

# SECTION **WCS**

## WARNING CHIME SYSTEM

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

### CONTENTS

<p><b>BASIC INSPECTION</b> ..... 3</p> <p><b>DIAGNOSIS AND REPAIR WORKFLOW</b> ..... 3</p> <p style="padding-left: 20px;">Work Flow .....3</p> <p><b>FUNCTION DIAGNOSIS</b> ..... 5</p> <p><b>WARNING CHIME SYSTEM</b> ..... 5</p> <p><b>WARNING CHIME SYSTEM</b> .....5</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : System Diagram .....5</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : System Description .....5</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : Component Parts Location .....6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : Component Description .....6</p> <p><b>LIGHT REMINDER WARNING CHIME</b> .....7</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : System Diagram .....7</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : System Description .....7</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : Component Parts Location .....8</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : Component Description .....8</p> <p><b>SEAT BELT REMINDER WARNING CHIME</b> .....8</p> <p style="padding-left: 20px;">SEAT BELT REMINDER WARNING CHIME : System Diagram .....9</p> <p style="padding-left: 20px;">SEAT BELT REMINDER WARNING CHIME : System Description .....9</p> <p style="padding-left: 20px;">SEAT BELT REMINDER WARNING CHIME : Component Parts Location ..... 10</p> <p style="padding-left: 20px;">SEAT BELT REMINDER WARNING CHIME : Component Description ..... 10</p> <p><b>PARKING BRAKE RELEASE WARNING CHIME</b>.... 10</p> <p style="padding-left: 20px;">PARKING BRAKE RELEASE WARNING CHIME : System Diagram ..... 11</p>	<p>PARKING BRAKE RELEASE WARNING CHIME : System Description .....11</p> <p>PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location .....11</p> <p>PARKING BRAKE RELEASE WARNING CHIME : Component Description .....12</p> <p><b>KEY WARNING CHIME</b> .....12</p> <p style="padding-left: 20px;">KEY WARNING CHIME : System Diagram .....12</p> <p style="padding-left: 20px;">KEY WARNING CHIME : System Description .....12</p> <p style="padding-left: 20px;">KEY WARNING CHIME : Component Parts Location .....13</p> <p style="padding-left: 20px;">KEY WARNING CHIME : Component Description...13</p> <p><b>DIAGNOSIS SYSTEM (METER)</b> .....14</p> <p style="padding-left: 20px;">CONSULT-III Function (METER/M&amp;A) .....14</p> <p><b>DIAGNOSIS SYSTEM (BCM)</b> .....17</p> <p><b>COMMON ITEM</b> .....17</p> <p style="padding-left: 20px;">COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM) .....17</p> <p><b>BUZZER</b> .....17</p> <p style="padding-left: 20px;">BUZZER : CONSULT-III Function (BCM - BUZZER) .....18</p> <p><b>COMPONENT DIAGNOSIS</b> .....19</p> <p><b>POWER SUPPLY AND GROUND CIRCUIT</b> ....19</p> <p><b>COMBINATION METER</b> .....19</p> <p style="padding-left: 20px;">COMBINATION METER : Diagnosis Procedure ....19</p> <p><b>BCM (BODY CONTROL MODULE)</b> .....19</p> <p style="padding-left: 20px;">BCM (BODY CONTROL MODULE) : Diagnosis Procedure .....19</p> <p><b>METER BUZZER CIRCUIT</b> .....21</p> <p style="padding-left: 20px;">Description .....21</p> <p style="padding-left: 20px;">Component Function Check .....21</p> <p style="padding-left: 20px;">Diagnosis Procedure .....21</p>
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WCS

