# SECTION DEF
# DEFOGGER

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# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORK FLOW

### Work Flow

INFOID:0000000007627462

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.CHECK DTC

Perform self-diagnosis with CONSULT.

Are any DTC detected?

YES >> Refer to BCS-85, "DTC Index".
NO >> 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 3. Then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 5.

#### 5.IDENTIFY 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 3.

Are all malfunctions corrected?

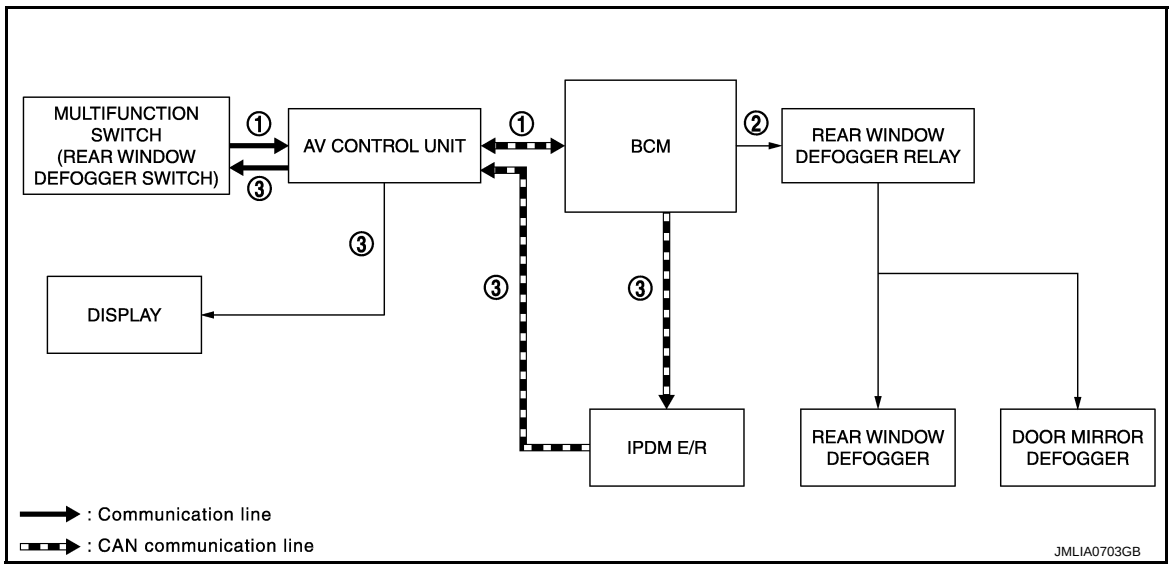
YES >> INSPECTION END
NO >> GO TO 4.

# SYSTEM DESCRIPTION

## REAR WINDOW DEFOGGER SYSTEM
## WITH NAVIGATION

### WITH NAVIGATION : System Diagram

INFOID:0000000007627463




1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

### WITH NAVIGATION : System Description

INFOID:0000000007627464

#### OPERATION DESCRIPTION

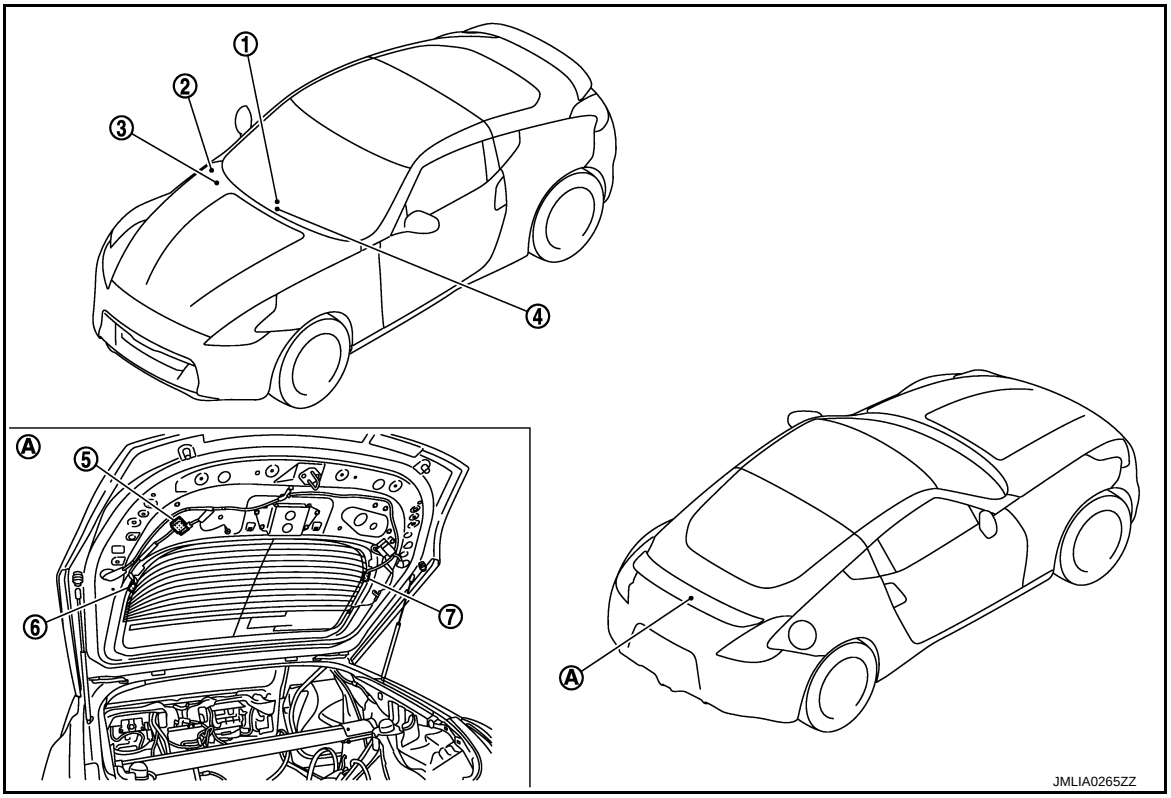
- Turn rear window defogger switch ON when the ignition switch is ON. Then multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication. AV control unit transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmits rear window defogger ON signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger are supplied with power and operate when rear window defogger relay turns ON.
- IPDM E/R transmits rear window defogger ON signal to AV control unit via CAN communication.
- When receiving the signal, AV control unit indicates rear defogger ON on the display. At the same time, AV control unit transmits rear defogger ON signal to multifunction switch (rear window defogger switch) via AV communication and illuminates rear window defogger switch indicator.

#### TIMER FUNCTION

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defoggers operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same operation also occurs during timer operation, if the ignition switch is turned OFF.

## WITH NAVIGATION : Component Parts Location

INFOID:0000000007627465




1. Multifunction switch (rear window defogger switch)
2. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
3. BCM
   Refer to BCS-9, "Component Parts Location".
4. AV control unit
   Refer to AV-126, "Component Parts Location".
5. Condenser
6. Rear window defogger connector
7. Rear window defogger connector

A. Behind back door assembly

## WITH NAVIGATION : Component Description

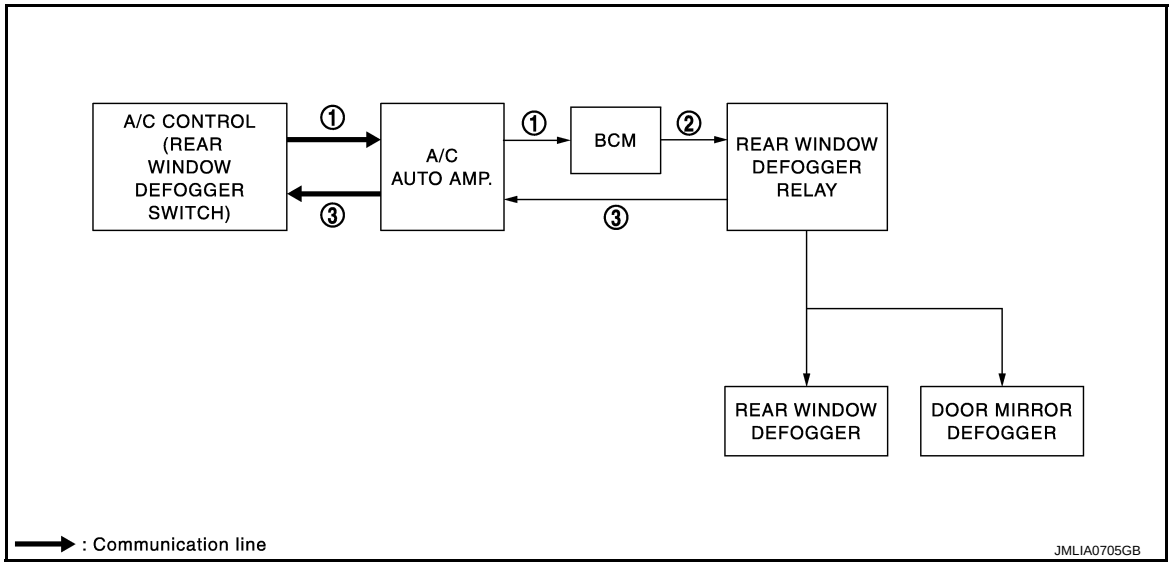
INFOID:0000000007627466

| | |
|---|---|
| Multifunction switch (Rear window defogger switch) | • The rear window defogger switch is installed.<br>• Turns the indicator lamp ON when detecting the operation of rear window defogger relay. |
| AV control unit | Displays the rear window defogger is ON on the display when detecting the operation of rear window defogger relay. |
| BCM | • Operates the rear window defogger relay when receiving rear window defogger switch signal.<br>• Performs the timer control of rear window defogger relay. |
| Rear window defogger relay | Operates the rear window defoggers and door mirror defogger with the control signal from BCM. |
| Rear window defogger | Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up. |
| Door mirror defogger | Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up. |
| IPDM E/R | Transmits rear window defogger ON signal to AV control unit via CAN communication. |

## WITHOUT NAVIGATION

## WITHOUT NAVIGATION : System Diagram

INFOID:0000000007627467




1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

## WITHOUT NAVIGATION : System Description

INFOID:0000000007627468

### OPERATION DESCRIPTION

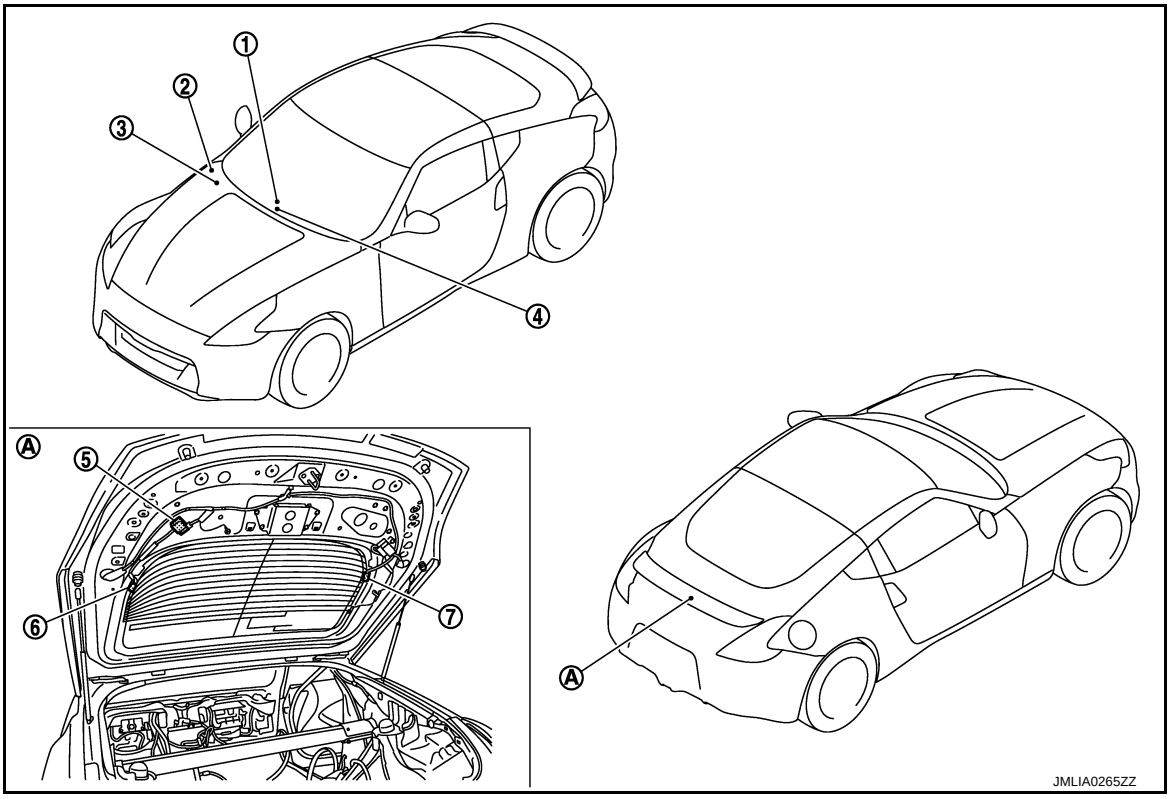
- Turn rear window defogger switch ON when the ignition switch is ON. Then A/C control (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp. and BCM.
- BCM turns rear window defogger relay ON when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger (with mirror defogger) are supplied with power and operates when rear window defogger relay turns ON.
- Rear window defogger relay transmits rear window defogger ON signal to A/C auto amp. when rear window defogger operates.
- At the same time, A/C auto amp. transmits rear defogger ON signal to A/C controller (rear window defogger switch) and illuminates rear window defogger switch indicator.

### TIMER FUNCTION

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defoggers (with mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same operation also occurs during timer operation, if the ignition switch is turned OFF.

## WITHOUT NAVIGATION : Component Parts Location

INFOID:0000000007627469




1. A/C controller
2. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
3. BCM
   Refer to BCS-9, "Component Parts Location".
4. A/C auto amp.
   Refer to HAC-23, "Component Parts Location".
5. Condenser
6. Rear window defogger connector
7. Rear window defogger connector

A. Behind back door assembly

## WITHOUT NAVIGATION : Component Description

INFOID:0000000007627470

| | |
|---|---|
| A/C control<br>(Rear window defogger switch) | • The rear window defogger switch is installed.<br>• Turns the indicator lamp ON when detecting the operation of rear window defogger relay. |
| A/C auto amp. | Transmit rear window defogger switch signal to BCM via CAN communication. |
| BCM | • Operates the rear window defogger relay with the operation of rear window defogger switch.<br>• Performs the timer control of rear window defogger relay. |
| Rear window defogger relay | Operates the rear window defogger and door mirror defogger (with mirror defogger) with the control signal from BCM. |
| Rear window defogger | Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up. |
| Door mirror defogger (with mirror defogger) | Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up. |

# DIAGNOSIS SYSTEM (BCM)

## COMMON ITEM

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

INFOID:0000000007798478

#### 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”.

## REAR WINDOW DEFOGGER

### REAR WINDOW DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)

INFOID:0000000007627472

Data monitor

| Monitor Item | Description |
|---|---|
| REAR DEF SW | • Without navigation: Displays “Press (ON)/other (OFF)” status determined with the rear window defogger switch<br>• With navigation: This is displayed even when it is not equipped |
| PUSH SW | Indicates [ON/OFF] condition of push switch |

## ACTIVE TEST

| Test Item | Description |
|---|---|
| REAR DEFOGGER | Rear window defogger operates when “ON” on CONSULT screen is touched |

# DTC/CIRCUIT DIAGNOSIS

## POWER SUPPLY AND GROUND CIRCUIT

### BCM

### BCM : Diagnosis Procedure

INFOID:0000000007627473

#### 1.CHECK FUSE AND FUSIBLE LINK

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

| Signal name | Fuse and fusible link No. |
|---|---|
| Battery power supply | K |
| | 10 |

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.

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

Is the measurement value normal?

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

#### 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.

# REAR WINDOW DEFOGGER SWITCH

## WITH NAVIGATION

### WITH NAVIGATION : Description

INFOID:0000000007627474

- The rear window defogger and door mirror defogger (with mirror defogger) are operated by turning the rear window defogger switch ON.
- The indicator lamp in the multifunction switch illuminates when the rear window defogger and door mirror defogger (with door mirror defogger) are operating.

### WITH NAVIGATION : Component Function Check

INFOID:0000000007627475

#### 1.CHECK FUNCTION

Check that the indicator lamp of rear window defogger illuminates when rear window defogger switch is ON.

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-14, "WITH NAVIGATION : Diagnosis Procedure".

### WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000007627476

#### 1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check multifunction switch (rear window defogger switch) operate.
Refer to AV-138, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace the malfunctioning parts.

## WITHOUT NAVIGATION

### WITHOUT NAVIGATION : Description

INFOID:0000000007627477

- The rear window defogger is operated by turning the rear window defogger switch ON.
- The indicator lamp in the A/C controller illuminates when the rear window defogger is operating.

### WITHOUT NAVIGATION : Component Function Check

INFOID:0000000007627478

#### 1.CHECK FUNCTION

With CONSULT

1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” or “BCM” using CONSULT.
3. Select “REAR DEF SW” in “DATA MONITOR” mode.
4. Check that the function operates normally according to the following conditions.

| Monitor item | Condition | | Status |
|---|---|---|---|
| REAR DEF SW | Rear window defogger switch | ON | On |
| | | OFF | Off |

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-14, "WITHOUT NAVIGATION : Diagnosis Procedure".

### WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000007627479

#### 1.CHECK A/C CONTROL (REAR WINDOW DEFOGGER SWITCH)

Check A/C control system.
Refer to HAC-5, "Work Flow".

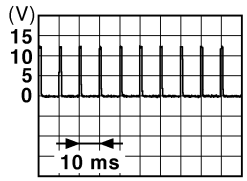
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2. CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect A/C auto amp. connector.
3. Turn ignition switch ON.
4. Check signal between A/C auto amp. harness connector and ground with oscilloscope.

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| A/C auto amp. | | | |
| Connector | Terminal | | |
| M66 | 27 | Ground |  |



JPMIA0012GB

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-80, "BASE AUDIO : Removal and Installation" (Base audio) or HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (BOSE audio without navigation).

NO >> GO TO 3.

## 3. CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector and A/C auto amp. connector.

| BCM | | A/C auto amp. | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M123 | 130 | M66 | 27 | Existed |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M123 | 130 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Removal and Installation".

NO >> Repair or replace harness.

# REAR WINDOW DEFOGGER RELAY

## Description

INFOID:0000000007627480

Power is supplied to the rear window defogger with BCM control.

## Component Function Check

INFOID:0000000007627481

### 1.CHECK FUNCTION

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger relay power supply circuit function is OK.
NO >> Refer to DEF-16, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627482

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.3, located in fuse block (J/B)].

Is the inspection result normal?

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

### 2.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 1

1. Turn ignition switch ON.
2. Check voltage between BCM harness connector and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| BCM | | | | | |
| Connector | Terminal | | | | |
| M123 | 151 | Ground | Rear window defogger switch | ON | 0 |
| | | | | OFF | Battery voltage |

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 3.

### 3.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect BCM connector and fuse block (J/B).
3. Check continuity between BCM harness connector and fuse block (J/B) harness connector.

| BCM | | Fuse block (J/B) | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M123 | 151 | M2 | 4B | Existed |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M123 | 151 | | Not existed |

Is the inspection result normal?

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

## 4.CHECK REAR WINDOW DEFOGGER RELAY

1. Remove rear window defogger relay,
2. Check rear window defogger relay.

Refer to DEF-17, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear window defogger relay.

## 5.CHECK FUSE BLOCK (J/B)

1. Install the rear window defogger relay.
2. Turn ignition switch ON.
3. Check voltage between fuse block (J/B) (fuse block side) and ground.

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Fuse block (J/B) | | | |
| Connector | Terminal | | |
| M2 | 4B | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace fuse block (J/B).

## 6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

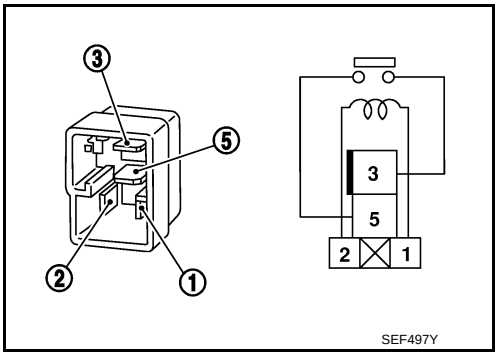
# Component Inspection

INFOID:0000000007627483

## 1.CHECK REAR WINDOW DEFOGGER RELAY

1. Turn ignition switch OFF.
2. Remove rear window defogger relay.
3. Check continuity between rear window defogger relay terminals.

| Terminal | | Condition | Continuity |
|---|---|---|---|
| Rear window defogger relay | | | |
| 3 | 5 | 12 V direct current supply between terminals 1 and 2 | Existed |
| | | No current supply | Not existed |




Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear window defogger relay.

# REAR WINDOW DEFOGGER

## Description

INFOID:0000000007627484

Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up.

## Component Function Check

INFOID:0000000007627485

### 1.CHECK REAR WINDOW DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger is OK.
NO >> Refer to DEF-18, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627486

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 20A fuse [No.14, No.15, located in fuse block (J/B)].

Is the inspection result normal?

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

### 2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between rear window defogger harness connector and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Rear window defogger | | | | | |
| Connector | Terminal | | | | |
| D201 | 1 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 4.

### 3.CHECK GROUND CIRCUIT

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

| Rear window defogger | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D107 | 2 | | Existed |

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace harness.

