# SECTION WCS
# WARNING CHIME SYSTEM

## CONTENTS

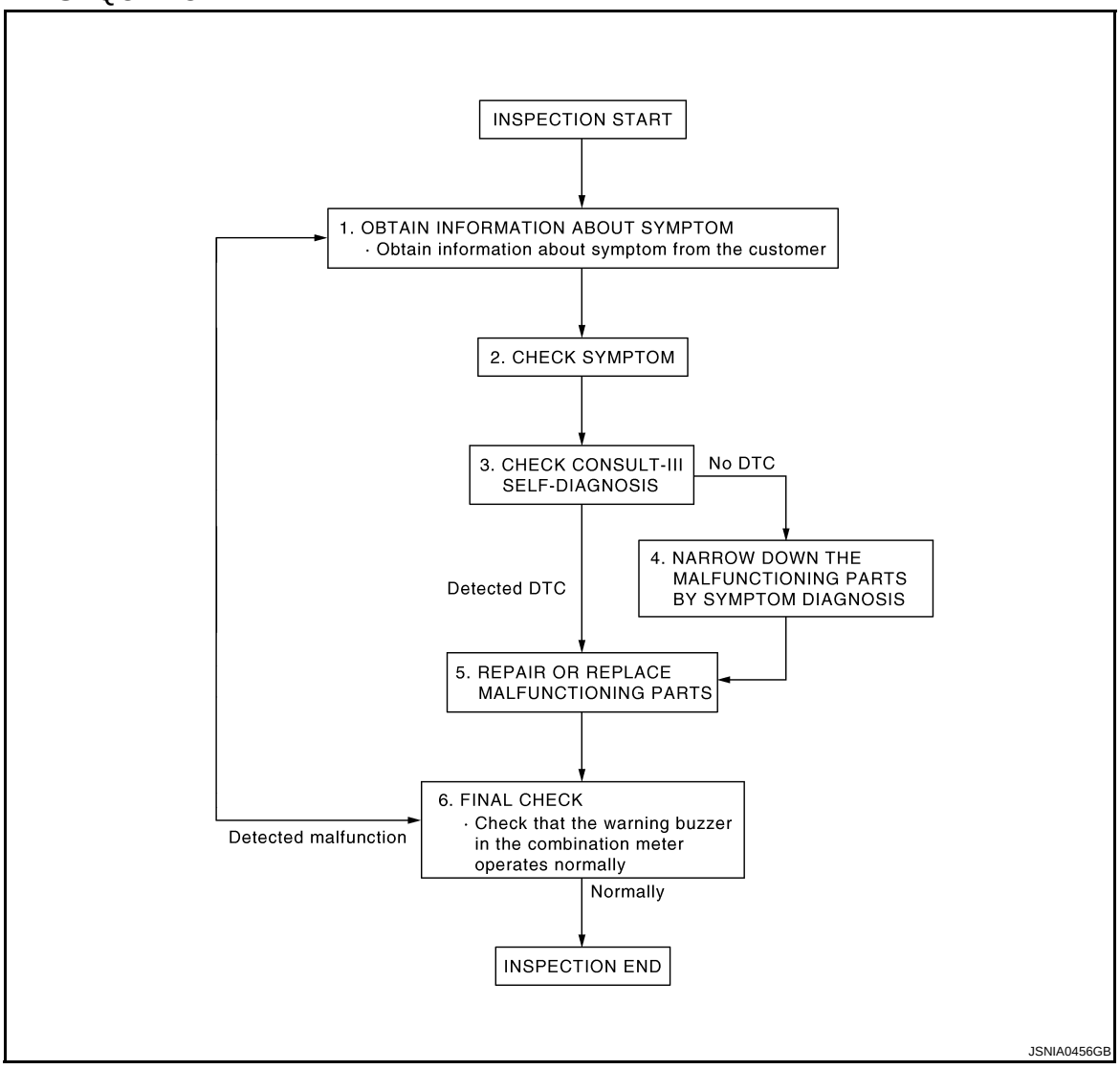
# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORKFLOW

### Work Flow

INFOID:0000000003452014

OVERALL SEQUENCE




DETAILED FLOW

### 1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

>> GO TO 2.

### 2.CHECK SYMPTOM

- Check the symptom based on the information obtained from the customer.
- Check if any other malfunctions are present.

>> GO TO 3.

### 3.CHECK CONSULT-III SELF-DIAGNOSIS RESULTS

Connect CONSULT-III and perform self-diagnosis. Refer to MWI-34, "CONSULT-III Function (METER/M&A)".

Are self-diagnosis results normal?

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

## 4. NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

## 5. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

**NOTE:**

If DTC is displayed, erase DTC after repairing or replacing malfunctioning parts.

>> GO TO 6.

## 6. FINAL CHECK

Check that the warning buzzer in the combination meter operates normally.

Does it operate normally?

YES >> INSPECTION END
NO >> GO TO 1.

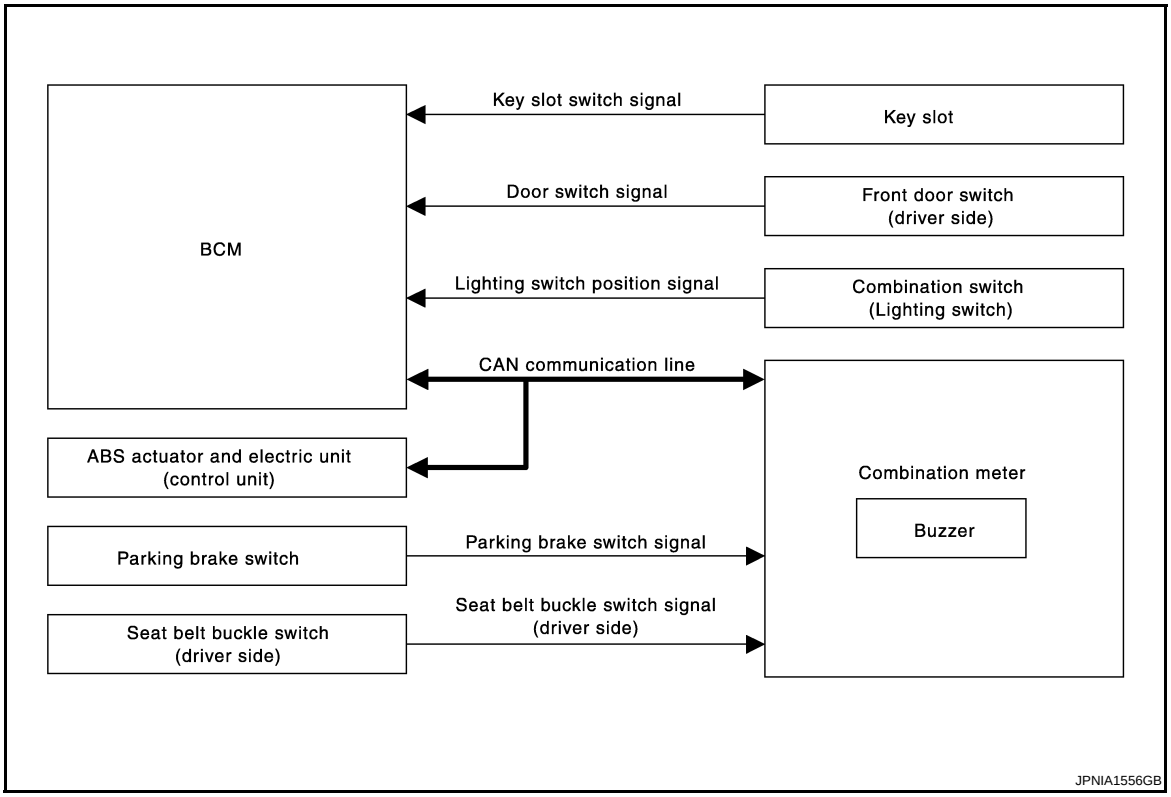
# FUNCTION DIAGNOSIS

## WARNING CHIME SYSTEM

## WARNING CHIME SYSTEM

### WARNING CHIME SYSTEM : System Diagram

INFOID:0000000003452017

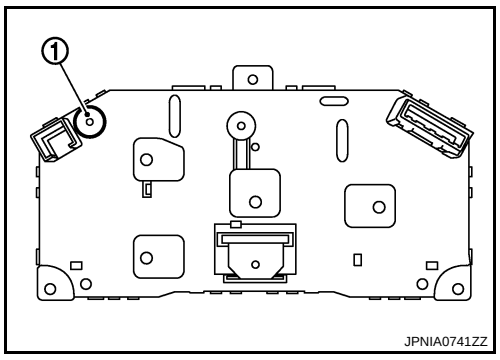



### WARNING CHIME SYSTEM : System Description

INFOID:0000000003465221

COMBINATION METER

- The buzzer (1) for the warning chime system is integrated in the combination meter.
- The combination meter sounds the alarm buzzer installed in the combination meter when receiving the buzzer output signal transmitted from each unit.




BCM

BCM receives signals from various units and transmits a buzzer output signal to the combination meter via CAN communication if it judges that the warning buzzer should be activated.

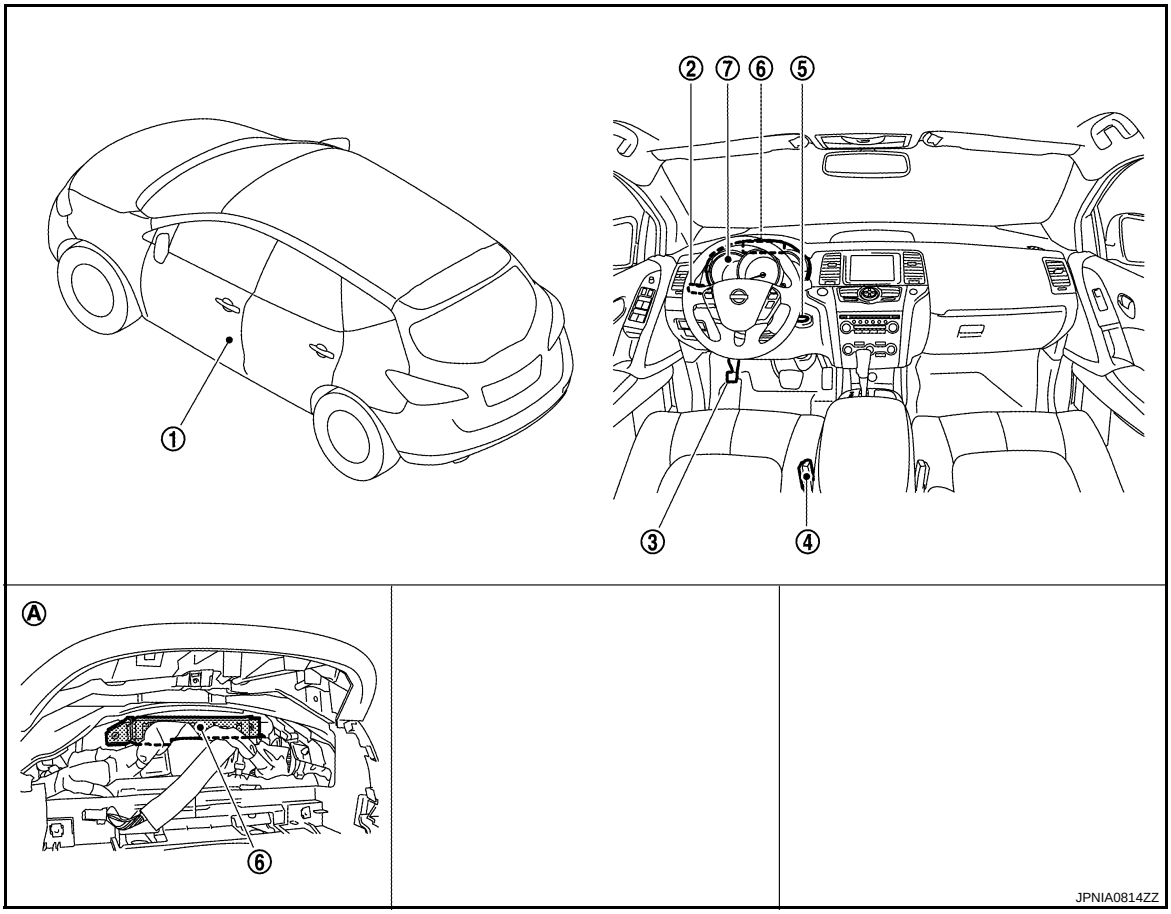
BCM Warning Function List

| Warning functions | Signal name |
|---|---|
| Light reminder warning chime | • Ignition switch signal<br>• Lighting switch position signal<br>• Door switch signal (driver side) |
| Seat belt warning chime | • Ignition switch signal<br>• Seat belt buckle switch signal (driver side) |
| Key warning chime | • Ignition signal<br>• Key slot switch signal<br>• Door switch signal (driver side) |

**NOTE:**
Parking brake release warning chime is detected by combination meter.

## WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000003452019




1. Front door switch (driver side)
2. Combination switch (Lighting switch)
3. Parking brake
4. Seat belt buckle switch (driver side)
5. Key slot
6. BCM
7. Combination meter

A. Behind the combination meter

## WARNING CHIME SYSTEM : Component Description

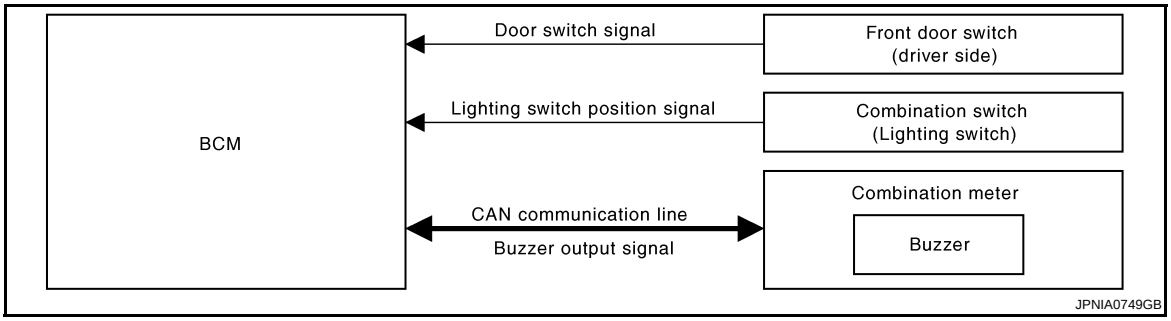
INFOID:0000000003452020

| Unit | Description |
|---|---|
| Combination meter | • Receives a buzzer output signal from the BCM with CAN communication line and sounds the buzzer.<br>• Judges whether the parking brake is released from the vehicle speed signal received from the ABS actuator and electric unit (control unit) with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.<br>• Receives the seat belt buckle switch signal (driver side) from the seat belt buckle switch (driver side) and transmits it to BCM with CAN communication line. |
| BCM | Transmits signals provided by various units to the combination meter with CAN communication line. |
| ABS actuator and electric unit (control unit) | Transmits the vehicle speed signal to combination meter with CAN communication line. |
| Seat belt buckle switch (driver side) | Transmits a seat belt buckle switch signal (driver side) to the combination meter. |
| Combination switch (Lighting switch) | Transmits the lighting switch position signal to BCM. |
| Front door switch (driver side) | Transmits the door switch signal (driver side) to BCM. |
| Parking brake switch | Refer to MWI-54, "Description". |
| Key slot | Transmits the key slot switch signal to BCM. |

# LIGHT REMINDER WARNING CHIME

## LIGHT REMINDER WARNING CHIME : System Diagram

INFOID:0000000003452021




## LIGHT REMINDER WARNING CHIME : System Description

INFOID:0000000003465397

### DESCRIPTION

With ignition switch in the OFF or ACC position, when the driver door is open and the lighting switch is the 1st or 2nd position, the light warning chime will sound.

- BCM detects ignition switch in the OFF or ACC position, front door switch (driver side) ON, and lighting switch in 1st or 2nd position. Then the BCM transmits the buzzer output signal (light reminder warning chime) to combination meter with CAN communication line.
- When combination meter receives buzzer output signal (light reminder warning chime), it sounds the buzzer.

### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Ignition switch is in the OFF or ACC
- Lighting switch is in the 1st or 2nd position
- Front door switch (driver side) is ON

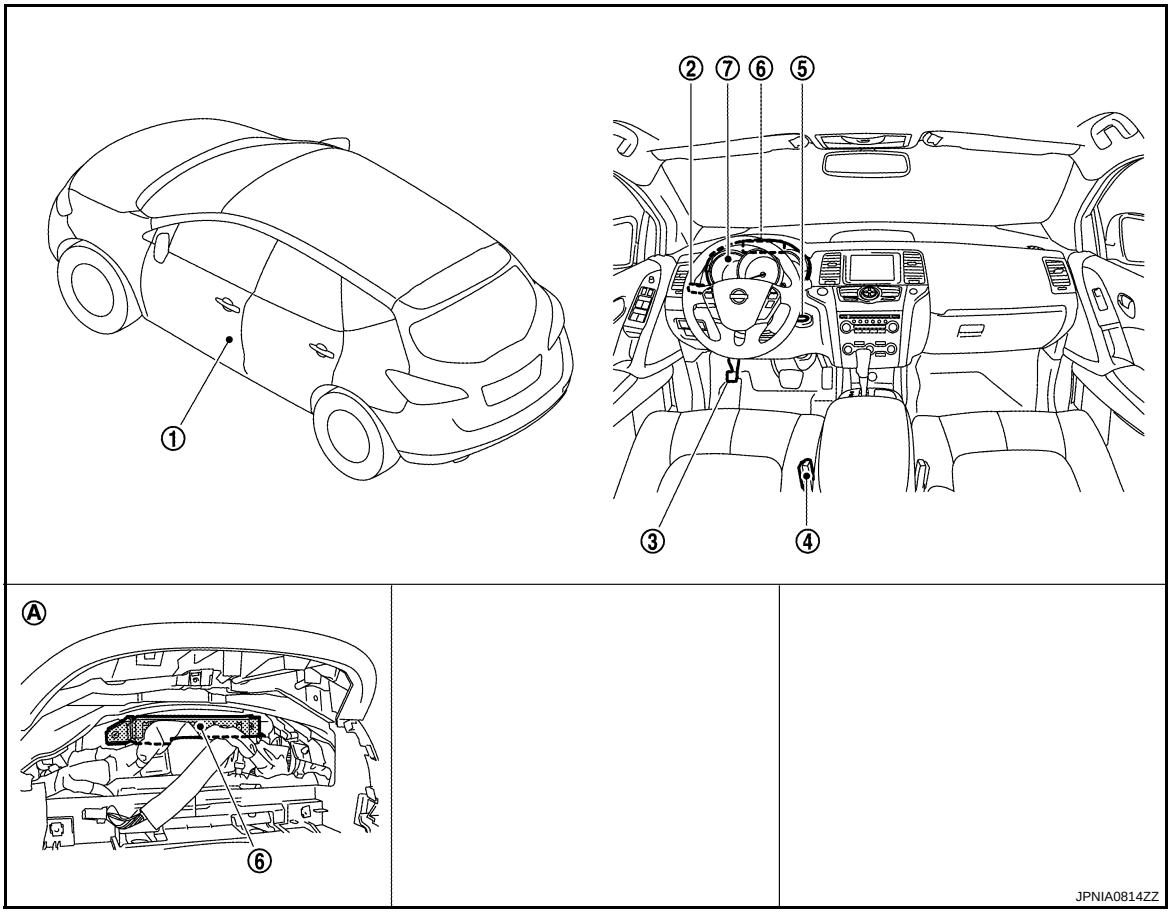
### WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

- Lighting switch OFF
- Ignition switch ON
- Front door switch (driver side) is OFF

## LIGHT REMINDER WARNING CHIME : Component Parts Location

INFOID:0000000003508997




1. Front door switch (driver side)
2. Combination switch (Lighting switch)
3. Parking brake
4. Seat belt buckle switch (driver side)
5. Key slot
6. BCM
7. Combination meter
A. Behind the combination meter

## LIGHT REMINDER WARNING CHIME : Component Description

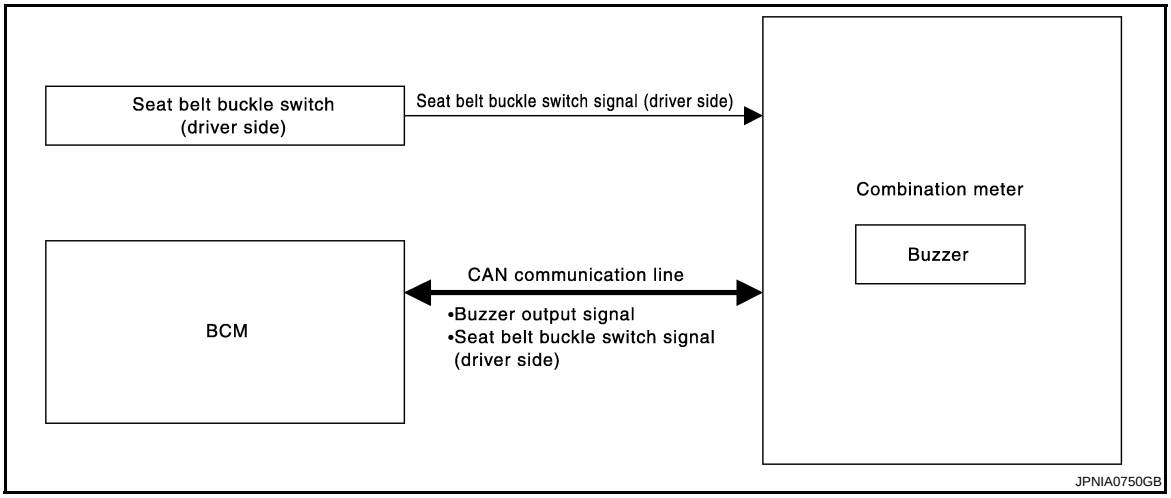
INFOID:0000000003465398

| Unit | Description |
|---|---|
| Combination meter | Receives a buzzer output signal from the BCM and sounds the buzzer. |
| BCM | Judges the light warning conditions from the signals provided by various switches and transmits a buzzer output signal to the combination meter via CAN communication line if necessary. |
| Combination switch (Lighting switch) | Transmits the lighting switch position signal to BCM. |
| Front door switch (driver side) | Transmits the door switch signal (driver side) to BCM. |

## SEAT BELT WARNING CHIME

## SEAT BELT WARNING CHIME : System Diagram

INFOID:0000000003452025




## SEAT BELT WARNING CHIME : System Description

INFOID:0000000003465318

### DESCRIPTION

With ignition switch turned ON and driver seat belt unfastened, seat belt warning chime will sound for approximately 6 seconds.

- The combination meter receives the seat belt buckle switch signal (driver side) from seat belt buckle switch (driver side) and transmits it to the BCM via CAN communication.
- The BCM receives seat belt buckle switch signal (driver side) from combination meter via CAN communication.
- The BCM detects seat belt reminder warning based on the received signal and transmits the buzzer output signal to combination meter via CAN communication.
- The combination meter receives the buzzer output signal from BCM via CAN communication and sounds the warning buzzer.

### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled, the warning buzzer will sound.

- Ignition switch ON
- Seat belt buckle switch (driver side) is ON (driver seat belt not fastened)

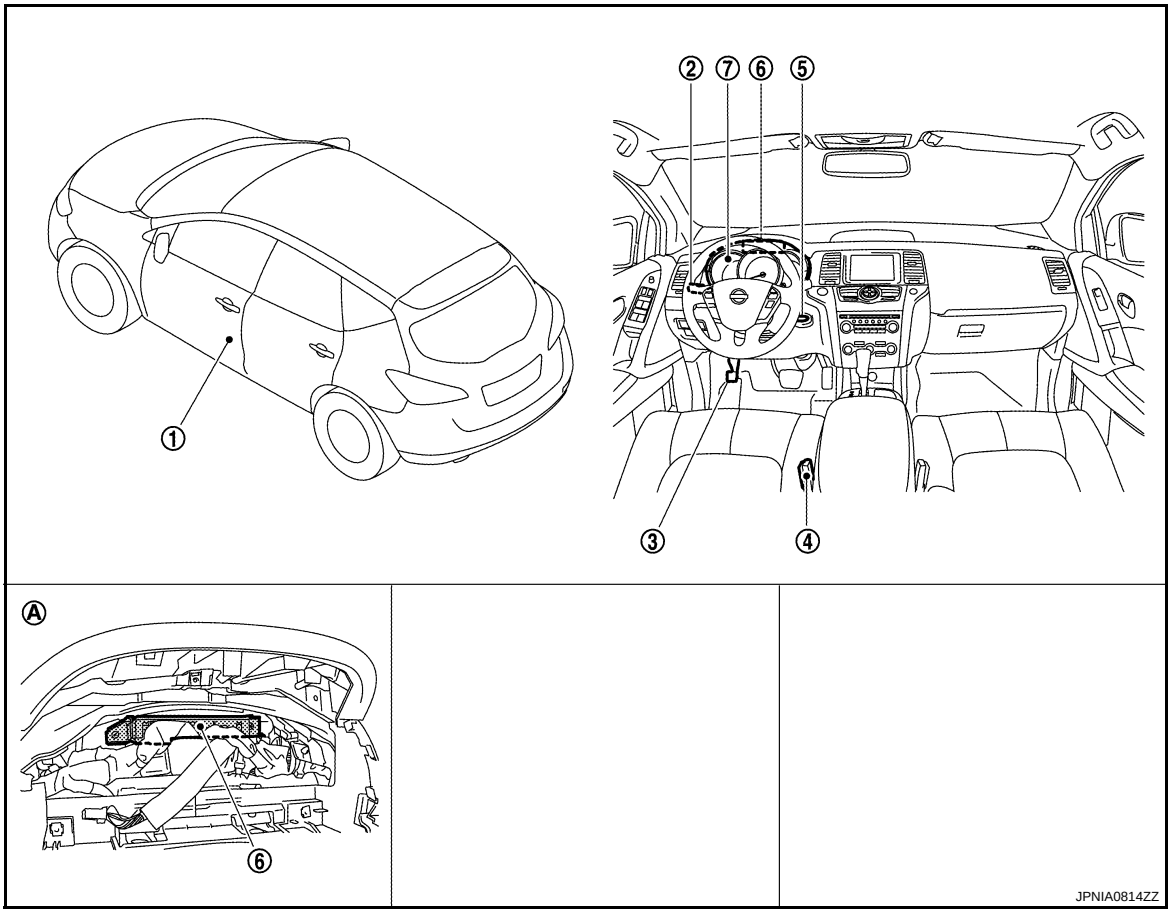
### WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions are fulfilled.

- Ignition switch OFF
- Seat belt buckle switch (driver side) is OFF (driver seat belt fastened)

## SEAT BELT WARNING CHIME : Component Parts Location

INFOID:0000000003508998




1. Front door switch (driver side)
2. Combination switch (Lighting switch)
3. Parking brake
4. Seat belt buckle switch (driver side)
5. Key slot
6. BCM
7. Combination meter
A. Behind the combination meter

## SEAT BELT WARNING CHIME : Component Description

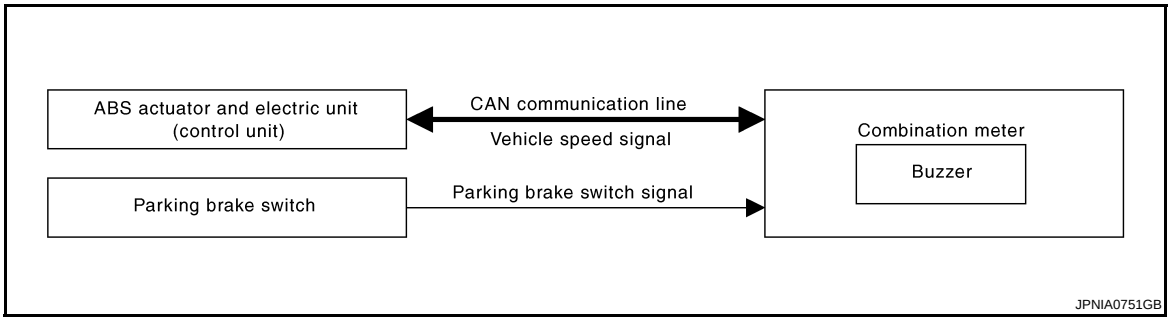
INFOID:0000000003465346

| Unit | Description |
|---|---|
| Combination meter | • Receives the seat belt buckle switch signal (driver side) from the seat belt buckle switch (driver side) and transmits it to BCM via CAN communication line.<br>• Receives a buzzer output signal from the BCM and sounds the buzzer. |
| BCM | Judges the seat belt warning condition according to the seat belt buckle switch signal (driver side) received from the combination meter via CAN communication and transmits a buzzer output signal to the combination meter via CAN communication line if necessary. |
| Seat belt buckle switch (driver side) | Transmits the seat belt buckle switch signal (driver side) to the combination meter. |

## PARKING BRAKE RELEASE WARNING CHIME

## PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:0000000003465347




## PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:0000000003465450

### DESCRIPTION

Parking brake release warning chime judges the remaining parking brake according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from parking brake switch to sound the warning buzzer.