<b>SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT</b> .....	<b>22</b>	<b>THE LIGHT REMINDER WARNING DOES NOT SOUND</b> .....	<b>65</b>
Description .....	22	Description .....	65
Component Function Check .....	22	Diagnosis Procedure .....	65
Diagnosis Procedure .....	22	<b>THE SEAT BELT REMINDER WARNING DOES NOT SOUND</b> .....	<b>66</b>
Component Inspection .....	23	Description .....	66
<b>PARKING BRAKE SWITCH SIGNAL CIRCUIT</b> .....	<b>24</b>	Trouble diagnosis procedure .....	66
Description .....	24	<b>THE PARKING BRAKE RELEASE WARNING DOES NOT SOUND</b> .....	<b>67</b>
Diagnosis Procedure .....	24	Description .....	67
Component Inspection .....	24	Diagnosis Procedure .....	67
<b>WARNING CHIME SYSTEM</b> .....	<b>25</b>	<b>THE KEY WARNING DOES NOT SOUND</b> .....	<b>68</b>
Wiring Diagram - WARNING CHIME - .....	25	Description .....	68
<b>ECU DIAGNOSIS</b> .....	<b>29</b>	Diagnosis Procedure .....	68
<b>COMBINATION METER</b> .....	<b>29</b>	<b>PRECAUTION</b> .....	<b>69</b>
Reference Value .....	29	<b>PRECAUTIONS</b> .....	<b>69</b>
Wiring Diagram - METER - .....	34	<b>FOR USA AND CANADA</b> .....	<b>69</b>
Fail Safe .....	41	FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	69
DTC Index .....	42	<b>FOR MEXICO</b> .....	<b>69</b>
<b>BCM (BODY CONTROL MODULE)</b> .....	<b>43</b>	FOR MEXICO : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	69
Reference Value .....	43		
Wiring Diagram - BCM - .....	58		
Fail Safe .....	62		
DTC Inspection Priority Chart .....	63		
DTC Index .....	63		
<b>SYMPTOM DIAGNOSIS</b> .....	<b>65</b>		

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

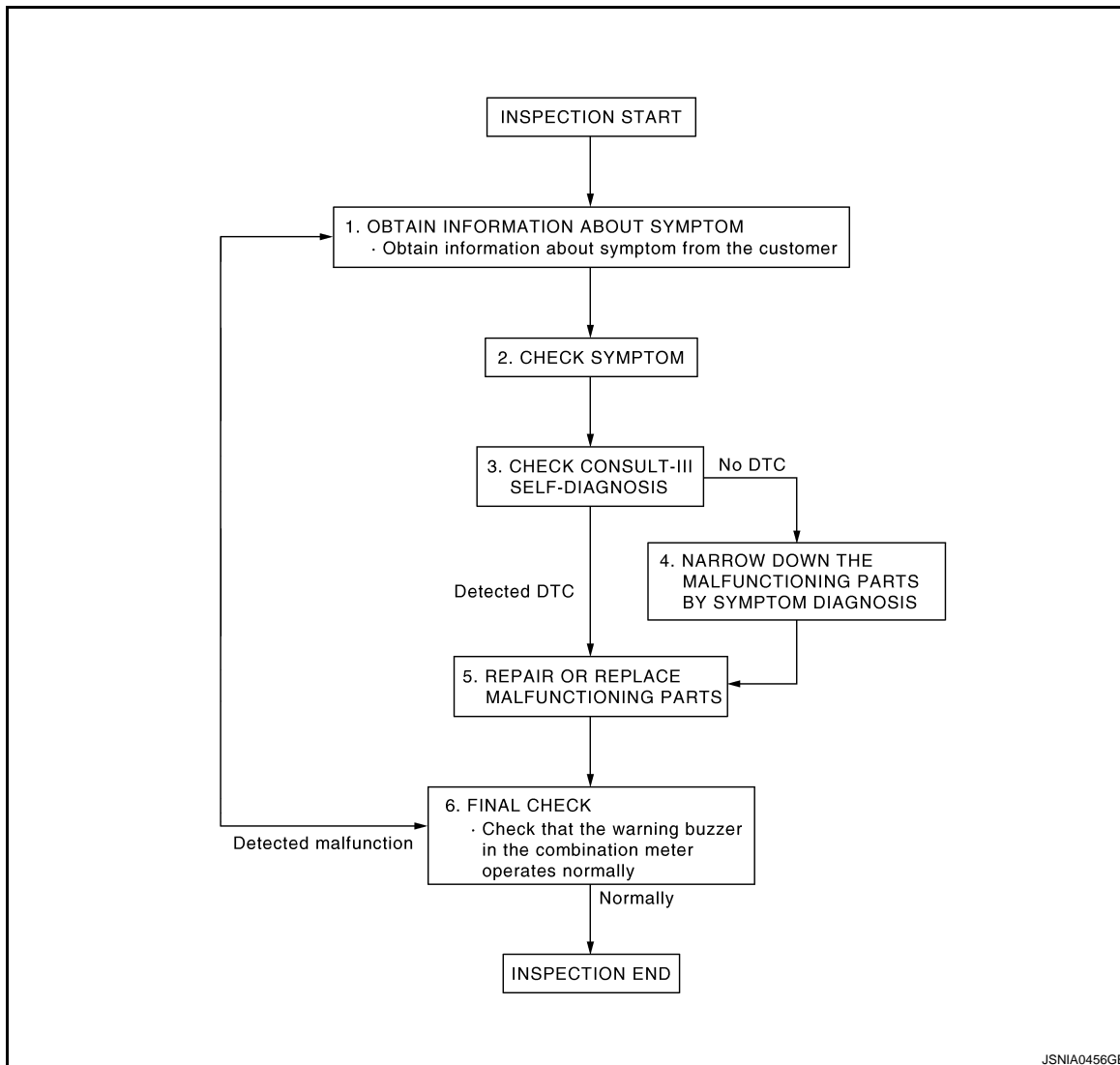
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000001686506