### 4.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect condenser connector and rear window defogger connector.
3. Check continuity between condenser (condenser side) connector and rear window defogger harness connector.

| Condenser | | Rear window defogger | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| D106 | 1 | D201 | 1 | Existed |

4. Check continuity between condenser (condenser side) connector and ground.

| Condenser | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D106 | 1 | | Not existed |

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace condenser. Refer to DEF-73, "Removal and Installation"

## 5. CHECK REAR WINDOW DEFOGGER CIRCUIT 2

1. Disconnect fuse block (J/B) connector.
2. Check continuity between fuse block (J/B) harness connector and condenser harness connector.

| Fuse block (J/B) | | Condenser | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| B6 | 10G | D106 | 1 | Existed |
| | 11G | | | |

3. Check continuity between fuse block (J/B) harness connector and ground.

| Fuse block (J/B) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| B6 | 10G | | Not existed |
| | 11G | | |

Is the inspection result normal?

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

## 6. CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) (fuse block side) and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Fuse block (J/B) | | | | | |
| Connector | Terminal | | | | |
| B6 | 10G | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |
| | 11G | | | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace fuse block (J/B).

## 7. CHECK FILAMENT

Check filament.

Refer to DEF-20, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace filament. Refer to DEF-71, "Inspection and Repair".

## 8.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

INFOID:0000000007627487

## 1.CHECK FILAMENT

Check the filament for damage.
Refer to DEF-71, "Inspection and Repair"

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair filament.

# REAR WINDOW DEFOGGER ON SIGNAL

## Description

INFOID:0000000007627488

Turns the indicator lamp in the rear window defogger switch ON when operating the rear window defogger.

## Component Function Check

INFOID:0000000007627489

### 1.CHECK FUNCTION

Check that the indicator lamps of rear window defogger switch are illuminated when turning the rear window defogger switch ON.

Is the inspection result normal?

YES >> Rear window defogger ON signal function is OK.
NO >> Refer to DEF-21, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627490

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.13, located in fuse block (J/B)].

Is the inspection result normal?

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

### 2.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP ON SIGNAL

1. Turn ignition switch ON.
2. Check voltage between A/C auto amp. harness connector ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| A/C auto amp. | | | | | |
| Connector | Terminal | | | | |
| M66 | 26 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-80, "BASE AUDIO : Removal and Installation" (base audio) or HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (Bose audio without navigation).
NO >> GO TO 3.

### 3.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector and A/C auto amp. connector.
3. Check continuity between fuse block (J/B) harness connector and A/C auto amp. harness connector.

| Fuse block (J/B) | | A/C auto amp. | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M3 | 9C | M66 | 26 | Existed |

4. Check continuity between fuse block (J/B) harness connector and ground.

| Fuse block (J/B) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M3 | 9C | | Not existed |

Is the inspection result normal?

YES >> Repair or replace fuse block (J/B).

NO >> Repair or replace harness.

# DOOR MIRROR DEFOGGER

## Description

INFOID:0000000007627491

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

## Component Function Check

INFOID:0000000007627492

### 1.CHECK DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that both side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Door mirror defogger is OK.
NO >> Refer to DEF-23, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627493

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.13, located in fuse block (J/B)].

Is the inspection result normal?

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

### 2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect fuse block (J/B) connector.
2. Turn ignition switch ON.
3. Check voltage between fuse block (J/B) connector and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Fuse block (J/B) | | | | | |
| Connector | Terminal | | | | |
| M3 | 9C | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |
| | 10C | | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace fuse block (J/B).

### 3.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# DRIVER SIDE DOOR MIRROR DEFOGGER

## Description

INFOID:0000000007627494

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

## Component Function Check

INFOID:0000000007627495

### 1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

1. Perform Active Test (“REAR DEFOGGER”) with CONSULT.
2. Touch “ON”.
3. Check that the driver side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Driver side door mirror defogger is OK.
NO >> Refer to DEF-24, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627496

### 1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror (driver side) harness connector and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Door mirror (driver side) | | | | | |
| Connector | Terminal | | | | |
| D3 | 4 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

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

### 2.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between fuse block (J/B) harness connector and door mirror (driver side) harness connector.

| Fuse block (J/B) | | Door mirror (driver side) | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M3 | 10C | D3 | 4 | Existed |

3. Check continuity between fuse block (J/B) harness connector and ground.

| Fuse block (J/B) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M3 | 10C | | Not existed |

Is the inspection result normal?

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

### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror (driver side) harness connector and ground.

| Door mirror (driver side) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D3 | 8 | | Existed |

Is the inspection result normal?

YES >> Replace door mirror glass (driver side). Refer to GW-20, "Removal and Installation".
NO >> Repair or replace harness.

## 4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

# PASSENGER SIDE DOOR MIRROR DEFOGGER

## Description

INFOID:0000000007627497

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

## Component Function Check

INFOID:0000000007627498

### 1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Perform Active Test (“REAR DEFOGGER”) with CONSULT.
2. Touch “ON”.
3. Check that the passenger side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Passenger side door mirror defogger is OK.
NO >> Refer to DEF-26, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627499

### 1.CHECK POWER SUPPLY CIRCUIT

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

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Door mirror (passenger side) | | | | | |
| Connector | Terminal | | | | |
| D33 | 4 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

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

### 2.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between fuse block (J/B) harness connector and door mirror (passenger side) harness connector.

| Fuse block (J/B) | | Door mirror (passenger side) | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M3 | 9C | D33 | 4 | Existed |

3. Check continuity between fuse block (J/B) harness connector and ground.

| Fuse block (J/B) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M3 | 9C | | Not existed |

Is the inspection result normal?

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

### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror (passenger side) harness connector and ground.

| Door mirror (passenger side) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D33 | 8 | | Existed |

Is the inspection result normal?

YES >> Replace door mirror glass (passenger side). Refer to GW-20, "Removal and Installation".
NO >> Repair or replace harness.

## 4. CHECK INTERMITTENT INCIDENT

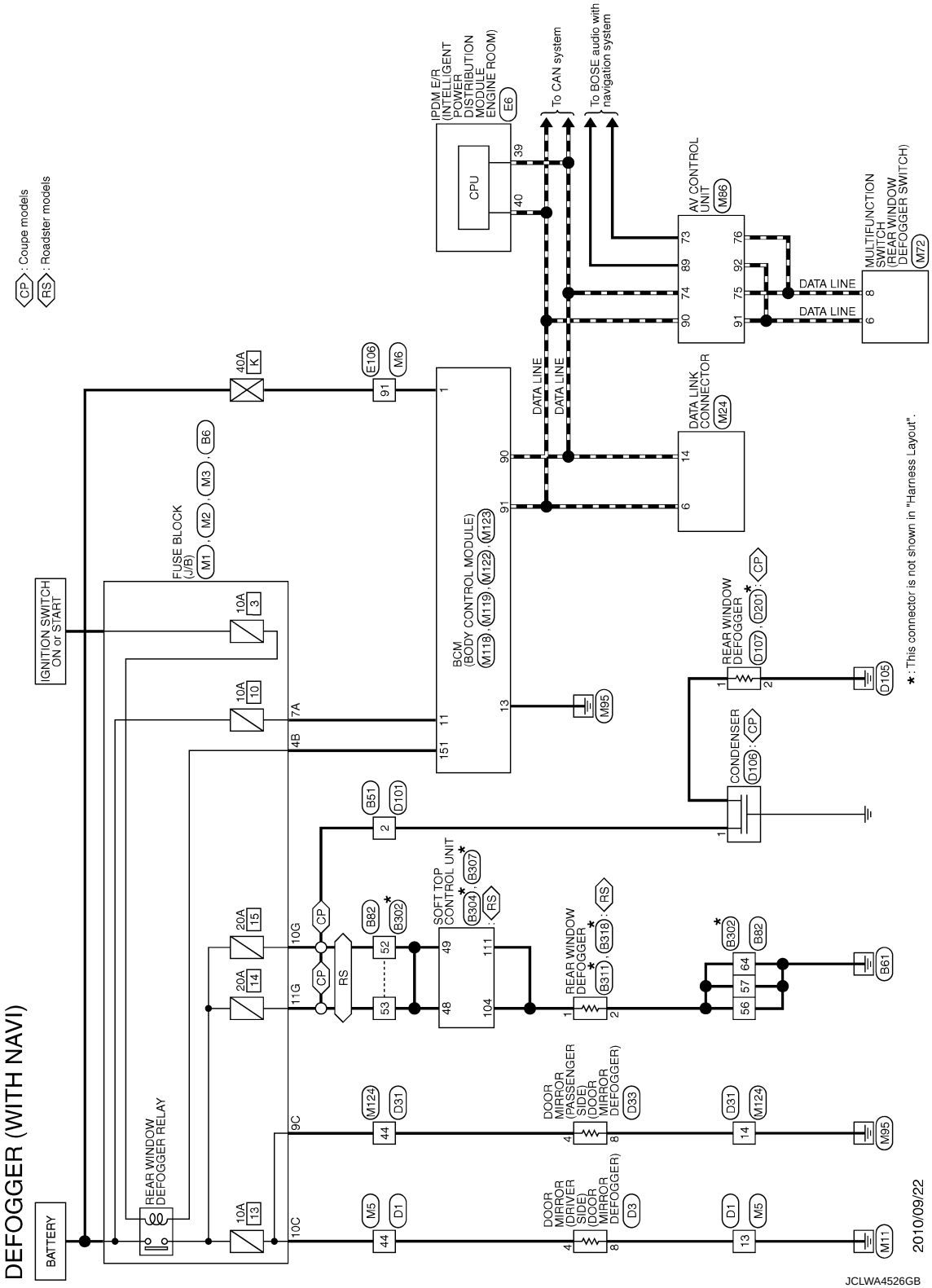
Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

# REAR WINDOW DEFOGGER SYSTEM

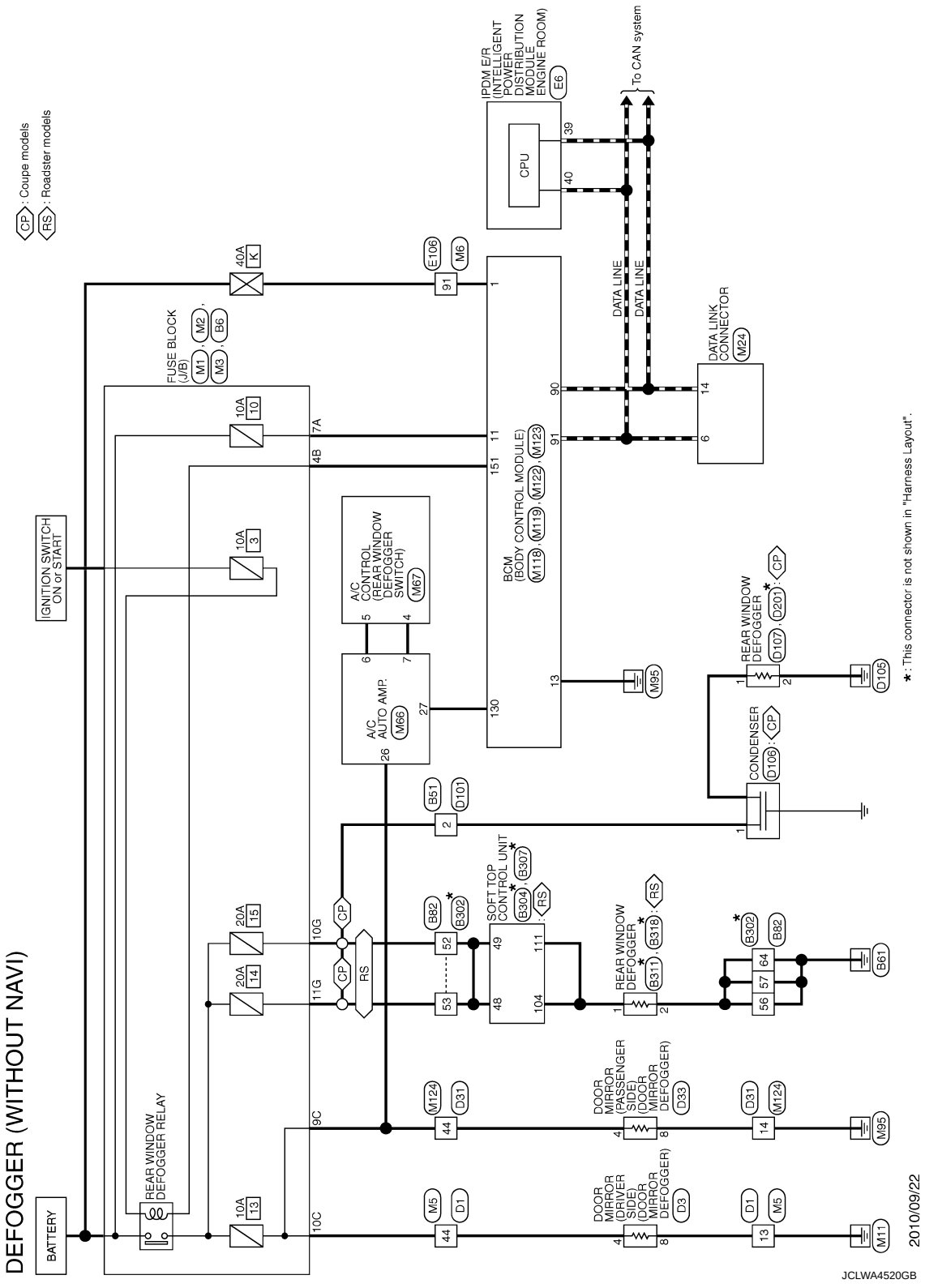
## Wiring Diagram - DEFOGGER (WITH NAVI) -

INFOID:0000000007627500



## Wiring Diagram - DEFOGGER (WITHOUT NAVI) -

INFOID:0000000007627501



# ECU DIAGNOSIS INFORMATION

## BCM (BODY CONTROL MODULE)

### Reference Value

INFOID:0000000007798484

#### 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 |

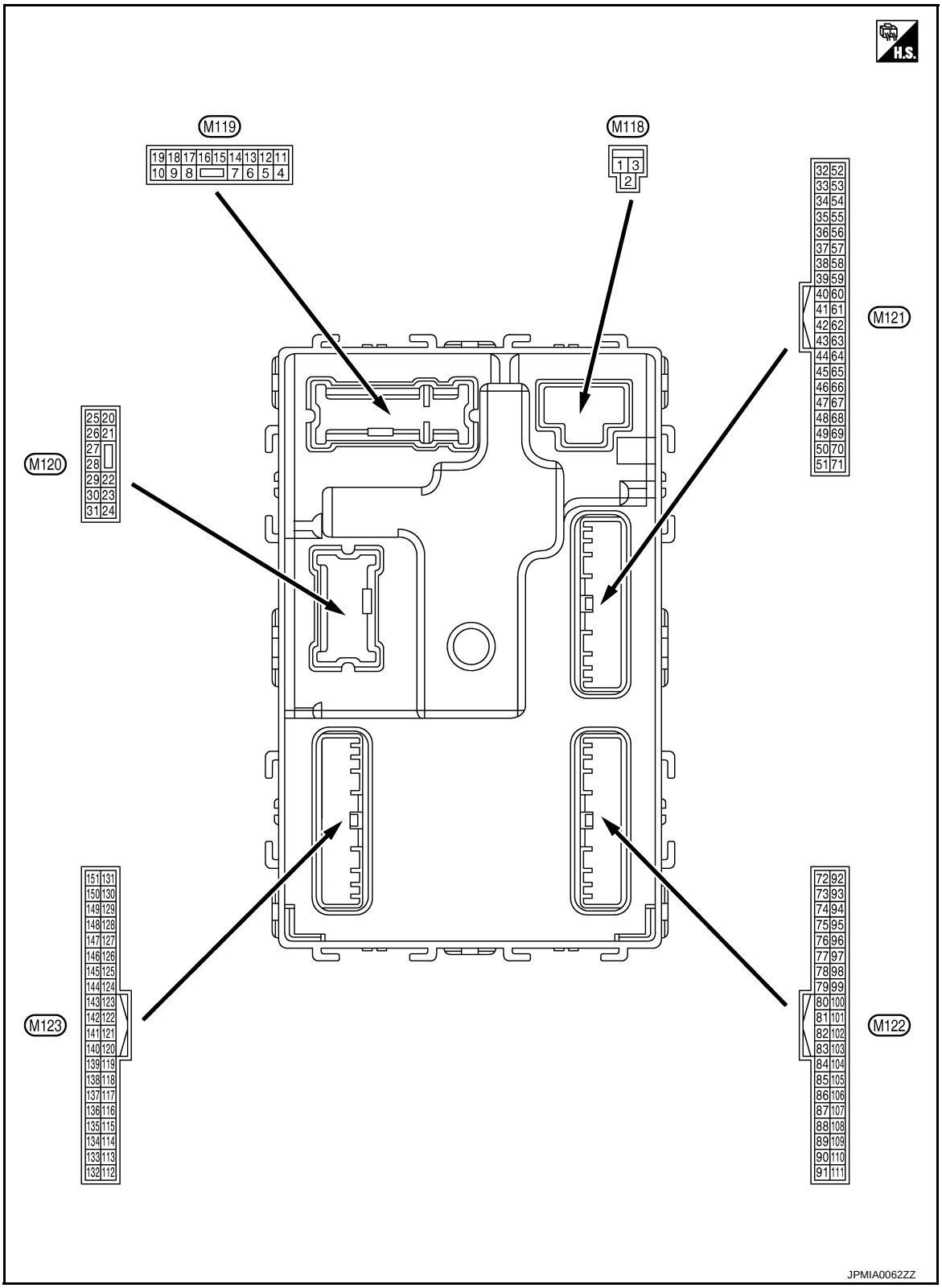
| Monitor Item | Condition | Value/Status |
|---|---|---|
| DOOR SW-RL | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| DOOR SW-BK | • Back door closed (Coupe models)<br>• Trunk lid closed (Roadster models) | Off |
| | • Back door opened (Coupe models)<br>• Trunk lid opened (Roadster 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 |

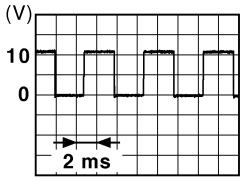
| Monitor Item | Condition | Value/Status |
|---|---|---|
| IGN RLY1 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| DETE SW -IPDM | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT PN -IPDM | • Selector 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 |

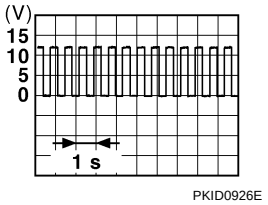
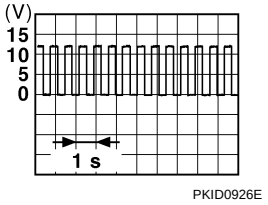
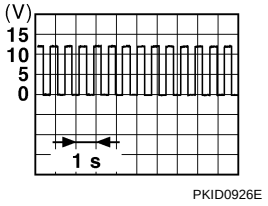
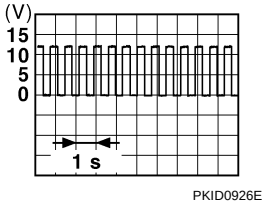
| Monitor Item | Condition | Value/Status |
|---|---|---|
| CONFRM ID ALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done |
| CONFIRM ID4 | The key ID that 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 |

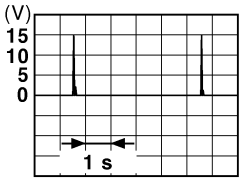
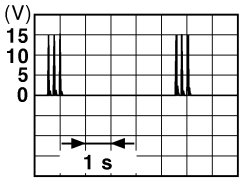
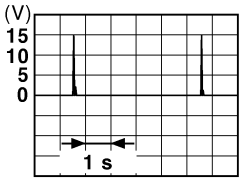
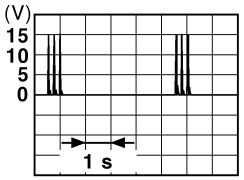
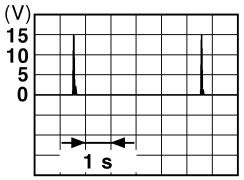
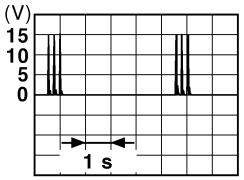
TERMINAL LAYOUT

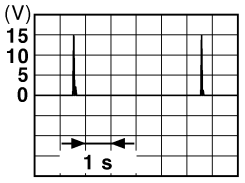
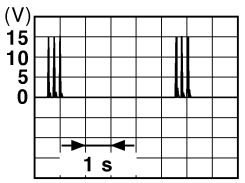
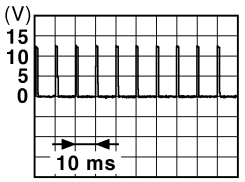
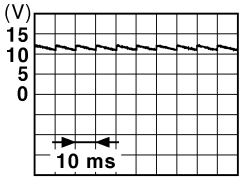


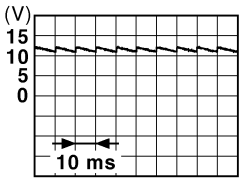
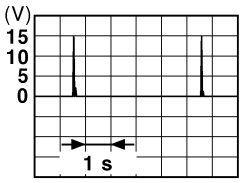
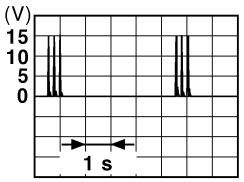
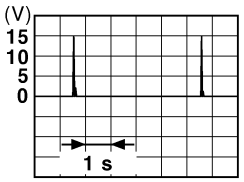
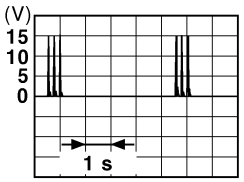