### WARNING OPERATION CONDITIONS

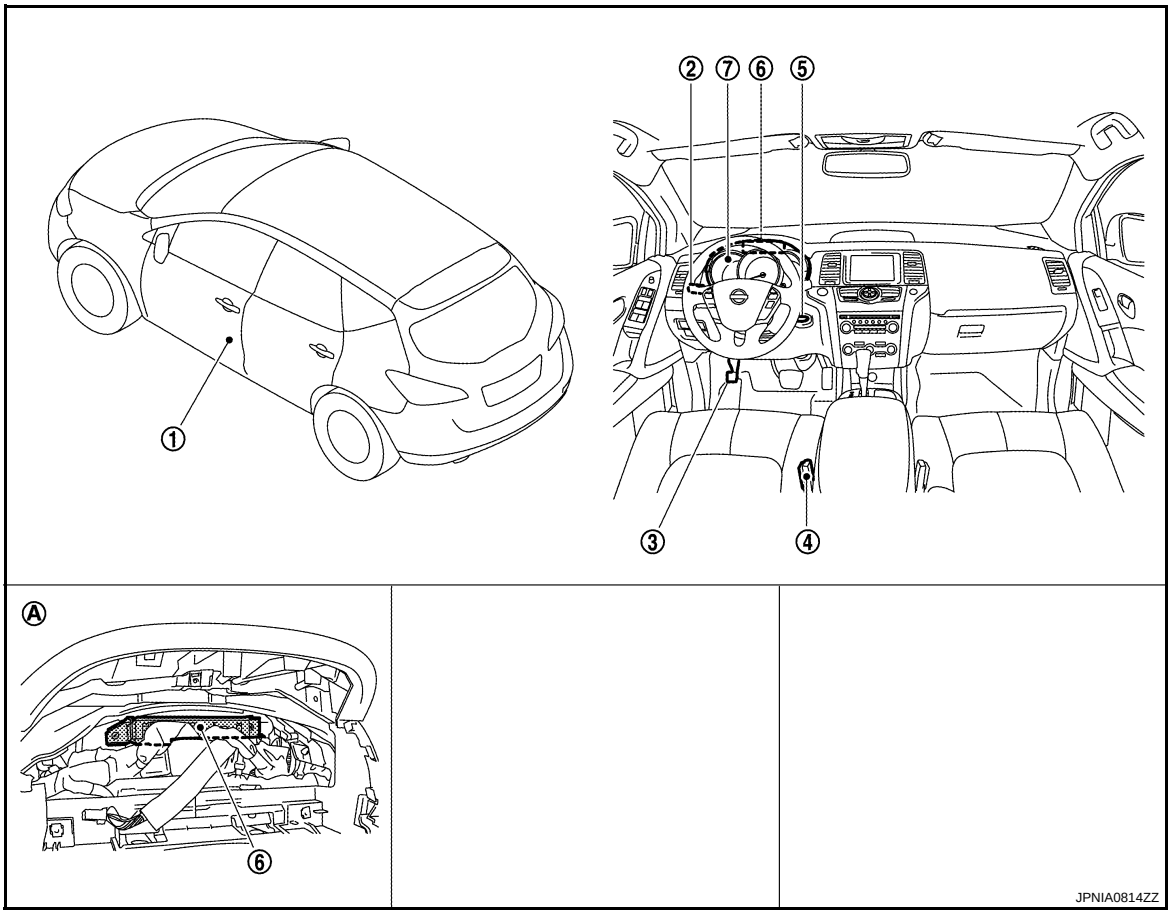
If all of the following conditions are fulfilled.
- Vehicle speed is 7 km/h (4.3 MPH) or higher
- Parking brake switch ON

### WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions are fulfilled.
- Vehicle speed is approximately 3 km/h (1.9 MPH) or less
- Parking brake switch OFF

## PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location

INFOID:0000000003509000




1. Front door switch (driver side)
2. Combination switch (Lighting switch)
3. Parking brake
4. Seat belt buckle switch (driver side)
5. Key slot
6. BCM
7. Combination meter
A. Behind the combination meter

## PARKING BRAKE RELEASE WARNING CHIME : Component Description

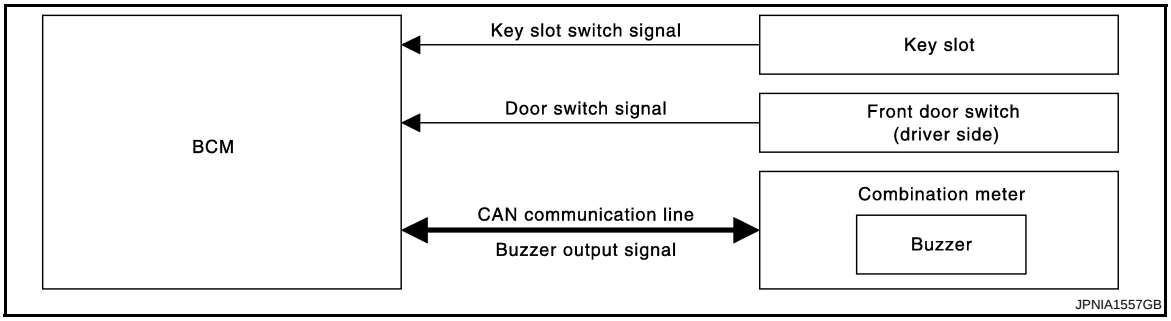
INFOID:0000000003465451

| Unit | Description |
|---|---|
| Combination meter | Judges the remaining parking brake according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from parking brake switch and sounds the warning buzzer. |
| ABS actuator and electric unit (control unit) | Transmits the vehicle speed signal to the combination meter via CAN communication. |
| Parking brake switch | Transmits the parking brake switch signal to the combination meter. |

## KEY WARNING CHIME

## KEY WARNING CHIME : System Diagram

INFOID:0000000003465350




## KEY WARNING CHIME : System Description

INFOID:0000000003465351

### DESCRIPTION

- BCM detects key warning according to the input of ignition switch, key slot switch signal and door switch (driver side) signal and transmits the buzzer output signal via CAN communication.
- The combination meter receives the buzzer output signal from BCM and sounds the warning buzzer.

### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled, the chime will sound.

- Other than ignition switch ON
- Key switch ON (keyfob is inserted in key slot)
- Front door switch (driver side) ON

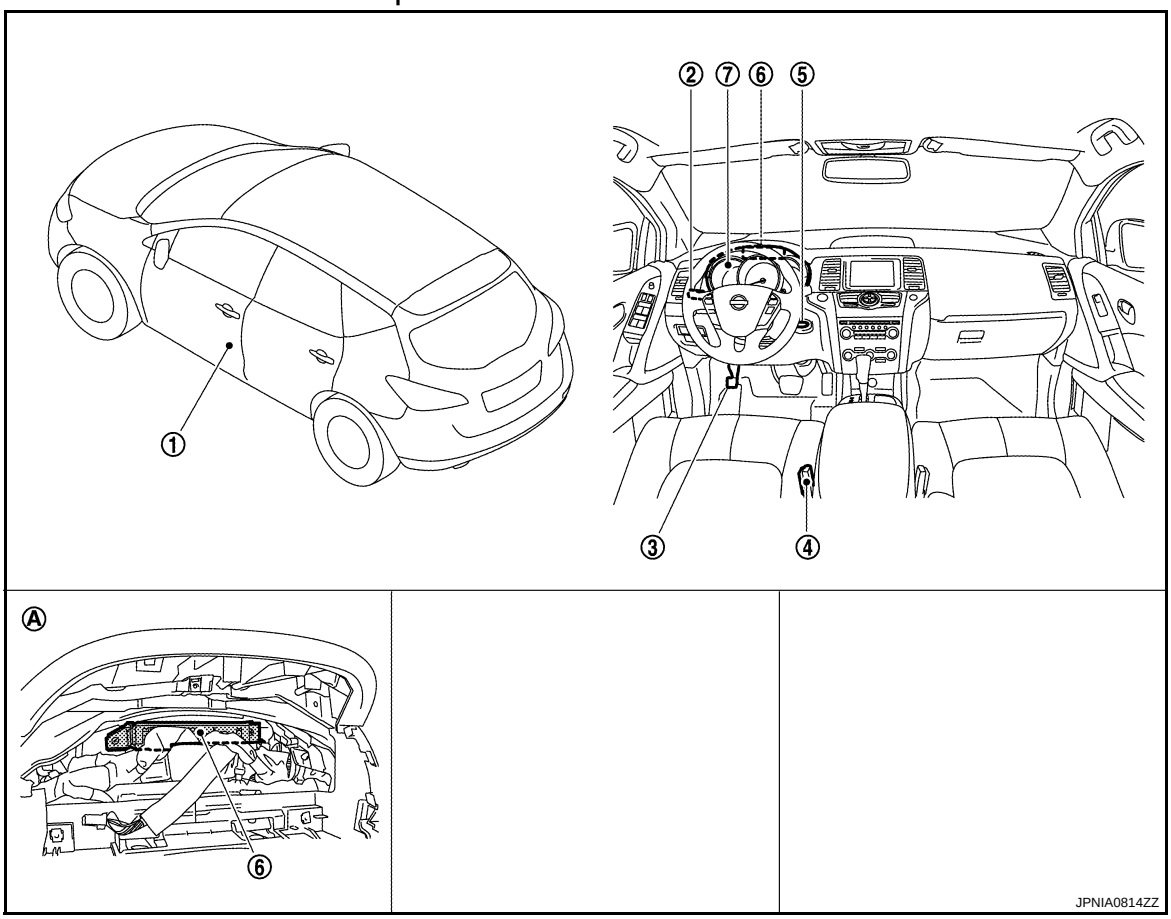
### WARNING CANCEL CONDITIONS

Warning canceled if any of the following conditions are fulfilled.

- Ignition switch ON
- Key switch OFF (keyfob is not inserted in key slot)
- Front door switch (driver side) OFF

## KEY WARNING CHIME : Component Parts Location

INFOID:0000000003509005




1. Front door switch (driver side)
2. Combination switch (Lighting switch)
3. Parking brake
4. Seat belt buckle switch (driver side)
5. Key slot
6. BCM
7. Combination meter
A. Behind the combination meter

## KEY WARNING CHIME : Component Description

INFOID:0000000003465353

| Unit | Description |
|---|---|
| Combination meter | Sounds the warning buzzer according to the buzzer output signal received from BCM via CAN communication. |
| BCM | Judges key warning according to the door switch signal (driver side) from the front door switch (driver side) and the key slot switch signal from the key slot and transmits the buzzer output signal to the combination meter via CAN communication. |
| Front door switch (driver side) | Transmits the door switch signal (driver side) to BCM. |
| Key slot | Transmits the key slot switch signal to BCM. |

# DIAGNOSIS SYSTEM (METER)

## CONSULT-III Function (METER/M&A)

INFOID:0000000003452069

### CONSULT-III APPLICATION ITEMS

CONSULT-III can perform the following diagnosis modes via CAN communication and the combination meter.

| System | Diagnosis mode | Description |
|---|---|---|
| METER/M&A | Self Diagnostic Result | The combination meter checks the conditions and displays memorized errors. |
| | Data Monitor | Displays the combination meter input/output data in real time. |
| | Special function | Lighting history of the warning lamp and indicator lamp can be checked. |

### SELF DIAG RESULT

Refer to WCS-48, "DTC Index".

### DATA MONITOR

Display Item List

X: Applicable

| Display item [Unit] | MAIN SIGNALS | Description |
|---|---|---|
| SPEED METER [km/h] | X | Value of vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication.<br>**NOTE:**<br>655.35 is displayed when the malfunction signal is received. |
| SPEED OUTPUT [km/h] | X | Vehicle speed signal value transmitted to other units via CAN communication.<br>**NOTE:**<br>655.35 is displayed when the malfunction signal is received. |
| ODO OUTPUT [km/h or mph] | | Odometer signal value transmitted to other units via CAN communication. |
| TACHO METER [rpm] | X | Value of the engine speed signal received from ECM via CAN communication.<br>**NOTE:**<br>8191.875 is displayed when the malfunction signal is received. |
| FUEL METER [L] | X | Fuel level indicated on combination meter. |
| W TEMP METER [°C] | X | Value of engine coolant temperature signal is received from ECM via CAN communication.<br>**NOTE:**<br>215 is displayed when the malfunction signal is input. |
| ABS W/L [On/Off] | | Status of ABS warning lamp detected from ABS warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication. |
| VDC/TCS IND [On/Off] | | Status of VDC OFF indicator lamp detected from VDC OFF indicator lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication. |
| SLIP IND [On/Off] | | Status of SLIP indicator lamp detected from slip indicator lamp signal received from ABS actuator and electric unit (control unit) via CAN communication. |
| BRAKE W/L [On/Off] | | Status of brake warning lamp detected from brake warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.<br>**NOTE:**<br>Displays “Off” if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON. |
| DOOR W/L [On/Off] | | Status of door warning detected from door switch signal received from BCM via CAN communication. |
| HI-BEAM IND [On/Off] | | Status of high beam indicator lamp detected from high beam request signal is received from BCM via CAN communication. |
| TURN IND [On/Off] | | Status of turn indicator lamp detected from turn indicator signal is received from BCM via CAN communication. |

| Display item [Unit] | MAIN SIGNALS | Description |
|---|---|---|
| LIGHT IND<br>[On/Off] | | Status of light indicator lamp detected from position light request signal is received from BCM via CAN communication. |
| OIL W/L<br>[On/Off] | | Status of oil pressure warning lamp detected from oil pressure switch signal is received from BCM via CAN communication. |
| MIL<br>[On/Off] | | Status of malfunction indicator lamp detected from malfunctioning indicator lamp signal is received from ECM via CAN communication. |
| CRUISE IND<br>[On/Off] | | Status of CRUISE indicator detected from ASCD status signal is received from ECM via CAN communication. |
| O/D OFF IND<br>[On/Off] | | Status of O/D OFF indicator detected from O/D OFF indicator signal is received from control device. |
| 4WD W/L<br>[On/Off] | | Status of AWD warning lamp detected from AWD warning lamp signal is received from AWD control unit via CAN communication. |
| 4WD LOCK IND<br>[On/Off] | | Status of AWD LOCK warning lamp detected from AWD LOCK warning lamp signal is received from AWD control unit via CAN communication. |
| FUEL W/L<br>[On/Off] | | Low-fuel warning lamp status detected by the identified fuel level. |
| WASHER W/L<br>[On/Off] | | Status of washer warning lamp judged from washer level switch input to combination meter. |
| AIR PRES W/L<br>[On/Off] | | Status of low tire pressure warning lamp detected from tire pressure signal is received from BCM via CAN communication. |
| KEY G/W W/L<br>[On/Off] | | Status of key warning lamp (G/Y) detected from key warning signal is received from BCM via CAN communication. |
| LCD<br>[B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY, OUTKY, LK WN] | | Displays status of Intelligent Key system warning detected from meter display signal is received from BCM via CAN communication. |
| SHIFT IND<br>[P, R, N, D, L] | | Status of shift position indicator detected from shift position signal is received from TCM via CAN communication. |
| O/D OFF SW<br>[On/Off] | | Status of O/D OFF switch. |
| M RANGE SW<br>[Off] | | This item is displayed, but cannot be monitored. |
| NM RANGE SW<br>[Off] | | This item is displayed, but cannot be monitored. |
| AT SFT UP SW<br>[Off] | | This item is displayed, but cannot be monitored. |
| AT SFT DWN SW<br>[Off] | | This item is displayed, but cannot be monitored. |
| ST SFT UP SW<br>[Off] | | This item is displayed, but cannot be monitored. |
| ST SFT DWN SW<br>[Off] | | This item is displayed, but cannot be monitored. |
| PKB SW<br>[On/Off] | | Status of parking brake switch. |
| BUCKLE SW<br>[On/Off] | | Status of seat belt buckle switch (driver side). |
| BRAKE OIL SW<br>[On/Off] | | Status of brake fluid level switch. |
| DISTANCE<br>[km] | | Value of possible driving distance calculated by combination meter. |
| A/C AMP CONN<br>[On/Off] | | Status of A/C auto amp. connection recognition signal. |

| Display item [Unit] | MAIN SIGNALS | Description |
|---|---|---|
| ENTER SW [On/Off] | | Status of ❑ (ENTER) switch. |
| SELECT SW [On/Off] | | Status of ● (SELECT) switch. |
| OUTSIDE TEMP [°C or °F] | | Ambient air temperature value converted from ambient sensor signal received from ambient sensor.<br>**NOTE:**<br>This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.) |
| FUEL LOW SIG [On/Off] | | Status of fuel level low warning signal to output to AV control unit via CAN communication. |
| BUZZER [On/Off] | X | Buzzer status (in the combination meter) is detected from the buzzer output signal received from each unit via CAN communication and the warning output condition of the combination meter. |

**NOTE:**

Some items are not available according to vehicle specification.

## SPECIAL FUNCTION

Special menu

| Display item | Description |
|---|---|
| W/L ON HISTORY | Lighting history of warning lamp and indicator lamp can be checked. |

W/L ON HISTORY

- Stores histories when warning/indicator lamp is turned on.
- “W/L ON HISTORY” indicates the “TIME” when the warning/indicator lamp is turned on.
- The “TIME” above is :
- 0 : The condition that the warning/indicator lamp has been turned on 1 or more times after starting the engine and waiting for 30 seconds.
- 1 - 39 : The number of times the engine was restarted after the 0 condition.
- NO W/L ON HISTORY : Stores NO (0) turning on history of warning/indicator lamp.

**NOTE:**

- W/L ON HISTORY is not stored for approximately 30 seconds after the engine starts.
- Brake warning lamp does not store any history when the parking the brake is applied or the brake fluid level gets low.

Display Item

| Display item | Description |
|---|---|
| ABS W/L | Lighting history of ABS warning lamp. |
| VDC/TCS IND | Lighting history of VDC OFF indicator lamp. |
| SLIP IND | Lighting history of SLIP indicator lamp. |
| BRAKE W/L | Lighting history of brake warning lamp. |
| DOOR W/L | Lighting history of door warning. |
| TRUNK/GLAS-H | This item is displayed, but cannot be monitored. |
| OIL W/L | Lighting history of oil pressure warning lamp. |
| C-ENG W/L | Lighting history of malfunction indicator lamp. |
| C-ENG2 W/L | This item is displayed, but cannot be monitored. |
| CRUISE IND | Lighting history of CRUISE indicator lamp. |
| SET IND | Lighting history of SET indicator. |
| CRUISE W/L | This item is displayed, but cannot be monitored. |
| BA W/L | This item is displayed, but cannot be monitored. |

| Display item | Description |
|---|---|
| O/D OFF IND | Lighting history of O/D OFF indicator lamp. |
| ATC/T-AMT W/L | This item is displayed, but cannot be monitored. |
| ATF TEMP W/L | This item is displayed, but cannot be monitored. |
| CVT IND | This item is displayed, but cannot be monitored. |
| SPORT IND | This item is displayed, but cannot be monitored. |
| 4WD W/L | Lighting history of AWD warning lamp. |
| FUEL W/L | Lighting history of low fuel level warning. |
| WASHER W/L | Lighting history of low washer fluid warning |
| AIR PRES W/L | Lighting history of low tire pressure warning lamp. |
| KEY G/Y W/L | Lighting history of key warning lamp (green/yellow). |
| KEY R W/L | Lighting history of key warning lamp (red). |
| KEY KNOB W/L | This item is displayed, but cannot be monitored. |
| SYS FAIL W/L | This item is displayed, but cannot be monitored. |
| SFT POSI W/L | This item is displayed, but cannot be monitored. |
| HV BAT W/L | This item is displayed, but cannot be monitored. |
| HEV BRAKE W/L | This item is displayed, but cannot be monitored. |
| SFT OPER W/L | This item is displayed, but cannot be monitored. |
| CHAGE W/L | Lighting history of charge warning lamp. |
| OIL LEV LOW | This item is displayed, but cannot be monitored. |
| DPF W/L | This item is displayed, but cannot be monitored. |

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

INFOID:0000000003514555

#### APPLICATION ITEM
CONSULT-III 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. Refer to CONSULT-III operation manual. |
| 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 | × | × | × |
| Remote keyless entry system | MULTI REMOTE ENT*1 | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | ×*2 | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| — | AIR CONDITONER*3 | | | |
| • 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 opener system | TRUNK | | × | × |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | TPMS (AIR PRESSURE MONITOR) | × | × | × |

**NOTE:**
- *1: At models with Intelligent Key system this item is displayed, but is not used.
- *2: At models with rain sensor this mode is displayed, but is not used.

• *3: 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-III.

| CONSULT screen item | Indication/Unit | Description | |
|---|---|---|---|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected | |
| Vehicle Condition | SLEEP>LOCK | Power position status of the moment a particular DTC is detected | While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”) |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.) |
| | LOCK>ACC | | While turning power supply position from “LOCK” to “ACC” |
| | ACC>ON | | While turning power supply position from “ACC” to “IGN” |
| | RUN>ACC | | While turning power supply position from “RUN” to “ACC” (Vehicle is stopping and selector lever is except P position.) |
| | CRANK>RUN | | While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it) |
| | RUN>URGENT | | While turning power supply position from “RUN“ to “ACC” (Emergency stop operation) |
| | ACC>OFF | | While turning power supply position from “ACC” to “OFF” |
| | OFF>LOCK | | While turning power supply position from “OFF” to “LOCK” |
| | OFF>ACC | | While turning power supply position from “OFF” to “ACC” |
| | ON>CRANK | | While turning power supply position from “IGN” to “CRANKING” |
| | OFF>SLEEP | | While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode |
| | LOCK>SLEEP | | While turning BCM status from normal mode (Power supply position is “LOCK”.) to low power consumption mode |
| | LOCK | | Power supply position is “LOCK” (Ignition switch OFF with steering is locked.) |
| | OFF | | Power supply position is “OFF” (Ignition switch OFF with steering is unlocked.) |
| | ACC | | Power supply position is “ACC” (Ignition switch ACC) |
| | ON | | Power supply position is “IGN” (Ignition switch ON with engine stopped) |
| | ENGINE RUN | | Power supply position is “RUN” (Ignition switch ON with engine running) |
| | CRANKING | | Power supply position is “CRANKING” (At engine cranking) |
| IGN Counter | 0 - 39 | The number of times that ignition switch is turned ON after DTC is detected<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. | |

# BUZZER

## BUZZER : CONSULT-III Function (BCM - BUZZER)

INFOID:0000000003452035

### CONSULT-III APPLICATION ITEMS

| Test item | Diagnosis mode | Description |
|---|---|---|
| BUZZER | Data Monitor | Displays BCM input data in real time. |
| | Active Test | Operation of electrical loads can be checked by sending driving signal to them. |

## DATA MONITOR

| Display item [Unit] | Description |
|---|---|
| PUSH SW [On/Off] | Status of push button ignition switch judged by BCM. |
| UNLK SEN-DR [On/Off] | Status of unlock sensor judged by BCM. |
| VEH SPEED 1 [Km/h] | Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line. |
| KEY SW-SLOT [On/Off] | Status of key slot judged by BCM. |
| TAIL LAMP SW [On/Off] | Status of each switch judged by BCM using the combination switch readout function. |
| FR FOG SW [On/Off] | Status of front fog lamp switch judged by BCM. |
| DOOR SW-DR [On/Off] | Status of driver side door switch judged by BCM. |

## ACTIVE TEST

| Display item [Unit] | Description |
|---|---|
| IGN KEY WARN ALM | The key warning chime operation can be checked by operating the relevant function (On/Off). |
| SEAT BELT WARN TEST | The seat belt warning chime operation can be checked by operating the relevant function (On/Off). |
| ID REGIST WARNING | The ID regist warning chime operation can be checked by operating the relevant function (On/Off). |
| LIGHT WARN ALM | The light warning chime operation can be checked by operating the relevant function (On/Off). |

# COMPONENT DIAGNOSIS

## POWER SUPPLY AND GROUND CIRCUIT

## COMBINATION METER

### COMBINATION METER : Diagnosis Procedure

INFOID:0000000003470010

#### 1.CHECK FUSE

Check for blown fuses.

| Power source | Fuse No. |
|---|---|
| Battery | 11 |
| Ignition switch ON or START | 4 |

Is the inspection result normal?

YES >> GO TO 2.
NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector terminals and ground.

| Terminals | | | Ignition switch position | Voltage (Approx.) |
|---|---|---|---|---|
| (+) | | (-) | | |
| Combination meter | | Ground | | |
| Connector | Terminal | | | |
| M34 | 1 | | OFF | Battery voltage |
| | 2 | | ON | |

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check harness between combination meter and fuse.

#### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector.
3. Check continuity between combination meter harness connector terminals and ground.

| Terminals | | | Continuity |
|---|---|---|---|
| (+) | | (-) | |
| Combination meter | | Ground | |
| Connector | Terminal | | |
| M34 | 3 | | Existed |
| | 23 | | |

Is the inspection result normal?

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

## BCM (BODY CONTROL MODULE)

### BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:0000000003470011

#### 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 | M |
| | 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.

# METER BUZZER CIRCUIT

## Description

INFOID:0000000003452040

- The buzzer for warning chime system is installed in the combination meter.
- The combination meter sounds the alarm buzzer based on the signals transmitted from various units.

## Component Function Check

INFOID:0000000003452041

### 1.CHECK OPERATION OF METER BUZZER

1. Select “BUZZER” of “BCM” on CONSULT-III.
2. Perform “LIGHT WARN ALM” of “Active Test”.

Does meter buzzer beep?

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

### 2.CHECK COMBINATION METER INPUT SIGNAL

Select the “Data Monitor” for the “METER/M&A” and check the “BUZZER” monitor value.

| BUZZER | |
|---|---|
| Under the condition of buzzer input | : On |
| Except above | : Off |

Is the inspection result normal?

YES >> Replace combination meter.
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

## Diagnosis Procedure

INFOID:0000000003452042

### 1.CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to MWI-43, "COMBINATION METER : Diagnosis Procedure".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair power supply circuit of combination meter. Refer to WCS-22, "COMBINATION METER : Diagnosis Procedure".

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

## Description

INFOID:0000000003452043

Transmits a seat belt buckle switch signal (driver side) to the combination meter.

## Component Function Check

INFOID:0000000003452044

### 1.CHECK COMBINATION METER INPUT SIGNAL

Select the “Data Monitor” for the “METER/M&A” and check the “BUCKLE SW” monitor value.

BUCKLE SW
When seat belt is fastened : Off
When seat belt is unfastened : On

>> INSPECTION END

## Diagnosis Procedure

INFOID:0000000003452045

### 1.CHECK COMBINATION METER INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between combination meter harness connector terminal and ground.

| Terminals | | | Condition | Voltage (Approx.) |
|---|---|---|---|---|
| (+) | | (-) | | |
| Combination meter | | Ground | | |
| Connector | Terminal | | | |
| M34 | 35 | | When seat belt is fastened | 12 V |
| | | | When seat belt is unfastened | 0 V |

Is the inspection result normal?

YES >> Replace combination meter
NO >> GO TO 2.

### 2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector and seat belt buckle switch (driver side) connector.
3. Check continuity between combination meter harness connector terminal and seat belt buckle switch (driver side) harness connector terminal.

| Terminals | | | | Continuity |
|---|---|---|---|---|
| (+) | | (-) | | |
| Combination meter | | Seat belt buckle switch(driver side) | | |
| Connector | Terminal | Connector | Terminal | |
| M34 | 35 | B409*1 | 15*1 | Exist |
| | | B449*2 | 40*2 | |

- *1 : Without automatic drive positioner
- *2 : With automatic drive positioner

4. Check harness continuity between combination meter harness connector terminal and ground.

| Terminals | | | Continuity |
|---|---|---|---|
| (+) | | (-) | |
| Combination meter | | Ground | |
| Connector | Terminal | | |
| M34 | 35 | | Not existed |

Is the inspection result normal?

