor DOWN signal | Output | When power window motor is operated DOWN | 12 |
| 10 (W) | Ground | Battery power supply | Input | — | 12 |
| 11 (B) | Ground | Ground | — | — | 0 |
| 12 (R) | Ground | Encoder pulse signal 1 | Input | When power window motor operates |  JMKIA0070GB |
| 14 (Y) | Ground | Passenger side door switch | Input | OFF (Door close) |  JPMIA0011GB |
| | | | | ON (Door open) | 0 |

| Terminal No. (Wire color) | | Description | | Condition | Voltage [V] (Approx.) |
|---|---|---|---|---|---|
| + | - | Signal name | Input/ Output | | |
| 15 (LG) | Ground | Encoder pulse signal 2 | Input | When power window motor operates |  JMKIA0070GB |
| 16 (Y) | Ground | Power window serial link | Input/ Output | Ignition switch ON |  JPMIA0013GB |

## Wiring Diagram - POWER WINDOW CONTROL SYSTEM -

INFOID:0000000007806699

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




## Fail-Safe

INFOID:0000000007625110

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 signals 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 sensor malfunction | When both pulse signal 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 indicating that the 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 the specified value is detected compared to the door glass fully closed position memorized in module, while door is being operated UP or DOWN. |
| Glass recognition position malfunction 2 | When pulse count that is out of door glass full stroke value or more is detected, while door glass is being operated UP or DOWN. |

It changes to condition before initialization and the following functions do not operate when switched to fail-safe control.
- Auto-up operation
- Anti-pinch function
- Automatic window adjusting function
- Retained power operation

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

# SYMPTOM DIAGNOSIS

## POWER WINDOWS DO NOT OPERATE WITH ANY POWER WINDOW SWITCHES

### Description

INFOID:0000000007625111

All power windows do not operate via power window main switch and power window sub-switch.

### Diagnosis Procedure

INFOID:0000000007625112

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

Check BCM power supply and ground circuit.
Refer to PWC-101, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

# DRIVER SIDE POWER WINDOW ALONE DOES NOT OPERATE

## Description

INFOID:0000000007625113

Driver side power window does not operate using power window main switch.

## Diagnosis Procedure

INFOID:0000000007625114

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

Check power window main switch power supply and ground circuit.
Refer to PWC-101, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure".

Is the inspection result normal?

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

### 2.CHECK DRIVER SIDE POWER WINDOW MOTOR

Check driver side power window motor.
Refer to PWC-104, "DRIVER SIDE : Component Function Check".

Is the measurement value within the specification?

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-44, "Intermittent Incident".
NO >> GO TO 1.

# PASSENGER SIDE POWER WINDOW ALONE DOES NOT OPERATE

## Description

INFOID:0000000007625115

Passenger side power window operates using power window main switch and power window sub-switch.

## Diagnosis Procedure

INFOID:0000000007625116

### 1.CHECK POWER WINDOW SUB-SWITCH POWER SUPPLY AND GROUND CIRCUIT

Check power window sub-switch power supply and ground circuit.
Refer to PWC-102, "POWER WINDOW SUB-SWITCH : 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

Check passenger side power window motor.
Refer to PWC-105, "PASSENGER SIDE : Component Function Check".

Is the measurement value within the specification?

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-44, "Intermittent Incident".
NO >> GO TO 1.

# ANTI-PINCH FUNCTION DOES NOT OPERATE

## DRIVER SIDE

### DRIVER SIDE : Description

INFOID:0000000007625117

Anti-pinch function does not operate when power window up operated.

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625118

#### 1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PWC-172, "DRIVER SIDE : Diagnosis Procedure".

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

## PASSENGER SIDE

### PASSENGER SIDE : Description

INFOID:0000000007625119

Anit-pinch function does not operate when power window up operated.

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625120

#### 1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PWC-172, "PASSENGER SIDE : Diagnosis Procedure".

#### 2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

# AUTO OPERATION DOES NOT OPERATE BUT MANUAL OPERATES NORMALLY

## DRIVER SIDE

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625121

#### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.
Refer to PWC-91, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

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-108, "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-44, "Intermittent Incident".
NO >> GO TO 1.

## PASSENGER SIDE

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625122

#### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is performed and operation is confirmed.
Refer to PWC-91, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

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-110, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# POWER WINDOW RETAINED POWER FUNCTION DOES NOT OPERATE NORMALLY

## Description

INFOID:0000000007625123

Retained power function does not operate after ignition switch turns OFF.