PHYSICAL VALUES

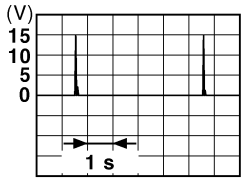
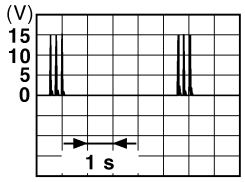
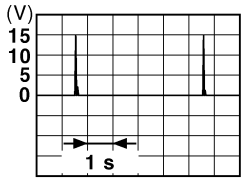
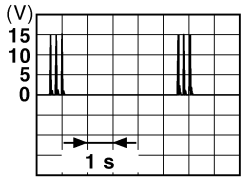
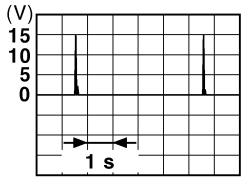
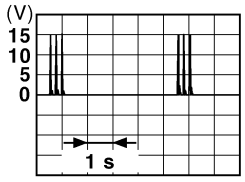
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (W) | Ground | P/W power supply (BAT) | 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 |

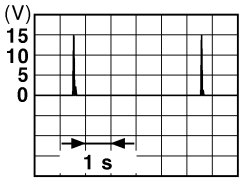
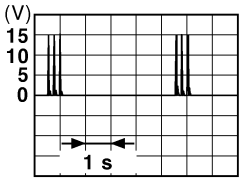
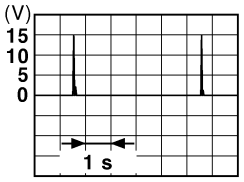
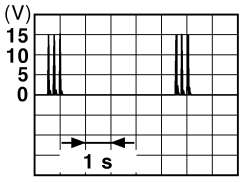
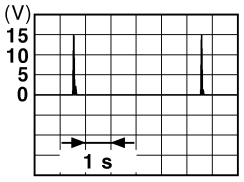
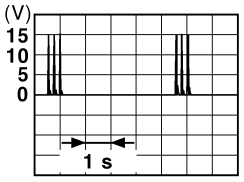
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 17 (W) | Ground | Turn signal RH (Front and side) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch 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 |

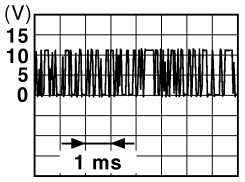
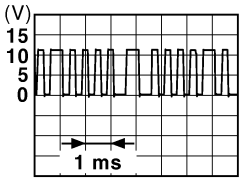
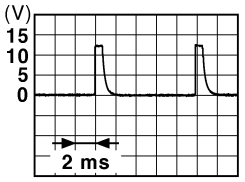
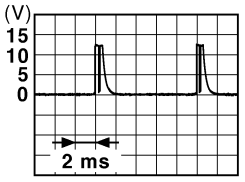
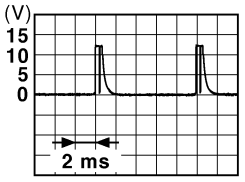
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 34 (G) | Ground | Luggage room/Trunk room antenna (–) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  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 |

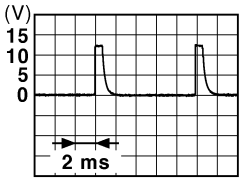
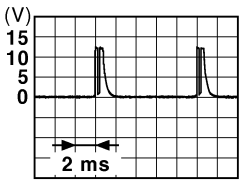
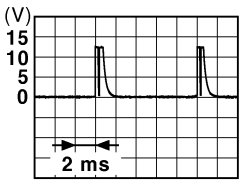
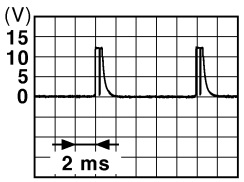
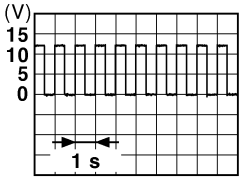
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 39 (W) | Ground | Rear bumper antenna (+) | Output | When the back door/trunk lid door request switch is operated with ignition switch OFF | When 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 |

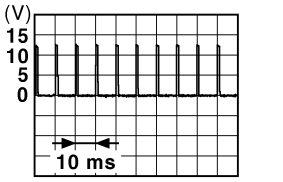
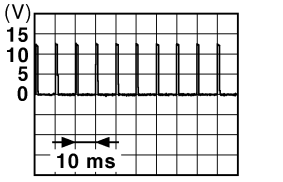
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 67 (GR) | Ground | Back door/Trunk lid opener switch | Input | Back door/ Trunk lid opener switch | Pressed | 0 V |
| | | | | | Not pressed |  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 |

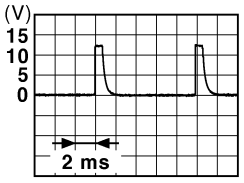
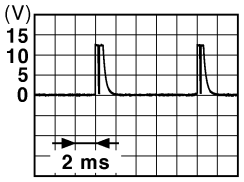
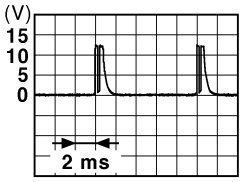
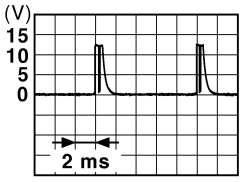
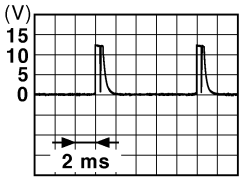
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 74 (SB) | Ground | Passenger door antenna (–) | Output | When the passenger door request switch is operated with ignition switch OFF | When Intelligent 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 |

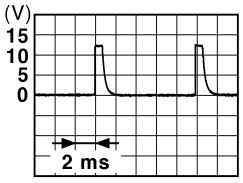
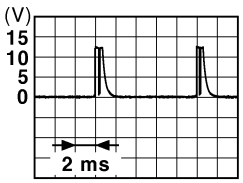
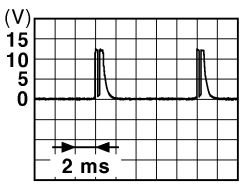
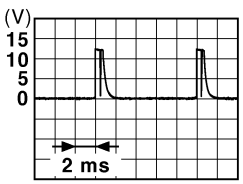
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 77 (LG) | Ground | Driver door antenna (+) | Output | When the driver door request switch is operated with ignition switch OFF | When Intelligent 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 |

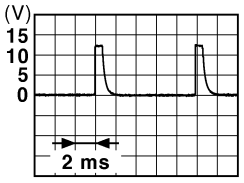
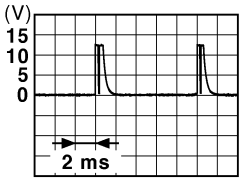
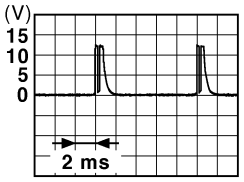
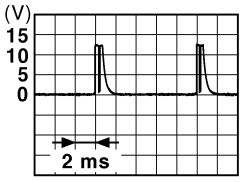
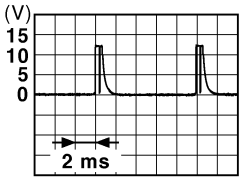
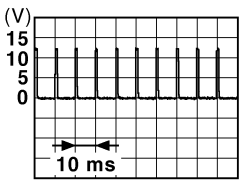
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 80 (GR) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent 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 |

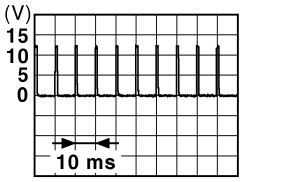
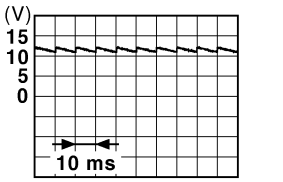
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 88 (V) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | 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 |

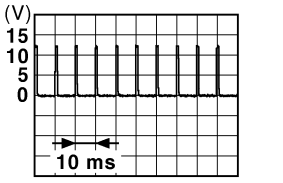
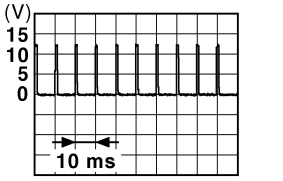
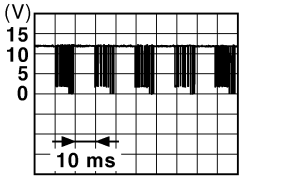
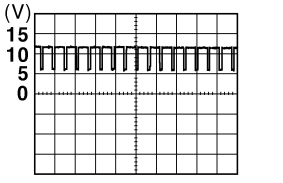
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 95 (O) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 12 V |
| 96*3 (Y) | Ground | A/T shift selector (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 |

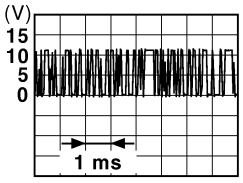
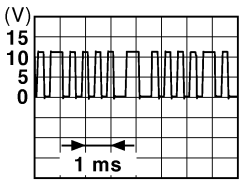
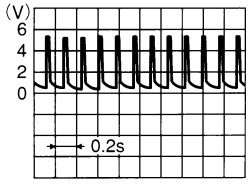
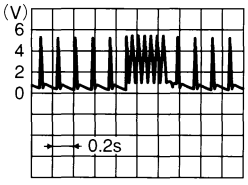
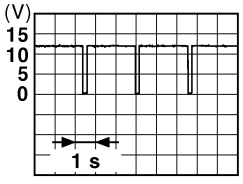
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 107 (LG) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB 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 |

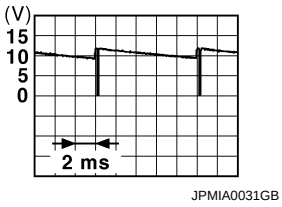
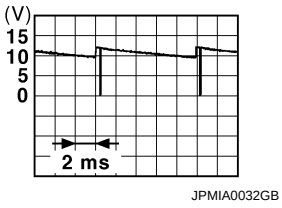
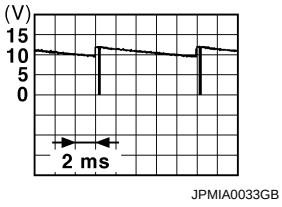
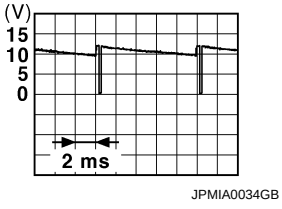
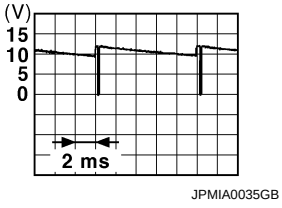
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 108 (R) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | 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 |

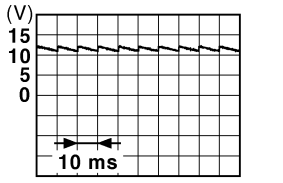
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 109 (Y) | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB 1.4 V |
| | | | | | 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 1.1 V |
| | | | | | ON | 0 V |
| 130*7 (L) | Ground | Rear window defogger switch | Input | Ignition switch ON | Rear window defogger switch OFF |  JPMIA0012GB 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 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:** The pulse width of this wave is varied by the illumination brightening/dimming level.  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) + | Terminal No. (Wire color) – | Description: Signal name | Description: Input/ Output | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| 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 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 | |

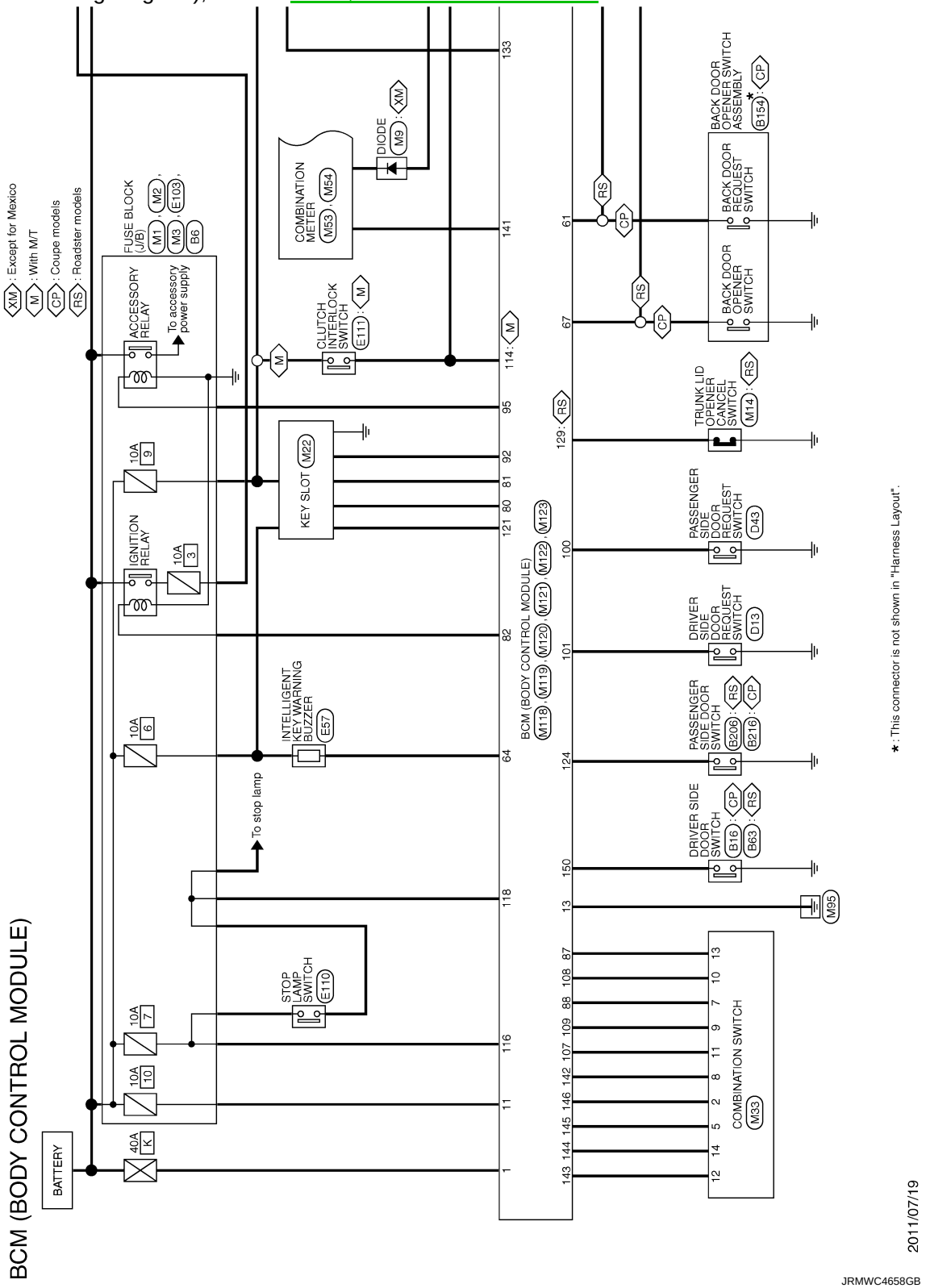
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 150 (GR) | Ground | Driver door switch | Input | Driver door switch | OFF (Door close) |  JPMIA0011GB 11.8 V |
| | | | | | ON (Door open) | 0 V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

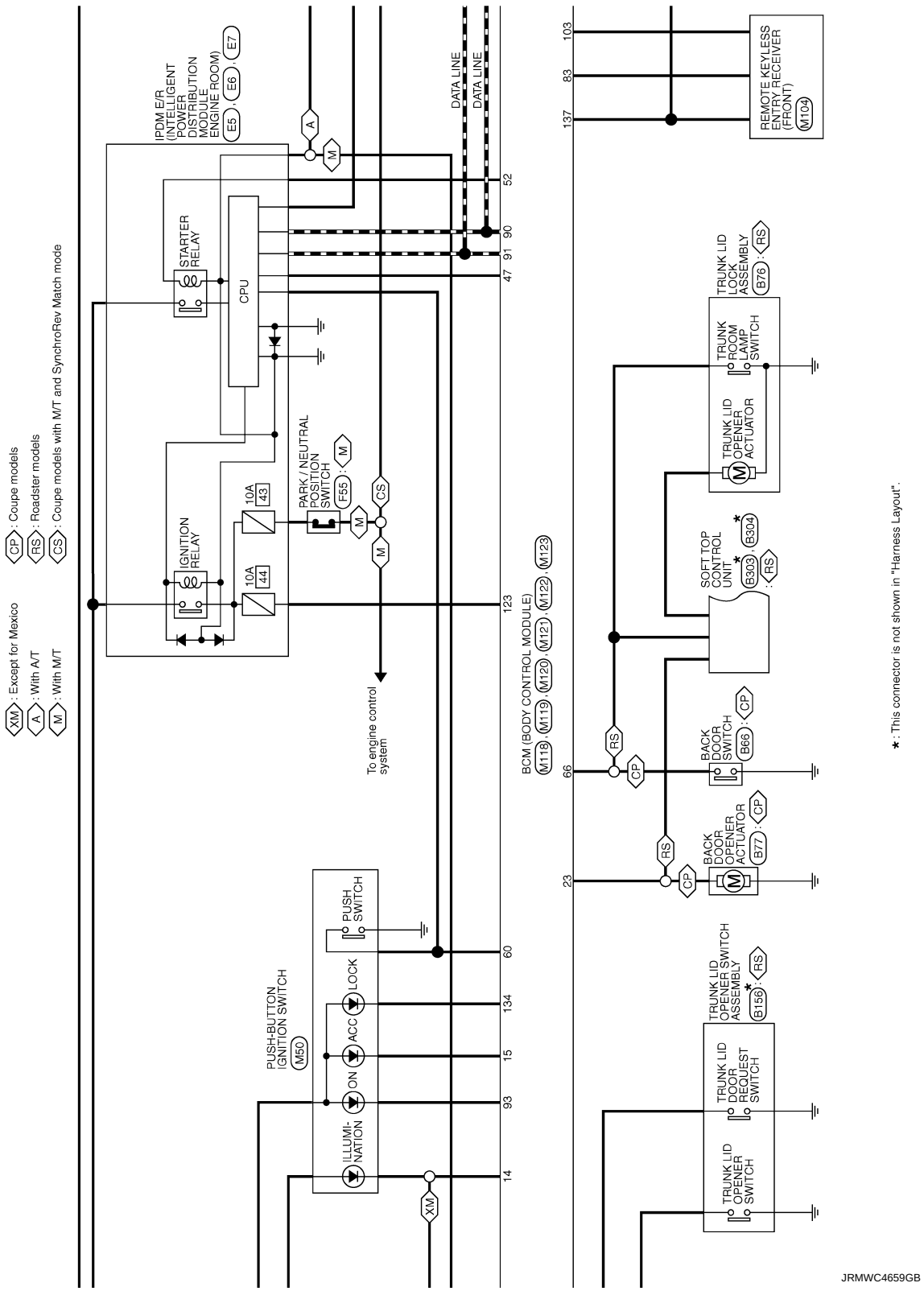
*1: Coupe models
*2: Roadster models
*3: A/T models
*4: M/T models
*5: With A/T or coupe models with M/T and SynchroRev Match mode
*6: With A/T or with M/T without SynchroRev Match mode
*7: Without NAVI
*8: With rear fog lamp
*9: BCM does not use this terminal for control.