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

## 3. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check harness continuity between seat belt buckle switch (driver side) harness connector terminal and ground.

| Terminals | | | Continuity |
|---|---|---|---|
| (+) | | (-) | |
| Combination meter | | Ground | |
| Connector | Terminal | | |
| B409*1 | 16*1 | | Exist |
| B449*2 | 41*2 | | |

- *1 : Without automatic drive positioner
- *2 : With automatic drive positioner

Is the inspection result normal?

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

# Component Inspection

INFOID:0000000003452046

## 1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

1. Turn ignition switch OFF.
2. Disconnect the seat belt buckle switch (driver side) connector.
3. Check continuity between terminals.

| Terminals | | | | Condition | Continuity |
|---|---|---|---|---|---|
| (+) | | (-) | | | |
| Seat belt buckle switch (driver side) | | | | | |
| Connector | Terminal | Connector | Terminal | | |
| B409*1 | 15*1 | B409*1 | 16*1 | When seat belt is fastened | Not existed |
| B449*2 | 40*2 | B449*2 | 41*2 | | |
| B409*1 | 15*1 | B409*1 | 16*1 | When seat belt is unfastened | Exist |
| B449*2 | 40*2 | B449*2 | 41*2 | | |

- Without automatic drive positioner
- With automatic drive positioner

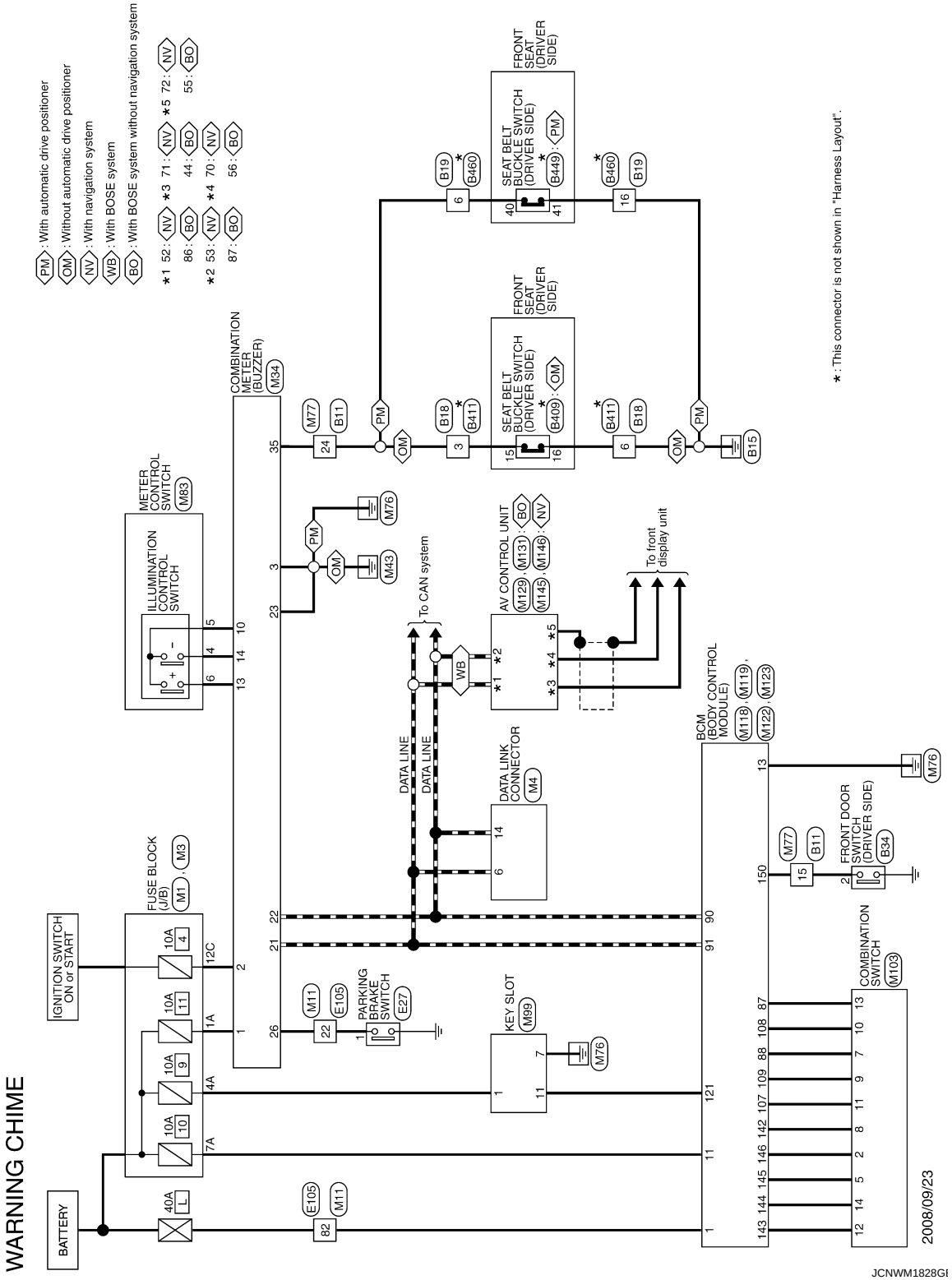
Is the inspection result normal?

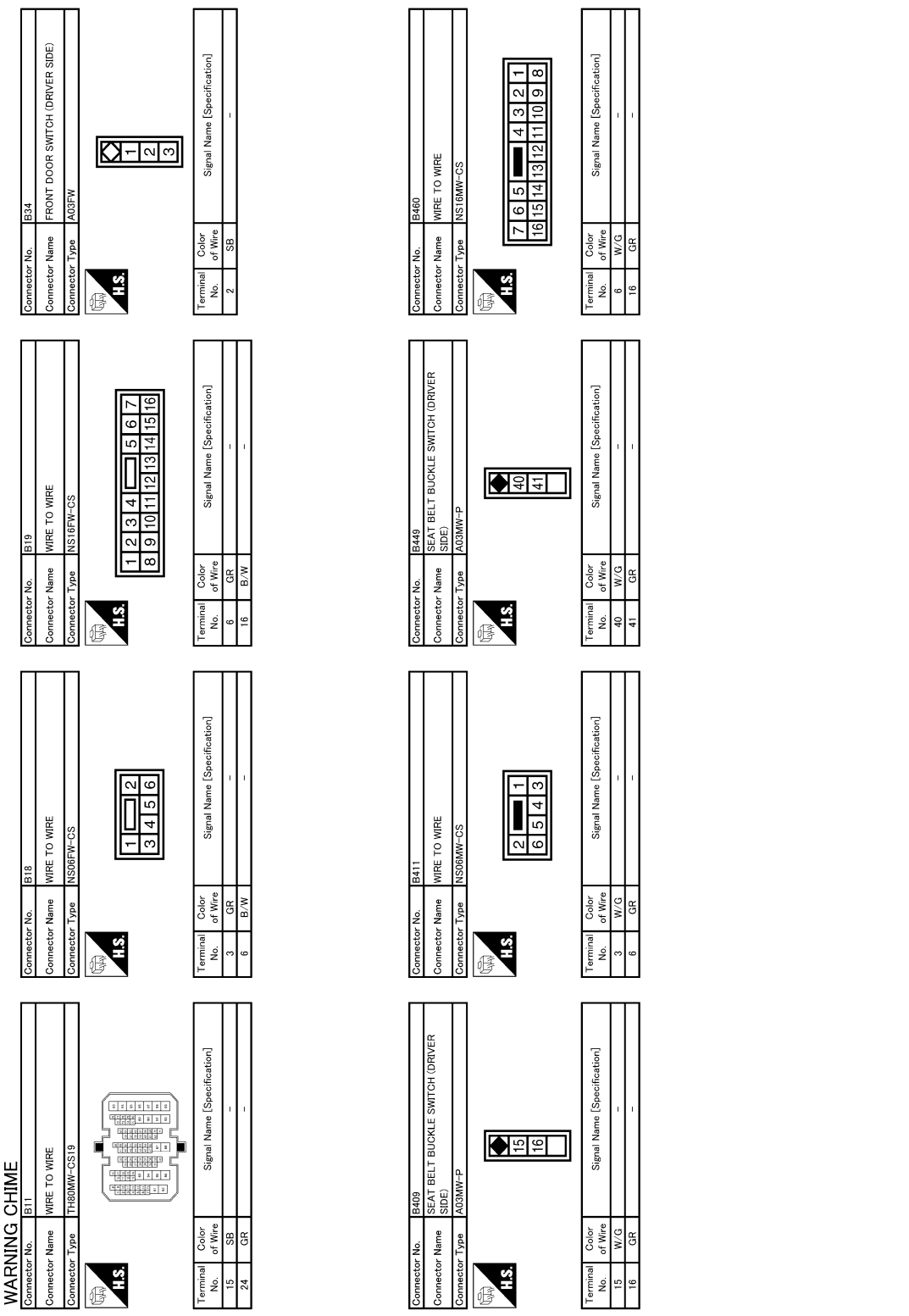
YES >> INSPECTION END
NO >> Replace the seat belt buckle. Refer to SB-7, "SEAT BELT BUCKLE : Removal and Installation".

# WARNING CHIME SYSTEM

## Wiring Diagram - WARNING CHIME -

INFOID:0000000003452047



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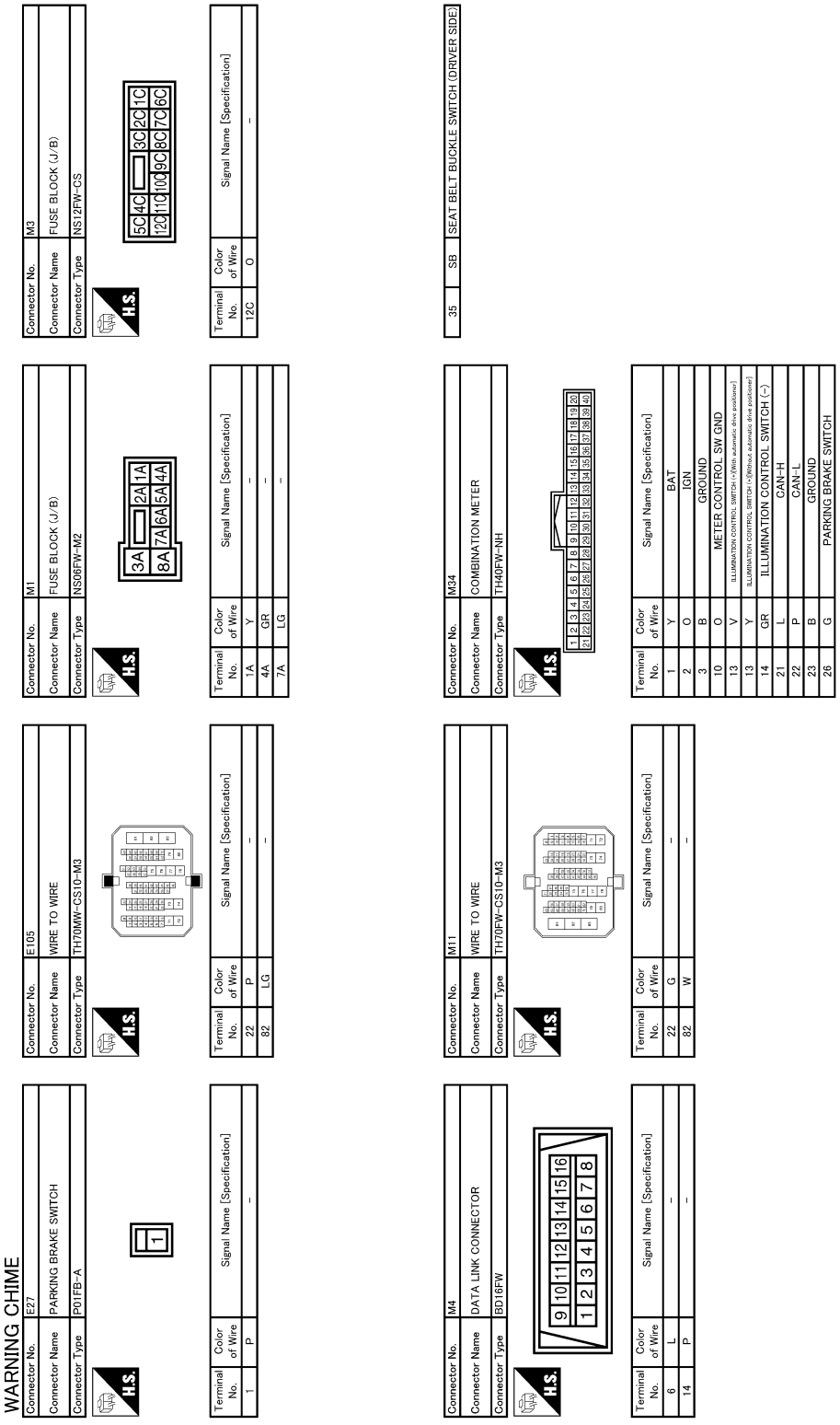


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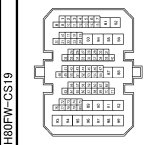
## WARNING CHIME

| Connector No. | M77 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS19 |

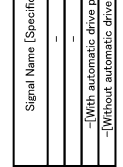


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 15 | SB | – |
| 24 | SB | – |

| Connector No. | M118 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M03FB-LC |

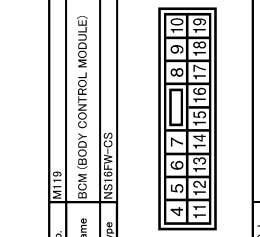
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | W | BAT (F/L) |

| Connector No. | M83 |
|---|---|
| Connector Name | METER CONTROL SWITCH |
| Connector Type | TH12FW-NH |



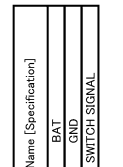
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | GR | – |
| 5 | O | – |
| 6 | V | –[With automatic drive positioner] |
| 6 | Y | –[Without automatic drive positioner] |

| Connector No. | M119 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS16FW-CS |



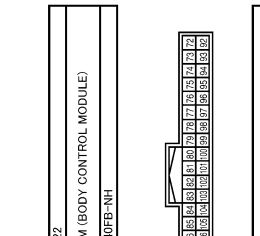
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |

| Connector No. | M99 |
|---|---|
| Connector Name | KEY SLOT |
| Connector Type | TH12FW-NH |



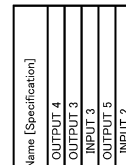
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | GR | BAT |
| 7 | B | GND |
| 11 | Y | KEY SWITCH SIGNAL |

| Connector No. | M122 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH |



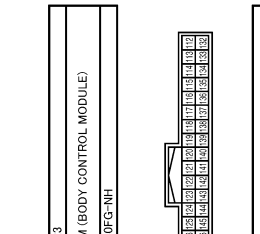
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 87 | R | COMBI SW INPUT 5 |
| 88 | GR | COMBI SW INPUT 3 |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 107 | O | COMBI SW INPUT 1 |
| 108 | P | COMBI SW INPUT 4 |
| 109 | SB | COMBI SW INPUT 2 |

| Connector No. | M103 |
|---|---|
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | Y | OUTPUT 4 |
| 5 | V | OUTPUT 3 |
| 7 | GR | INPUT 3 |
| 8 | L | OUTPUT 5 |
| 9 | SB | INPUT 2 |
| 10 | P | INPUT 4 |
| 11 | O | INPUT 1 |
| 12 | W | OUTPUT 1 |
| 13 | R | INPUT 5 |
| 14 | P | OUTPUT 2 |

| Connector No. | M123 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 121 | Y | KEY SLOT SW |
| 142 | L | COMBI SW OUTPUT 5 |
| 143 | W | COMBI SW OUTPUT 1 |
| 144 | P | COMBI SW OUTPUT 2 |
| 145 | V | COMBI SW OUTPUT 3 |
| 146 | Y | COMBI SW OUTPUT 4 |
| 150 | SB | DRIVER DOOR SW |

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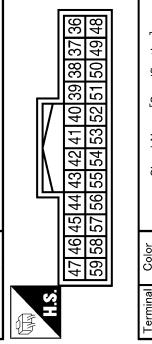
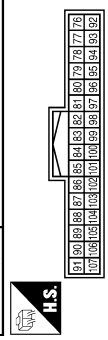
WARNING CHIME

| Connector No. | M129 |
|---|---|
| Connector Name | AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) |
| Connector Type | TH24FW-NH |



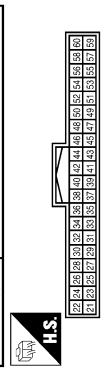

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 44 | G | COMM (DISP->CONT) |
| 55 | SHIELD | SHIELD |
| 56 | R | COMM (CONT->DISP) |

| Connector No. | M131 |
|---|---|
| Connector Name | AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM) |
| Connector Type | TH32FW-NH |



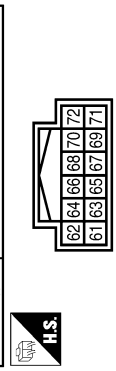

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 86 | L | CAN-H |
| 87 | P | CAN-L |

| Connector No. | M145 |
|---|---|
| Connector Name | AV CONTROL UNIT (WITH NAVIGATION SYSTEM) |
| Connector Type | TH40FW-NH |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 52 | L | CAN-H |
| 53 | P | CAN-L |

| Connector No. | M146 |
|---|---|
| Connector Name | AV CONTROL UNIT (WITH NAVIGATION SYSTEM) |
| Connector Type | TH12FW-NH |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 70 | R | COMM (CONT->DISP) |
| 71 | G | COMM (DISP->CONT) |
| 72 | SHIELD | SHIELD |

JCNWM1832GI

# ECU DIAGNOSIS

## COMBINATION METER

### Reference Value

INFOID:0000000003519120

VALUES ON THE DIAGNOSIS TOOL

| Monitor Item | Condition | | Value/Status |
|---|---|---|---|
| SPEED METER [km/h] | Ignition switch ON | While driving | Equivalent to speedometer reading<br>**NOTE:**<br>655.35 is displayed when the malfunction signal is received |
| SPEED OUTPUT [km/h] | Ignition switch ON | While driving | Equivalent to speedometer reading<br>**NOTE:**<br>655.35 is displayed when the malfunction signal is received |
| ODO OUTPUT [km/h or mph] | Ignition switch ON | — | Equivalent to odometer reading in combination meter |
| TACHO METER [rpm] | Ignition switch ON | While driving | Equivalent to tachometer reading<br>**NOTE:**<br>8191.875 is displayed when the malfunction signal is received |
| FUEL METER [L] | Ignition switch ON | — | Values according to fuel level |
| W TEMP METER [°C] | Ignition switch ON | — | Values according to engine coolant temperature<br>**NOTE:**<br>215 is displayed when the malfunction signal is input |
| ABS W/L | Ignition switch ON | ABS warning lamp ON | On |
| | | ABS warning lamp OFF | Off |
| VDC/TCS IND | Ignition switch ON | VDC OFF indicator lamp ON | On |
| | | VDC OFF indicator lamp OFF | Off |
| SLIP IND | Ignition switch ON | SLIP Indicator lamp ON | On |
| | | SLIP indicator lamp OFF | Off |
| BRAKE W/L | Ignition switch ON | Brake warning lamp ON | On |
| | | Brake warning lamp OFF | Off |
| DOOR W/L | Ignition switch ON | Door warning lamp ON | On |
| | | Door warning lamp OFF | Off |
| HI-BEAM IND | Ignition switch ON | High-beam indicator lamp ON | On |
| | | High-beam indicator lamp OFF | Off |
| TURN IND | Ignition switch ON | Turn signal indicator lamp ON | On |
| | | Turn signal indicator lamp OFF | Off |
| LIGHT IND | Ignition switch ON | Light indicator lamp ON | On |
| | | Light indicator lamp OFF | Off |
| OIL W/L | Ignition switch ON | Oil pressure warning lamp ON | On |
| | | Oil pressure warning lamp OFF | Off |
| MIL | Ignition switch ON | Malfunction indicator lamp ON | On |
| | | Malfunction indicator lamp OFF | Off |
| CRUISE IND | Ignition switch ON | CRUISE indicator lamp ON | On |
| | | CRUISE indicator lamp OFF | Off |

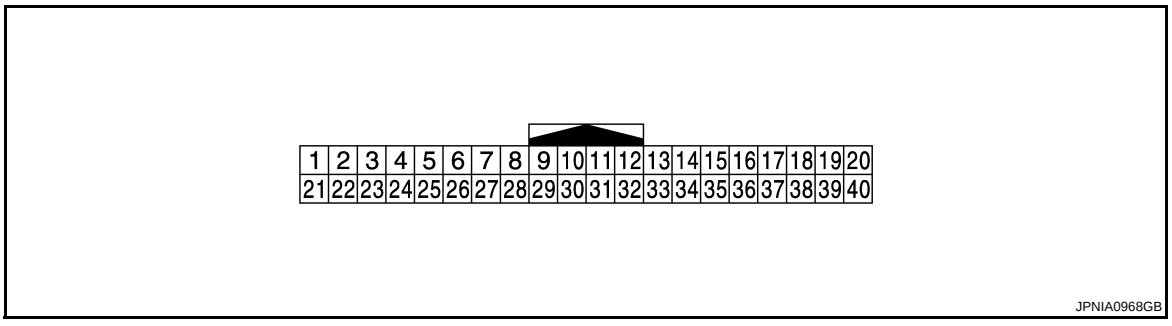
| Monitor Item | Condition | | Value/Status |
|---|---|---|---|
| O/D OFF IND | Ignition switch ON | O/D OFF indicator lamp ON | On |
| | | O/D OFF indicator lamp OFF | Off |
| 4WD W/L | Ignition switch ON | AWD warning lamp ON | On |
| | | AWD warning lamp OFF | Off |
| 4WD LOCK IND | Ignition switch ON | AWD LOCK indicator lamp ON | On |
| | | AWD LOCK indicator lamp OFF | Off |
| FUEL W/L | Ignition switch ON | Low-fuel warning lamp ON | On |
| | | Low-fuel warning lamp OFF | Off |
| WASHER W/L | Ignition switch ON | Washer warning displayed | On |
| | | Washer warning not displayed | Off |
| AIR PRES W/L | Ignition switch ON | Low tire pressure lamp ON | On |
| | | Low tire pressure lamp OFF | Off |
| KEY G/Y W/L | Ignition switch ON | Key warning lamp (green/yellow) ON | On |
| | | Key warning lamp (green/yellow) OFF | Off |
| LCD | Ignition switch ON | Engine start information display | B&P I |
| | Ignition switch ACC | Engine start information display | B&P N |
| | Ignition switch LOCK | Key ID warning display | ID NG |
| | Ignition switch LOCK | Steering lock information display | ROTAT |
| | Ignition switch LOCK | P position warning display | SFT P |
| | Ignition switch LOCK | Intelligent Key insert information display | INSRT |
| | Ignition switch LOCK | Intelligent Key low battery warning display | BATT |
| | Ignition switch ON | Take away warning display | NO KY |
| | Ignition switch LOCK | Key warning display | OUTKY |
| | Ignition switch ON | ACC warning display | LK WN |
| SHIFT IND | Ignition switch ON | Shift position indicator P display | P |
| | | Shift position indicator R display | R |
| | | Shift position indicator N display | N |
| | | Shift position indicator D display | D |
| | | Shift position indicator L display | L |
| O/D OFF SW | Ignition switch ON | Overdrive control switch ON | On |
| | | Overdrive control switch OFF | Off |
| M RANGE SW | Ignition switch ON | **NOTE:**<br>This item is displayed, but cannot be monitored. | Off |
| NM RANGE SW | Ignition switch ON | **NOTE:**<br>This item is displayed, but cannot be monitored. | Off |

| Monitor Item | Condition | | Value/Status |
|---|---|---|---|
| AT SFT UP SW | Ignition switch ON | **NOTE:** This item is displayed, but cannot be monitored. | Off |
| AT SFT DWN SW | Ignition switch ON | **NOTE:** This item is displayed, but cannot be monitored. | Off |
| ST SFT UP SW | Ignition switch ON | **NOTE:** This item is displayed, but cannot be monitored. | Off |
| ST SFT DWN SW | Ignition switch ON | **NOTE:** This item is displayed, but cannot be monitored. | Off |
| PKB SW | Ignition switch ON | Parking brake switch ON | On |
| | | Parking brake switch OFF | Off |
| BUCKLE SW | Ignition switch ON | Seat belt (driver side) not fastened | On |
| | | Seat belt (driver side) fastened | Off |
| BRAKE OIL SW | Ignition switch ON | Brake fluid level switch ON | On |
| | | Brake fluid level switch OFF | Off |
| DISTANCE [km] | Ignition switch ON | — | Possible driving distance calculated by combination meter |
| A/C AMP CONN | Ignition switch ON | Other than the following | On |
| | | Receives ambient sensor power signal | Off |
| ENTER SW | Ignition switch ON | When ❑ is pressed | On |
| | | Other than the above | Off |
| SELECT SW | Ignition switch ON | When ● is pressed | On |
| | | Other than the above | Off |
| OUTSIDE TEMP [°C] or [°F] | Ignition switch ON | — | Equivalent to ambient temperature **NOTE:** This may not match the indicated value on the information display. |
| FUEL LOW SIG | Ignition switch ON | Low fuel warning displayed | On |
| | | Low fuel warning not displayed | Off |
| BUZZER | Ignition switch ON | Buzzer ON | On |
| | | Buzzer OFF | Off |

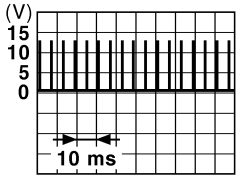
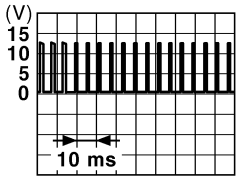
**NOTE:**

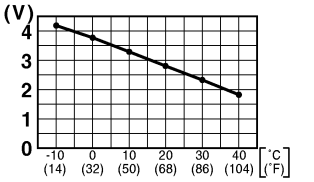
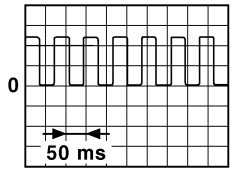
Some items are not available according to vehicle specification.