## Diagnosis Procedure

INFOID:0000000007625124

### 1.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-63, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# DOOR KEY CYLINDER SWITCH DOES NOT OPERATE POWER WINDOWS

## Description

INFOID:0000000007625125

Power window does not operate when locking or unlocking a door using door key cylinder.

## Diagnosis Procedure

INFOID:0000000007625126

### 1.PERFORM INITIALIZATION PROCEDURE

Initialization procedure is executed and operation is confirmed.
Refer to PWC-91, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

Is the inspection result normal?

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

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

Check driver side door lock assembly (door key cylinder switch).
Refer to DLK-74, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# KEYLESS POWER WINDOW DOWN DOES NOT OPERATE

## Description

INFOID:0000000007625127

Power window down does not operate when pressing unlock button on Intelligent Key.

## Diagnosis Procedure

INFOID:0000000007625128

### 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-281, "Diagnosis Procedure".

### 2.CHECK POWER WINDOW OPERATION

Check power window operation.

Does power window operate up/down using power window main switch?

YES >> GO TO 3.
NO >> Refer to PWC-168, "Diagnosis Procedure".

### 3.CHECK “PW DOWN SET” SETTING IN “WORK SUPPORT”

Check “PW DOWN SET” setting in “WORK SUPPORT”.
Refer to DLK-42, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)".

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-44, "Intermittent Incident".
NO >> GO TO 1.

# POWER WINDOW LOCK SWITCH DOES NOT FUNCTION

## Diagnosis Procedure

INFOID:0000000007625129

### 1.REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to PWC-181, "Removal and Installation".

# POWER WINDOW SWITCH ILLUMINATION DOES NOT ILLUMINATE

## DRIVER SIDE

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625130

1. REPLACE POWER WINDOW MAIN SWITCH

Replace power window main switch.

>> Refer to PWC-181, "Removal and Installation".

## PASSENGER SIDE

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625131

1. REPLACE POWER WINDOW SUB-SWITCH

Replace power window sub-switch.

>> Refer to PWC-181, "Removal and Installation".

# AUTOMATIC WINDOW ADJUSTING FUNCTION DOES NOT OPERATE DRIVER SIDE

## DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007625132

### 1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PWC-172, "DRIVER SIDE : Diagnosis Procedure".

### 2.CHECK DOOR SWITCH

Check door switch.
Refer to PWC-112, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# PASSENGER SIDE

## PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007625133

### 1.CHECK AUTO UP OPERATION

Check AUTO UP operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to PWC-172, "PASSENGER SIDE : Diagnosis Procedure".

### 2.CHECK DOOR SWITCH

Check door switch.
Refer to PWC-113, "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-44, "Intermittent Incident".
NO >> GO TO 1.

# PRECAUTION

## PRECAUTIONS

## FOR USA AND CANADA

### FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000007625134

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

**WARNING:**

**Always observe the following items for preventing accidental activation.**

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

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

**WARNING:**

**Always observe the following items for preventing accidental activation.**

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

### FOR USA AND CANADA : Precaution for Battery Service

INFOID:0000000007625135

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

## FOR MEXICO

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

INFOID:0000000007625136

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.**

## FOR MEXICO : Precaution for Battery Service

INFOID:0000000007625137

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

# REMOVAL AND INSTALLATION

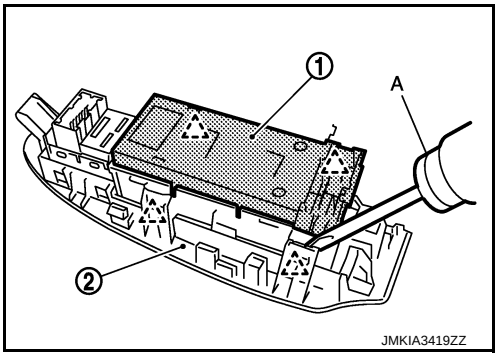
## POWER WINDOW MAIN SWITCH

### Removal and Installation

INFOID:0000000007625138

REMOVAL

1. Remove the power window main switch finisher (2).
   Refer to INT-15, "Removal and Installation".
2. Power window main switch (1) is removed from power window main switch finisher (2) using flat-bladed screw driver (A) etc.




: Pawl

**CAUTION:**
**Never fold the pawl of power window main switch finisher.**
**NOTE:**
The same procedure is also performed for power window sub-switch.

INSTALLATION

Install in the reverse order of removal.
**NOTE:**
Power window main switch is replaced or is removed it is necessary to do the initialization procedure.
Refer to PWC-92, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".