## Wiring Diagram - BCM -

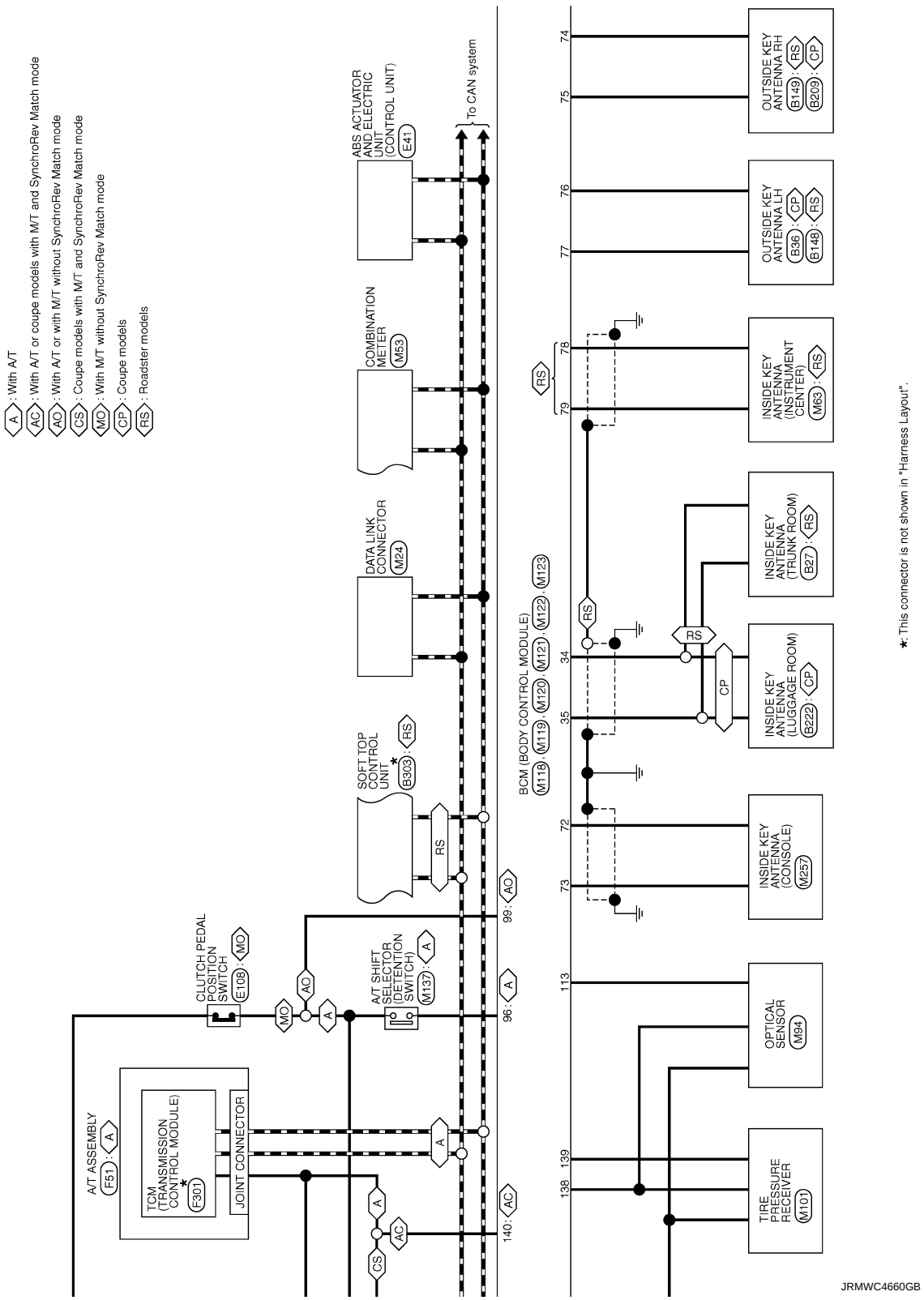
INFOID:0000000007798485

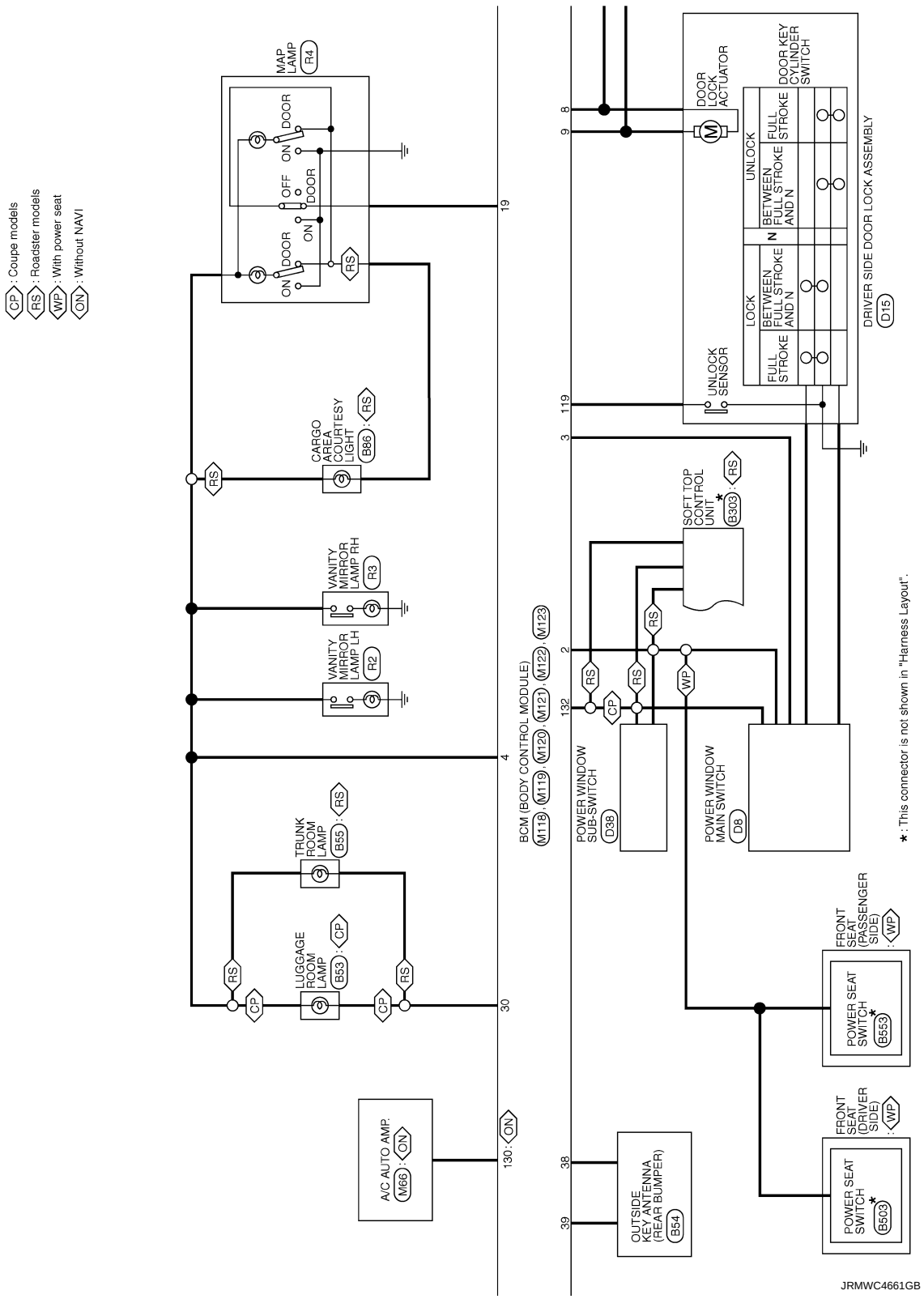
For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".

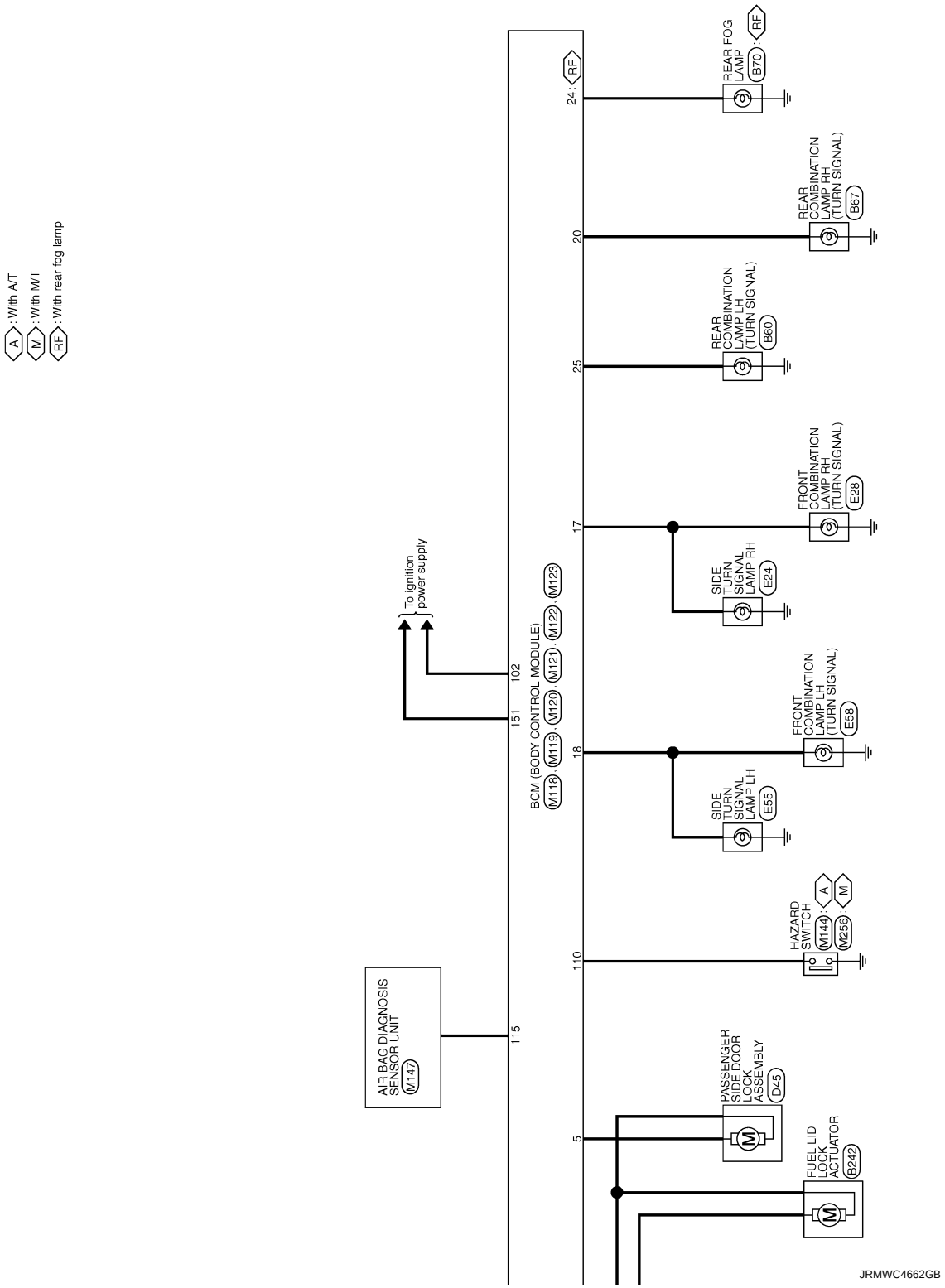





★: This connector is not shown in "Harness Layout".


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
TCM (TRANSMISSION CONTROL MODULE)
F301
JOINT CONNECTOR
CLUTCH PEDAL POSITION SWITCH
E108
A/T SHIFT SELECTOR (DETENTION SWITCH)
M137
SOFT TOP CONTROL UNIT
B303
DATA LINK CONNECTOR
M24
COMBINATION METER
M53
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
E41
To CAN system
96 : A
99 : AO
140 : AC
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
OPTICAL SENSOR
M94
TIRE PRESSURE RECEIVER
M101
INSIDE KEY ANTENNA (CONSOLE)
M257
INSIDE KEY ANTENNA (LUGGAGE ROOM)
B222
INSIDE KEY ANTENNA (TRUNK ROOM)
B27
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M63
OUTSIDE KEY ANTENNA LH
B36, B148
OUTSIDE KEY ANTENNA RH
B149, B209
*: 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
8
9
119
3
2
132
38
39
DOOR LOCK ACTUATOR
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
UNLOCK SENSOR
SOFT TOP CONTROL UNIT* B303 : RS
POWER WINDOW SUB-SWITCH D38
POWER WINDOW MAIN SWITCH D8
FRONT SEAT (PASSENGER SIDE) : WP
POWER SEAT SWITCH* B553
FRONT SEAT (DRIVER SIDE) : WP
POWER SEAT SWITCH* B503
OUTSIDE KEY ANTENNA (REAR BUMPER) B54
*: This connector is not shown in "Harness Layout".
JRMWC4661GB




## Fail-safe

*INFOID:0000000007798486*

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:0000000007798487

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:0000000007798488

**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 |

# SYMPTOM DIAGNOSIS

## REAR WINDOW DEFOGGER DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000007627507

**1.** CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DEF-13, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

**2.** CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
- With Navigation: Refer to DEF-14, "WITH NAVIGATION : Component Function Check".
- Without Navigation: Refer to DEF-14, "WITHOUT NAVIGATION : Component Function Check".

Is the inspection result normal?

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

**3.** CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to DEF-16, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

**4.** CHECK REAR WINDOW DEFOGGER

Check rear window defogger.
Refer to DEF-18, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

**5.** 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.

# REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OPERATE

## Diagnosis Procedure

INFOID:0000000007627508

### 1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DEF-13, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

### 2.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
Refer to DEF-14, "WITH NAVIGATION : Component Function Check"(With Navi) or DEF-14, "WITHOUT NAVIGATION : Component Function Check"(Without Navi).

Is the inspection result normal?

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

### 3.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to DEF-16, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

### 4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

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

# REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DEFOGGERS OPERATE

## Diagnosis Procedure

INFOID:0000000007627509

### 1.CHECK REAR WINDOW DEFOGGER

Check rear window defogger.
Refer to DEF-18, "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 inspection result normal?

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

# DOOR MIRROR DEFOGGER DOES NOT OPERATE

## BOTH SIDES

### BOTH SIDES : Diagnosis Procedure

INFOID:0000000007627510

#### 1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.
Refer to DEF-23, "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 inspection result normal?

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

## DRIVER SIDE

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007627511

#### 1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-24, "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 inspection result normal?

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

## PASSENGER SIDE

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007627512

#### 1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.
Refer to DEF-26, "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 inspection result normal?

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

# ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT OPERATES

## Diagnosis Procedure

INFOID:0000000007627513

### 1.CHECK AV CONTROL FUNCTION

Check that the AV control unit is operating normally. Refer to AV-173, "Work Flow".

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 inspection result normal?

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

# REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

## WITH NAVIGATION

### WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000007627514

#### 1.CHECK REAR WINDOW DEFOGGER OPERATION

Check rear window defogger operation.

Is the inspection result normal?

YES >> Check AV control system. Refer to AV-173, "Work Flow".
NO >> Check rear window defogger system. Refer to DEF-5, "Work Flow".

## WITHOUT NAVIGATION

### WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000007627515

#### 1.CHECK A/C CONTROLLER FUNCTION

Check that the A/C controller is operating normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check A/C control system. Refer to HAC-5, "Work Flow".

#### 2.CHECK REAR WINDOW DEFOGGER ON SIGNAL

Check rear window defogger ON signal.
Refer to DEF-21, "Component Function Check".

Is the inspection result normal?

YES >> Replace A/C controller (rear window defogger switch). Refer to HAC-78, "BASE AUDIO : Removal and Installation" (Base audio) or HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (BOSE audio without navigation).
NO >> Repair or replace the malfunctioning parts.

# PRECAUTION

## PRECAUTIONS

## FOR USA AND CANADA

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

INFOID:0000000007627516

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:0000000007798508

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:0000000007627517

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.**

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- **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:0000000007798509

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

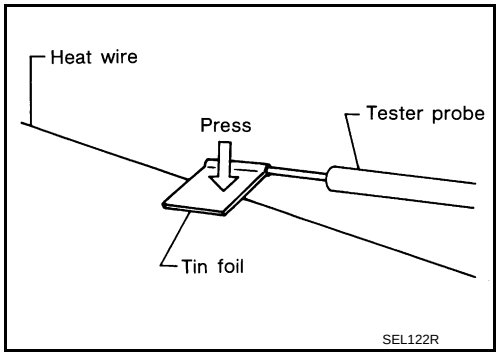
## FILAMENT

### Inspection and Repair

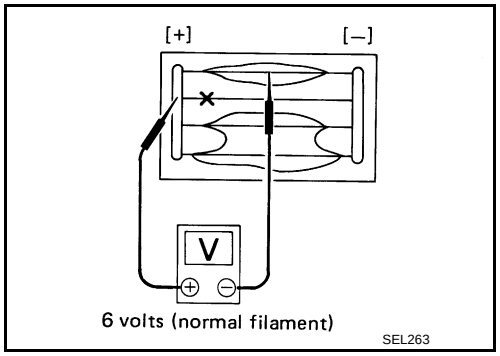
INFOID:0000000007627518

#### INSPECTION

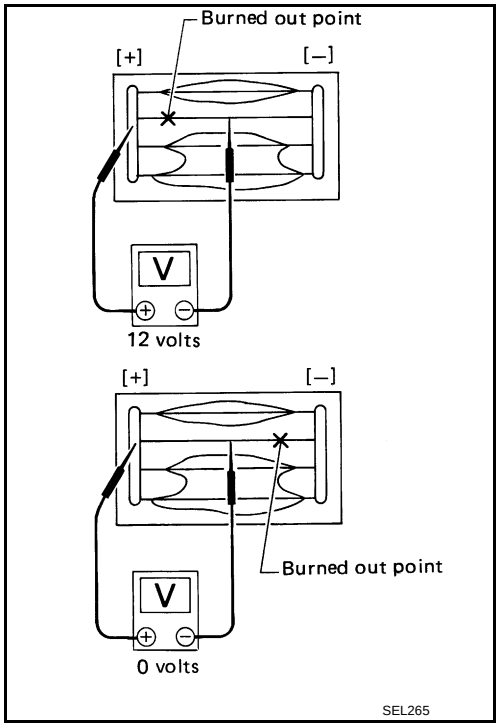
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.




2. Attach probe circuit tester (in Volt range) to middle portion of each filament.




3. If a filament is burned out, circuit tester registers 0 or battery voltage.
4. To locate burned out point, move probe to left and right along filament. Test needle swings abruptly when probe passes the point.




#### REPAIR

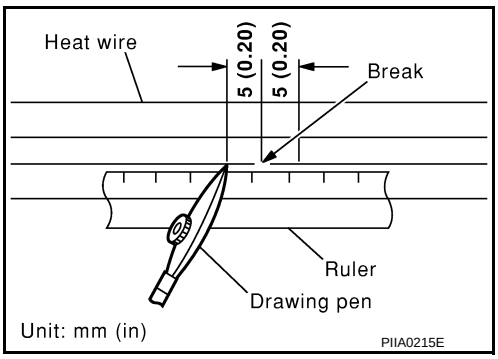
REPAIR EQUIPMENT

- Conductive silver composition (Dupont No. 4817 or an equivalent)

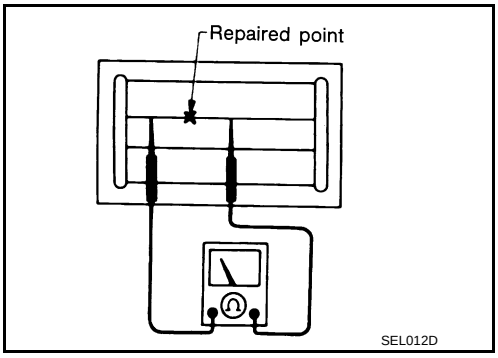
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

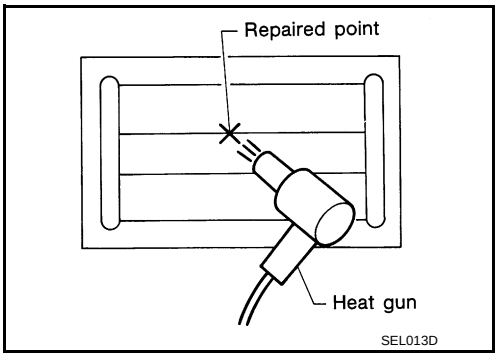
1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen.
   Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on break with drawing pen. Slightly overlap existing heat wire on both sides [preferably 5 mm (0.20 in)] of the break.




4. After repair has been complete, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited.
   Do not touch repaired area while test is being conducted.



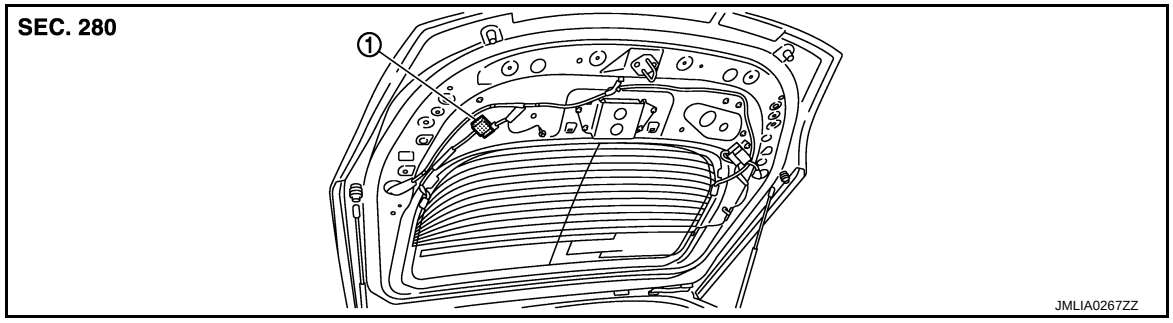

5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and hot air outlet.
   If a heat gun is not available, let the repaired area dry for 24 hours.



# CONDENSER

## Exploded View

INFOID:0000000007627519



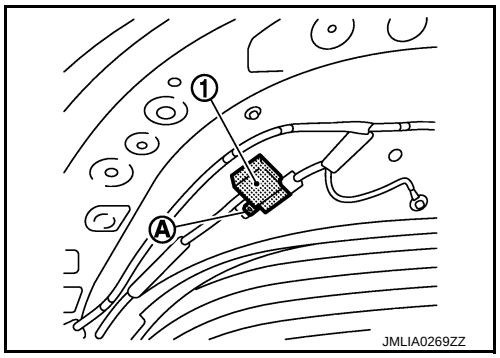

1. Condenser

## Removal and Installation

INFOID:0000000007627520

### REMOVAL

1. Remove the back door finisher lower.
   Refer to INT-33, "Removal and Installation".
2. Remove bolt (A), and then remove condenser (1) from the vehicle body.




### INSTALLATION

Install in the reverse order of removal.

# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORK FLOW

### Work Flow

INFOID:0000000007627521

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.CHECK DTC

Perform self-diagnosis with CONSULT.

Are any DTC detected?

YES >> Refer to BCS-85, "DTC Index".
NO >> 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 3. Then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 5.

#### 5.IDENTIFY 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 3.

Are all malfunctions corrected?