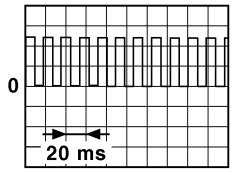
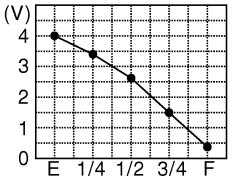
## TERMINAL LAYOUT




## PHYSICAL VALUES

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 1 (Y) | Ground | Battery power supply | Input | Ignition switch OFF | — | Battery voltage |
| 2 (O) | Ground | IGN signal | Input | Ignition switch ON | — | Battery voltage |
| 3 (B) | Ground | Ground | — | Ignition switch ON | — | 0 V |
| 5 (SB) | Ground | Illumination control signal | Output | Ignition switch ON | • Lighting switch 1ST<br>• When meter illumination is maximum |  JPNIA0828GB |
| | | | | | • Lighting switch 1ST<br>• When meter illumination is minimum |  JPNIA0827GB |
| 8 (SB) | 10 (O) | Trip reset signal | Input | Ignition switch ON | When trip reset switch is pressed. | 0 V |
| | | | | | Other than the above | 5 V |
| 10 (O) | Ground | Meter control switch ground | — | Ignition switch ON | — | 0 V |
| 11 (L) | 10 (O) | Enter switch signal | Input | Ignition switch ON | When ❑ is pressed. | 0 V |
| | | | | | Other than the above | 5 V |
| 12 (R) | 10 (O) | Select switch signal | Input | Ignition switch ON | When ● is pressed. | 0 V |
| | | | | | Other than the above | 5 V |
| 13 (Y*1 or V*2) | 10 (O) | Illumination control switch signal (+) | Input | Ignition switch ON | When + is pressed. | 0 V |
| | | | | | Other than the above | 5 V |
| 14 (GR) | 10 (O) | Illumination control switch signal (-) | Input | Ignition switch ON | When – is pressed. | 0 V |
| | | | | | Other than the above | 5 V |
| 15 (BR) | Ground | Air bag signal | Input | Ignition switch ON | Air bag warning lamp ON | 4 V |
| | | | | | Air bag warning lamp OFF | 0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 18 (L) | Ground | Ambient sensor signal | Input | Ignition switch ON | Changes depending to ambient temperature. |   JSNIA0014GB |
| 19 (P) | Ground | Ambient sensor power | Input | Ignition switch ON | — | 5 V |
| 20 (Y) | Ground | Ambient sensor ground | Input | Ignition switch ON | — | 0 V |
| 21 (L) | — | CAN-H | — | — | — | — |
| 22 (P) | — | CAN-L | — | — | — | — |
| 23 (B) | Ground | Ground | — | Ignition switch ON | — | 0 V |
| 24 (W) | Ground | Fuel level sensor signal ground | — | Ignition switch ON | — | 0 V |
| 25 (BR) | Ground | Alternator signal | Input | Ignition switch ON | Charge warning lamp ON | 2 V |
| | | | | | Charge warning lamp OFF | 12 V |
| 26 (G) | Ground | Parking brake switch signal | Input | Ignition switch ON | Parking brake ON | 0 V |
| | | | | | Parking brake OFF | 5 V |
| 27 (V) | Ground | Brake fluid level switch signal | Input | Ignition switch ON | Brake fluid level is normal | 12 V |
| | | | | | Brake fluid level is less than LOW level | 0 V |
| 29 (R) | Ground | Washer level switch signal | Input | Ignition switch ON | Washer level switch ON | 0 V |
| | | | | | Washer level switch OFF | 5 V |
| 30 (P) | Ground | Vehicle speed signal output (2-pulse) | Output | Ignition switch ON | Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)] | **NOTE:** The maximum voltage varies depending on the specification (destination unit).   JSNIA0015GB |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 31 (V) | Ground | Vehicle speed signal output (8-pulse) | Output | Ignition switch ON | Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)] | **NOTE:** The maximum voltage varies depending on the specification (destination unit).   JSNIA0012GB |
| 32 (LG) | Ground | Overdrive control switch signal | Input | Ignition switch ON | Overdrive control switch pressed. | 0 V |
| | | | | | Overdrive control switch not pressed. | 12 V |
| 34 (G) | Ground | Fuel level sensor signal | Input | Ignition switch ON | — |   JPNIA0740ZZ |
| 35 (SB) | Ground | Seat belt buckle switch signal (driver side) | Input | Ignition switch ON | When driver seat belt is fastened. | 12 V |
| | | | | | When driver seat belt is unfastened. | 0 V |
| 36 (R) | Ground | Seat belt buckle switch signal (passenger side) | Input | Ignition switch ON | • When getting in the passenger seat. • When passenger seat belt is fastened. | 12 V |
| | | | | | • When getting in the passenger seat. • When passenger seat belt is unfastened. | 0 V |

*1: Without automatic drive positioner

*2: With automatic drive positioner

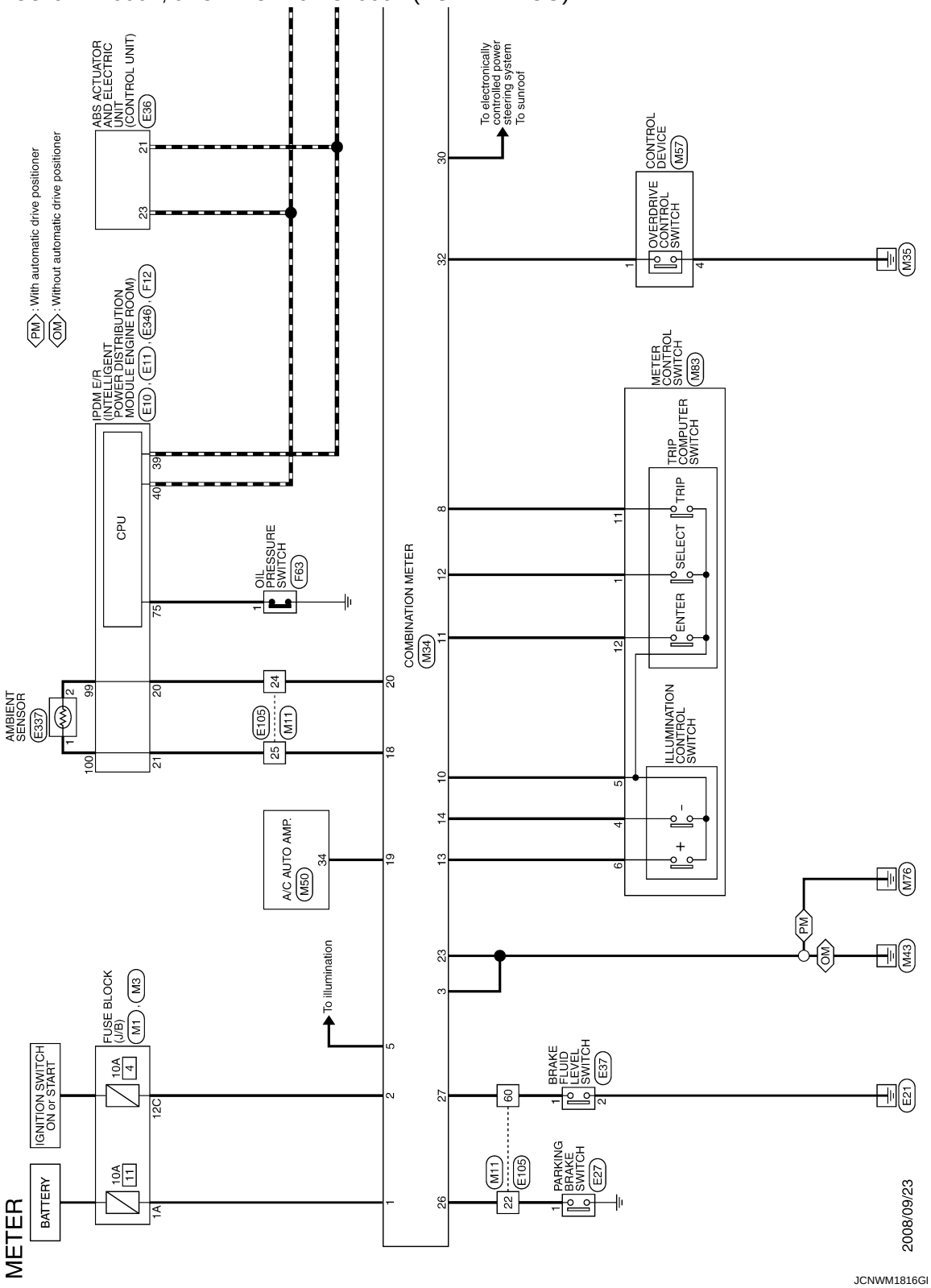
## Wiring Diagram - METER -

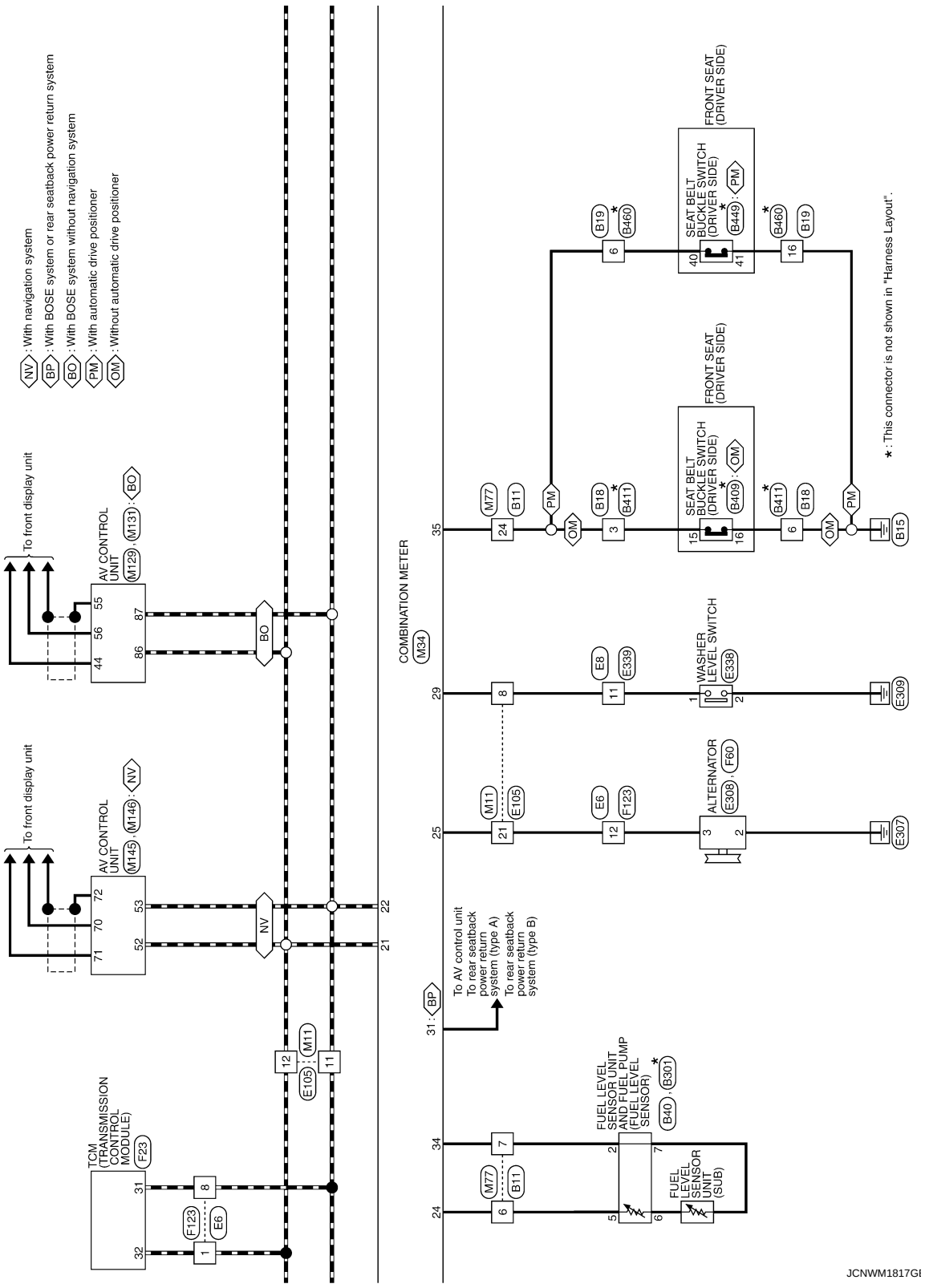
INFOID:0000000003470024

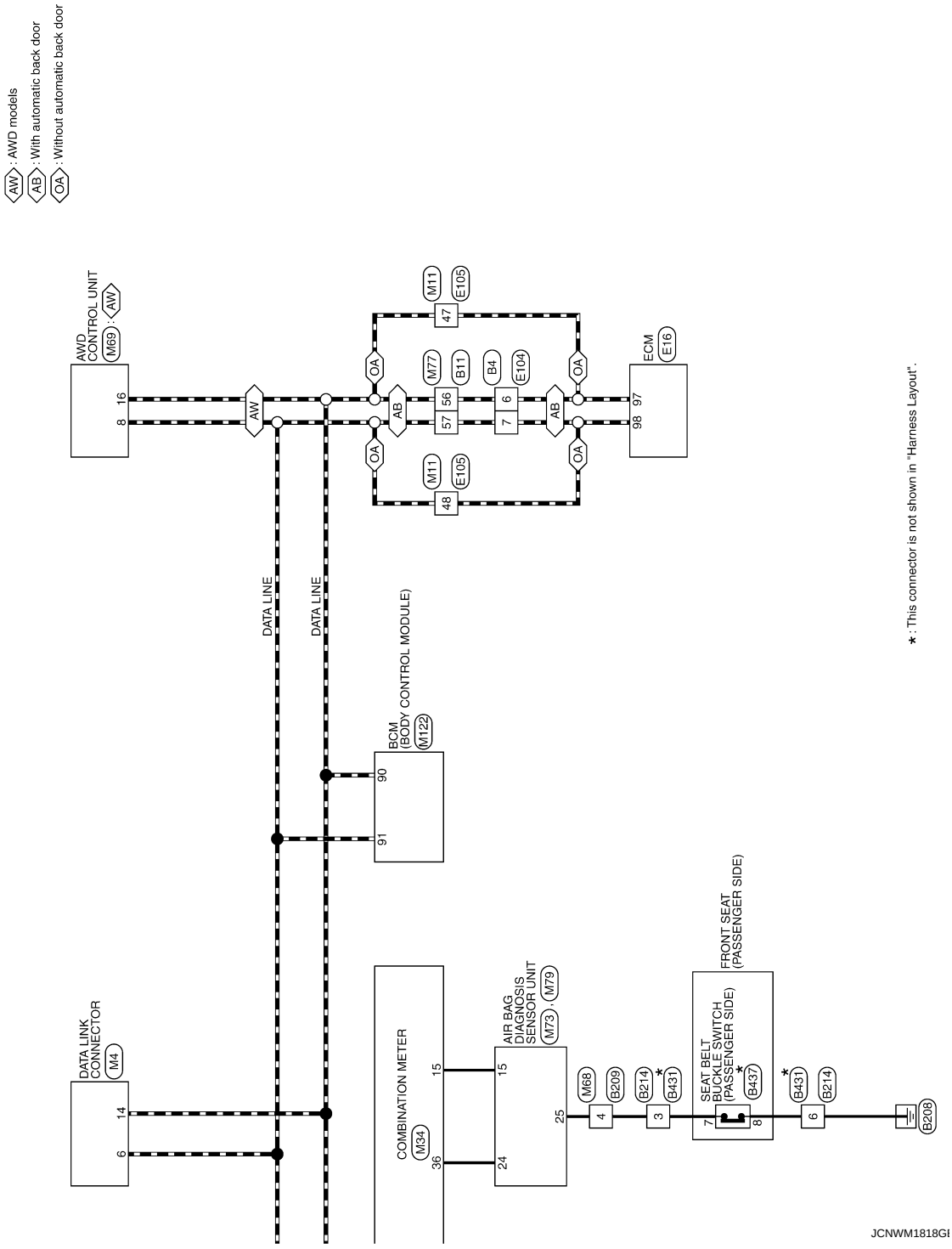
**NOTE:**

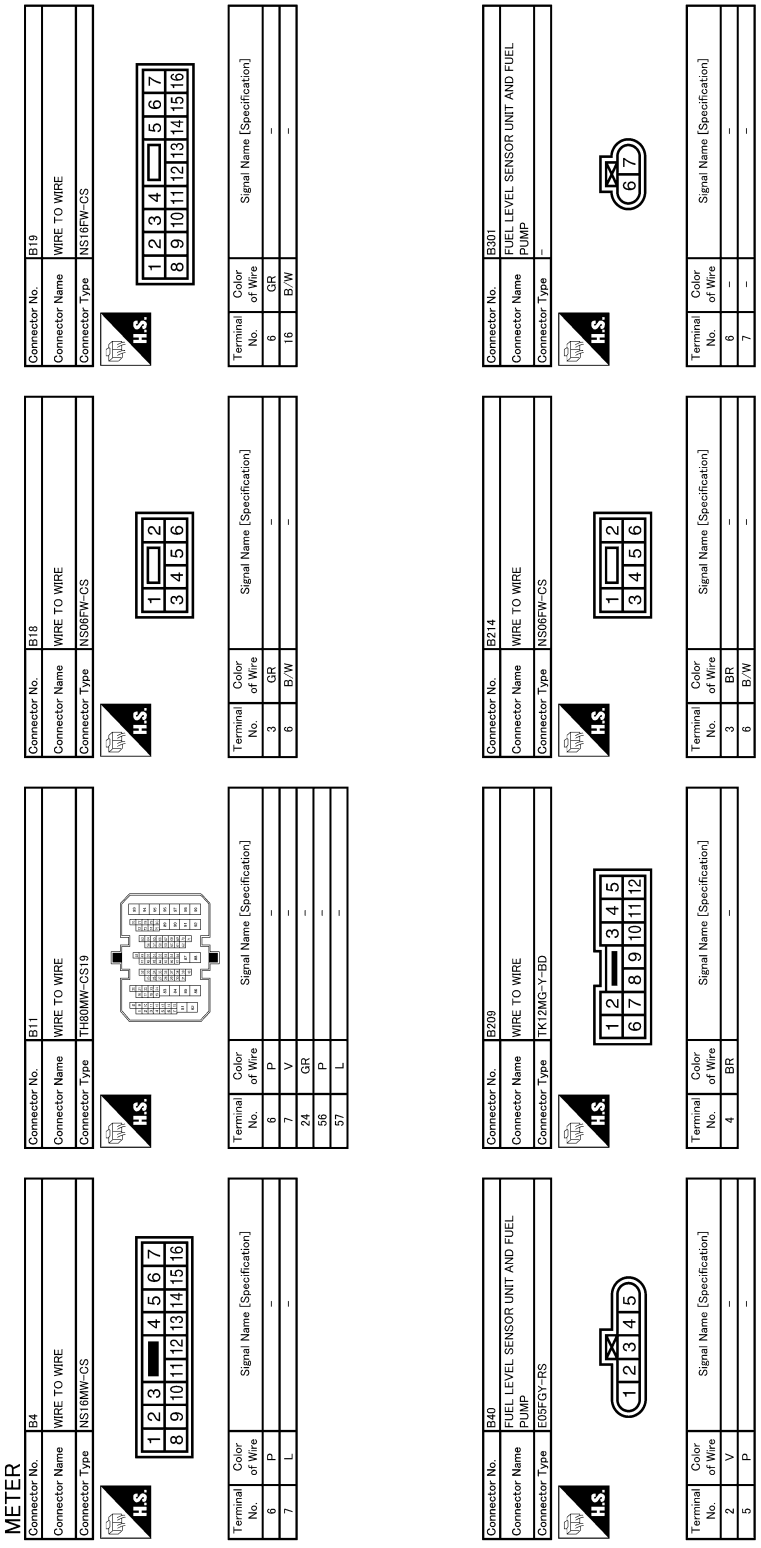
- Type A Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)

- Type B: From VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO), JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)




NV : With navigation system
BP : With BOSE system or rear seatback power return system
BO : With BOSE system without navigation system
PM : With automatic drive positioner
OM : Without automatic drive positioner
To front display unit
AV CONTROL UNIT
M129
M131 : BO
M145
M146 : NV
BO
NV
TCM (TRANSMISSION CONTROL MODULE)
F23
F123
E6
E105 : M11
COMBINATION METER
M34
To AV control unit
To rear seatback power return system (type A)
To rear seatback power return system (type B)
FUEL LEVEL SENSOR UNIT AND FUEL PUMP (FUEL LEVEL SENSOR)
B301
B40
FUEL LEVEL SENSOR UNIT (SUB)
WASHER LEVEL SWITCH
E338
E339
E309
ALTERNATOR
E308 : F60
E307
SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
B409 : OM
B449 : PM
FRONT SEAT (DRIVER SIDE)
B411
B460
B18
B19
B15
PM
OM
* : This connector is not shown in "Harness Layout".
JCNWM1817GB


AW : AWD models
AB : With automatic back door
OA : Without automatic back door
AWD CONTROL UNIT
M69
AW
16
8
ECM
E16
97
98
M11
E105
47
48
M77
B11
B4
E104
56
57
6
7
DATA LINE
DATA LINE
BCM
(BODY CONTROL MODULE)
M122
90
91
DATA LINK CONNECTOR
M4
14
6
COMBINATION METER
M34
15
36
AIR BAG DIAGNOSIS SENSOR UNIT
M73
M79
15
24
25
M68
B209
4
B214
3
B431
FRONT SEAT (PASSENGER SIDE)
SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
B437
7
8
B431
B214
6
B208
* : This connector is not shown in "Harness Layout".
JCNWM1818GB




JCNWM1819GB

METER

| Connector No. | B409 |
|---|---|
| Connector Name | SEAT BELT BUCKLE SWITCH (DRIVER SIDE) |
| Connector Type | A03MW-P |

H.S.

| 15 | 16 |
|---|---|

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 15 | W/G | – |
| 16 | GR | – |

| Connector No. | B411 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS06MW-CS |

H.S.

| 2 | 1 |
|---|---|
| 6 | 5 | 4 | 3 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | W/G | – |
| 6 | GR | – |

| Connector No. | B431 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS06MW-CS |

H.S.

| 2 | 1 |
|---|---|
| 6 | 5 | 4 | 3 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | W/G | – |
| 6 | GR | – |

| Connector No. | B437 |
|---|---|
| Connector Name | SEAT BELT BUCKLE SWITCH (PASSENGER SIDE) |
| Connector Type | A03MW-P |

H.S.

| 7 | 8 |
|---|---|

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 7 | W/G | – |
| 8 | GR | – |

| Connector No. | B449 |
|---|---|
| Connector Name | SEAT BELT BUCKLE SWITCH (DRIVER SIDE) |
| Connector Type | A03MW-P |

H.S.

| 40 | 41 |
|---|---|

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 40 | W/G | – |
| 41 | GR | – |

| Connector No. | B460 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |

H.S.

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | W/G | – |
| 16 | GR | – |

| Connector No. | E6 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK16MGY-1V |

H.S.

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L | – |
| 8 | P | – |
| 12 | BR | – |

| Connector No. | E8 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MBR-CS |

H.S.

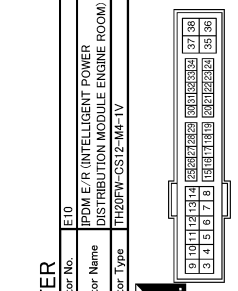
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 11 | G | – |

JCNWM1820GB

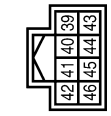
METER

| Connector No. | E10 |
|---|---|
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4-1V |



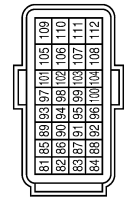

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 20 | L | – |
| 21 | O | – |

| Connector No. | E11 |
|---|---|
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH08FW-NH |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 39 | P | – |
| 40 | L | – |

| Connector No. | E16 |
|---|---|
| Connector Name | ECM |
| Connector Type | RH24FB-RZ8-L-LH |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 97 | P | VEHCAN-L |
| 98 | L | VEHCAN-H |

| Connector No. | E27 |
|---|---|
| Connector Name | PARKING BRAKE SWITCH |
| Connector Type | P01FB-A |


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | P | – |

| Connector No. | E36 |
|---|---|
| Connector Name | ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) |
| Connector Type | AE222FB-AJ24-LH |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 21 | P | CAN1 L |
| 23 | L | CAN1 H |

| Connector No. | E37 |
|---|---|
| Connector Name | BRAKE FLUID LEVEL SWITCH |
| Connector Type | YV02FGY |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | P | – |
| 2 | B | – |

| Connector No. | E104 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | P | – |
| 7 | L | – |

| Connector No. | E105 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70MW-CS10-M3 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | G | – |
| 11 | P | – |
| 12 | L | – |
| 21 | BR | – |
| 22 | P | – |
| 24 | L | – |
| 25 | O | – |
| 47 | P | – |
| 48 | L | – |
| 60 | V | – |

JCNWM1821GB

METER

| Connector No. | E308 |
|---|---|
| Connector Name | ALTERNATOR |
| Connector Type | - |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | B | - |

| Connector No. | E346 |
|---|---|
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH16FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 99 | BR | - |
| 100 | SB | - |

| Connector No. | E337 |
|---|---|
| Connector Name | AMBIENT SENSOR |
| Connector Type | RS02FB |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | SB | - |
| 2 | BR | - |

| Connector No. | F12 |
|---|---|
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 75 | LG | - |

| Connector No. | E338 |
|---|---|
| Connector Name | WASHER LEVEL SWITCH |
| Connector Type | Z02FBR |

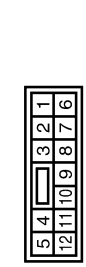
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | - |
| 2 | B | - |

| Connector No. | F23 |
|---|---|
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) |
| Connector Type | RH40FB-RZ8-L-RH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 31 | P | CAN-L |
| 32 | L | CAN-H |

| Connector No. | E339 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FBR-CS |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 11 | R | - |

| Connector No. | F60 |
|---|---|
| Connector Name | ALTERNATOR |
| Connector Type | HS03FB |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | BR | - |

JCNWM1822GB

METER

| Connector No. | F63 |
|---|---|
| Connector Name | OIL PRESSURE SWITCH |
| Connector Type | E01FGY-RS-AR |

H.S.



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | LG | – |

| Connector No. | F123 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK16FGY-1V |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L | – |
| 8 | P | – |
| 12 | BR | – |

| Connector No. | M1 |
|---|---|
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS06FW-M2 |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1A | Y | – |

| Connector No. | M3 |
|---|---|
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FW-CS |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 12C | O | – |

| Connector No. | M4 |
|---|---|
| Connector Name | DATA LINK CONNECTOR |
| Connector Type | BD16FW |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | L | – |
| 14 | P | – |

| Connector No. | M11 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70FW-CS10-M3 |

H.S.



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | R | – |
| 11 | P | – |
| 12 | L | – |
| 21 | BR | – |
| 22 | G | – |
| 24 | Y | – |
| 25 | L | – |
| 47 | P | – |
| 48 | L | – |
| 60 | V | – |

| Connector No. | M24 |
|---|---|
| Connector Name | COMBINATION METER |
| Connector Type | TH40FW-NH |

H.S.