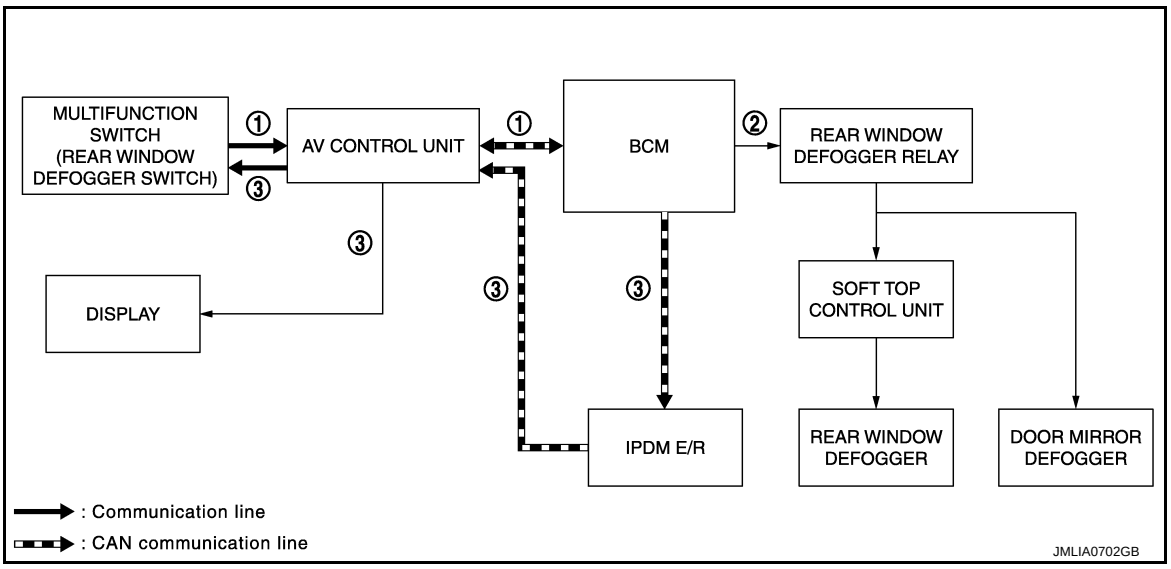
YES >> INSPECTION END
NO >> GO TO 4.

# SYSTEM DESCRIPTION

## REAR WINDOW DEFOGGER SYSTEM
## WITH NAVIGATION

### WITH NAVIGATION : System Diagram

INFOID:0000000007627522




1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

### WITH NAVIGATION : System Description

INFOID:0000000007627523

#### OPERATION DESCRIPTION

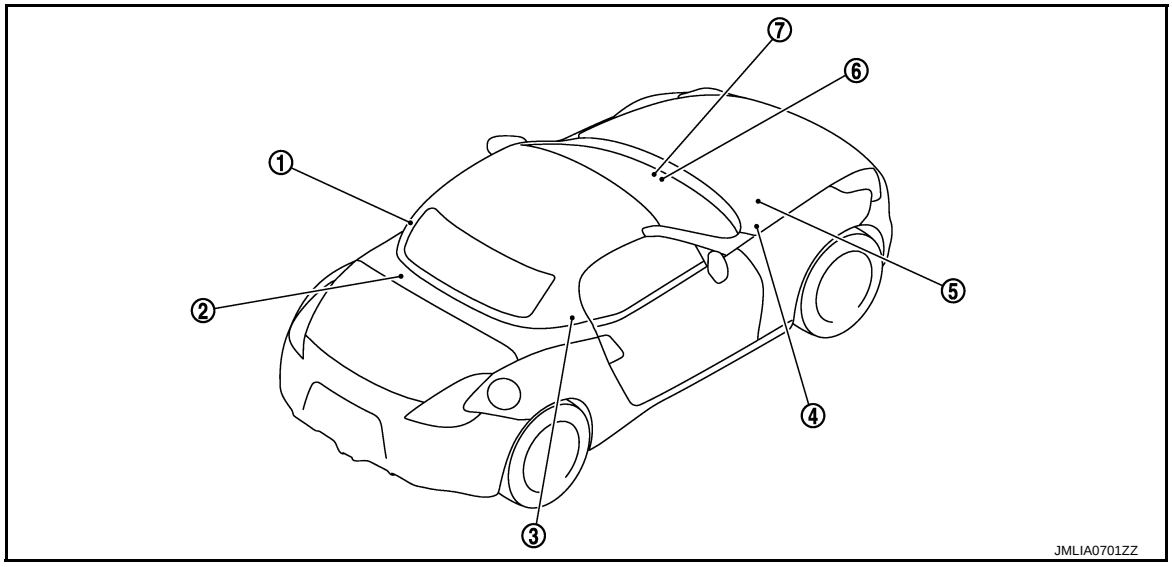
- Turn rear window defogger switch ON when the ignition switch is ON. Then multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication. AV control unit transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmits rear window defogger ON signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Door mirror defoggers are supplied with power and operate when rear window defogger relay turns ON.
- Rear window defogger relay sends power supply to soft top control unit.
- Soft top control unit detects roof state and controls rear window defogger operation.
- IPDM E/R transmits rear window defogger ON signal to AV control unit via CAN communication.
- When receiving the signal, AV control unit indicates rear defogger ON on the display. At the same time, AV control unit transmits rear defogger ON signal to multifunction switch (rear window defogger switch) via AV communication and illuminates rear window defogger switch indicator.

#### TIMER FUNCTION

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defoggers operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same operation also occurs during timer operation, if the ignition switch is turned OFF.

## WITH NAVIGATION : Component Parts Location

INFOID:0000000007627524




1. Rear window defogger connector
2. Soft top control unit
   Refer to RF-11, "Component Parts Location".
3. Rear window defogger connector
4. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
5. BCM
   Refer to BCS-9, "Component Parts Location".
6. AV control unit
   Refer to AV-126, "Component Parts Location".
7. Multifunction switch (rear window defogger switch)

## WITH NAVIGATION : Component Description

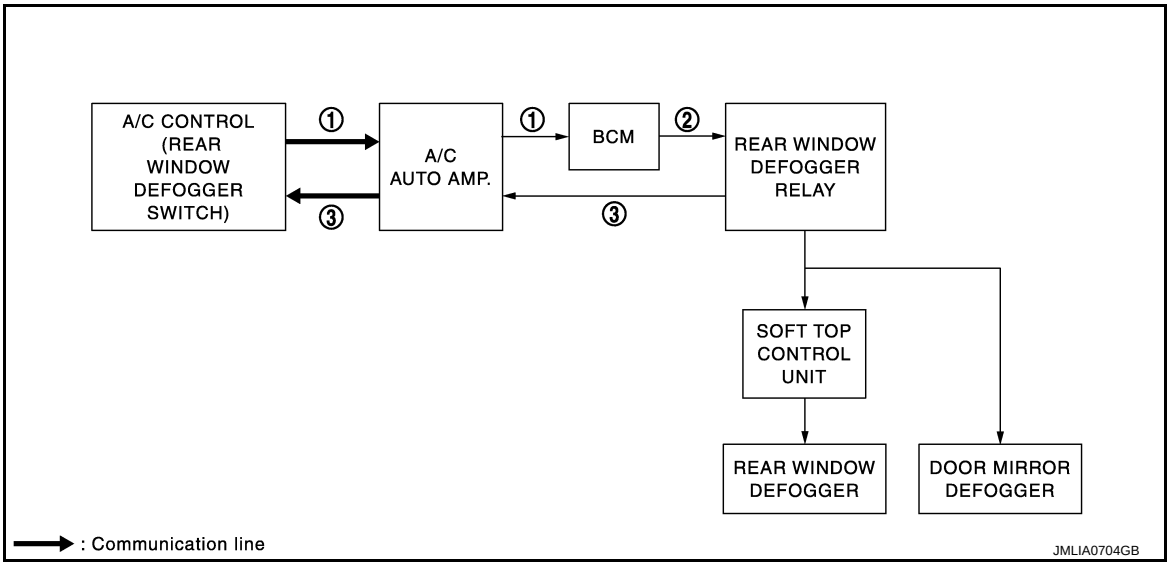
INFOID:0000000007627525

| | |
|---|---|
| Multifunction switch (Rear window defogger switch) | • The rear window defogger switch is installed.<br>• Turns the indicator lamp ON when detecting the operation of rear window defogger relay. |
| AV control unit | Displays the rear window defogger is ON on the display when detecting the operation of rear window defogger relay. |
| BCM | • Operates the rear window defogger relay when receiving rear window defogger switch signal.<br>• Performs the timer control of rear window defogger relay. |
| Rear window defogger relay | • Operates the door mirror defoggers with the control signal from BCM.<br>• Power is supplied to the soft top control unit (rear window defogger) with the control signal from BCM. |
| Door mirror defogger | Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up. |
| Soft top control unit | Soft top control unit detects roof state and controls rear window defogger operation. |
| Rear window defogger | Heats the heating wire with the power supply from the soft top control unit to prevent the rear window from fogging up. |
| IPDM E/R | Transmits rear window defogger ON signal to AV control unit via CAN communication. |

## WITHOUT NAVIGATION

## WITHOUT NAVIGATION : System Diagram

INFOID:0000000007627526




1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

## WITHOUT NAVIGATION : System Description

INFOID:0000000007627527

### OPERATION DESCRIPTION

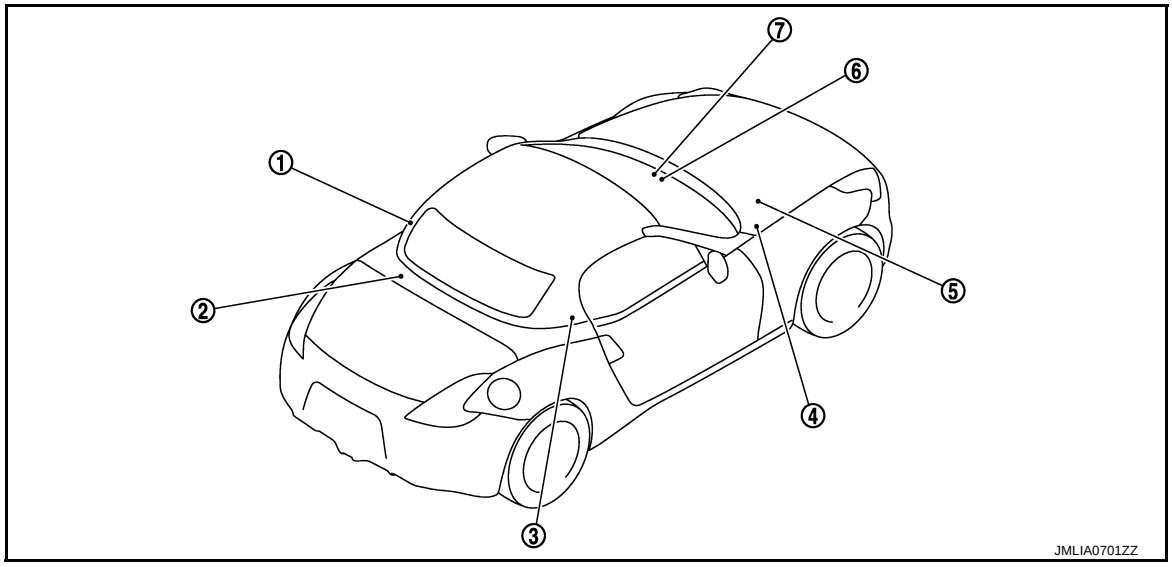
- Turn rear window defogger switch ON when the ignition switch is ON. Then A/C control (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp. and BCM.
- BCM turns rear window defogger relay ON when rear window defogger switch signal is received.
- Door mirror defoggers are supplied with power and operate when rear window defogger relay turns ON.
- Rear window defogger relay sends power supply to soft top control unit.
- Soft top control unit detects roof state and controls rear window defogger operation.
- Rear window defogger relay transmits rear window defogger ON signal to A/C auto amp. when rear window defogger operates.
- At the same time, A/C auto amp. transmits rear defogger ON signal to A/C controller (rear window defogger switch) and illuminates rear window defogger switch indicator.

### TIMER FUNCTION

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defoggers operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same operation also occurs during timer operation, if the ignition switch is turned OFF.

## WITHOUT NAVIGATION : Component Parts Location

INFOID:0000000007627528




1. Rear window defogger connector
2. Soft top control unit
   Refer to RF-11, "Component Parts Location".
3. Rear window defogger connector
4. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
5. BCM
   Refer to BCS-9, "Component Parts Location".
6. A/C auto amp.
   Refer to HAC-23, "Component Parts Location".
7. A/C control (rear window defogger switch)

## WITHOUT NAVIGATION : Component Description

INFOID:0000000007627529

| | |
|---|---|
| A/C control<br>(Rear window defogger switch) | • The rear window defogger switch is installed.<br>• Turns the indicator lamp ON when detecting the operation of rear window defogger relay. |
| A/C auto amp. | Transmit rear window defogger switch signal to BCM via CAN communication. |
| BCM | • Operates the rear window defogger relay with the operation of rear window defogger switch.<br>• Performs the timer control of rear window defogger relay. |
| Rear window defogger relay | • Operates the door mirror defoggesr with the control signal from BCM.<br>• Power is supplied to the soft top control unit (rear window defogger) with the control signal from BCM. |
| Door mirror defogger | Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up. |
| Soft top control unit | Soft top control unit detects roof state and controls rear window defogger operation. |
| Rear window defogger | Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up. |

# DIAGNOSIS SYSTEM (BCM)

## COMMON ITEM

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

INFOID:0000000007798491

#### 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”.

# REAR WINDOW DEFOGGER

## REAR WINDOW DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)

*INFOID:0000000007627531*

Data monitor

| Monitor Item | Description |
|---|---|
| REAR DEF SW | • Without navigation: Displays “Press (ON)/other (OFF)” status determined with the rear window defogger switch<br>• With navigation: This is displayed even when it is not equipped |
| PUSH SW | Indicates [ON/OFF] condition of push switch |

## ACTIVE TEST

| Test Item | Description |
|---|---|
| REAR DEFOGGER | Rear window defogger operates when “ON” on CONSULT screen is touched |

# DTC/CIRCUIT DIAGNOSIS

## POWER SUPPLY AND GROUND CIRCUIT

### BCM

### BCM : Diagnosis Procedure

INFOID:0000000007627532

#### 1.CHECK FUSE AND FUSIBLE LINK

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

| Signal name | Fuse and fusible link No. |
|---|---|
| Battery power supply | K |
| | 10 |

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.

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

Is the measurement value normal?

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

#### 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.

# REAR WINDOW DEFOGGER SWITCH

## WITH NAVIGATION

### WITH NAVIGATION : Description

INFOID:0000000007627533

- The rear window defogger or door mirror defogger (with mirror defogger) are operated by turning the rear window defogger switch ON.
- The indicator lamp in the rear window defogger illuminates when the rear window defogger or door mirror defogger (with mirror defogger) are operating.

### WITH NAVIGATION : Component Function Check

INFOID:0000000007627534

#### 1.CHECK FUNCTION

Check that the indicator lamp of rear window defogger illuminates when rear window defogger switch is ON.

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-83, "WITH NAVIGATION : Diagnosis Procedure"

### WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000007627535

#### 1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check multifunction switch (rear window defogger switch) operate. Refer to AV-13, "Diagnosis Description" (Base audio) or AV-138, "Description" (BOSE audio).

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace the malfunctioning parts.

## WITHOUT NAVIGATION

### WITHOUT NAVIGATION : Description

INFOID:0000000007627536

- The rear window defogger or door mirror defogger (with mirror defogger) are operated by turning the rear window defogger switch ON.
- The indicator lamp in the rear window defogger illuminates when the rear window defogger or door mirror defogger (with mirror defogger) are operating.

### WITHOUT NAVIGATION : Component Function Check

INFOID:0000000007627537

#### 1.CHECK FUNCTION

With CONSULT

1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” or “BCM” using CONSULT.
3. Select “REAR DEF SW” in “DATA MONITOR” mode.
4. Check that the function operates normally according to the following conditions.

| Monitor item | Condition | | Status |
|---|---|---|---|
| REAR DEF SW | Rear window defogger switch | ON | On |
| | | OFF | Off |

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-83, "WITHOUT NAVIGATION : Diagnosis Procedure".

### WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000007627538

#### 1.CHECK A/C CONTROL (REAR WINDOW DEFOGGER SWITCH)

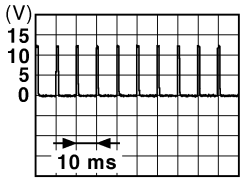
Check A/C control system.
Refer to HAC-5, "Work Flow".

Is the inspection result normal?

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

## 2.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect A/C auto amp. connector.
3. Turn ignition switch ON.
4. Check signal between A/C auto amp. harness connector and ground with oscilloscope.

| (+) | | (–) | Signal (Reference value) |
|---|---|---|---|
| A/C auto amp. | | | |
| Connector | Terminal | | |
| M66 | 27 | Ground |  JPMIA0012GB |

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation".
NO >> GO TO 3.

## 3.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector and A/C auto amp. connector.

| BCM | | A/C auto amp. | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M123 | 130 | M66 | 27 | Existed |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M123 | 130 | | Not existed |

Is the inspection result normal?

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

# REAR WINDOW DEFOGGER RELAY

## Description

INFOID:0000000007627539

- Operates the door mirror defogger (with door mirror defogger) with the control signal from BCM.
- Power is supplied to the soft top control unit (rear window defogger) with the control signal from BCM.

## Component Function Check

INFOID:0000000007627540

### 1.CHECK FUNCTION

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger relay power supply circuit function is OK.
NO >> Refer to DEF-85, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627541

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.3, located in fuse block (J/B)].

Is the inspection result normal?

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

### 2.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 1

1. Turn ignition switch ON.
2. Check voltage between BCM harness connector and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| BCM | | | | | |
| Connector | Terminal | | | | |
| M123 | 151 | Ground | Rear window defogger switch | ON | 0 |
| | | | | OFF | Battery voltage |

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 3.

### 3.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect BCM connector and fuse block (J/B).
3. Check continuity between BCM harness connector and fuse block (J/B) harness connector.

| BCM | | Fuse block (J/B) | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M123 | 151 | M2 | 4B | Existed |

4. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M123 | 151 | | Not existed |

Is the inspection result normal?

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

## 4.CHECK REAR WINDOW DEFOGGER RELAY

1. Disconnect rear window defogger relay,
2. Check rear window defogger relay.

Refer to DEF-86, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear window defogger relay.

## 5.CHECK FUSE BLOCK (J/B)

1. Install the rear window defogger relay.
2. Turn ignition switch ON.
3. Check voltage between fuse block (J/B) (fuse block side) and ground.

| (+) | | (–) | Voltage (V) (Approx.) |
|---|---|---|---|
| Fuse block (J/B) | | | |
| Connector | Terminal | | |
| M2 | 4B | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace fuse block (J/B).

## 6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident"

>> INSPECTION END

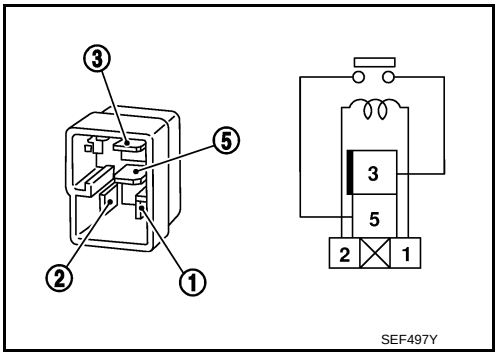
# Component Inspection

INFOID:0000000007627542

## 1.CHECK REAR WINDOW DEFOGGER RELAY

1. Turn ignition switch OFF.
2. Disconnect rear window defogger relay.
3. Check continuity between rear window defogger relay terminals.

| Terminal | | Condition | Continuity |
|---|---|---|---|
| Rear window defogger relay | | | |
| 3 | 5 | 12 V direct current supply between terminals 1 and 2 | Existed |
| | | No current supply | Not existed |



SEF497Y

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear window defogger relay.

# SOFT TOP CONTROL UNIT

## Description

INFOID:0000000007627543

Soft top control unit detects roof state and controls rear defogger.

## Component Function Check

INFOID:0000000007627544

### 1.CHECK REAR WINDOW DEFOGGER

With CONSULT
1. Turn ignition switch ON and soft top fully close.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Soft top control unit is OK.
NO >> Refer to DEF-87, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627545

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following.

- 20A fuse [No.14, located in fuse block (J/B)]
- 20A fuse [No.15, located in fuse block (J/B)]

Is the inspection result normal

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

### 2.CHECK SOFT TOP CONTROL UNIT CIRCUIT

1. Disconnect soft top control unit connector and fuse block (J/B) connector.
2. Check continuity between soft top control unit and fuse block (J/B) harness connector.

| Fuse block (J/B) | | Soft top control unit | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| B6 | 10G | B304 | 49 | Existed |
| | 11G | | 48 | |

3. Check continuity between soft top control unit and ground.

| Soft top control unit | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| B304 | 49 | | Not existed |
| | 48 | | |

Is the inspection result normal?

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

### 3.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) (fuse block side) and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Fuse block (J/B) | | | | | |
| Connector | Terminal | | | | |
| B6 | 10G | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |
| | 11G | | | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace fuse block (J/B).

## 4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

>> INSPECTION END.

# REAR WINDOW DEFOGGER

## Description

INFOID:0000000007627546

Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up.

## Component Function Check

INFOID:0000000007627547

### 1.CHECK REAR WINDOW DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger is OK.
NO >> Refer to DEF-89, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627548

### 1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON and soft top fully close.
2. Check voltage between rear window defogger harness connector and ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Rear window defogger | | | | | |
| Connector | Terminal | | | | |
| B311 | 1 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

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

### 2.CHECK REAR WINDOW DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect soft top control unit connector.
3. Check continuity between soft top control unit harness connector and rear window defogger harness connector.

| Soft top control unit | | Rear window defogger | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| B307 | 104 | B311 | 1 | Existed |
| | 111 | | | |

4. Check continuity between soft top control unit harness connector and ground.

| Soft top control unit | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| B307 | 104 | | Not existed |
| | 111 | | |

Is the inspection result normal?