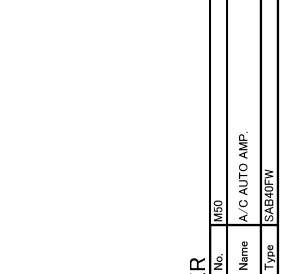



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | Y | BAT |
| 2 | O | IGN |
| 3 | B | GROUND |
| 5 | SB | ILLUMINATION CONTROL |
| 8 | SB | TRIP RESET SWITCH |
| 10 | O | METER CONTROL SW GND |
| 11 | L | ENTER SWITCH |
| 12 | R | SELECT SWITCH |
| 13 | V | ILLUMINATION CONTROL SWITCH (+)[With automatic drive positioner] |
| 13 | Y | ILLUMINATION CONTROL SWITCH (+)[Without automatic drive positioner] |
| 14 | GR | ILLUMINATION CONTROL SWITCH (–) |
| 15 | BR | AIR BAG |
| 18 | L | AMBIENT SENSOR |
| 19 | P | AMBIENT SENSOR POWER |
| 20 | Y | AMBIENT SENSOR GROUND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GROUND |
| 24 | W | FUEL LEVEL SENSOR GROUND |
| 25 | BR | CHG |
| 26 | G | PARKING BRAKE SWITCH |
| 27 | V | BRAKE FLUID LEVEL SWITCH |
| 29 | R | WASHER LEVEL SWITCH |
| 30 | P | VEHICLE SPEED (2-PULSE) |
| 31 | V | VEHICLE SPEED (8-PULSE) |
| 32 | LG | OD OFF/SPORTS |
| 34 | G | FUEL LEVEL SENSOR |
| 35 | SB | SEAT BELT BUCKLE SWITCH (DRIVER SIDE) |
| 36 | R | SEAT BELT BUCKLE SWITCH (PASSENGER SIDE) |

JCNWM1823GB

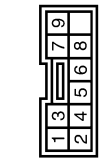
METER

| Connector No. | M50 |
|---|---|
| Connector Name | A/C AUTO AMP. |
| Connector Type | SAB40FW |



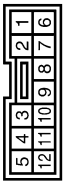
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 34 | P | AMB POWER |

| Connector No. | M57 |
|---|---|
| Connector Name | CONTROL DEVICE |
| Connector Type | TK10FW |



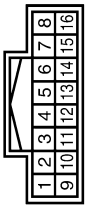
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | LG | – |
| 4 | B | – |

| Connector No. | M68 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK12FG-Y |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | L | – |

| Connector No. | M69 |
|---|---|
| Connector Name | AWD CONTROL UNIT |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 8 | L | CAN-H |
| 16 | P | CAN-L |

| Connector No. | M73 |
|---|---|
| Connector Name | AIR BAG DIAGNOSIS SENSOR UNIT |
| Connector Type | TK28FY-EX-SC |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 15 | BR | A/B W/L |
| 24 | R | SEATBELT W/L |

| Connector No. | M77 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80FW-CS19 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | W | – |
| 7 | G | – |
| 24 | SB | – |
| 56 | P | – |
| 57 | L | – |

| Connector No. | M79 |
|---|---|
| Connector Name | AIR BAG DIAGNOSIS SENSOR UNIT |
| Connector Type | TK12FY-1V-EX |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 25 | L | BUCKLE SW RH |

| Connector No. | M83 |
|---|---|
| Connector Name | METER CONTROL SWITCH |
| Connector Type | TH12FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | R | – |
| 4 | GR | – |
| 5 | O | – |
| 6 | V | –[With automatic drive positioner] |
| 6 | Y | –[Without automatic drive positioner] |
| 11 | SB | – |
| 12 | L | – |

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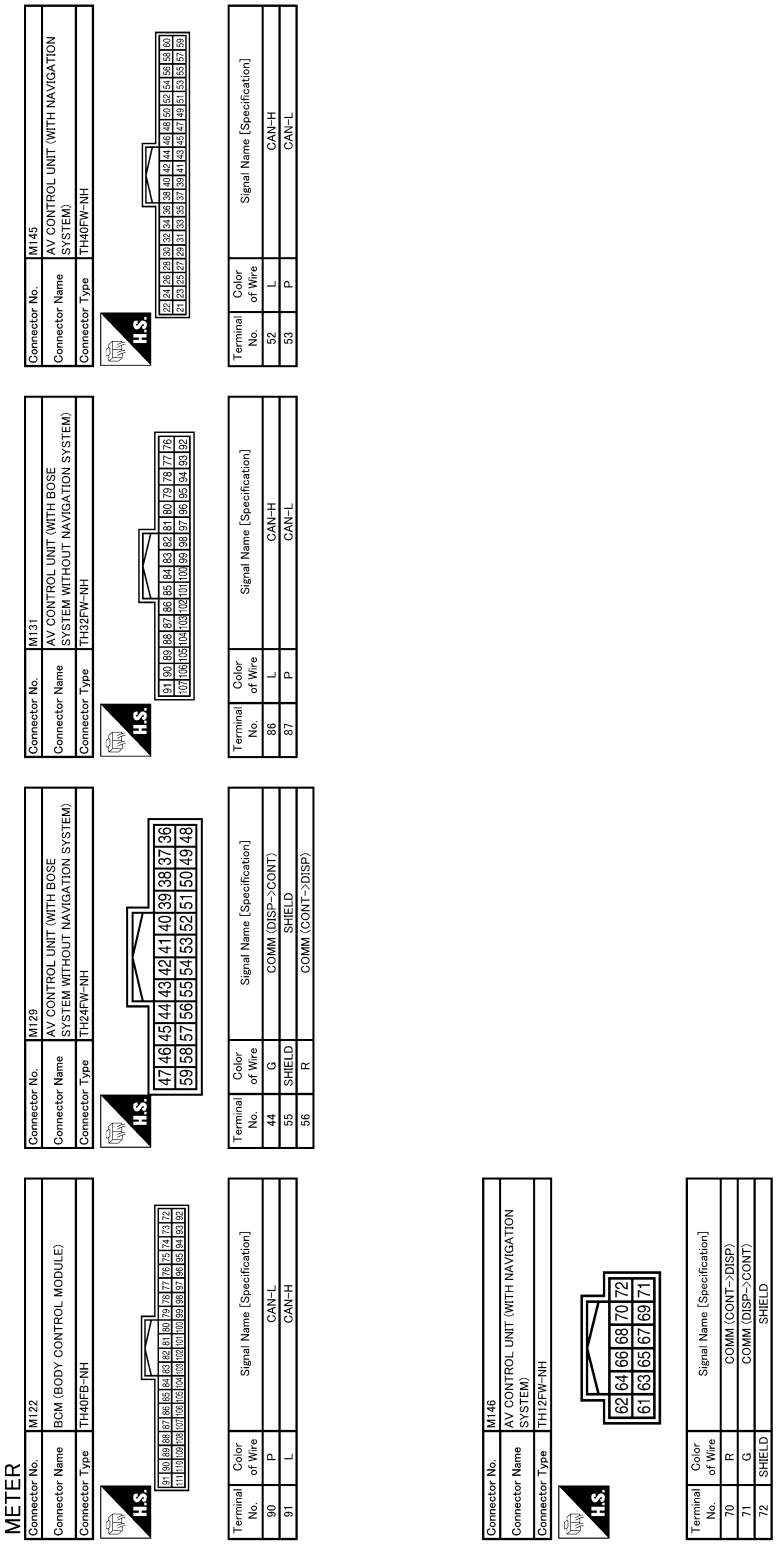



JCNWM1825GI

## Fail-Safe

*INFOID:0000000003470025*

### FAIL-SAFE

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning.

| Function | | Specifications |
|---|---|---|
| Speedometer | | Reset to zero by suspending communication. |
| Tachometer | | |
| Engine coolant temperature gauge | | |
| Illumination control | | When suspending communication, changes to nighttime mode. |
| Information display | Door open warning | The display turns off by suspending communication. |
| | Parking brake release warning | |
| | Instantaneous fuel warning | • When reception time of an abnormal signal is 2 seconds or less, the last received datum is used for calculation to indicate the result.<br>• When reception time of an abnormal signal is more than two seconds, the last result calculated during normal condition is indicated. |
| | Average fuel consumption | |
| | Average vehicle speed | |
| | Travel distance | |
| Buzzer | | The buzzer turns off by suspending communication. |
| Warning lamp/indicator lamp | ABS warning lamp | The lamp turns on by suspending communication. |
| | VDC OFF indicator lamp | |
| | SLIP indicator lamp | |
| | Brake warning lamp | |
| | AWD warning lamp | |
| | Low tire pressure warning lamp | The lamp turns ON after flashing for 1 minute. |
| | High beam indicator lamp | The lamp turns off by suspending communication. |
| | Turn signal indicator lamp | |
| | Light indicator lamp | |
| | Oil pressure warning lamp | |
| | Malfunction indicator lamp | |
| | CRUISE indicator lamp | |
| | O/D OFF indicator lamp | |
| | AWD LOCK indicator lamp | |
| | Key warning lamp | |

## DTC Index

INFOID:0000000003470026

| Display contents of CONSULT-III | Diagnostic item is detected when ... | Refer to |
|---|---|---|
| CAN COMM CIRCUIT [U1000] | When combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more. | MWI-38, "Diagnosis Procedure" |
| CONTROL UNIT (CAN) [U1010] | When detecting error during the initial diagnosis of the CAN controller of combination meter. | MWI-39, "Diagnosis Procedure" |
| VEHICLE SPEED [B2205] | The abnormal vehicle speed signal is input from the ABS actuator and electric unit (control unit) for 2 seconds or more. | MWI-40, "Diagnosis Procedure" |
| ENGINE SPEED [B2267] | If ECM continuously transmits abnormal engine speed signals for 2 seconds or more. | MWI-41, "Diagnosis Procedure" |
| WATER TEMP [B2268] | If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more. | MWI-42, "Diagnosis Procedure" |

# BCM (BODY CONTROL MODULE)

## Reference Value

INFOID:0000000003470027

### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III 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/AUTO | Off |
| | Front wiper switch INT/AUTO | 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 |
| RR WIPER ON | Other than rear wiper switch ON | Off |
| | Rear wiper switch ON | On |
| RR WIPER INT | Other than rear wiper switch INT | Off |
| | Rear wiper switch INT | On |
| RR WASHER SW | Rear washer switch OFF | Off |
| | Rear washer switch ON | On |
| RR WIPER STOP | Rear wiper is in STOP position | Off |
| | Rear wiper is not in STOP position | On |
| 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 | Front fog lamp switch OFF | Off |
| | Front fog lamp switch ON | On |
| RR FOG SW | **NOTE:**<br>The item is indicated, but not monitored. | Off |

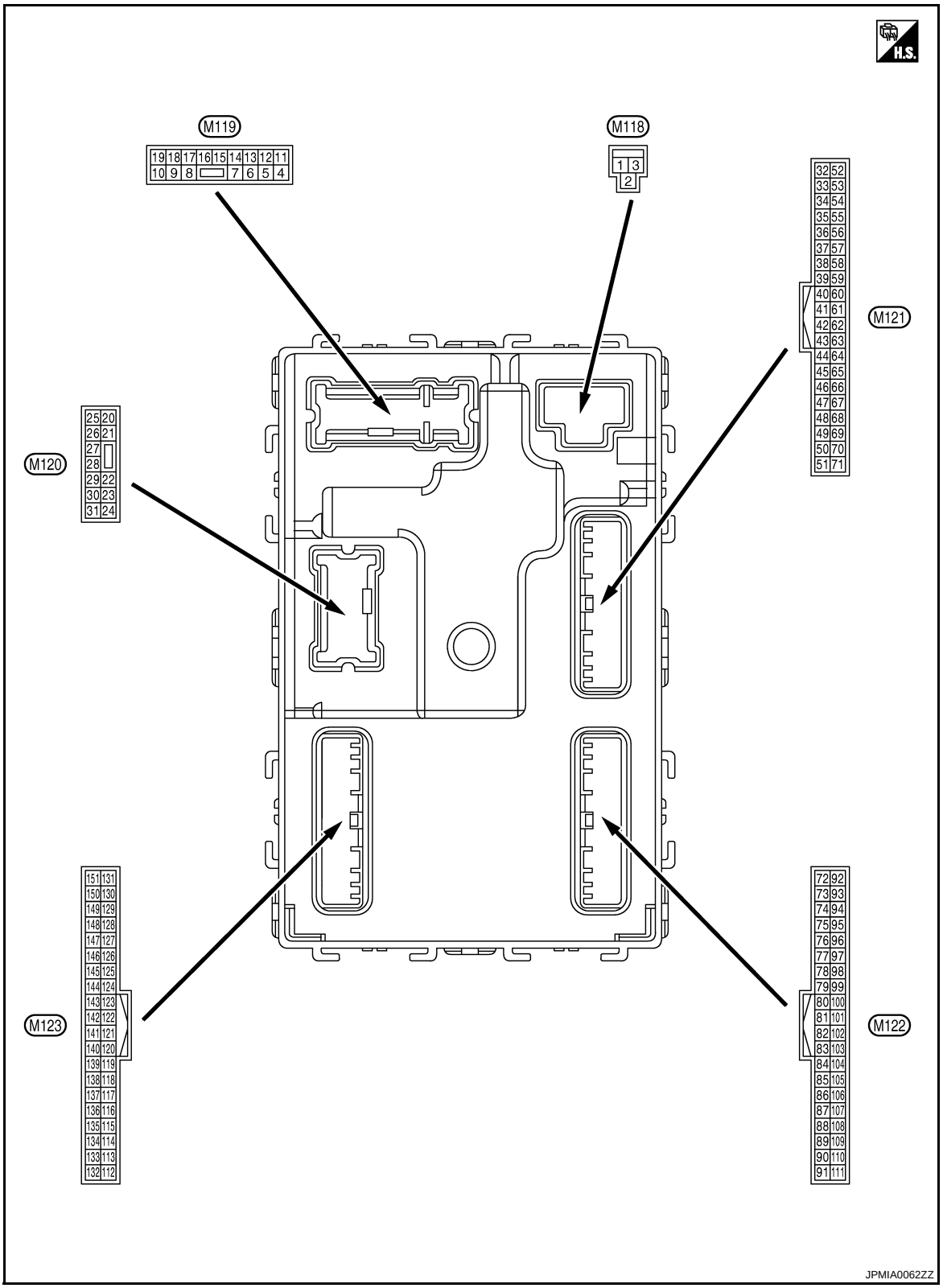
| Monitor Item | Condition | Value/Status |
|---|---|---|
| DOOR SW-DR | Driver door closed | Off |
| | Driver door opened | On |
| DOOR SW-AS | Passenger door closed | Off |
| | Passenger door opened | On |
| DOOR SW-RR | Rear RH door closed | Off |
| | Rear RH door opened | On |
| DOOR SW-RL | Rear LH door closed | Off |
| | Rear LH door opened | On |
| DOOR SW-BK | Back door closed | Off |
| | Back door opened | On |
| CDL LOCK SW | Other than power door lock switch LOCK | Off |
| | Power door lock switch LOCK | On |
| CDL UNLOCK SW | Other than power door lock switch UNLOCK | Off |
| | Power door lock 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>At model with BOSE audio system this item is not monitored. | Rear window defogger switch OFF | Off |
| | Rear window defogger switch ON | On |
| TR CANCEL SW | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| TR/BD OPEN SW | Back door opener switch OFF | Off |
| | While the back door opener switch is turned ON | On |
| TRNK/HAT MNTR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| RKE-LOCK | LOCK button of the key is not pressed | Off |
| | LOCK button of the key is pressed | On |
| RKE-UNLOCK | UNLOCK button of the key is not pressed | Off |
| | UNLOCK button of the key is pressed | On |
| RKE-TR/BD | BACK DOOR OPEN button of the key is not pressed | Off |
| | BACK DOOR OPEN button of the key is pressed | On |
| RKE-PANIC | PANIC button of the key is not pressed | Off |
| | PANIC button of the key is pressed | On |
| RKE-P/W OPEN | UNLOCK button of the key is not pressed | Off |
| | UNLOCK button of the key is pressed and held | On |
| RKE-MODE CHG | LOCK/UNLOCK button of the key is not pressed and held simultaneously | Off |
| | LOCK/UNLOCK button of the 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 -RR | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| REQ SW -BD/TR | Back door request switch is not pressed | Off |
| | Back door request switch is pressed | 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 | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| ACC RLY -F/B | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| CLUCH SW | **NOTE:**<br>The item is indicated, but not monitored. | Off |
| 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 |
| | Stop lamp switch 1 signal circuit is normal | On |
| DETE/CANCL SW | Selector lever in P position | Off |
| | Selector lever in any position other than P | On |
| SFT PN/N SW | Selector lever in any position other than P and N | Off |
| | Selector lever in P or N position | On |
| S/L -LOCK | Steering is unlocked | Off |
| | Steering is locked | On |
| S/L -UNLOCK | Steering is locked | Off |
| | Steering is unlocked | On |
| S/L RELAY-F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| 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 |
| 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 | Off |
| | Selector lever in P or N position | On |

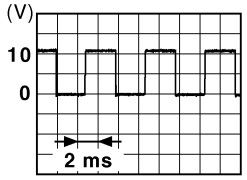
| Monitor Item | Condition | Value/Status |
|---|---|---|
| SFT P -MET | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT N -MET | Selector lever in any position other than N | Off |
| | Selector lever in N position | On |
| ENGINE STATE | Engine stopped | Stop |
| | While the engine stalls | Stall |
| | At engine cranking | Crank |
| | Engine running | Run |
| S/L LOCK-IPDM | Steering is unlocked | Off |
| | Steering is locked | On |
| S/L UNLK-IPDM | Steering is locked | Off |
| | Steering is unlocked | On |
| S/L RELAY-REQ | Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK. | Off |
| | Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK. | On |
| 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 (5 seconds) | READY |
| | Driver door is unlocked | UNLOCK |
| DOOR STAT-AS | Passenger door is locked | LOCK |
| | Wait with selective UNLOCK operation (5 seconds) | READY |
| | Passenger door is unlocked | UNLOCK |
| ID OK FLAG | Steering is locked | Reset |
| | Steering is unlocked | 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 key is not inserted into key slot | Off |
| | The key is inserted into key slot | On |
| RKE OPE COUN1 | During the operation of the key | Operation frequency of the key |
| RKE OPE COUN2 | **NOTE:**<br>The item is indicated, but not monitored. | — |
| 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 |

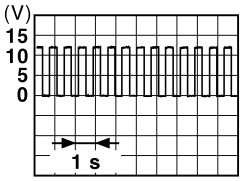
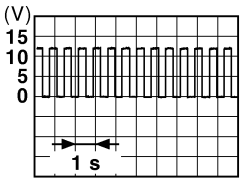
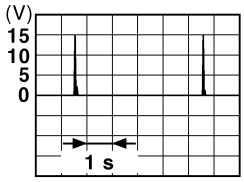
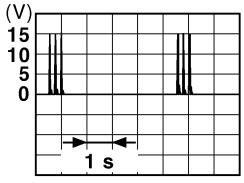
| Monitor Item | Condition | Value/Status |
|---|---|---|
| CONFIRM ID2 | The key ID that the key slot receives is not recognized by the second key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the second key ID registered to BCM. | Done |
| CONFIRM ID1 | The 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 key is not registered to BCM | Yet |
| | The ID of fourth key is registered to BCM | Done |
| TP 3 | The ID of third key is not registered to BCM | Yet |
| | The ID of third key is registered to BCM | Done |
| TP 2 | The ID of second key is not registered to BCM | Yet |
| | The ID of second key is registered to BCM | Done |
| TP 1 | The ID of first key is not registered to BCM | Yet |
| | The ID of first 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 |

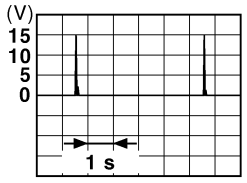
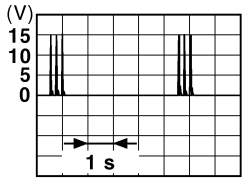
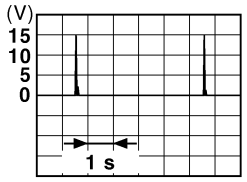
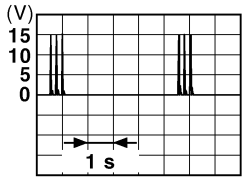
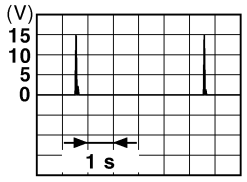
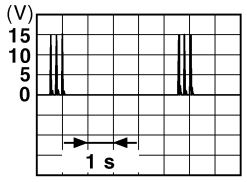
TERMINAL LAYOUT

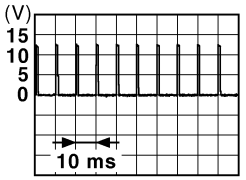
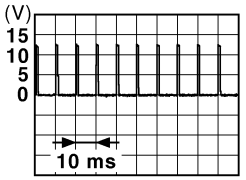
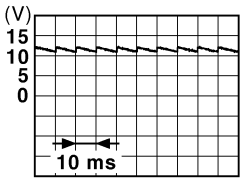
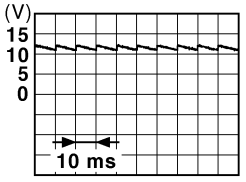


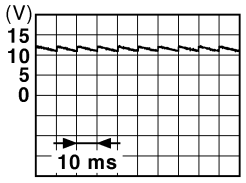
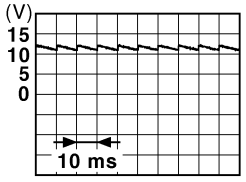
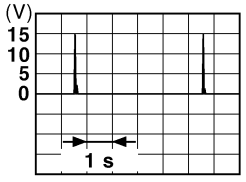
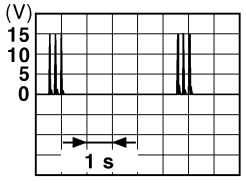

PHYSICAL VALUES

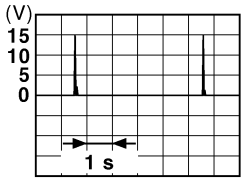
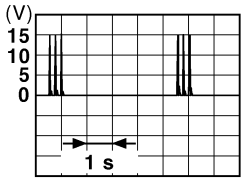
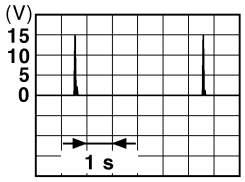
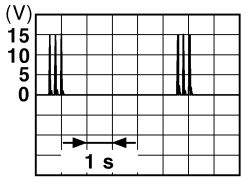
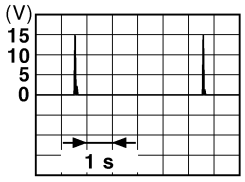
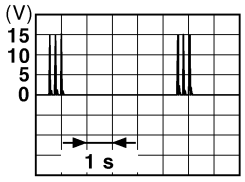
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (GR) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | Battery voltage |
| 3 (L) | Ground | P/W power supply (RAP) | Output | Ignition switch ON | | Battery voltage |
| 4 (P) | 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) | | Battery voltage |
| 5 (G) | Ground | Passenger door UNLOCK | Output | Passenger door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 7 (W) | Ground | Step lamp | Output | Step lamp | ON | 0 V |
| | | | | | OFF | Battery voltage |
| 8 (V) | Ground | All doors LOCK | Output | All doors | LOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than LOCK (Actuator is not activated) | 0 V |
| 9 (G) | Ground | Driver door UNLOCK | Output | Driver door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 10 (P) | Ground | Rear RH door and rear LH door UNLOCK | Output | Rear RH door and rear LH door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 11 (LG) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 13 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 14 (O) | 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 (L) | Ground | ACC indicator lamp | Output | Ignition switch | OFF | Battery voltage |
| | | | | | ACC | 0.2 V |
| | | | | | ON | 0 V |

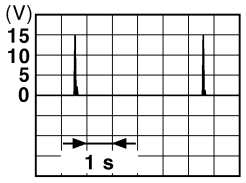
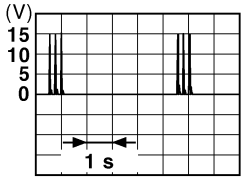
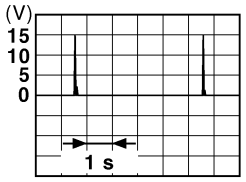
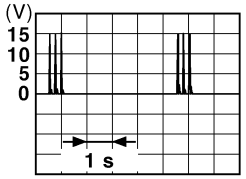
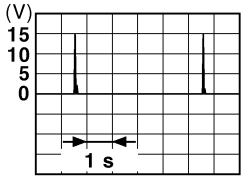
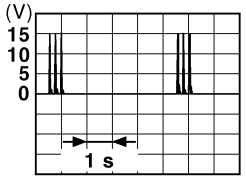
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 17 (G) | Ground | Turn signal RH | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch RH |  PKID0926E<br>6.5 V |
| 18 (BR) | Ground | Turn signal LH | Output | Ignition switch ON | Turn signal switch OFF | 0 V |
| | | | | | Turn signal switch LH |  PKID0926E<br>6.5 V |
| 19 (Y) | Ground | Room lamp timer control | Output | Interior room lamp | OFF | Battery voltage |
| | | | | | ON | 0 V |
| 23 (BR) | Ground | Back door open | Output | Back door | OPEN (Back door opener actuator is activated) | Battery voltage |
| | | | | | Other than OPEN (Back door opener actuator is not activated) | 0 V |
| 26 (G) | Ground | Rear wiper | Output | Rear wiper | OFF (Stopped) | 0 V |
| | | | | | ON (Operated) | Battery voltage |
| 34*[1] (B) | Ground | Luggage 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 |

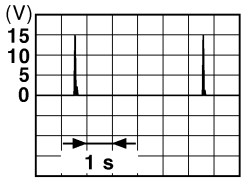
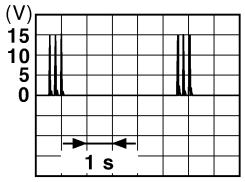
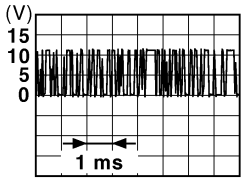
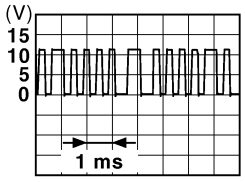
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 35*1 (W) | Ground | Luggage room antenna (+) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 38*1 (L) | Ground | Rear bumper antenna (-) | Output | When the back 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 |
| 39*1 (BR) | Ground | Rear bumper antenna (+) | Output | When the back 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 (L) | Ground | Ignition relay (IPDM E/R) control | Output | Ignition switch | OFF or ACC | Battery voltage |
| | | | | | ON | 0 V |

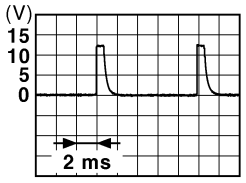
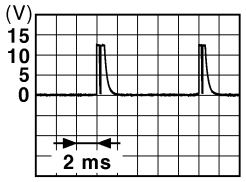
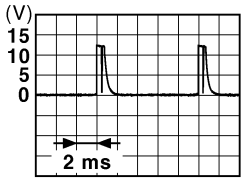
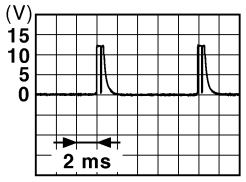
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 52 (R) | Ground | Starter relay control | Output | Ignition switch ON | When selector lever is in P or N position | Battery voltage |
| | | | | | When selector lever is not in P or N position | 0.3 V |
| | | | | Ignition switch OFF | | 0 V |
| 61*1 (R) | Ground | Back door request switch | Input | Back door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB 1.0 V |
| 64*1 (GR) | Ground | Warning buzzer | Output | Warning buzzer | Sounding | 0 V |
| | | | | | Not sounding | Battery voltage |
| 65 (O) | Ground | Rear wiper stop position | Input | Rear wiper | In stop position |  JPMIA0016GB 1.0 V |
| | | | | | Not in stop position | 0 V |
| 66 (Y) | Ground | Back door switch | Input | Back door switch | OFF (When back door closes) |  JPMIA0011GB 11.8 V |
| | | | | | ON (When back door opens) | 0 V |
| 67 (LG) | Ground | Back door opener switch | Input | Back door opener switch | Pressed | 0 V |
| | | | | | Not pressed |  JPMIA0011GB 11.8 V |

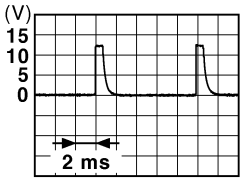
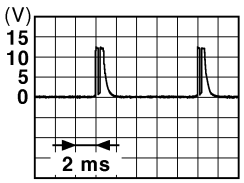
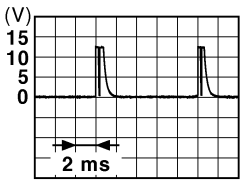
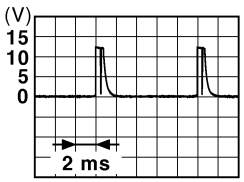
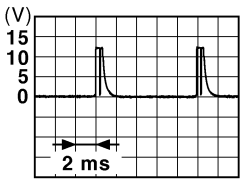
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 68 (W) | Ground | Rear RH door switch | Input | Rear RH door switch | OFF (When rear RH door closes) |  JPMIA0011GB<br>11.8 V |
| | | | | | ON (When rear RH door opens) | 0 V |
| 69 (R) | Ground | Rear LH door switch | Input | Rear LH door switch | OFF (When rear LH door closes) |  JPMIA0011GB<br>11.8 V |
| | | | | | ON (When rear LH door opens) | 0 V |
| 72*1 (B) | 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 |

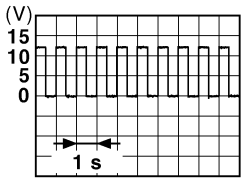
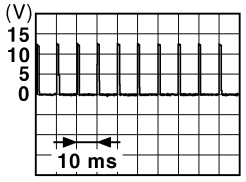
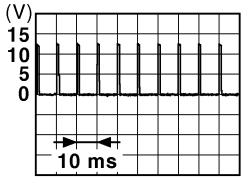
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 73*1 (W) | Ground | Room antenna 2 (+) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 74*1 (Y) | 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*1 (LG) | 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 |

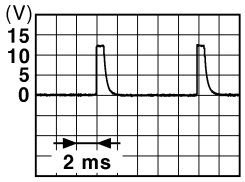
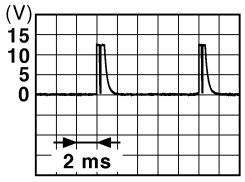
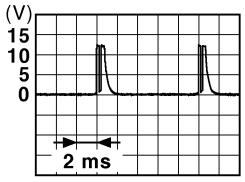
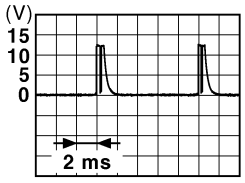
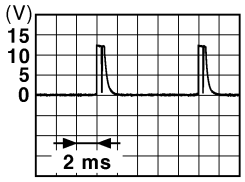
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 76*1 (V) | Ground | Driver door antenna (-) | Output | When the driver door request switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the antenna detection area |  JMKIA0063GB |
| 77*1 (P) | 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*1 (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 |

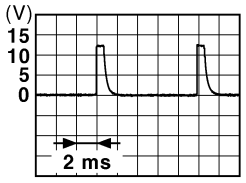
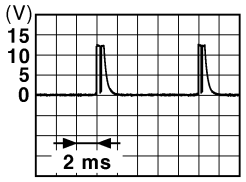
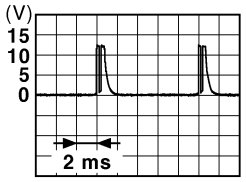
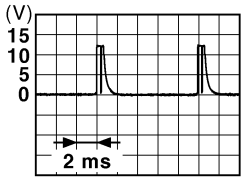
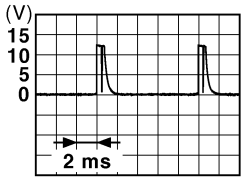
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 79*1 (G) | Ground | Room antenna 1 (+) (Instrument panel) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |  JMKIA0062GB |
| | | | | | When Intelligent Key is not in the passenger compartment |  JMKIA0063GB |
| 80 (SB) | Ground | NATS antenna amp (built in key slot) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 81 (O) | Ground | NATS antenna amp (built in key slot) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 82 (BR) | Ground | Ignition relay [fuse block (J/B)] control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 83 (P) | Ground | Remote keyless entry receiver communication | Input/ Output | During waiting | |  JMKIA0064GB |
| | | | | When operating either button on the key | |  JMKIA0065GB |