YES >> Replace soft top control unit. Refer to RF-235, "Removal and Installation".
NO >> Repair or replace harness.

## 3.CHECK GROUND CIRCUIT

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

| Rear window defogger | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| B318 | 2 | | Existed |

Is the inspection result normal?

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

## 4.CHECK FILAMENT

Check filament.
Refer to DEF-90, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace filament. Refer to DEF-151, "Inspection and Repair".

## 5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident"

>> INSPECTION END

# Component Inspection

INFOID:0000000007627549

## 1.CHECK FILAMENT

Check the filament for damage.
Refer to DEF-151, "Inspection and Repair"

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair filament.

# REAR WINDOW DEFOGGER ON SIGNAL

## Description

INFOID:0000000007627550

Turns the indicator lamp in the rear window defogger switch ON when operating the rear window defogger.

## Component Function Check

INFOID:0000000007627551

### 1.CHECK FUNCTION

Check that the indicator lamps of rear window defogger switch are illuminated when turning the rear window defogger switch ON.

Is the inspection result normal?

YES >> Rear window defogger ON signal function is OK.
NO >> Refer to DEF-91, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627552

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.13, located in fuse block (J/B)].

Is the inspection result normal?

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

### 2.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP ON SIGNAL

1. Turn ignition switch ON.
2. Check voltage between A/C auto amp. harness connector ground.

| (+) | | (–) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| A/C auto amp. | | | | | |
| Connector | Terminal | | | | |
| M66 | 26 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation".
NO >> GO TO 3.

### 3.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector and A/C auto amp. connector.
3. Check continuity between fuse block (J/B) harness connector and A/C auto amp. harness connector.

| Fuse block (J/B) | | A/C auto amp. | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M3 | 9C | M66 | 26 | Existed |

4. Check continuity between fuse block (J/B) harness connector and ground.

| Fuse block (J/B) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M3 | 9C | | Not existed |

Is the inspection result normal?

YES >> Repair or replace fuse block (J/B).
NO >> Repair or replace harness.

# DOOR MIRROR DEFOGGER

## Description

INFOID:0000000007627553

Power is supplied to the door mirror defogger with BCM control.

## Component Function Check

INFOID:0000000007627554

### 1.CHECK DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that both side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Door mirror defogger is OK.
NO >> Refer to DEF-92, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627555

### 1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following.

- 10A fuse (No.13, located in fuse block (J/B))

Is the inspection result normal?

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

### 2.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) (fuse block side) and ground.

| (+) | | (-) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Fuse block (J/B) | | | | | |
| Connector | Terminal | | | | |
| M3 | 9C | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |
| | 10C | | | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace fuse block (J/B).

# DRIVER SIDE DOOR MIRROR DEFOGGER

## Description

INFOID:0000000007627556

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

## Component Function Check

INFOID:0000000007627557

### 1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the driver side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Driver side door mirror defogger is OK.
NO >> Refer to DEF-93, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627558

### 1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror (driver side) harness connector and ground.

| (+) | | (-) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Door mirror (driver side) | | | | | |
| Connector | Terminal | | | | |
| D3 | 4 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 2.

### 2.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Turn ignition switch ON.
4. Check voltage between fuse block (J/B) harness connector and ground.

| (+) | | (-) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Fuse block (J/B) | | | | | |
| Connector | Terminal | | | | |
| M3 | 10C | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace fuse block (J/B).

### 3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between fuse block (J/B) harness connector and door mirror (driver side) harness connector.

| Fuse block (J/B) | | Door mirror (driver side) | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M3 | 10C | D3 | 4 | Existed |

3. Check continuity between fuse block (J/B) harness connector and ground.

| Fuse block (J/B) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M3 | 10C | Ground | Not existed |

Is the inspection result normal?

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

## 4.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror (driver side) harness connector and ground.

| Door mirror (driver side) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D3 | 8 | Ground | Existed |

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

## 5.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-94, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door mirror (driver side). Refer to GW-20, "Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END.

# Component Inspection

INFOID:0000000007627559

## 1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Check continuity between door mirror terminals.

| Door mirror (driver side) | | | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D3 | 4 | 8 | Existed |

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace door mirror (driver side). Refer to GW-20, "Removal and Installation".

# PASSENGER SIDE DOOR MIRROR DEFOGGER

## Description

INFOID:0000000007627560

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

## Component Function Check

INFOID:0000000007627561

### 1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the passenger side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Passenger side door mirror defogger is OK.
NO >> Refer to DEF-95, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000007627562

### 1.CHECK POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Door mirror (Passenger side) | | | | | |
| Connector | Terminal | | | | |
| D33 | 4 | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 2.

### 2.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Turn ignition switch ON.
4. Check voltage between fuse block (J/B) harness connector and ground.

| (+) | | (-) | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|
| Fuse block (J/B) | | | | | |
| Connector | Terminal | | | | |
| M3 | 9C | Ground | Rear window defogger switch | ON | Battery voltage |
| | | | | OFF | 0 |

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace fuse block (J/B).

### 3.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.

2. Check continuity between fuse block (J/B) harness connector and door mirror (passenger side) harness connector.

| Fuse block (J/B) | | Door mirror (passenger side) | | Continuity |
|---|---|---|---|---|
| Connector | Terminal | Connector | Terminal | |
| M3 | 9C | D33 | 4 | Existed |

3. Check continuity between fuse block (J/B) harness connector and ground.

| Fuse block (J/B) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| M3 | 9C | Ground | Not existed |

Is the inspection result normal?

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

## 4.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror (passenger side) harness connector and ground.

| Door mirror (passenger side) | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D33 | 8 | Ground | Existed |

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

## 5.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check passenger side door mirror defogger.
Refer to DEF-96, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door mirror (passenger side).Refer to GW-20, "Removal and Installation".

## 6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-44, "Intermittent Incident".

>> INSPECTION END.

# Component Inspection

INFOID:0000000007627563

## 1.CHECK PASSENGER DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror (passenger side) connector.
3. Check continuity between door mirror terminals.

| Door mirror (passenger side) | | | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D33 | 4 | 8 | Existed |

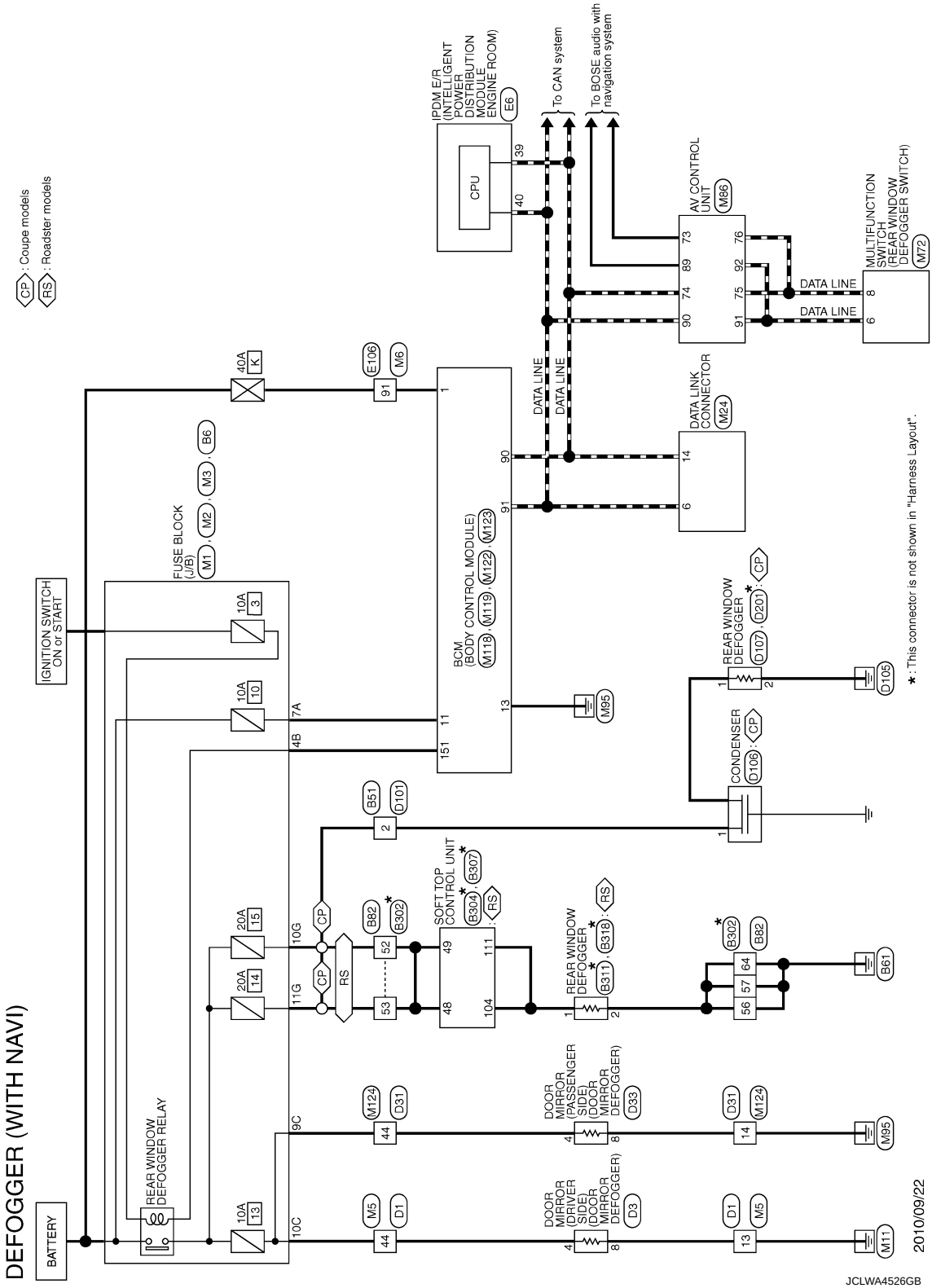
Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace door mirror (passenger side). Refer to GW-20, "Removal and Installation".

# REAR WINDOW DEFOGGER SYSTEM

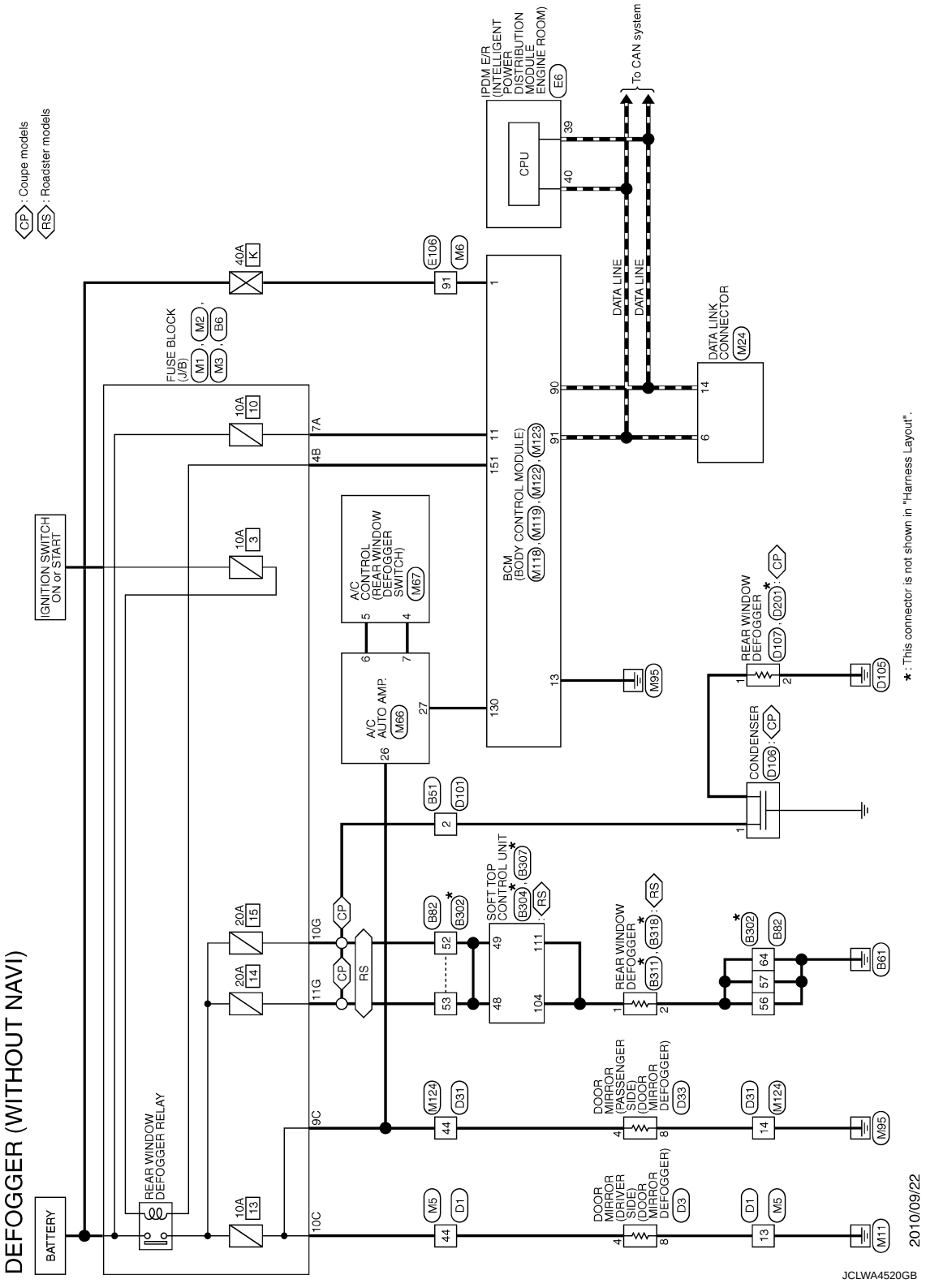
## Wiring Diagram - DEFOGGER (WITH NAVI) -

INFOID:0000000007627564



## Wiring Diagram - DEFOGGER (WITHOUT NAVI) -

INFOID:0000000007627565



# ECU DIAGNOSIS INFORMATION

## BCM (BODY CONTROL MODULE)

### Reference Value

INFOID:0000000007798493

#### 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 |

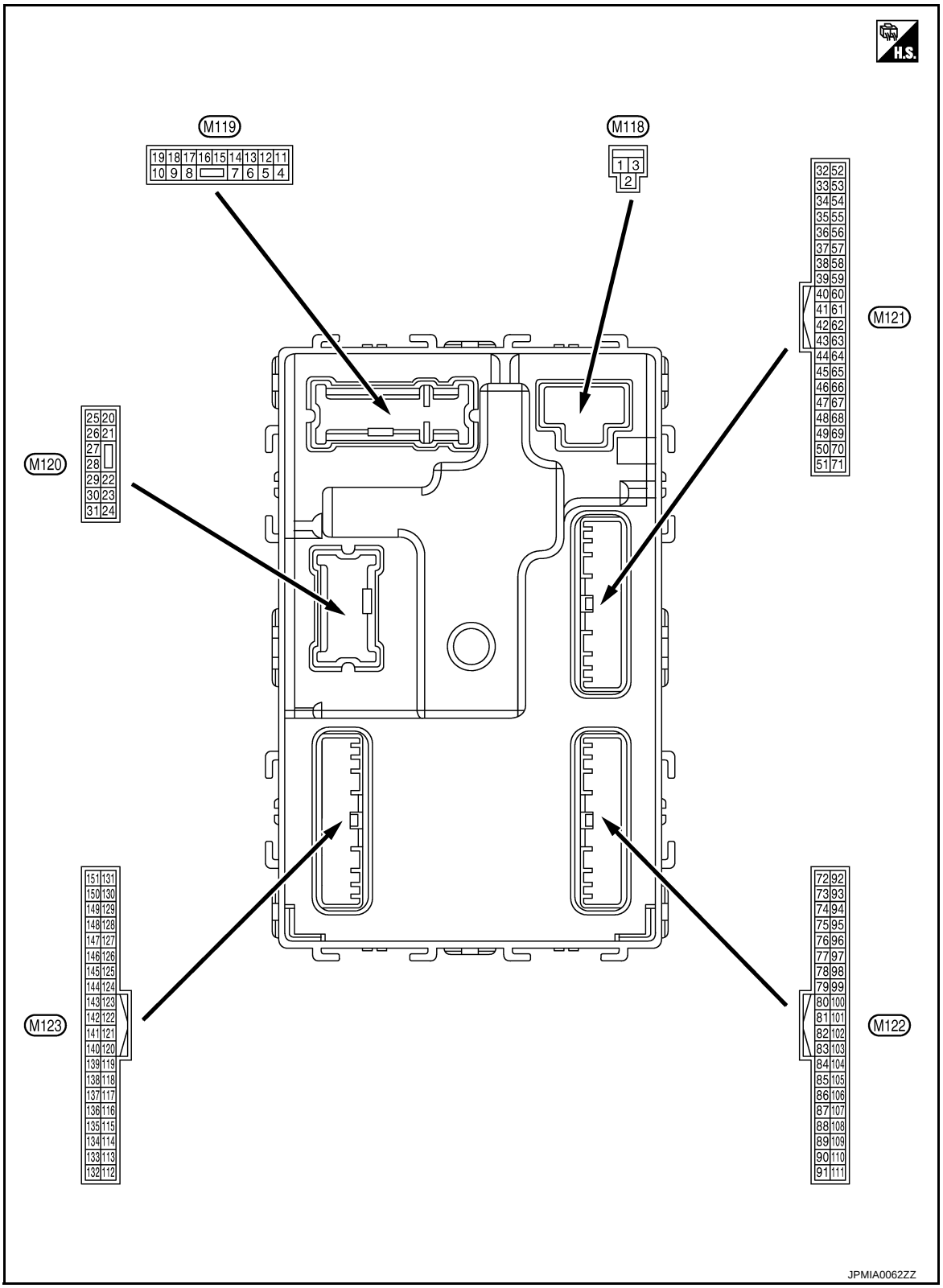
| Monitor Item | Condition | Value/Status |
|---|---|---|
| DOOR SW-RL | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| DOOR SW-BK | • Back door closed (Coupe models)<br>• Trunk lid closed (Roadster models) | Off |
| | • Back door opened (Coupe models)<br>• Trunk lid opened (Roadster 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 |

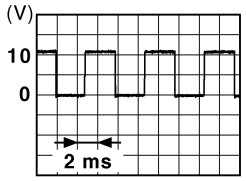
| Monitor Item | Condition | Value/Status |
|---|---|---|
| IGN RLY1 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| DETE SW -IPDM | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT PN -IPDM | • Selector 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 |

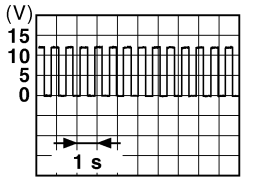
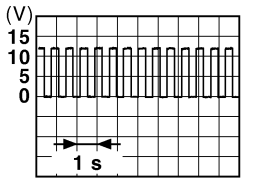
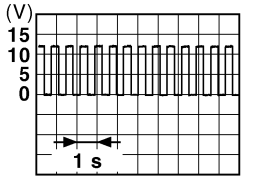
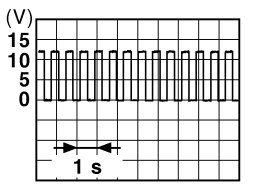
| Monitor Item | Condition | Value/Status |
|---|---|---|
| CONFRM ID ALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done |
| CONFIRM ID4 | The key ID that 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 |

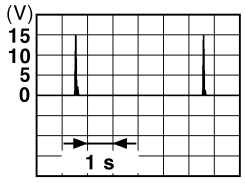
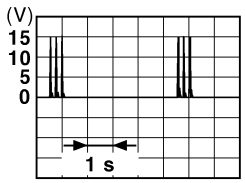
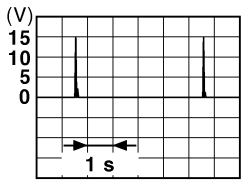
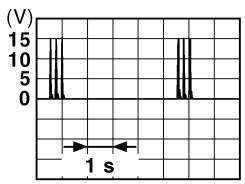
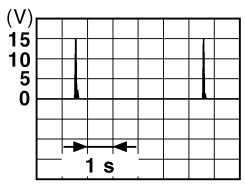
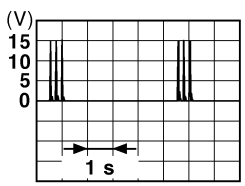
TERMINAL LAYOUT

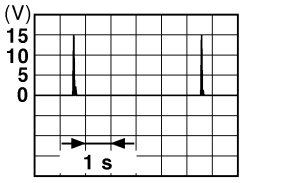
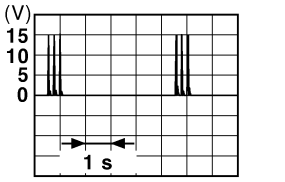
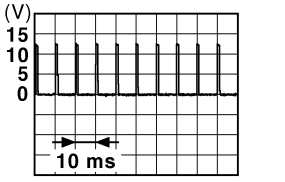
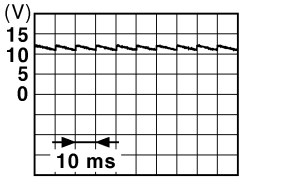


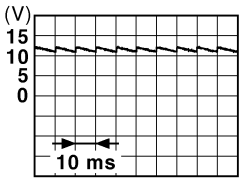
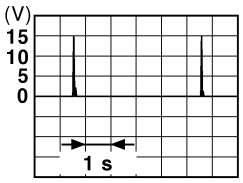
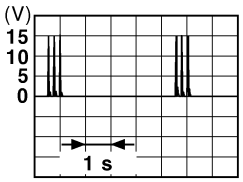
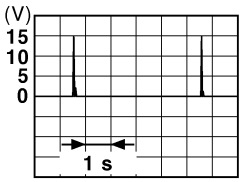
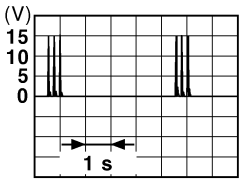