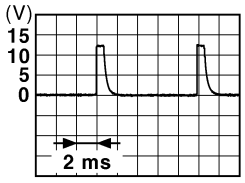
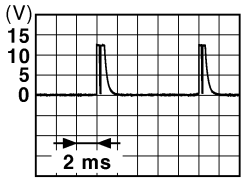
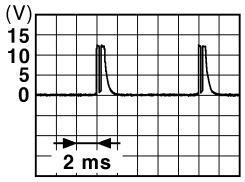
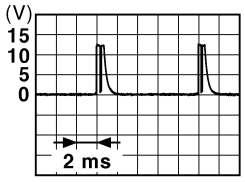
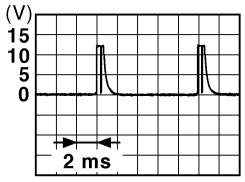
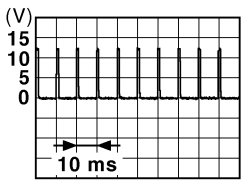
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 87 (R) | Ground | Combination switch INPUT 5 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Front fog lamp switch ON (Wiper intermittent dial 4) |  JPMIA0037GB 1.3 V |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4) |  JPMIA0039GB 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 |

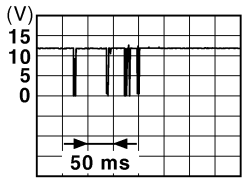
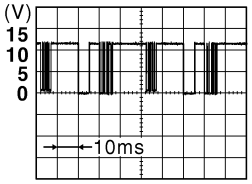
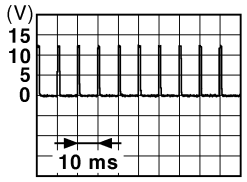
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 88 (GR) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch HI (Wiper intermittent dial 4) |  JPMIA0036GB 1.3 V |
| | | | | | Lighting switch 2ND (Wiper intermittent dial 4) |  JPMIA0037GB 1.3 V |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) |  JPMIA0039GB 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 |
| 89 (BR) | Ground | Push-button ignition switch (push switch) | Input | Push-button ignition switch (push switch) | Pressed | 0 V |
| | | | | | Not pressed | Battery voltage |
| 90 (P) | Ground | CAN - L | Input/ Output | — | | — |
| 91 (L) | Ground | CAN - H | Input/ Output | — | | — |

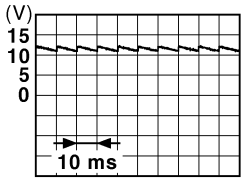
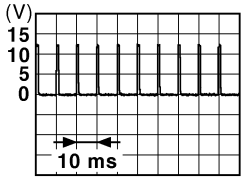
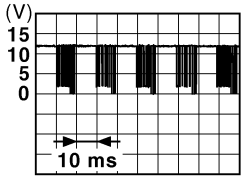
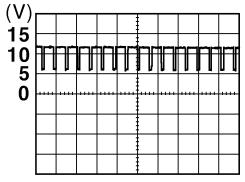
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 92 (R)*1 (L)*2 | Ground | Key slot illumination | Output | Key slot illumination | OFF | 0 V |
| | | | | | Blinking |  JPMIA0015GB 6.5 V |
| | | | | | ON | Battery voltage |
| 93 (L) | Ground | ON indicator lamp | Output | Ignition switch | OFF or ACC | Battery voltage |
| | | | | | ACC | 0.2 V |
| | | | | | ON | 0 V |
| 95 (L) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | Battery voltage |
| 96 (Y) | Ground | Control device (detention switch) power supply | Output | — | | Battery voltage |
| 97 (O) | Ground | Steering lock condition No. 1 | Input | Steering lock | LOCK status | 0 V |
| | | | | | UNLOCK status | Battery voltage |
| 98 (L) | Ground | Steering lock condition No. 2 | Input | Steering lock | LOCK status | Battery voltage |
| | | | | | UNLOCK status | 0 V |
| 99 (V) | Ground | Selector lever P position switch | Input | Selector lever | P position | 0 V |
| | | | | | Any position other than P | Battery voltage |
| 100*1 (P) | Ground | Passenger door request switch | Input | Passenger door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB 1.0 V |
| 101*1 (W) | Ground | Driver door request switch | Input | Driver door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  JPMIA0016GB 1.0 V |
| 102 (Y) | Ground | Blower fan motor relay control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 103 (L) | Ground | Remote keyless entry receiver power supply | Output | Ignition switch OFF | | Battery voltage |

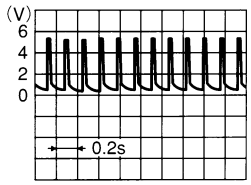
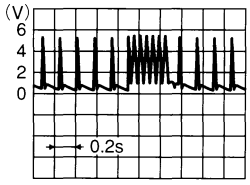
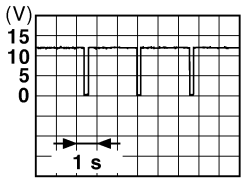
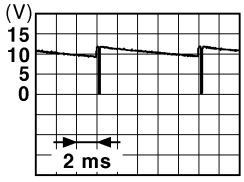
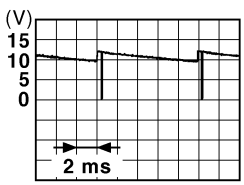
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 106 (Y) | Ground | Steering lock unit power supply | Output | Ignition switch | OFF or ACC | Battery voltage |
| | | | | | ON | 0 V |
| 107 (O) | 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 |

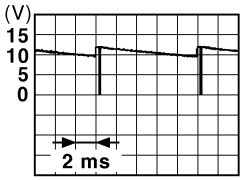
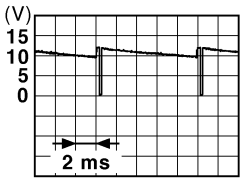
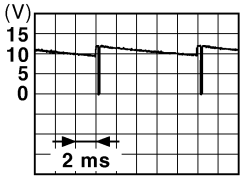
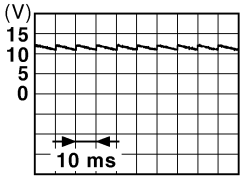
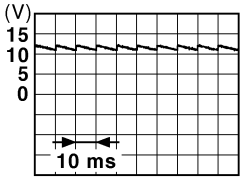
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 108 (P) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  JPMIA0041GB 1.4 V |
| | | | | | Lighting switch AUTO (Wiper intermittent dial 4) |  JPMIA0038GB 1.3 V |
| | | | | | Lighting switch 1ST (Wiper intermittent dial 4) |  JPMIA0036GB 1.3 V |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) |  JPMIA0040GB 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 (SB) | 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/ AUTO |  JPMIA0038GB 1.3 V |
| | | | | | Front wiper switch HI |  JPMIA0040GB 1.3 V |
| 110 (G) | 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 | | | |
| 111 (LG) | Ground | Steering lock unit communication | Input/ Output | Steering lock | LOCK status | Battery voltage |
| | | | | | LOCK or UNLOCK |  JMKIA0066GB |
| | | | | | For 15 seconds after UNLOCK | Battery voltage |
| | | | | | 15 seconds or later after UNLOCK | 0 V |
| 112 (R) | Ground | Rain sensor serial link | Input/ Output | Ignition switch ON | |  JPMIA0156GB<br>8.7 V |
| 113*3 (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 |
| 116 (GR) | Ground | Stop lamp switch 1 | Input | — | | Battery voltage |
| 118 (L) | 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*1 (W) | Ground | Front door lock assembly driver side (Unlock sensor) | Input | Driver door | LOCK status (unlock sensor switch OFF) |  JPMIA0012GB<br>1.1 V |
| | | | | | UNLOCK status (unlock sensor switch ON) | 0 V |
| 121 (Y) | Ground | Key slot switch | Input | When the key is inserted into key slot | | Battery voltage |
| | | | | When the key is not inserted into key slot | | 0 V |
| 122 (R) | Ground | ACC feedback | Input | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | Battery voltage |
| 123 (G) | Ground | IGN feedback | Input | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 124 (R) | Ground | Passenger door switch | Input | Passenger door switch | OFF (When passenger door closes) |  JPMIA0011GB 11.8 V |
| | | | | | ON (When passenger door opens) | 0 V |
| 130*4 (BR) | 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 (G) | Ground | Power window switch communication | Input/ Output | Ignition switch ON | |  JPMIA0013GB 10.2 V |
| | | | | Ignition switch OFF or ACC | | Battery voltage |
| 133 (W) | Ground | Push-button ignition switch illumination | Output | Push-button ignition switch illumination | ON (When tail lamps OFF) | 9.5 V |
| | | | | | ON (When tail lamps ON) | **NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB |
| | | | | | OFF | 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*5 (O) | Ground | Tire pressure receiver communication | Input/ Output | Ignition switch ON | Standby state |  OCC3881D |
| | | | | | When receiving the signal from the transmitter |  OCC3880D |
| 140 (GR) | Ground | Selector lever P/N position | Input | Selector lever | P or N position | Battery voltage |
| | | | | | Except P and N positions | 0 V |
| 141 (O) | Ground | Security indicator | Output | Security indicator | ON | 0 V |
| | | | | | Blinking |  JPMIA0014GB<br>11.3 V |
| | | | | | OFF | Battery voltage |
| 142 (L) | Ground | Combination switch OUTPUT 5 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Lighting switch 1ST |  JPMIA0031GB<br>10.7 V |
| | | | | | Lighting switch HI | |
| | | | | | Lighting switch 2ND | |
| | | | | | Turn signal switch RH | |
| 143 (W) | 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<br>10.7 V |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) | |
| | | | | | 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 | |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 144 (P) | 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 |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4) | |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) | |
| | | | | | 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 (V) | Ground | Combination switch OUTPUT 3 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Front wiper switch INT/ AUTO |  JPMIA0034GB 10.7 V |
| | | | | | Front wiper switch LO | |
| | | | | | Lighting switch AUTO | |
| 146 (Y) | Ground | Combination switch OUTPUT 4 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | | Front fog lamp switch ON |  JPMIA0035GB 10.7 V |
| | | | | | Lighting switch 2ND | |
| | | | | | Lighting switch PASS | |
| | | | | | Turn signal switch LH | |
| 149*5 (W) | Ground | Tire pressure warning check switch | Input | Ignition switch ON | |  JPMIA0011GB 11.8 V |
| 150 (SB) | Ground | Driver door switch | Input | Driver door switch | OFF (When driver door closes) |  JPMIA0011GB 11.8 V |
| | | | | | ON (When driver door opens) | 0 V |

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|---|---|---|---|---|---|---|
| + | – | Signal name | Input/ Output | | | |
| 151 (G) | Ground | Rear window defogger relay control | Output | Rear window defogger | Active | 0 V |
| | | | | | Not activated | Battery voltage |

**NOTE:**

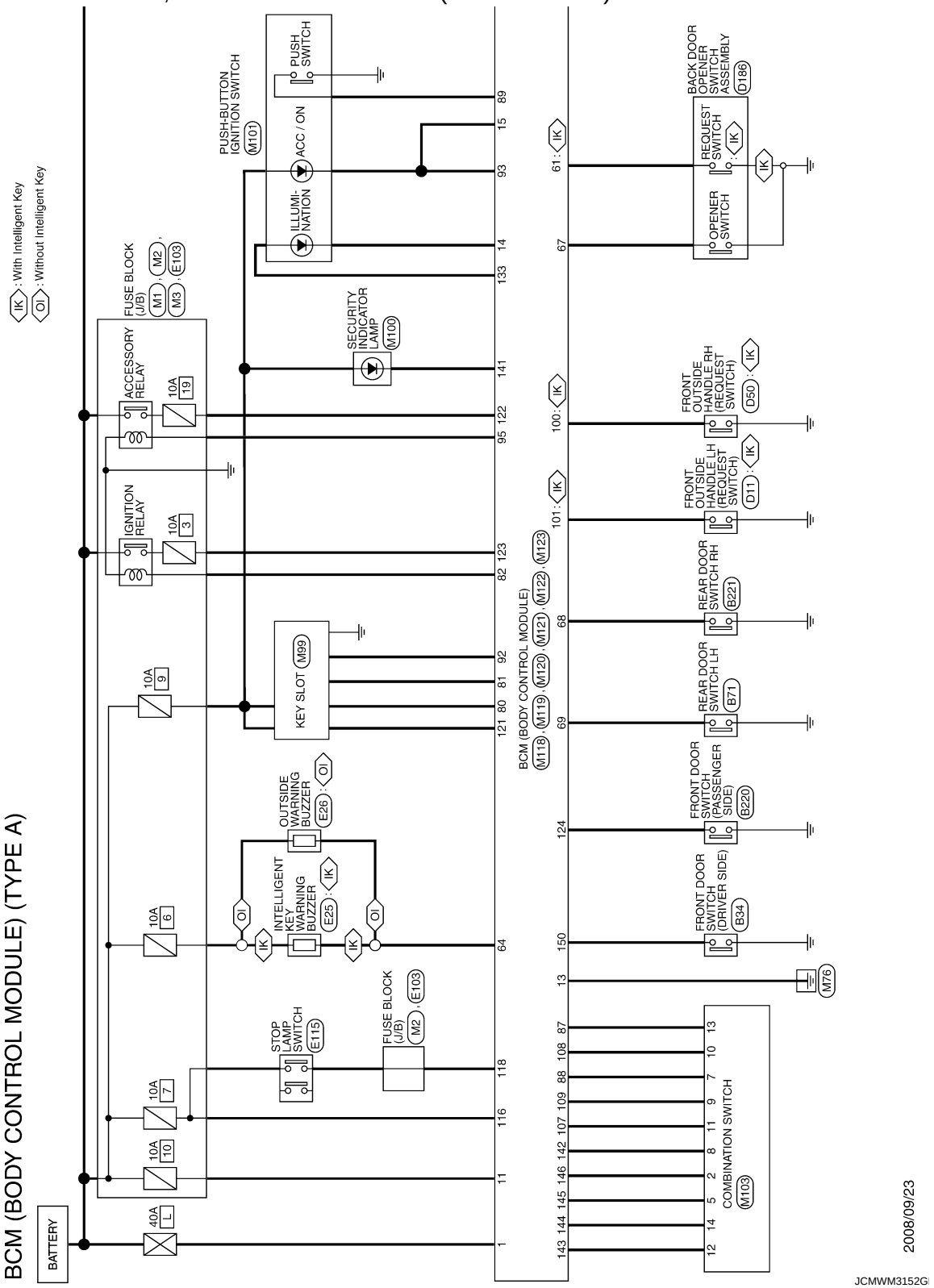
- *1: With Intelligent Key system
- *2: Without Intelligent Key system
- *3: With auto light system
- *4: Without BOSE audio system
- *5: With TPMS

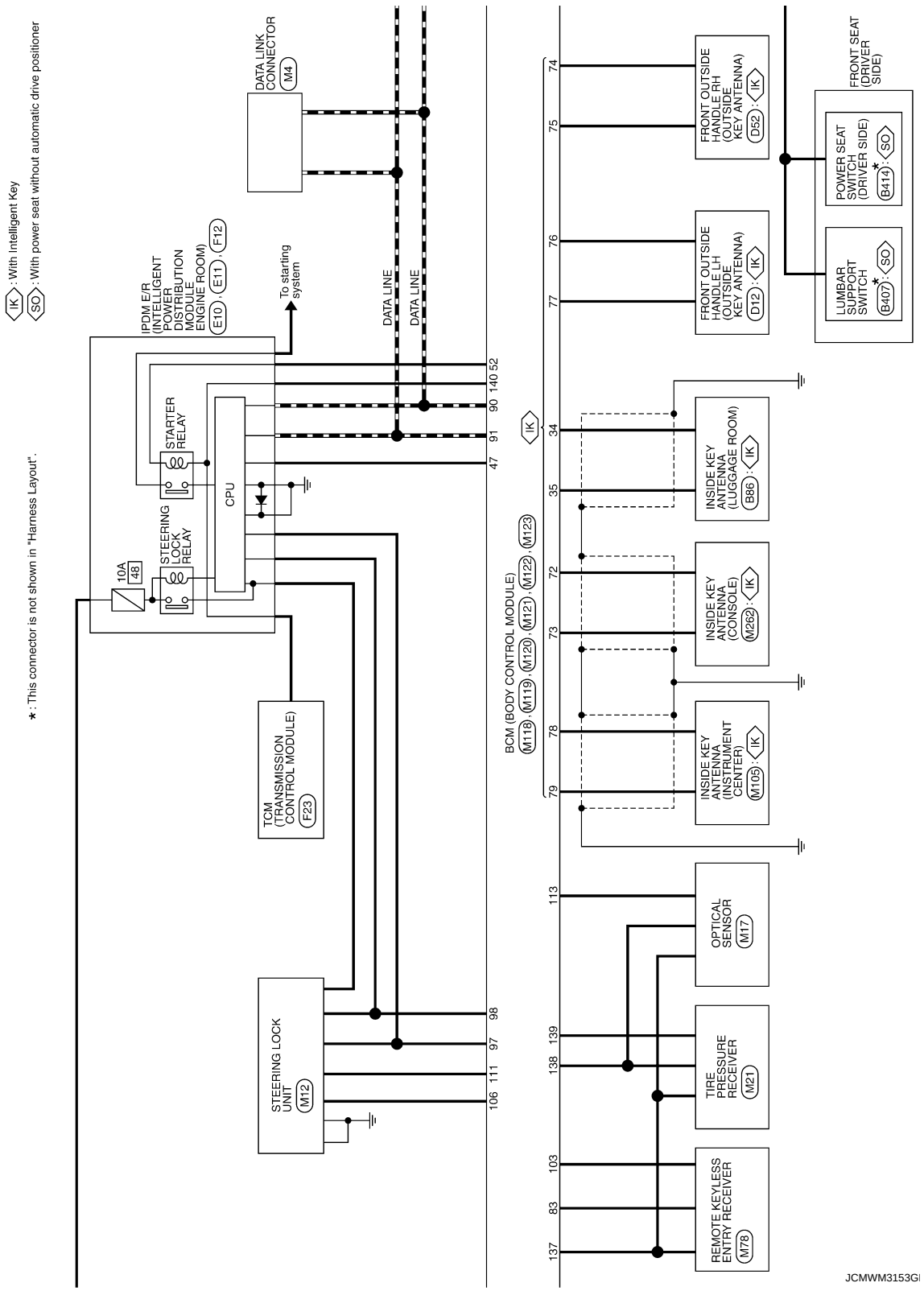
## Wiring Diagram - BCM -

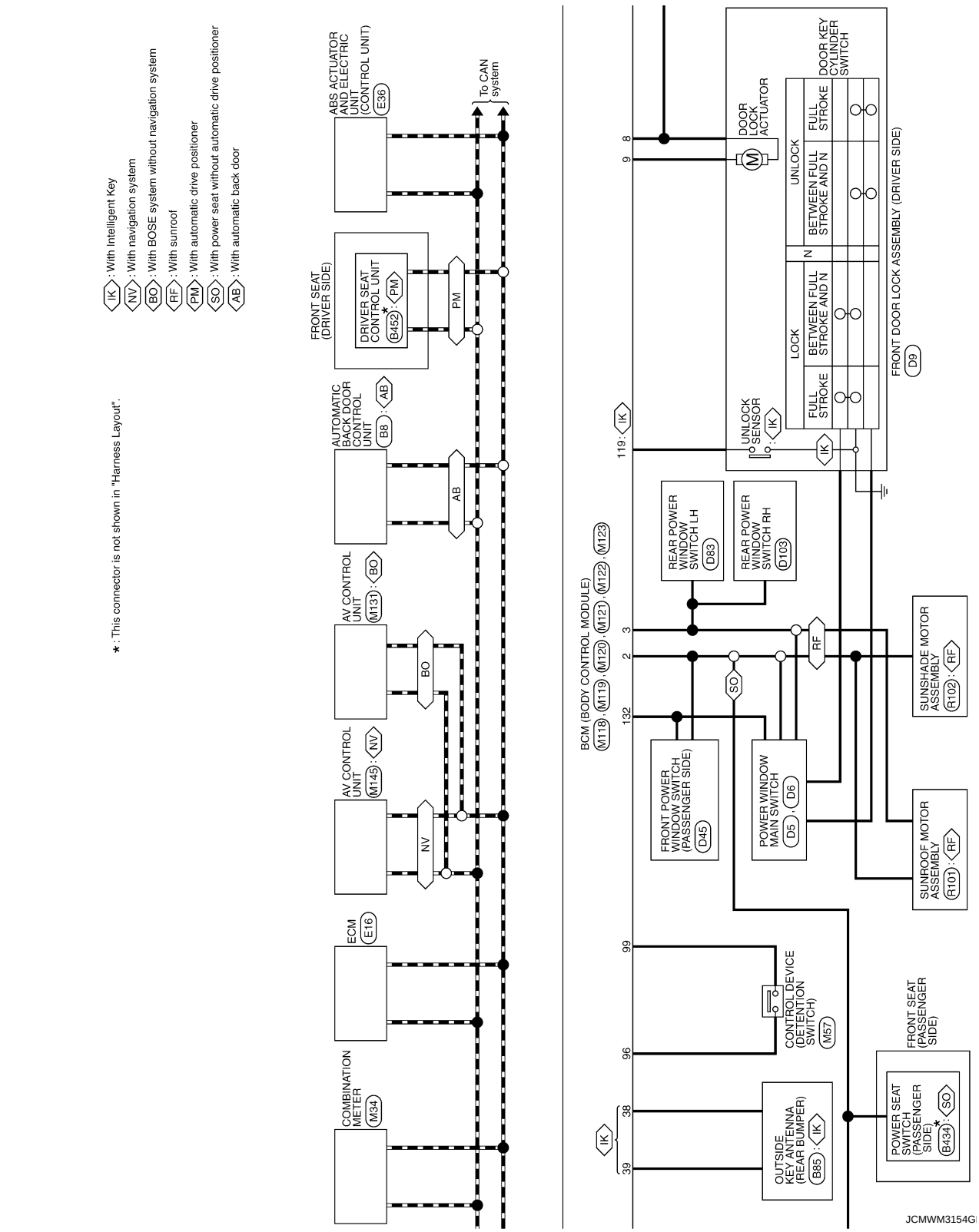
INFOID:0000000003470028

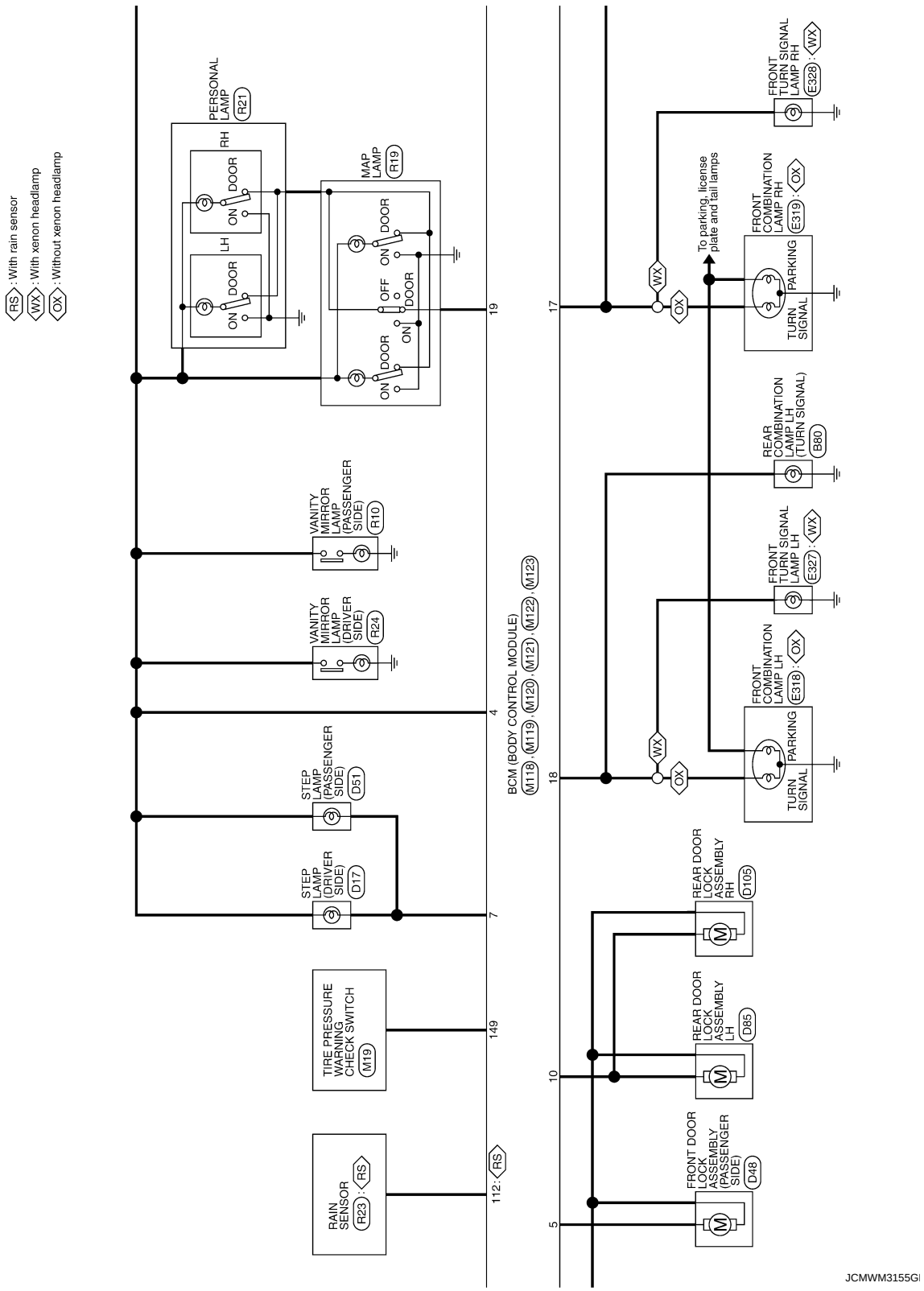
UP TO VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

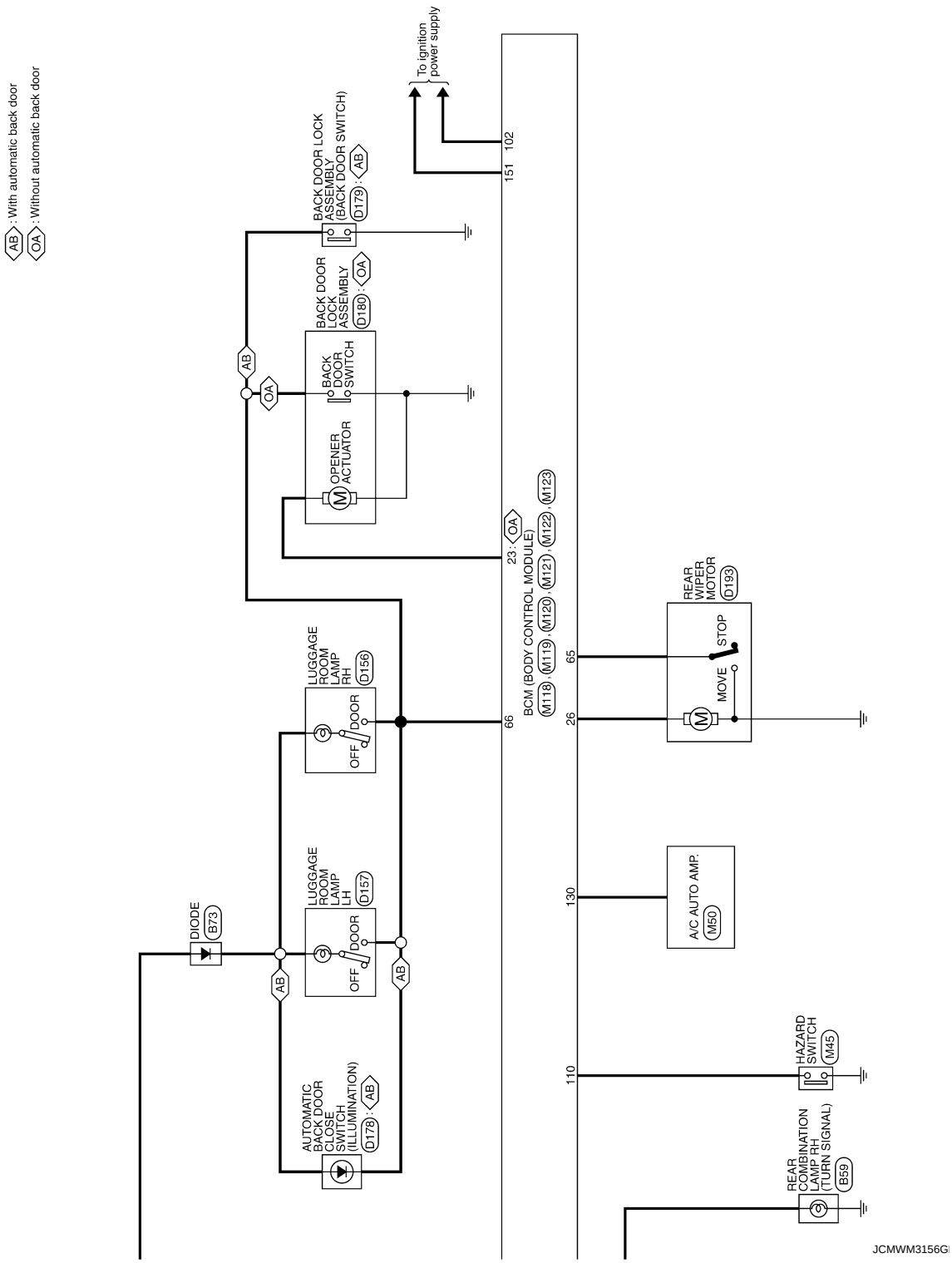
JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)