PHYSICAL VALUES

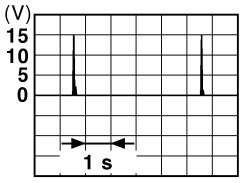
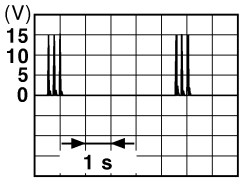
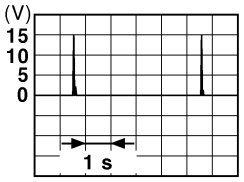
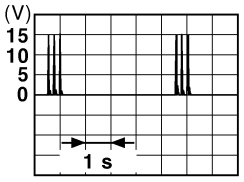
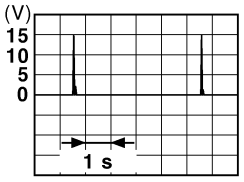
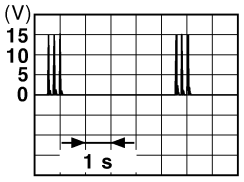
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (W) | Ground | P/W power supply (BAT) | 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 |

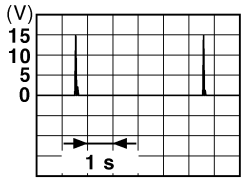
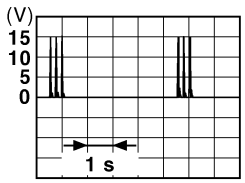
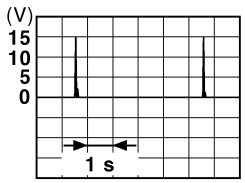
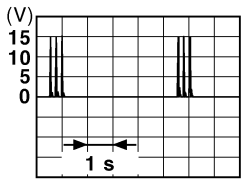
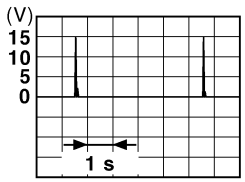
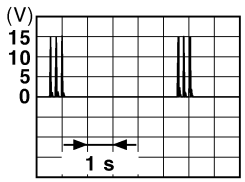
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 17 (W) | Ground | Turn signal RH (Front and side) | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch 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 |

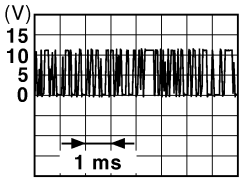
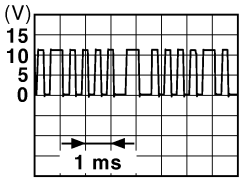
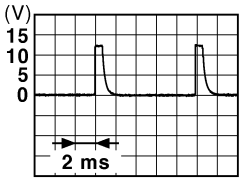
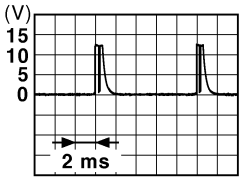
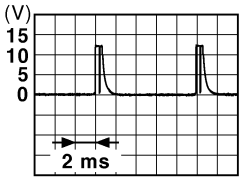
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 34 (G) | Ground | Luggage room/Trunk room antenna (–) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |   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 |

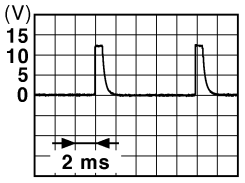
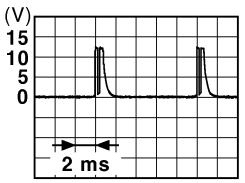
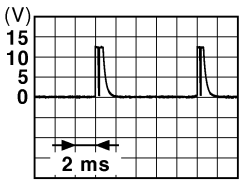
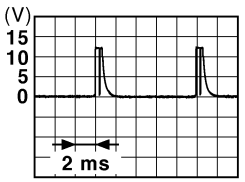
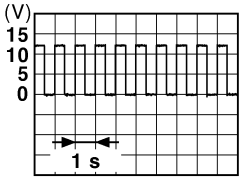
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 39 (W) | Ground | Rear bumper antenna (+) | Output | When the back door/trunk lid door request switch is operated with ignition switch OFF | When 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 |

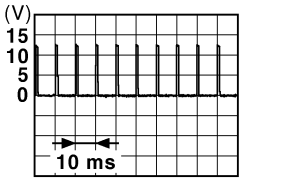
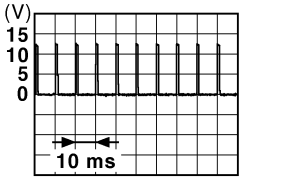
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 67 (GR) | Ground | Back door/Trunk lid opener switch | Input | Back door/ Trunk lid opener switch | Pressed | 0 V |
| | | | | | Not pressed |  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 |

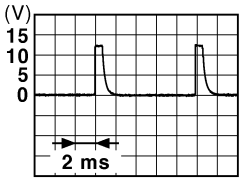
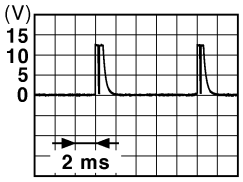
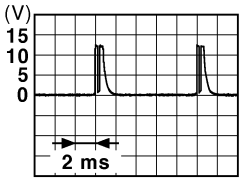
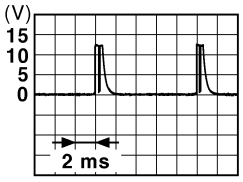
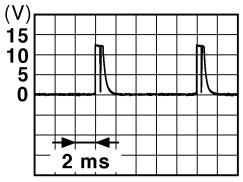
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 74 (SB) | Ground | Passenger door antenna (–) | Output | When the passenger door request switch is operated with ignition switch OFF | When Intelligent 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 |

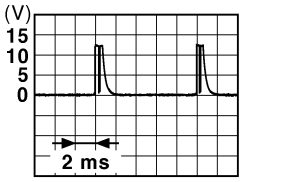
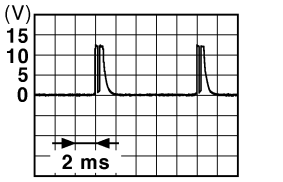
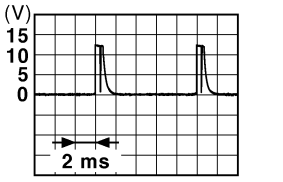
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 77 (LG) | Ground | Driver door antenna (+) | Output | When the driver door request switch is operated with ignition switch OFF | When Intelligent 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 |

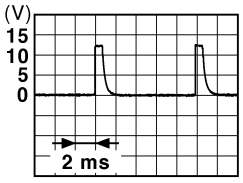
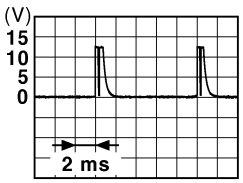
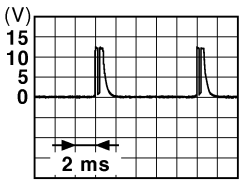
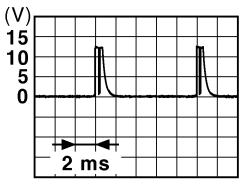
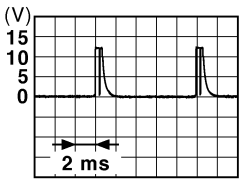
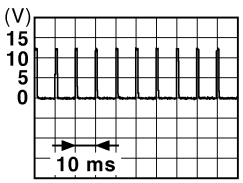
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 80 (GR) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent 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<br>1.4 V |
| | | | | | Rear fog lamp switch ON (Wiper intermittent dial 4) |  JPMIA0038GB<br>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<br>1.3 V |

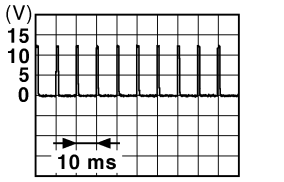
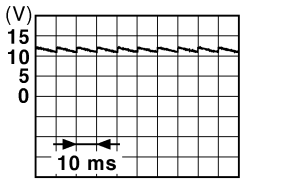
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 88 (V) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | 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 |

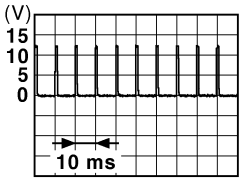
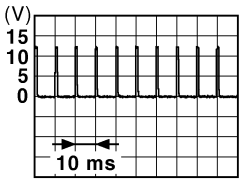
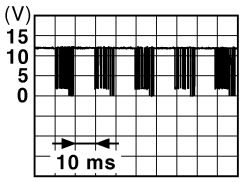
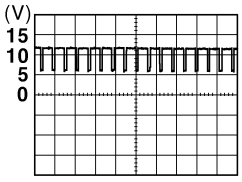
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | – | | | | | |
| 95 (O) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 12 V |
| 96*3 (Y) | Ground | 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 |

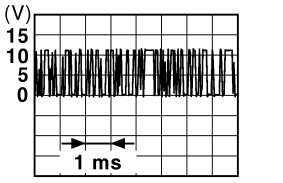
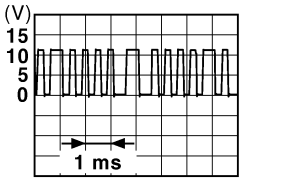
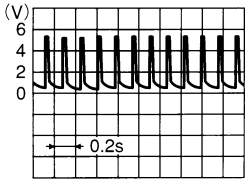
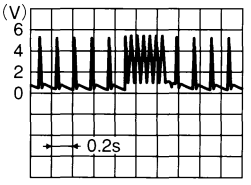
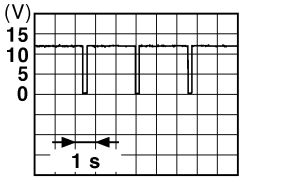
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 107 (LG) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB<br>1.4 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 |

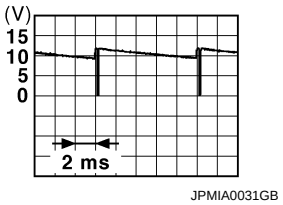
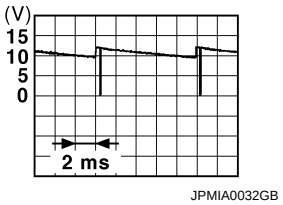
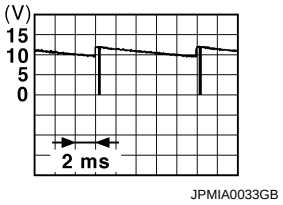
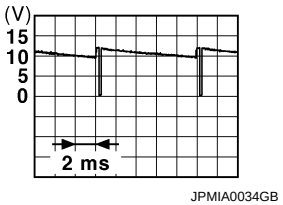
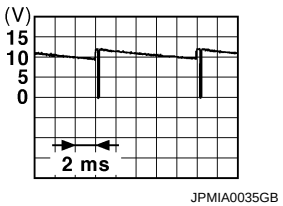
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 108 (R) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | 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 |

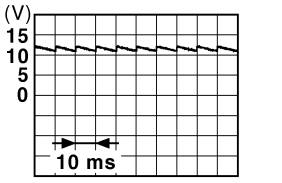
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 109 (Y) | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  JPMIA0041GB 1.4 V |
| | | | | | 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 | |

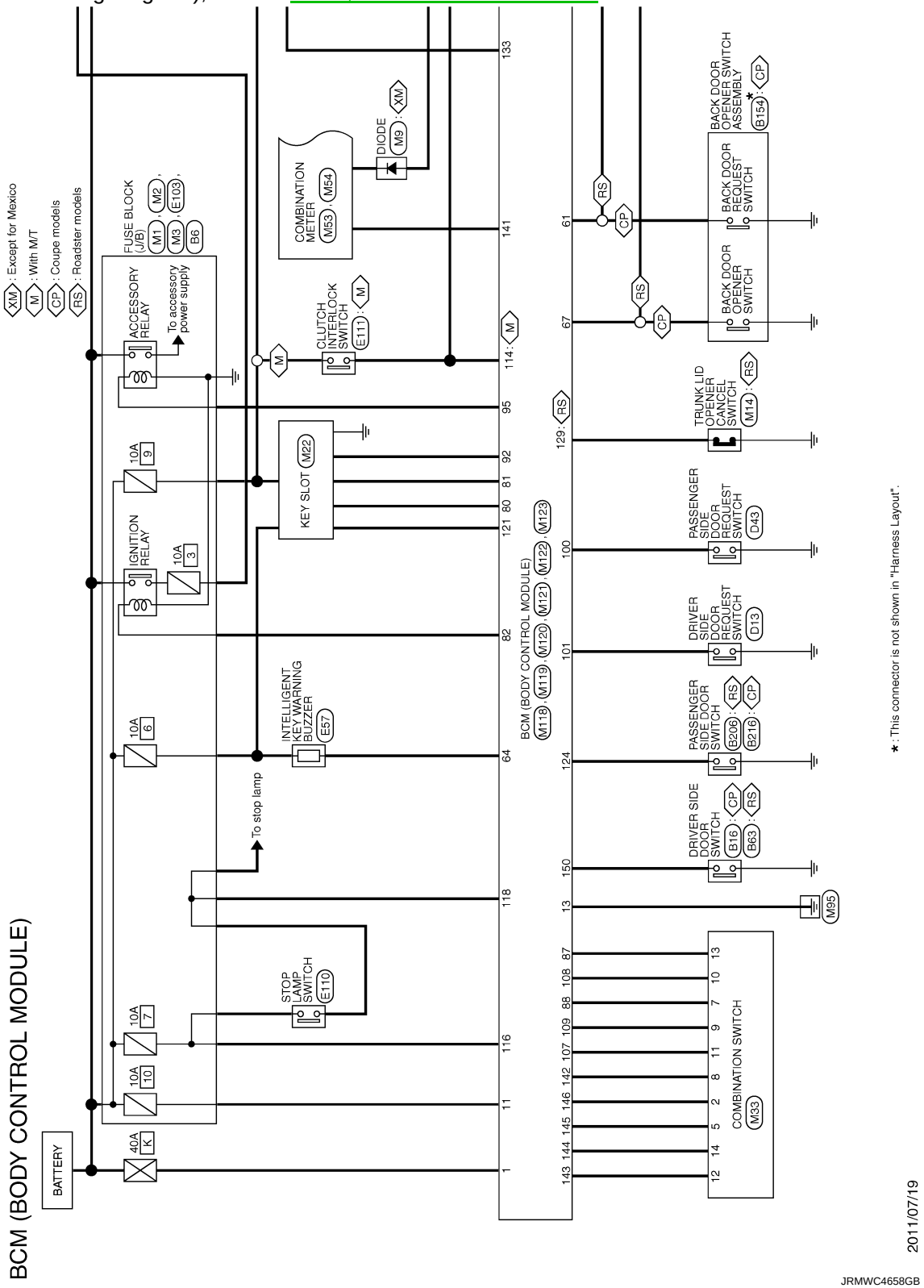
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 150 (GR) | Ground | Driver door switch | Input | Driver door switch | OFF (Door close) |  JPMIA0011GB 11.8 V |
| | | | | | ON (Door open) | 0 V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

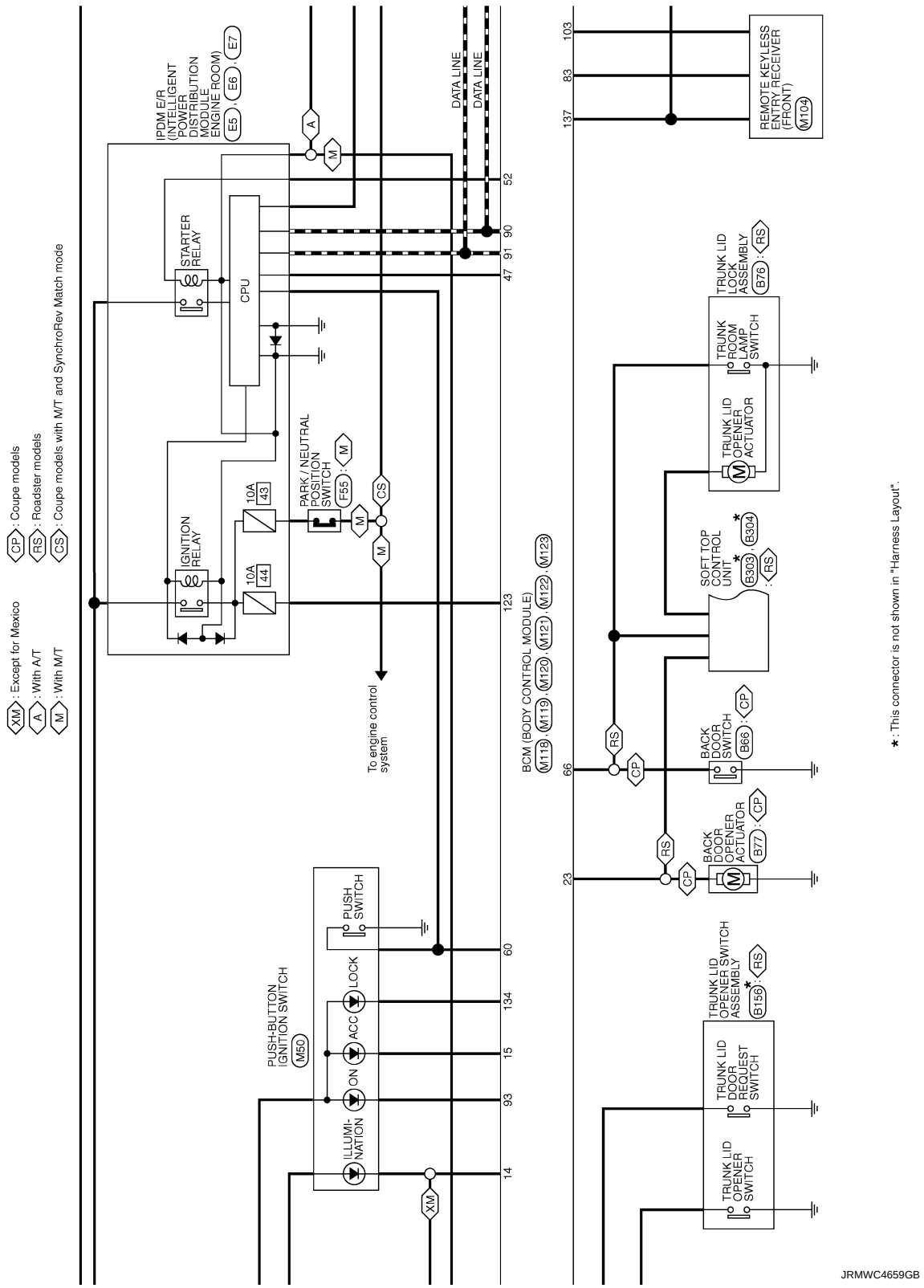
*1: Coupe models
*2: Roadster models
*3: A/T models
*4: M/T models
*5: With A/T or coupe models with M/T and SynchroRev Match mode
*6: With A/T or with M/T without SynchroRev Match mode
*7: Without NAVI
*8: With rear fog lamp
*9: BCM does not use this terminal for control.

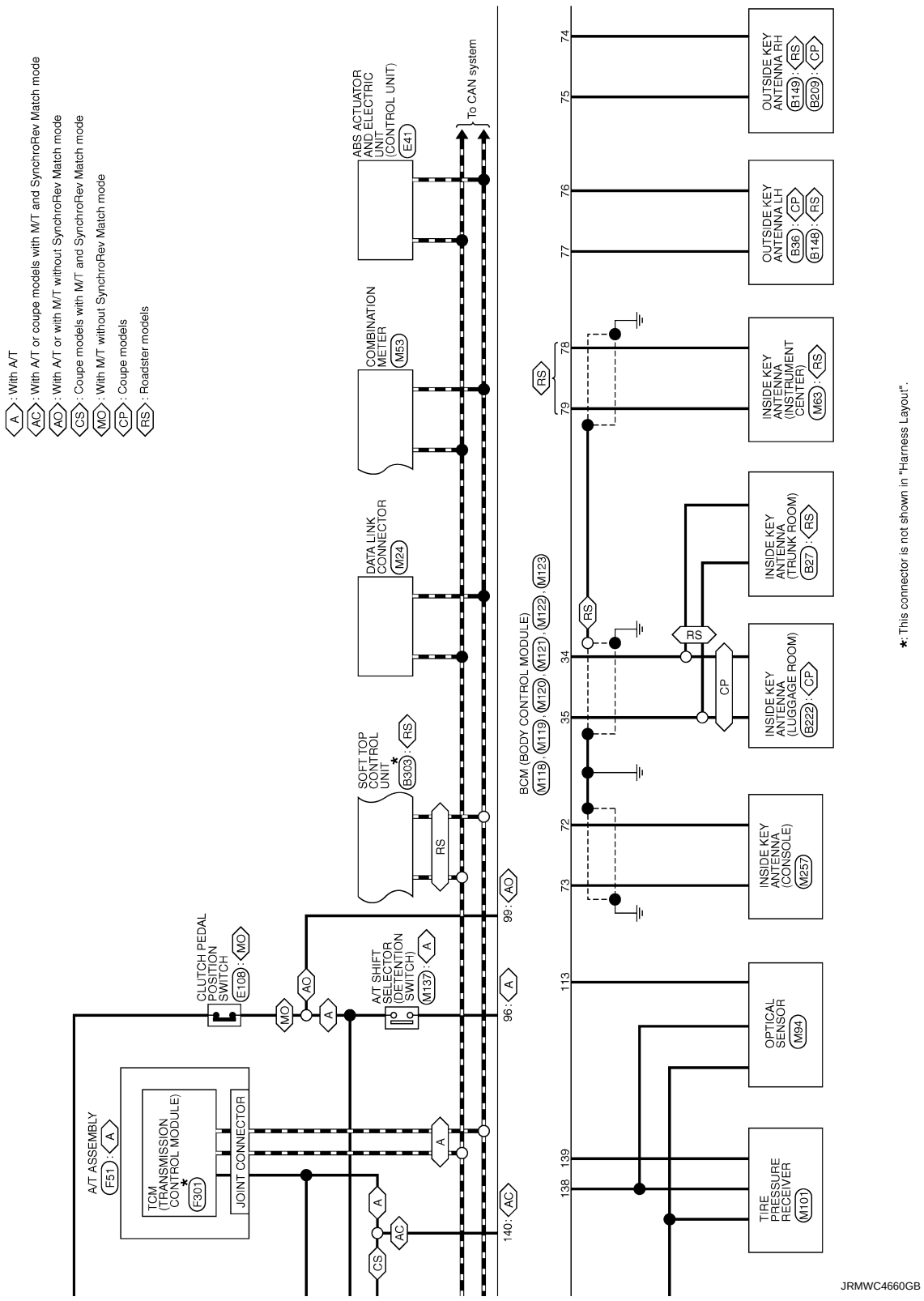
## Wiring Diagram - BCM -

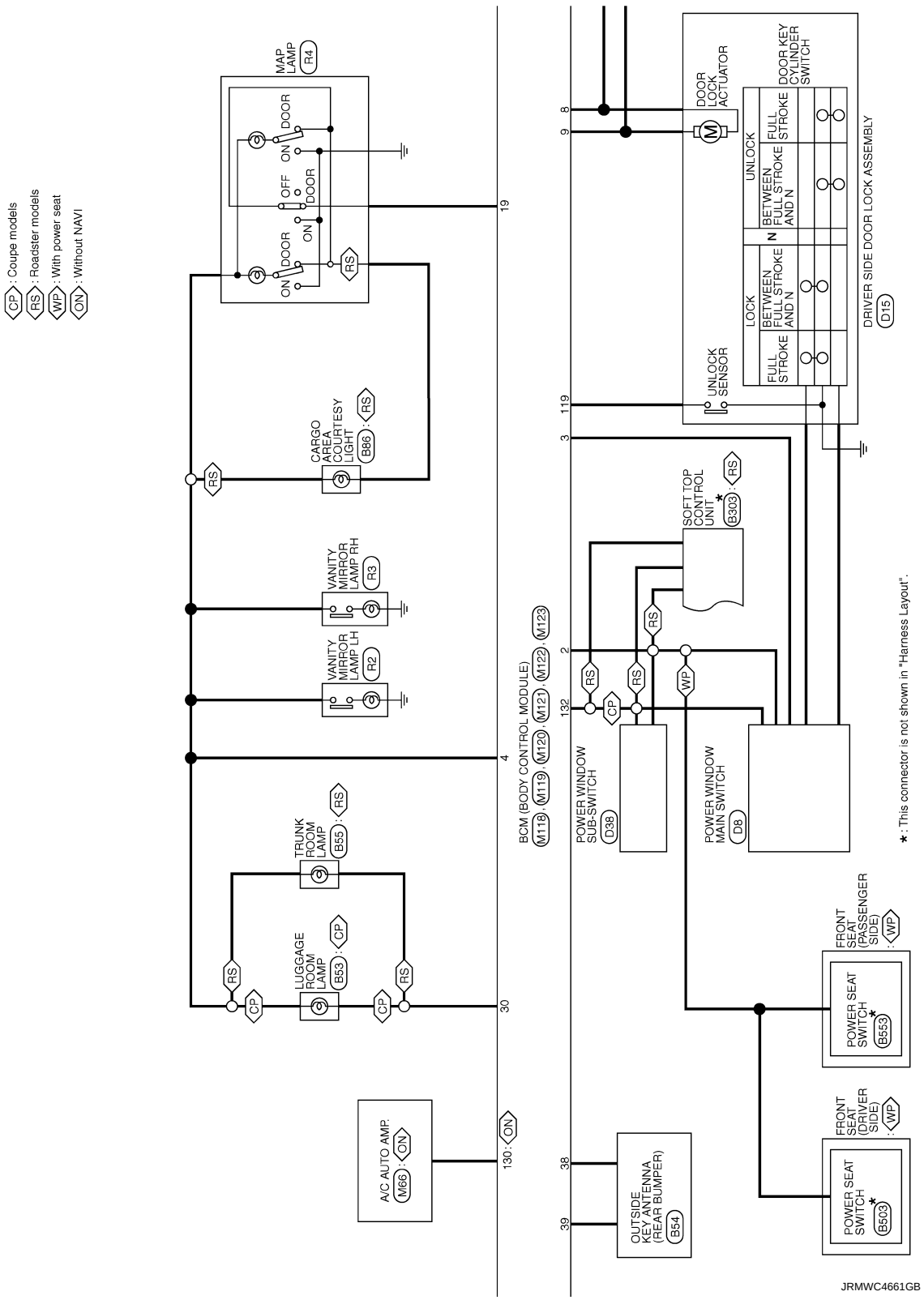
INFOID:0000000007798494

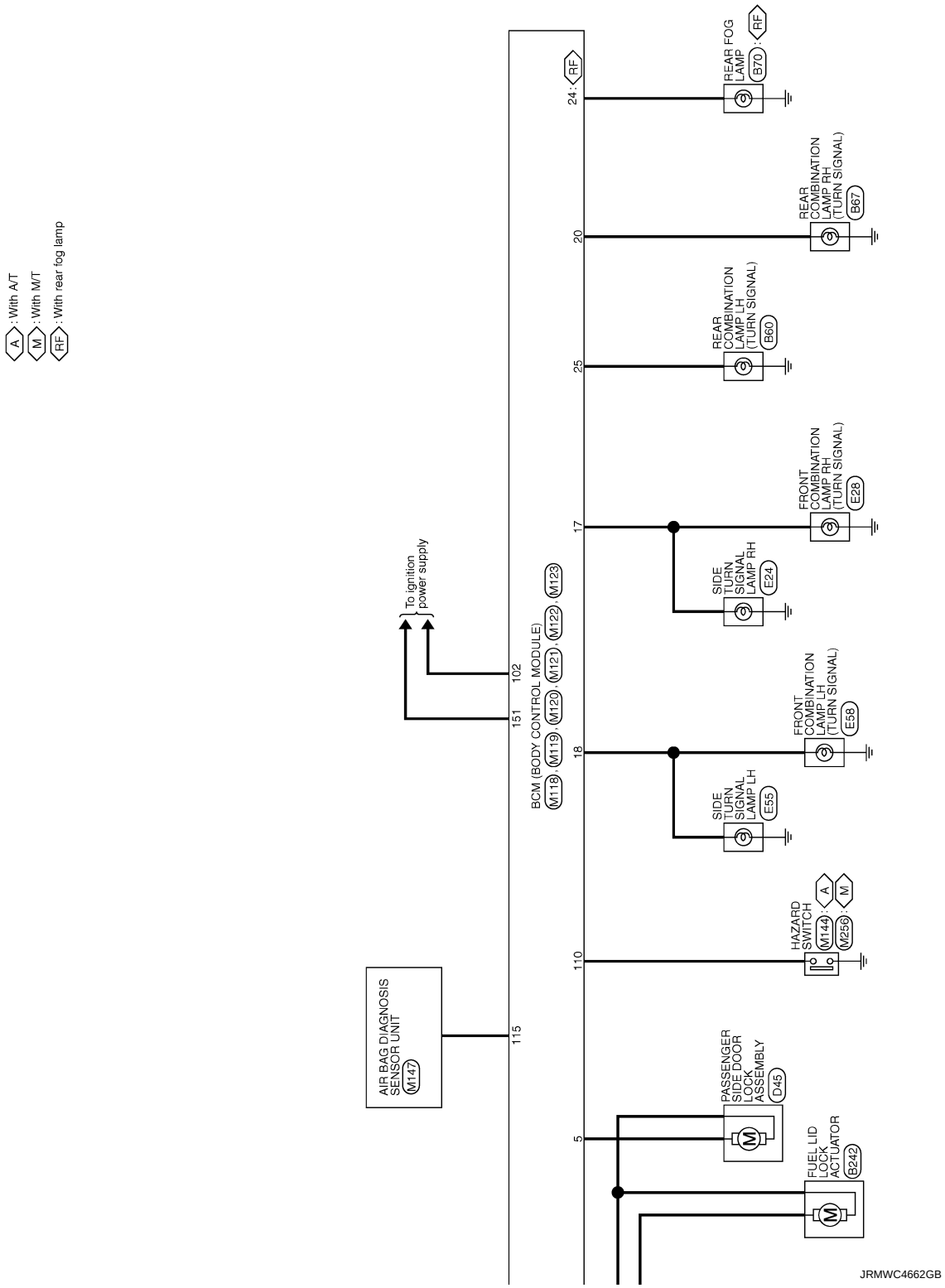
For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".




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)
OPTICAL SENSOR (M94)
TIRE PRESSURE RECEIVER (M101)
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
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:0000000007798495*

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:0000000007798496

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:0000000007798497

**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:0000000007798498

### VALUES ON THE DIAGNOSIS TOOL

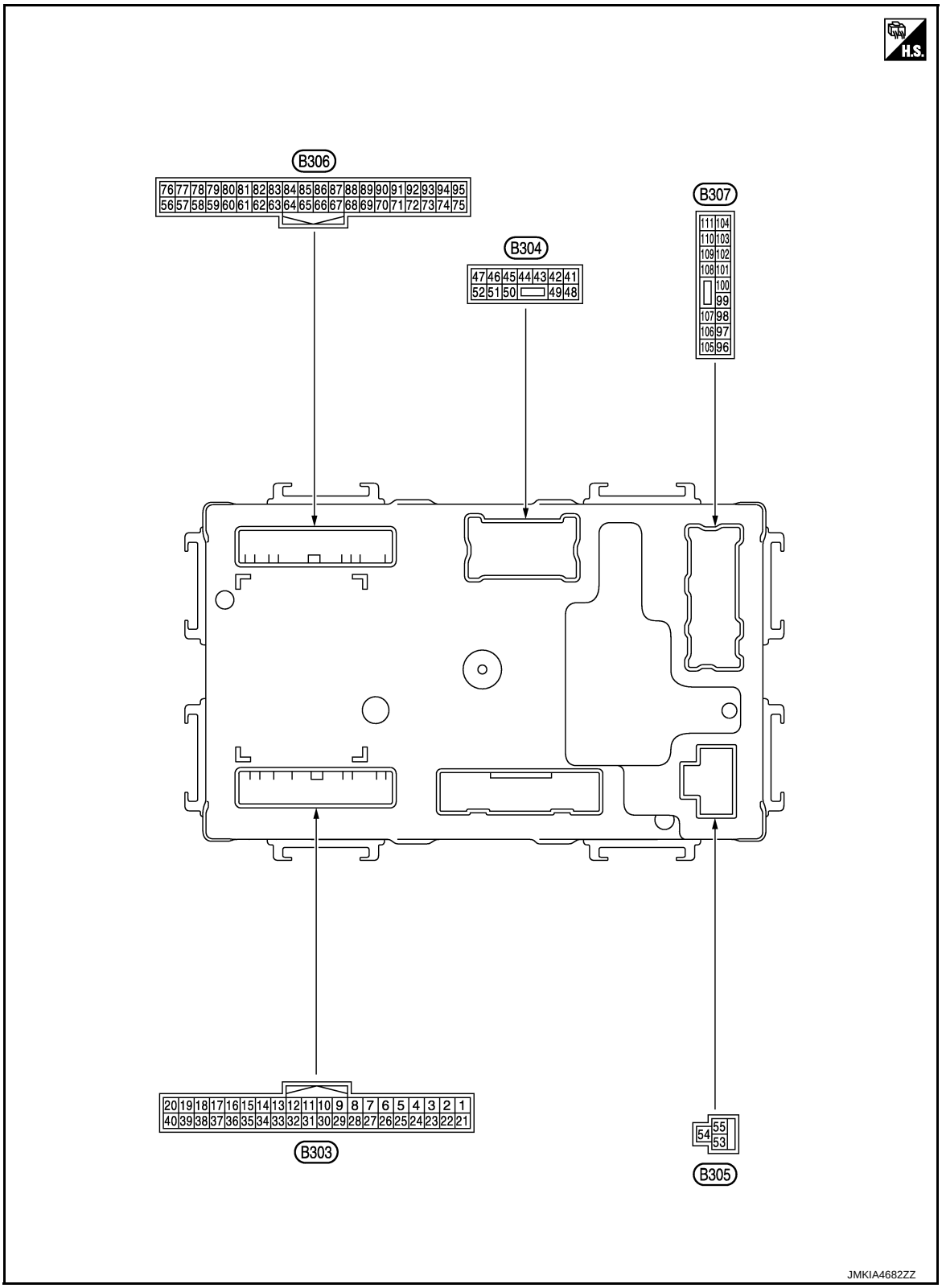
CONSULT-III MONITOR ITEM

| 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 |

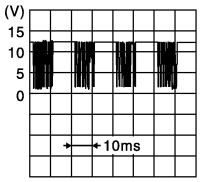
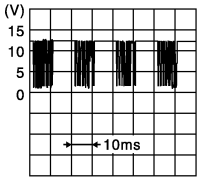
| Monitor Item | Condition | | Status/Value |
|---|---|---|---|
| S/LID CLOSE RH | State of storage lid drive cylinder RH | Storage lid is close | ON |
| | | Other than above | OFF |
| | | Storage lid status sensor RH circuit is open or short | NG |
| 5TH BOW LATCH OP | State of 5th bow latch cylinder | Unlock | ON |
| | | Other than above | OFF |
| | | 5th bow latch open sensor circuit is open or short | NG |
| SWITCH VALVE 1 | Operation of switching valve 1 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 1 circuit is short | NG |
| SWITCH VALVE 2 | Operation of switching valve 2 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 2 circuit is short | NG |
| SWITCH VALVE 3 | Operation of switching valve 3 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 3 circuit is short | NG |
| SWITCH VALVE 4 | Operation of switching valve 4 | Operate | ON |
| | | Stop | OFF |
| | | Switching valve 4 circuit is short | NG |
| SWITCH 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:0000000007798499

### 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-III | | 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-III | | 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:0000000007798500

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-III | |
|---|---|---|
| 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-III | |
|---|---|---|
| 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:0000000007798501

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

| Display contents of CONSULT-III | | 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-III | | 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).

# SYMPTOM DIAGNOSIS

## REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OPERATE

### Diagnosis Procedure

INFOID:0000000007627575

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

Check power supply and ground circuit.
Refer to DEF-82, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

#### 2.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
- With Navigation: Refer to DEF-83, "WITH NAVIGATION : Component Function Check".
- Without Navigation: Refer to DEF-83, "WITHOUT NAVIGATION : Component Function Check".

Is the inspection result normal?

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

#### 3.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to DEF-85, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

#### 4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

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

# REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DEFOGGERS OPERATE

## Diagnosis Procedure

INFOID:0000000007627576

### 1.CHECK SOFT TOP CONTROL UNIT CIRCUIT

Check soft top control unit circuit.
Refer to DEF-87, "Component Function Check".

Is the inspection result normal?

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

### 2.CHECK REAR WINDOW DEFOGGER

Check rear window defogger.
Refer to DEF-89, "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 inspection result normal?

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

# DOOR MIRROR DEFOGGER DOES NOT OPERATE

## BOTH SIDES

### BOTH SIDES : Diagnosis Procedure

INFOID:0000000007627577

#### 1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.
Refer to DEF-92, "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 inspection result normal?

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

## DRIVER SIDE

### DRIVER SIDE : Diagnosis Procedure

INFOID:0000000007627578

#### 1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-93, "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 inspection result normal?

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

## PASSENGER SIDE

### PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000007627579

#### 1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.
Refer to DEF-95, "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 inspection result normal?

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

# ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT OPERATES

## Diagnosis Procedure

INFOID:0000000007627580

### 1.CHECK AV CONTROL FUNCTION

Check that the AV control unit is operating normally. Refer to AV-173, "Work Flow".

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 inspection result normal?

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

# REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

## WITH NAVIGATION

### WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000007627581

#### 1.CHECK REAR WINDOW DEFOGGER OPERATION

Check rear window defogger operation.

Is the inspection result normal?

YES >> Check AV control system. Refer to AV-173, "Work Flow".
NO >> Check rear window defogger system. Refer to DEF-74, "Work Flow".

## WITHOUT NAVIGATION

### WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000007627582

#### 1.CHECK A/C CONTROL FUNCTION

Check that the A/C control is operating normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check A/C control system. Refer to HAC-5, "Work Flow".

#### 2.CHECK REAR WINDOW DEFOGGER ON SIGNAL

Check rear window defogger ON signal.
Refer to DEF-91, "Component Function Check".

Is the inspection result normal?

YES >> Replace A/C control (rear window defogger switch). Refer to HAC-78, "BASE AUDIO : Removal and Installation" (Base audio) or HAC-79, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (BOSE audio without navigation).
NO >> Repair or replace the malfunctioning parts.

# PRECAUTION

## PRECAUTIONS

## FOR USA AND CANADA

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

INFOID:0000000007627583

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:0000000007798520

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:0000000007627584

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:0000000007798521

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

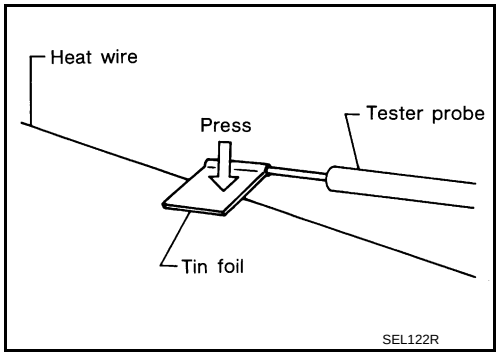
## FILAMENT

### Inspection and Repair

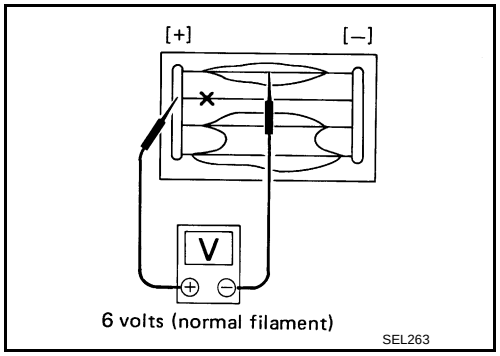
INFOID:0000000007627585

#### INSPECTION

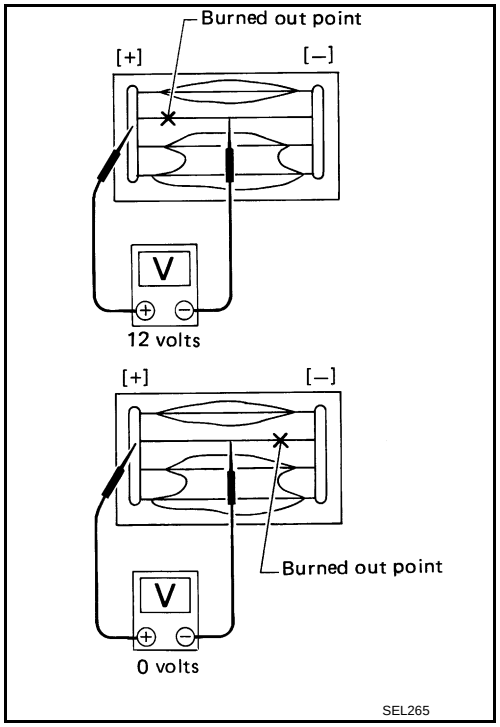
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.




2. Attach probe circuit tester (in Volt range) to middle portion of each filament.




3. If a filament is burned out, circuit tester registers 0 or battery voltage.
4. To locate burned out point, move probe to left and right along filament. Test needle swings abruptly when probe passes the point.




#### REPAIR

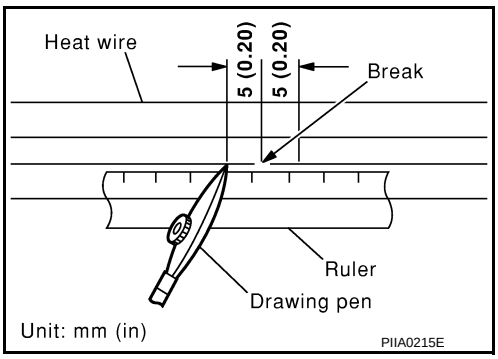
REPAIR EQUIPMENT

- Conductive silver composition (Dupont No. 4817 or an equivalent)

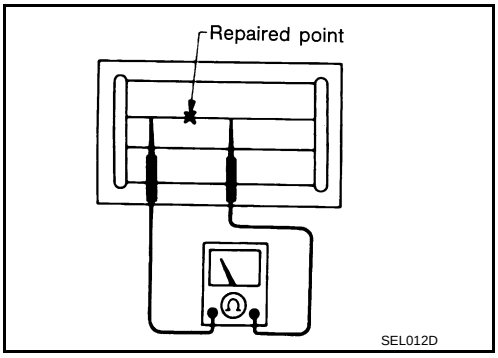
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen.
   Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on break with drawing pen. Slightly overlap existing heat wire on both sides [preferably 5 mm (0.20 in)] of the break.




4. After repair has been complete, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited.
   Do not touch repaired area while test is being conducted.




5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and hot air outlet.
   If a heat gun is not available, let the repaired area dry for 24 hours.