IK : With intelligent Key
SO : With power seat without automatic drive positioner
* : This connector is not shown in "Harness Layout".
DATA LINK CONNECTOR (M4)
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) (E10), (E11), (F12)
To starting system
DATA LINE
DATA LINE
STARTER RELAY
CPU
STEERING LOCK RELAY
10A 48
TCM (TRANSMISSION CONTROL MODULE) (F23)
STEERING LOCK UNIT (M12)
47 91 90 140 52
106 111 97 98
BCM (BODY CONTROL MODULE) (M118), (M119), (M120), (M121), (M122), (M123)
IK
74 75 76 77
34 35 72 73 78 79
113
139 138
103 83 137
FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA) (D52) : IK
FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA) (D12) : IK
INSIDE KEY ANTENNA (LUGGAGE ROOM) (B86) : IK
INSIDE KEY ANTENNA (CONSOLE) (M262) : IK
INSIDE KEY ANTENNA (INSTRUMENT CENTER) (M105) : IK
OPTICAL SENSOR (M17)
TIRE PRESSURE RECEIVER (M21)
REMOTE KEYLESS ENTRY RECEIVER (M78)
FRONT SEAT (DRIVER SIDE)
POWER SEAT SWITCH (DRIVER SIDE) (B414)* : SO
LUMBAR SUPPORT SWITCH (B407)* : SO
JCMWM3153GB


IK : With Intelligent Key
NV : With navigation system
BO : With BOSE system without navigation system
RF : With sunroof
PM : With automatic drive positioner
SO : With power seat without automatic drive positioner
AB : With automatic back door
*: This connector is not shown in "Harness Layout".
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E36
To CAN system
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT B452 *: PM
PM
AUTOMATIC BACK DOOR CONTROL UNIT B8 : AB
AB
AV CONTROL UNIT M131 : BO
BO
AV CONTROL UNIT M145 : NV
NV
ECM E16
COMBINATION METER M34
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
119 : IK
8
9
DOOR LOCK ACTUATOR
UNLOCK SENSOR IK : IK
LOCK
UNLOCK
N
FULL STROKE
BETWEEN FULL STROKE AND N
DOOR KEY CYLINDER SWITCH
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) D9
REAR POWER WINDOW SWITCH LH D83
REAR POWER WINDOW SWITCH RH D103
3
2
132
RF
SO
SUNSHADE MOTOR ASSEMBLY R102 : RF
FRONT POWER WINDOW SWITCH (PASSENGER SIDE) D45
POWER WINDOW MAIN SWITCH D5, D6
SUNROOF MOTOR ASSEMBLY R101 : RF
99
96
CONTROL DEVICE (DETENTION SWITCH) M57
FRONT SEAT (PASSENGER SIDE)
IK
38
39
OUTSIDE KEY ANTENNA (REAR BUMPER) B85 : IK
POWER SEAT SWITCH (PASSENGER SIDE) B434 *: SO
JCMWM3154G


RS : With rain sensor
WX : With xenon headlamp
OX : Without xenon headlamp
PERSONAL LAMP R21
RH
LH
DOOR
ON
MAP LAMP R19
OFF
VANITY MIRROR LAMP (PASSENGER SIDE) R10
VANITY MIRROR LAMP (DRIVER SIDE) R24
STEP LAMP (PASSENGER SIDE) D51
STEP LAMP (DRIVER SIDE) D17
TIRE PRESSURE WARNING CHECK SWITCH M19
RAIN SENSOR R23 : RS
112 : RS
149
19
4
7
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
18
17
10
5
WX
OX
To parking, license plate and tail lamps
FRONT TURN SIGNAL LAMP RH E328 : WX
FRONT COMBINATION LAMP RH E319 : OX
TURN SIGNAL
PARKING
REAR COMBINATION LAMP LH (TURN SIGNAL) B80
FRONT TURN SIGNAL LAMP LH E327 : WX
FRONT COMBINATION LAMP LH E318 : OX
REAR DOOR LOCK ASSEMBLY RH D105
REAR DOOR LOCK ASSEMBLY LH D85
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) D48
JCMWM3155GB


AB : With automatic back door
OA : Without automatic back door
To ignition power supply
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH) D179 : AB
BACK DOOR LOCK ASSEMBLY D180 : OA
BACK DOOR SWITCH
OPENER ACTUATOR
LUGGAGE ROOM LAMP RH D156
LUGGAGE ROOM LAMP LH D157
DOOR
OFF
DIODE B73
AUTOMATIC BACK DOOR CLOSE SWITCH (ILLUMINATION) D178 : AB
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
REAR WIPER MOTOR D193
STOP
MOVE
A/C AUTO AMP. M50
HAZARD SWITCH M45
REAR COMBINATION LAMP RH (TURN SIGNAL) B59
102
151
23 : OA
66
65
26
130
110
JCMWM3156G

BCM (BODY CONTROL MODULE) (TYPE A)

| Connector No. | M103 |
|---|---|
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH16FW-NH |

H.S.

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | Y | OUTPUT 4 |
| 5 | V | OUTPUT 3 |
| 7 | GR | INPUT 3 |
| 8 | L | OUTPUT 5 |
| 9 | SB | INPUT 2 |
| 10 | P | INPUT 4 |
| 11 | O | INPUT 1 |
| 12 | W | OUTPUT 1 |
| 13 | R | INPUT 5 |
| 14 | P | OUTPUT 2 |

| Connector No. | M118 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M03FB-LC |

H.S.

| 1 | 3 |
|---|---|
| 2 | |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | W | BAT (F/L) |
| 2 | GR | POWER WINDOW POWER SUPPLY (BAT) |
| 3 | L | POWER WINDOW POWER SUPPLY (RAP) |

| Connector No. | M120 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS12FW-CS |

H.S.

| 20 | 21 | | 22 | 23 | 24 |
|---|---|---|---|---|---|
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 23 | BR | BACK DOOR OPEN OUTPUT |
| 26 | G | REAR WIPER OUTPUT |

| Connector No. | M121 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FGY-NH |

H.S.

| 51 | 50 | 49 | 48 | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71 | 70 | 69 | 68 | 67 | 66 | 65 | 64 | 63 | 62 | 61 | 60 | 59 | 58 | 57 | 56 | 55 | 54 | 53 | 52 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 34 | B | LUGGAGE ROOM ANT1− |
| 35 | W | LUGGAGE ROOM ANT1+ |
| 38 | L | REAR BUMPER ANT− |
| 39 | BR | REAR BUMPER ANT+ |
| 47 | L | IGN RELAY IPDM E/R CONT |
| 52 | R | STARTER RELAY CONT |
| 61 | R | BACK DOOR OPENER REQUEST SW |
| 64 | GR | REQUEST SW BUZZER |
| 65 | O | REAR WIPER STOP POSITION |
| 66 | Y | BACK DOOR SW |
| 67 | LG | BACK DOOR OPENER SW |

| Connector No. | M119 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS16FW-CS |

H.S.

| 4 | 5 | 6 | 7 | | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 5 | G | PASSENGER DOOR UNLOCK OUTPUT |
| 7 | W | STEP LAMP OUTPUT |
| 8 | V | ALL DOOR, FUEL LID LOCK OUTPUT |
| 9 | G | DRIVER DOOR, FUEL LID UNLOCK OUTPUT |
| 10 | P | REAR DOOR UNLOCK OUTPUT |
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 14 | O | PUSH-BUTTON IGNITION SW ILL GND |
| 15 | L | ACC IND |
| 17 | G | TURN SIGNAL RH |

| 68 | W | REAR RH DOOR SW |
|---|---|---|
| 69 | R | REAR LH DOOR SW |

| 18 | BR | TURN SIGNAL LH |
|---|---|---|
| 19 | Y | ROOM LAMP TIMER CONTROL |

JCMWM3157GI

BCM (BODY CONTROL MODULE) (TYPE A)

| Connector No. | M122 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH |

H.S.

| 91 | 90 | 89 | 88 | 87 | 86 | 85 | 84 | 83 | 82 | 81 | 80 | 79 | 78 | 77 | 76 | 75 | 74 | 73 | 72 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 111 | 110 | 109 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 92 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 72 | B | ROOM ANT2– |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT– |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT– |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1– |
| 79 | G | ROOM ANT1+ |
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 82 | BR | IGN RELAY (F/B) CONT |
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 87 | R | COMBI SW INPUT 5 |
| 88 | GR | COMBI SW INPUT 3 |
| 89 | BR | PUSH SW |
| 90 | P | CAN–L |
| 91 | L | CAN–H |
| 92 | R | KEY SLOT ILL[With Intelligent Key] |
| 92 | L | KEY SLOT ILL[Without Intelligent Key] |
| 93 | L | ON IND |
| 95 | L | ACC RELAY CONT |
| 96 | Y | A/T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |
| 98 | L | S/L CONDITION 2 |
| 99 | V | SHIFT P |
| 100 | P | PASSENGER DOOR REQUEST SW |
| 101 | W | DRIVER DOOR REQUEST SW |
| 102 | Y | BLOWER FAN MOTOR RELAY CONT |
| 103 | L | KEYLESS ENTRY RECEIVER POWER SUPPLY |
| 106 | Y | S/L POWER SUPPLY |
| 107 | O | COMBI SW INPUT 1 |
| 108 | P | COMBI SW INPUT 4 |
| 109 | SB | COMBI SW INPUT 2 |
| 110 | G | HAZARD SW |
| 111 | LG | S/L COMM |

| Connector No. | M123 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH |

H.S.

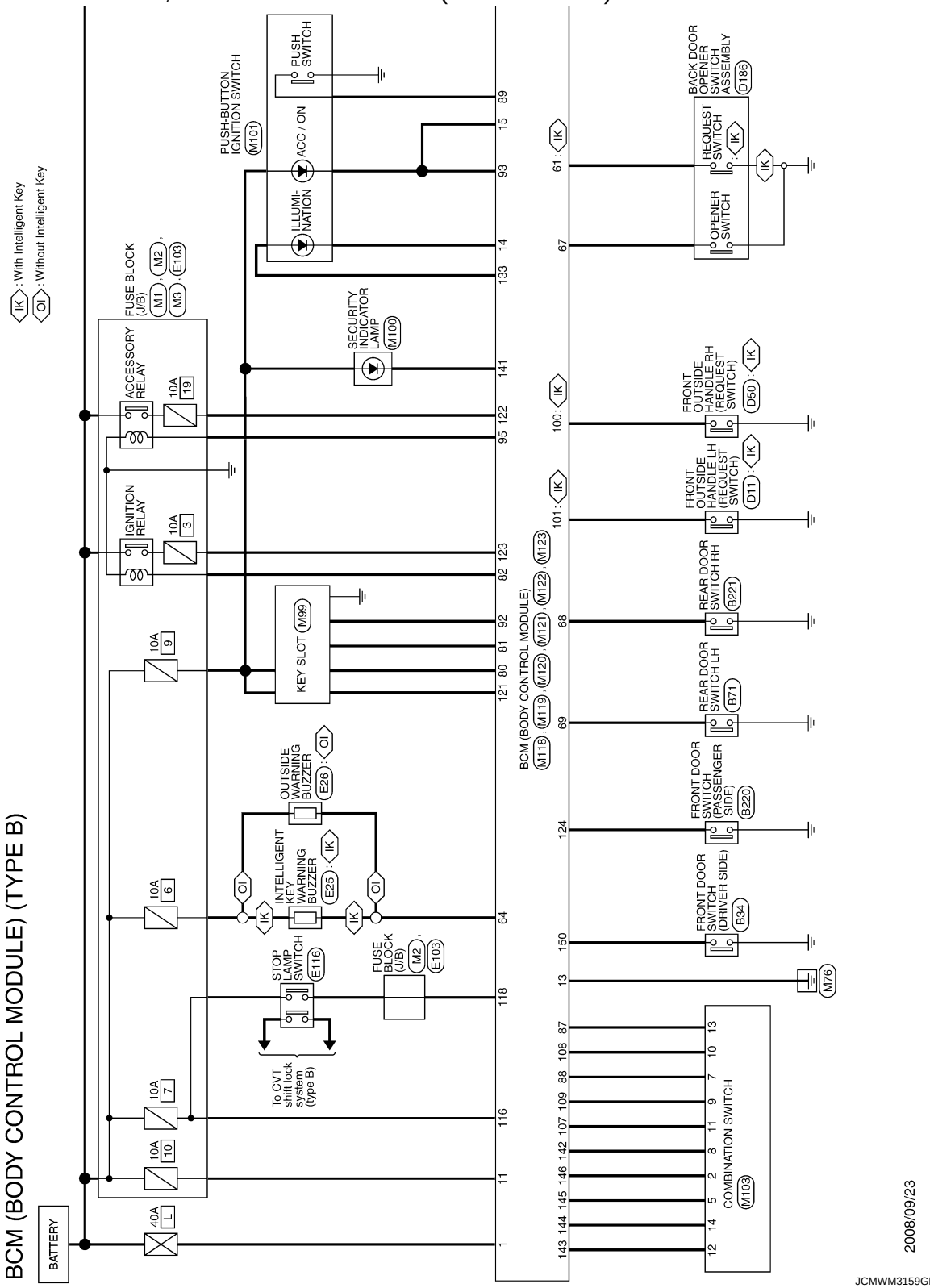
| 131 | 130 | 129 | 128 | 127 | 126 | 125 | 124 | 123 | 122 | 121 | 120 | 119 | 118 | 117 | 116 | 115 | 114 | 113 | 112 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 151 | 150 | 149 | 148 | 147 | 146 | 145 | 144 | 143 | 142 | 141 | 140 | 139 | 138 | 137 | 136 | 135 | 134 | 133 | 132 |

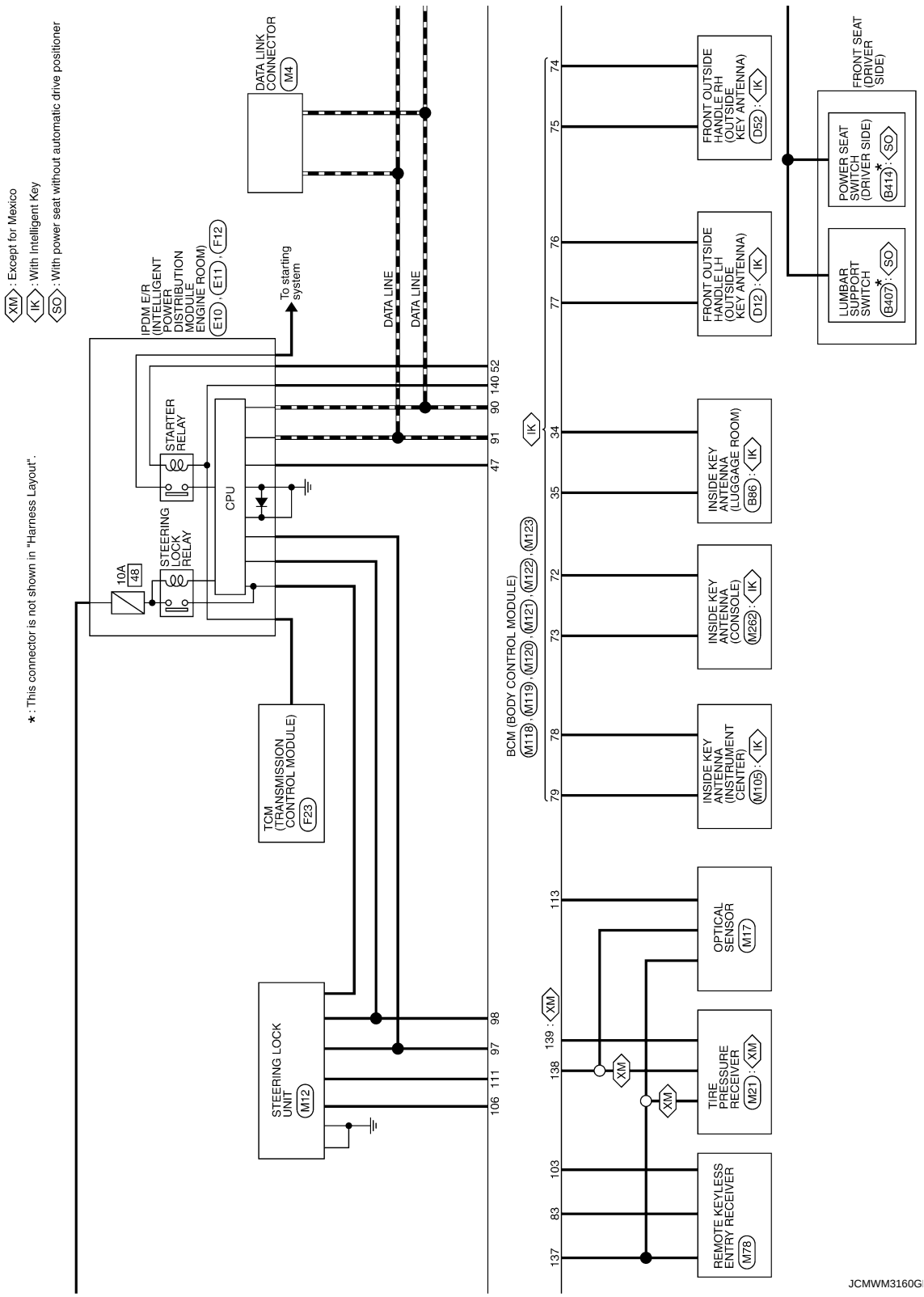
| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 112 | R | RAIN SENSOR SERIAL LINK |
| 113 | O | OPTICAL SENSOR |
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 119 | W | DR DOOR UNLOCK SENSOR |
| 121 | Y | KEY SLOT SW |
| 122 | R | ACC F/B |
| 123 | G | IGN F/B |
| 124 | R | PASSENGER DOOR SW |
| 130 | BR | REAR DEFOGGER SW |
| 132 | G | POWER WINDOW SW COMM |
| 133 | W | PUSH-BUTTON IGNITION SW ILL POWER |
| 137 | P | RECEIVER/SENSOR GND |
| 138 | V | RECEIVER/SENSOR POWER SUPPLY |
| 139 | O | TIRE PRESS RECEIVER SIGNAL |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 142 | L | COMBI SW OUTPUT 5 |
| 143 | W | COMBI SW OUTPUT 1 |
| 144 | P | COMBI SW OUTPUT 2 |
| 145 | V | COMBI SW OUTPUT 3 |
| 146 | Y | COMBI SW OUTPUT 4 |
| 149 | W | TIRE PRESS WARNING CHECK SW |
| 150 | SB | DRIVER DOOR SW |
| 151 | G | REAR WINDOW DEFOGGER RELAY |

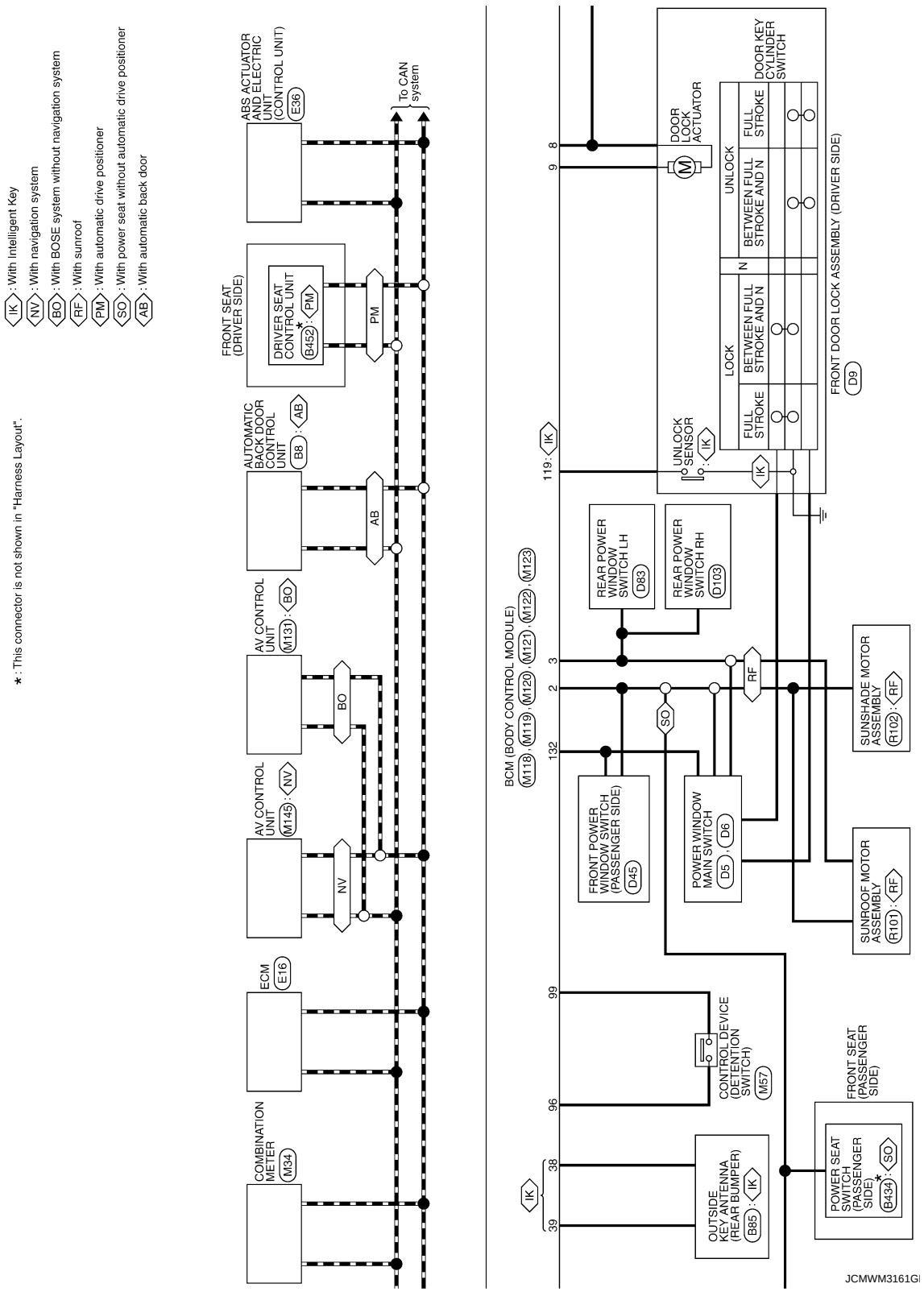
JCMWM3158G

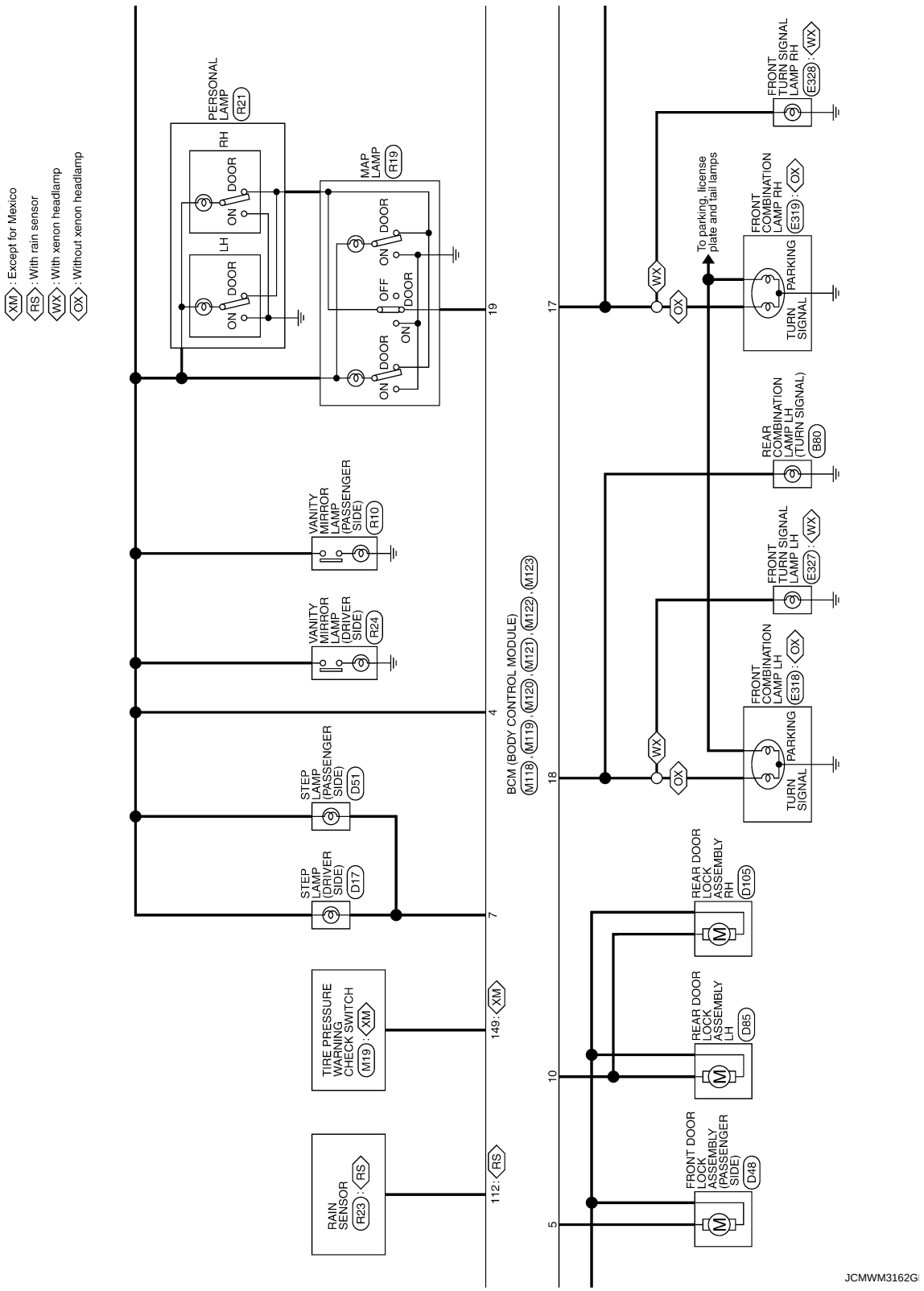
FROM VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO),

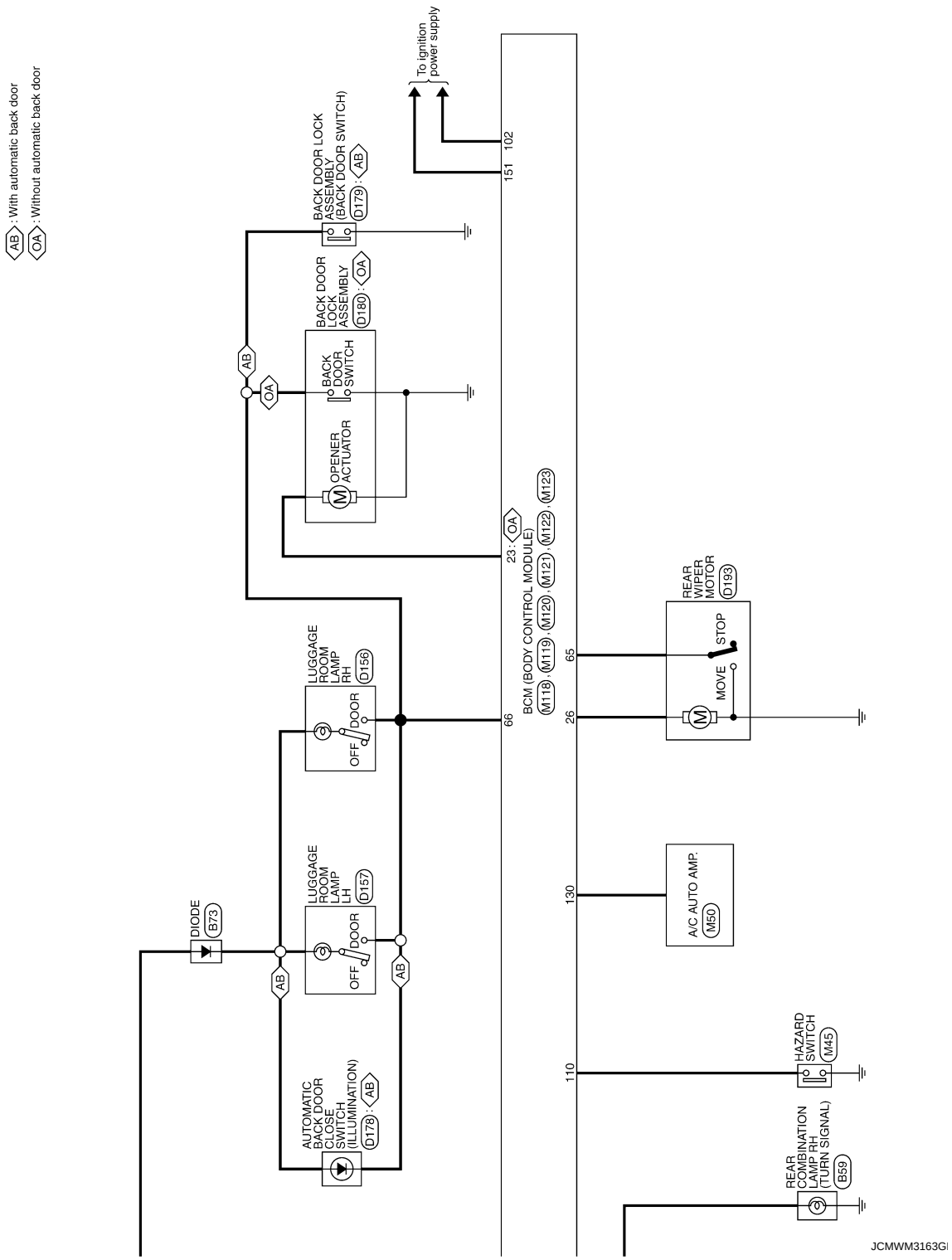
JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)




XM : Except for Mexico
IK : With Intelligent Key
SO : With power seat without automatic drive positioner
*: This connector is not shown in "Harness Layout".
DATA LINK CONNECTOR
M4
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E10, E11, F12
To starting system
DATA LINE
DATA LINE
STARTER RELAY
CPU
STEERING LOCK RELAY
10A
48
TCM (TRANSMISSION CONTROL MODULE)
F23
STEERING LOCK UNIT
M12
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
D52 : IK
FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
D12 : IK
INSIDE KEY ANTENNA (LUGGAGE ROOM)
B86 : IK
INSIDE KEY ANTENNA (CONSOLE)
M262 : IK
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M105 : IK
OPTICAL SENSOR
M17
TIRE PRESSURE RECEIVER
M21 : XM
REMOTE KEYLESS ENTRY RECEIVER
M78
FRONT SEAT (DRIVER SIDE)
POWER SEAT SWITCH (DRIVER SIDE)
B414* : SO
LUMBAR SUPPORT SWITCH
B407* : SO
JCMWM3160G


IK : With Intelligent Key
NV : With navigation system
BO : With BOSE system without navigation system
RF : With sunroof
PM : With automatic drive positioner
SO : With power seat without automatic drive positioner
AB : With automatic back door
★ : This connector is not shown in "Harness Layout".
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E36
To CAN system
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT B452 ★ PM
AUTOMATIC BACK DOOR CONTROL UNIT B8 AB
AV CONTROL UNIT M131 BO
AV CONTROL UNIT M145 NV
ECM E16
COMBINATION METER M34
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
DOOR LOCK ACTUATOR
UNLOCK SENSOR IK
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
DOOR KEY CYLINDER SWITCH
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) D9
REAR POWER WINDOW SWITCH LH D83
REAR POWER WINDOW SWITCH RH D103
FRONT POWER WINDOW SWITCH (PASSENGER SIDE) D45
POWER WINDOW MAIN SWITCH D5 D6
SUNSHADE MOTOR ASSEMBLY R102 RF
SUNROOF MOTOR ASSEMBLY R101 RF
CONTROL DEVICE (DETENTION SWITCH) M57
OUTSIDE KEY ANTENNA (REAR BUMPER) B85 IK
FRONT SEAT (PASSENGER SIDE)
POWER SEAT SWITCH (PASSENGER SIDE) ★ B434 SO
JCMWM3161GB


XM : Except for Mexico
RS : With rain sensor
WX : With xenon headlamp
OX : Without xenon headlamp
PERSONAL LAMP R21
RH
LH
DOOR
ON
MAP LAMP R19
OFF
VANITY MIRROR LAMP (PASSENGER SIDE) R10
VANITY MIRROR LAMP (DRIVER SIDE) R24
STEP LAMP (PASSENGER SIDE) D51
STEP LAMP (DRIVER SIDE) D17
TIRE PRESSURE WARNING CHECK SWITCH M19 : XM
RAIN SENSOR R23 : RS
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
19
4
7
149 : XM
112 : RS
17
18
10
5
To parking, license plate and tail lamps
FRONT TURN SIGNAL LAMP RH E328 : WX
FRONT COMBINATION LAMP RH E319 : OX
TURN SIGNAL
PARKING
REAR COMBINATION LAMP LH (TURN SIGNAL) B80
FRONT TURN SIGNAL LAMP LH E327 : WX
FRONT COMBINATION LAMP LH E318 : OX
REAR DOOR LOCK ASSEMBLY RH D105
REAR DOOR LOCK ASSEMBLY LH D85
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) D48
JCMWM3162G


AB : With automatic back door
OA : Without automatic back door
To ignition power supply
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH) D179 : AB
BACK DOOR LOCK ASSEMBLY D180 : OA
BACK DOOR SWITCH
OPENER ACTUATOR
LUGGAGE ROOM LAMP RH D156
LUGGAGE ROOM LAMP LH D157
DOOR
OFF
DIODE B73
AUTOMATIC BACK DOOR CLOSE SWITCH (ILLUMINATION) D178 : AB
BCM (BODY CONTROL MODULE) (M118), (M119), (M120), (M121), (M122), (M123)
102
151
23 : OA
66
65
26
130
110
REAR WIPER MOTOR D193
STOP
MOVE
A/C AUTO AMP. M50
HAZARD SWITCH M45
REAR COMBINATION LAMP RH (TURN SIGNAL) B59
JCMWM3163GI

BCM (BODY CONTROL MODULE) (TYPE B)

| Connector No. | M103 |
|---|---|
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH16FW-NH |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | Y | OUTPUT 4 |
| 5 | V | OUTPUT 3 |
| 7 | GR | INPUT 3 |
| 8 | L | OUTPUT 5 |
| 9 | SB | INPUT 2 |
| 10 | P | INPUT 4 |
| 11 | O | INPUT 1 |
| 12 | W | OUTPUT 1 |
| 13 | R | INPUT 5 |
| 14 | P | OUTPUT 2 |

| Connector No. | M118 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M03FB-LC |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | W | BAT (F/L) |
| 2 | GR | POWER WINDOW POWER SUPPLY (BAT) |
| 3 | L | POWER WINDOW POWER SUPPLY (RAP) |

| Connector No. | M119 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS16FW-CS |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 5 | G | PASSENGER DOOR UNLOCK OUTPUT |
| 7 | W | STEP LAMP OUTPUT |
| 8 | V | ALL DOOR, FUEL LID LOCK OUTPUT |
| 9 | G | DRIVER DOOR, FUEL LID UNLOCK OUTPUT |
| 10 | P | REAR DOOR UNLOCK OUTPUT |
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 14 | O | PUSH-BUTTON IGNITION SW ILL GND |
| 15 | L | ACC IND |
| 17 | G | TURN SIGNAL RH |
| 18 | BR | TURN SIGNAL LH |
| 19 | Y | ROOM LAMP TIMER CONTROL |

| Connector No. | M120 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS12FW-CS |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 23 | BR | BACK DOOR OPEN OUTPUT |
| 26 | G | REAR WIPER OUTPUT |

| Connector No. | M121 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FGY-NH |

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 34 | B | LUGGAGE ROOM ANT1- |
| 35 | W | LUGGAGE ROOM ANT1+ |
| 38 | L | REAR BUMPER ANT- |
| 39 | BR | REAR BUMPER ANT+ |
| 47 | L | IGN RELAY IPDM E/R CONT |
| 52 | R | STARTER RELAY CONT |
| 61 | R | BACK DOOR OPENER REQUEST SW |
| 64 | GR | REQUEST SW BUZZER |
| 65 | O | REAR WIPER STOP POSITION |
| 66 | Y | BACK DOOR SW |
| 67 | LG | BACK DOOR OPENER SW |
| 68 | W | REAR RH DOOR SW |
| 69 | R | REAR LH DOOR SW |

JCMWM3164G

BCM (BODY CONTROL MODULE) (TYPE B)

| Connector No. | M122 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH |

H.S

| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 111 | 110 | 109 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 92 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 72 | B | ROOM ANT2– |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT– |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT– |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1– |
| 79 | G | ROOM ANT1+ |
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 82 | BR | IGN RELAY (F/B) CONT |
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 87 | R | COMBI SW INPUT 5 |
| 88 | GR | COMBI SW INPUT 3 |
| 89 | BR | PUSH SW |
| 90 | P | CAN–L |
| 91 | L | CAN–H |
| 92 | R | KEY SLOT ILL[With Intelligent Key] |
| 92 | L | KEY SLOT ILL[Without Intelligent Key] |
| 93 | L | ON IND |
| 95 | L | ACC RELAY CONT |
| 96 | Y | A/T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |
| 98 | L | S/L CONDITION 2 |
| 99 | V | SHIFT P |
| 100 | P | PASSENGER DOOR REQUEST SW |
| 101 | W | DRIVER DOOR REQUEST SW |
| 102 | Y | BLOWER FAN MOTOR RELAY CONT |
| 103 | L | KEYLESS ENTRY RECEIVER POWER SUPPLY |
| 106 | Y | S/L POWER SUPPLY |
| 107 | O | COMBI SW INPUT 1 |
| 108 | P | COMBI SW INPUT 4 |
| 109 | SB | COMBI SW INPUT 2 |
| 110 | G | HAZARD SW |
| 111 | LG | S/L COMM |

| Connector No. | M123 |
|---|---|
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH |

H.S

| 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 51 | 50 | 49 | 48 | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 112 | R | RAIN SENSOR SERIAL LINK |
| 113 | O | OPTICAL SENSOR |
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 119 | W | DR DOOR UNLOCK SENSOR |
| 121 | Y | KEY SLOT SW |
| 122 | R | ACC F/B |
| 123 | G | IGN F/B |
| 124 | R | PASSENGER DOOR SW |
| 130 | BR | REAR DEFOGGER SW |
| 132 | G | POWER WINDOW SW COMM |
| 133 | W | PUSH-BUTTON IGNITION SW ILL POWER |
| 137 | P | RECEIVER/SENSOR GND |
| 138 | V | RECEIVER/SENSOR POWER SUPPLY |
| 139 | O | TIRE PRESS RECEIVER SIGNAL |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 142 | L | COMBI SW OUTPUT 5 |
| 143 | W | COMBI SW OUTPUT 1 |
| 144 | P | COMBI SW OUTPUT 2 |
| 145 | V | COMBI SW OUTPUT 3 |
| 146 | Y | COMBI SW OUTPUT 4 |
| 149 | W | TIRE PRESS WARNING CHECK SW |
| 150 | SB | DRIVER DOOR SW |
| 151 | G | REAR WINDOW DEFOGGER RELAY |

JCMWM3165GI

## Fail-safe

*INFOID:0000000003470029*

### FAIL-SAFE CONTROL BY DTC

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

| Display contents of CONSULT | Fail-safe | Cancellation |
|---|---|---|
| B2013: ID DISCORD BCM-S/L | Inhibit engine cranking | Erase DTC |
| B2014: CHAIN OF S/L-BCM | Inhibit engine cranking | Erase DTC |
| 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 |
| B2557: VEHICLE SPEED | Inhibit steering lock | When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms |
| 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 |
| B2601: SHIFT POSITION | Inhibit steering lock | 500 ms after the following signal reception status becomes consistent<br>• Selector lever P position switch signal<br>• P range signal (CAN) |
| B2602: SHIFT POSITION | Inhibit steering lock | 5 seconds after the following BCM recognition conditions are fulfilled<br>• Ignition switch is in the ON position<br>• Selector lever P position switch signal: Except P position (battery voltage)<br>• Vehicle speed: 4 km/h (2.5 MPH) or more |
| B2603: SHIFT POSI STATUS | Inhibit steering lock | 500 ms after the following BCM recognition conditions are fulfilled<br>• Ignition switch is in the ON position<br>• Selector lever P position switch signal: Except P position (battery voltage)<br>• Selector lever P/N position signal: Except P and N positions (0 V) |
| B2604: PNP SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled<br>• Status 1<br>- Ignition switch is in the ON position<br>- Selector lever P/N position signal: P and N position (battery voltage)<br>- P range signal or N range signal (CAN): ON<br>• Status 2<br>- Ignition switch is in the ON position<br>- Selector lever P/N position signal: Except P and N positions (0 V)<br>- P range signal and N range signal (CAN): OFF |
| B2605: PNP SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled<br>• Ignition switch is in the ON position<br>- Power position: IGN<br>- Selector lever P/N position signal: Except P and N positions (0 V)<br>- Interlock/PNP switch signal (CAN): OFF<br>• Status 2<br>- Ignition switch is in the ON position<br>- Selector lever P/N position signal: P or N position (battery voltage)<br>- PNP switch signal (CAN): ON |
| B2606: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent<br>• Steering lock relay signal (Request signal)<br>• Steering lock relay signal (Condition signal) |

| Display contents of CONSULT | Fail-safe | Cancellation |
|---|---|---|
| B2607: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent<br>• Steering lock relay signal (Request signal)<br>• Steering lock relay signal (Condition 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) |
| B2609: S/L STATUS | • Inhibit engine cranking<br>• Inhibit steering lock | When the following steering lock conditions agree<br>• BCM steering lock control status<br>• Steering lock condition No. 1 signal status<br>• Steering lock condition No. 2 signal status |
| 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) |
| B2612: S/L STATUS | • Inhibit engine cranking<br>• Inhibit steering lock | When any of the following conditions are fulfilled<br>• Steering lock unit status signal (CAN) is received normally<br>• The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R) |
| 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 |
| B2619: BCM | Inhibit engine cranking | 1 second after the steering lock unit power supply output control inside BCM becomes normal |
| B261E: VEHICLE TYPE | Inhibit engine cranking | BCM initialization |
| B26E9: S/L STATUS | • Inhibit engine cranking<br>• Inhibit steering lock | When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled<br>• Steering condition No. 1 signal: LOCK (0V)<br>• Steering condition No. 2 signal: LOCK (Battery voltage) |

## HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

**NOTE:**
The blinking speed is normal while activating the hazard warning lamp.

## FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

**NOTE:**
If rain sensor malfunction is detected when ignition switch is turned OFF ⇒ ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

## REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.
When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. More than 1 minute is passed after the rear wiper stop.

2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

## DTC Inspection Priority Chart

INFOID:0000000003470030

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 |
| 4 | • B2013: ID DISCORD BCM-S/L<br>• B2014: CHAIN OF S/L-BCM<br>• 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>• B2606: S/L RELAY<br>• B2607: S/L RELAY<br>• B2608: STARTER RELAY<br>• B2609: S/L STATUS<br>• B260A: IGNITION RELAY<br>• B260B: STEERING LOCK UNIT<br>• B260C: STEERING LOCK UNIT<br>• B260D: STEERING LOCK UNIT<br>• B260F: ENG STATE SIG LOST<br>• B2612: S/L STATUS<br>• B2614: ACC RELAY CIRC<br>• B2615: BLOWER RELAY CIRC<br>• B2616: IGN RELAY CIRC<br>• B2617: STARTER RELAY CIRC<br>• B2618: BCM<br>• B2619: BCM<br>• B261A: PUSH-BTN IGN SW<br>• B261E: VEHICLE TYPE<br>• B26E9: S/L STATUS<br>• B26EA: KEY REGISTRATION<br>• C1729: VHCL SPEED SIG ERR<br>• U0415: VEHICLE SPEED SIG |

| Priority | DTC |
|---|---|
| 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>• C1712: [CHECKSUM ERR] FL<br>• C1713: [CHECKSUM ERR] FR<br>• C1714: [CHECKSUM ERR] RR<br>• C1715: [CHECKSUM ERR] RL<br>• C1716: [PRESSDATA ERR] FL<br>• C1717: [PRESSDATA ERR] FR<br>• C1718: [PRESSDATA ERR] RR<br>• C1719: [PRESSDATA ERR] RL<br>• C1720: [CODE ERR] FL<br>• C1721: [CODE ERR] FR<br>• C1722: [CODE ERR] RR<br>• C1723: [CODE ERR] RL<br>• C1724: [BATT VOLT LOW] FL<br>• C1725: [BATT VOLT LOW] FR<br>• C1726: [BATT VOLT LOW] RR<br>• C1727: [BATT VOLT LOW] RL<br>• C1734: CONTROL UNIT |
| 6 | • B2621: INSIDE ANTENNA<br>• B2622: INSIDE ANTENNA<br>• B2623: INSIDE ANTENNA |

## DTC Index

INFOID:0000000003470031

**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-17, "COMMON ITEM : CONSULT-III 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 page |
|---|---|---|---|---|---|
| No DTC is detected. further testing may be required. | — | — | — | — | — |
| U1000: CAN COMM CIRCUIT | — | — | — | — | BCS-40 |
| U1010: CONTROL UNIT (CAN) | — | — | — | — | BCS-41 |
| U0415: VEHICLE SPEED SIG | — | — | — | — | BCS-42 |
| B2013: ID DISCORD BCM-S/L | × | × | — | — | SEC-55 |
| B2014: CHAIN OF S/L-BCM | × | × | — | — | SEC-56 |
| B2190: NATS ANTENNA AMP | × | — | — | — | SEC-47 |
| B2191: DIFFERENCE OF KEY | × | — | — | — | SEC-50 |
| B2192: ID DISCORD BCM-ECM | × | — | — | — | SEC-51 |
| B2193: CHAIN OF BCM-ECM | × | — | — | — | SEC-53 |
| B2195: ANTI SCANNING | × | — | — | — | SEC-54 |
| B2553: IGNITION RELAY | — | × | — | — | PCS-49 |

| 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 page |
|---|---|---|---|---|---|
| B2555: STOP LAMP | — | × | — | — | SEC-59 |
| B2556: PUSH-BTN IGN SW | — | × | × | — | SEC-61 |
| B2557: VEHICLE SPEED | × | × | × | — | SEC-63 |
| B2560: STARTER CONT RELAY | × | × | × | — | SEC-64 |
| B2562: LOW VOLTAGE | — | × | — | — | BCS-43 |
| B2601: SHIFT POSITION | × | × | × | — | SEC-65 |
| B2602: SHIFT POSITION | × | × | × | — | SEC-68 |
| B2603: SHIFT POSI STATUS | × | × | × | — | SEC-70 |
| B2604: PNP SW | × | × | × | — | SEC-73 |
| B2605: PNP SW | × | × | × | — | SEC-75 |
| B2606: S/L RELAY | × | × | × | — | SEC-77 |
| B2607: S/L RELAY | × | × | × | — | SEC-78 |
| B2608: STARTER RELAY | × | × | × | — | SEC-80 |
| B2609: S/L STATUS | × | × | × | — | SEC-82 |
| B260A: IGNITION RELAY | × | × | × | — | PCS-51 |
| B260B: STEERING LOCK UNIT | — | × | × | — | SEC-86 |
| B260C: STEERING LOCK UNIT | — | × | × | — | SEC-87 |
| B260D: STEERING LOCK UNIT | — | × | × | — | SEC-88 |
| B260F: ENG STATE SIG LOST | × | × | × | — | SEC-89 |
| B2612: S/L STATUS | × | × | × | — | SEC-92 |
| B2614: ACC RELAY CIRC | — | × | × | — | PCS-53 |
| B2615: BLOWER RELAY CIRC | — | × | × | — | PCS-56 |
| B2616: IGN RELAY CIRC | — | × | × | — | PCS-59 |
| B2617: STARTER RELAY CIRC | × | × | × | — | SEC-96 |
| B2618: BCM | × | × | × | — | PCS-62 |
| B2619: BCM | × | × | × | — | SEC-98 |
| B261A: PUSH-BTN IGN SW | — | × | × | — | SEC-99 |
| B261E: VEHICLE TYPE | × | × | × (Turn ON for 15 seconds) | — | SEC-102 |
| B2621: INSIDE ANTENNA | — | × | — | — | DLK-95 |
| B2622: INSIDE ANTENNA | — | × | — | — | DLK-97 |
| B2623: INSIDE ANTENNA | — | × | — | — | DLK-99 |
| B26E9: S/L STATUS | × | × | × (Turn ON for 15 seconds) | — | SEC-90 |
| B26EA: KEY REGISTRATION | — | × | × (Turn ON for 15 seconds) | — | SEC-91 |
| C1704: LOW PRESSURE FL | — | — | — | × | WT-16 |
| 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 page |
|---|---|---|---|---|---|
| C1708: [NO DATA] FL | — | — | — | × | WT-18 |
| C1709: [NO DATA] FR | — | — | — | × | |
| C1710: [NO DATA] RR | — | — | — | × | |
| C1711: [NO DATA] RL | — | — | — | × | |
| C1712: [CHECKSUM ERR] FL | — | — | — | × | WT-21 |
| C1713: [CHECKSUM ERR] FR | — | — | — | × | |
| C1714: [CHECKSUM ERR] RR | — | — | — | × | |
| C1715: [CHECKSUM ERR] RL | — | — | — | × | |
| C1716: [PRESSDATA ERR] FL | — | — | — | × | WT-24 |
| C1717: [PRESSDATA ERR] FR | — | — | — | × | |
| C1718: [PRESSDATA ERR] RR | — | — | — | × | |
| C1719: [PRESSDATA ERR] RL | — | — | — | × | |
| C1720: [CODE ERR] FL | — | — | — | × | WT-26 |
| C1721: [CODE ERR] FR | — | — | — | × | |
| C1722: [CODE ERR] RR | — | — | — | × | |
| C1723: [CODE ERR] RL | — | — | — | × | |
| C1724: [BATT VOLT LOW] FL | — | — | — | × | WT-29 |
| C1725: [BATT VOLT LOW] FR | — | — | — | × | |
| C1726: [BATT VOLT LOW] RR | — | — | — | × | |
| C1727: [BATT VOLT LOW] RL | — | — | — | × | |
| C1729: VHCL SPEED SIG ERR | — | — | — | × | WT-32 |
| C1734: CONTROL UNIT | — | — | — | × | WT-33 |

# SYMPTOM DIAGNOSIS

## THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

### Description

INFOID:0000000003452061

- The parking brake warning buzzer sounds continuously during vehicle travel though the parking brake is released.
- The parking brake warning buzzer does not sound at all even though driving the vehicle with the parking brake applied.

### Diagnosis Procedure

INFOID:0000000003452062

#### 1.CHECK PARKING BRAKE WARNING LAMP

1. Start the engine.
2. Check the operation of the brake warning lamp by operating the parking brake.

| | |
|---|---|
| When parking brake is applied | : ON |
| When parking brake is released | : OFF |

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> GO TO 2.

#### 2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform a check for the parking brake switch signal circuit. Refer to MWI-54, "Diagnosis Procedure".

Is the inspection result normal?

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

#### 3.CHECK PARKING BRAKE SWITCH

Perform a unit check for the parking brake switch. Refer to BRC-80, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> Replace the parking brake switch. Refer to PB-6, "Removal and Installation".

# THE LIGHT REMINDER WARNING DOES NOT SOUND

## Description

INFOID:0000000003452063

Light reminder warning chime does not sound even though headlamp is illuminated.

## Diagnosis Procedure

INFOID:0000000003452064

### 1.CHECK COMBINATION SWITCH (LIGHT SWITCH) OPERATION

Check that the headlamps operate normally by operating the combination switch (light switch).

Do they operate normally?

YES >> GO TO 2.
NO >> Refer to EXL-162, "Diagnosis Procedure".

### 2.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

Perform the check for the front door switch (driver side) signal circuit. Refer to DLK-103, "WITH AUTOMATIC BACK DOOR : Diagnosis Procedure".

Is the inspection result normal?

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

### 3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Perform a unit check for the front door switch (driver side). Refer to DLK-105, "WITH AUTOMATIC BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Replace the BCM. Refer to BCS-96, "Removal and Installation".
NO >> Replace the front door switch (driver side). Refer to DLK-368, "Removal and Installation".

# THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

## Description

INFOID:0000000003465637

- Seat belt reminder warning does not sound.
- Seat belt reminder warning sounds continuously.

## Diagnosis Procedure

INFOID:0000000003465638

### 1.CHECK SEAT BELT WARNING LAMP

1. Turn ignition switch ON.
2. Check the operation of the seat belt warning lamp in the combination meter.

| | |
|---|---|
| Seat belt fastened | : OFF |
| Seat belt not fastened | : ON |

Is the inspection result normal?

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

### 2.CHECK BCM OUTPUT SIGNAL

Check if the light reminder warning chime is activated by performing BCM active test. Refer to WCS-20, "BUZZER : CONSULT-III Function (BCM - BUZZER)".

Is the inspection result normal?

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

### 3.CHECK COMBINATION METER INPUT SIGNAL

Check if buzzer switches to proper condition (On/Off) on data monitor of combination meter. Refer to WCS-15, "CONSULT-III Function (METER/M&A)".

| | |
|---|---|
| Buzzer active condition | : On |
| Buzzer non-active condition | : Off |

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> Replace the BCM. Refer to BCS-96, "Removal and Installation".

### 4.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

Perform the check for the seat belt buckle switch circuit. Refer to WCS-25, "Diagnosis Procedure".

Is the inspection result normal?

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

### 5.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Perform a unit check for the seat belt buckle switch (driver side). Refer to WCS-26, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter.
NO >> Replace the seat belt buckle.Refer to SB-7, "SEAT BELT BUCKLE : Removal and Installation".

# THE KEY WARNING DOES NOT SOUND

## Description

INFOID:0000000003515168

The is key warning chime does not sound under the following conditions.
- Key inserted into the key slot. (Key slot switch ON)
- Ignition switch is not in ON or START. (Ignition switch signal OFF)
- Front door switch (driver side) is open. [Door switch signal (driver side) ON]

## Diagnosis Procedure

INFOID:0000000003515169

### 1.CHECK BCM INPUT SIGNAL

1. Connect CONSULT-III.
2. Select the “Data Monitor” of “BCM (BUZZER)” and check the “KEY SW-SLOT” monitor value. Refer to WCS-49, "Reference Value".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".
NO >> GO TO 2.

### 2.CHECK KEY SLOT SWITCH SIGNAL CIRCUIT

Check the key slot switch signal circuit. Refer to DLK-423, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check applicable parts, and repair or replace corresponding parts.

### 3.CHECK DOOR SWITCH SIGNAL (DRIVER SIDE) CIRCUIT

Check the door switch signal (driver side) circuit. Refer to DLK-103, "WITH AUTOMATIC BACK DOOR : Diagnosis Procedure".

Is the inspection result normal?

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

### 4.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check the front door switch (driver side). Refer to DLK-105, "WITH AUTOMATIC BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".
NO >> Replace front door switch (driver side). Refer to DLK-368, "Exploded View".

# PRECAUTION

## PRECAUTIONS

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

INFOID:0000000003470036

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 AIRBAG” and “SEAT BELT” of this Service Manual.

**WARNING:**

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which 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 the “SRS AIRBAG”.**
- **Do not 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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury.

When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.