#### 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

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## DIAGNOSIS AND REPAIR WORKFLOW

### < BASIC INSPECTION >

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1. Connect CONSULT-III and perform "Self Diagnostic Result" of "METER/M&". Refer to [WCS-14. "CONSULT-III Function \(METER/M&A\)"](#).
2. Check if DTC is detected. Refer to [WCS-42. "DTC Index"](#).

**NOTE:**

If "CAN COMM CIRCUIT [U1000]" is displayed, start with the diagnosis for the CAN communication system. Refer to [MWI-36. "Diagnosis Procedure"](#).

If any DTC detected?

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

### 4. NARROW DOWN THE 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 repair or replace malfunctioning parts.

>> GO TO 6.

### 6. FINAL CHECK

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

Does it operate normally?

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

# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

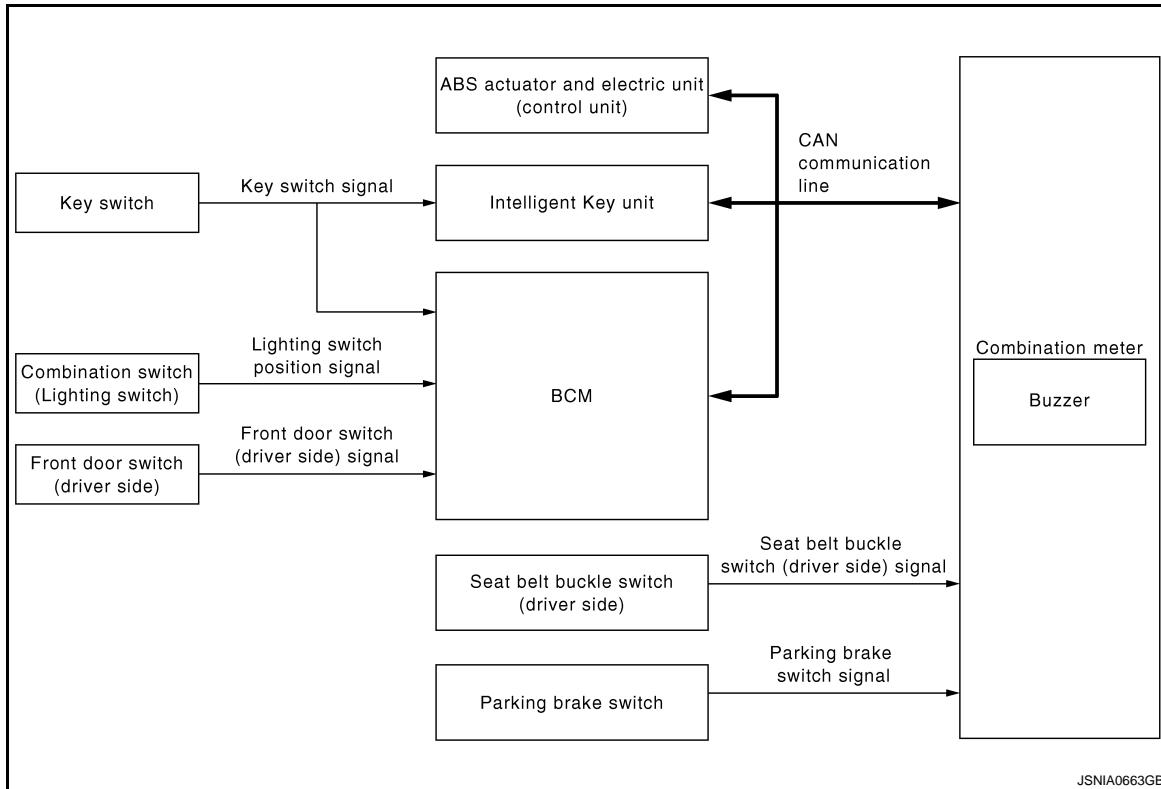
## FUNCTION DIAGNOSIS

### WARNING CHIME SYSTEM

### WARNING CHIME SYSTEM

### WARNING CHIME SYSTEM : System Diagram

INFOID:000000001686507

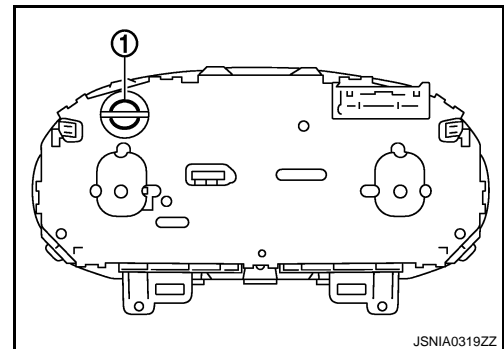


### WARNING CHIME SYSTEM : System Description

INFOID:000000001686508

The buzzer (1) for the warning chime system is integrated in the combination meter. Combination meter sounds warning buzzer in the following conditions.

- When receiving the buzzer output signal (light reminder warning chime, key warning chime, seat belt reminder warning chime) from BCM.
- When it judges the necessity of buzzer output according to vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication and parking brake switch signal received from parking brake switch.
- When receiving the buzzer output signal (Intelligent Key warning chime) from Intelligent Key unit. For the further details, refer to [DLK-35, "System Description"](#).



### WARNING CHIME FUNCTION LIST

Warning functions	Signal name	Warning chime judge unit
Light reminder warning chime	<ul style="list-style-type: none"> <li>• Ignition switch signal</li> <li>• Lighting switch position signal</li> <li>• Front door switch signal (driver side)</li> </ul>	BCM
Key warning chime	<ul style="list-style-type: none"> <li>• Ignition switch signal</li> <li>• Key switch signal</li> <li>• Front door switch signal (driver side)</li> </ul>	
Seat belt reminder warning chime	<ul style="list-style-type: none"> <li>• Seat belt buckle switch (driver side) signal</li> <li>• Ignition switch signal</li> </ul>	

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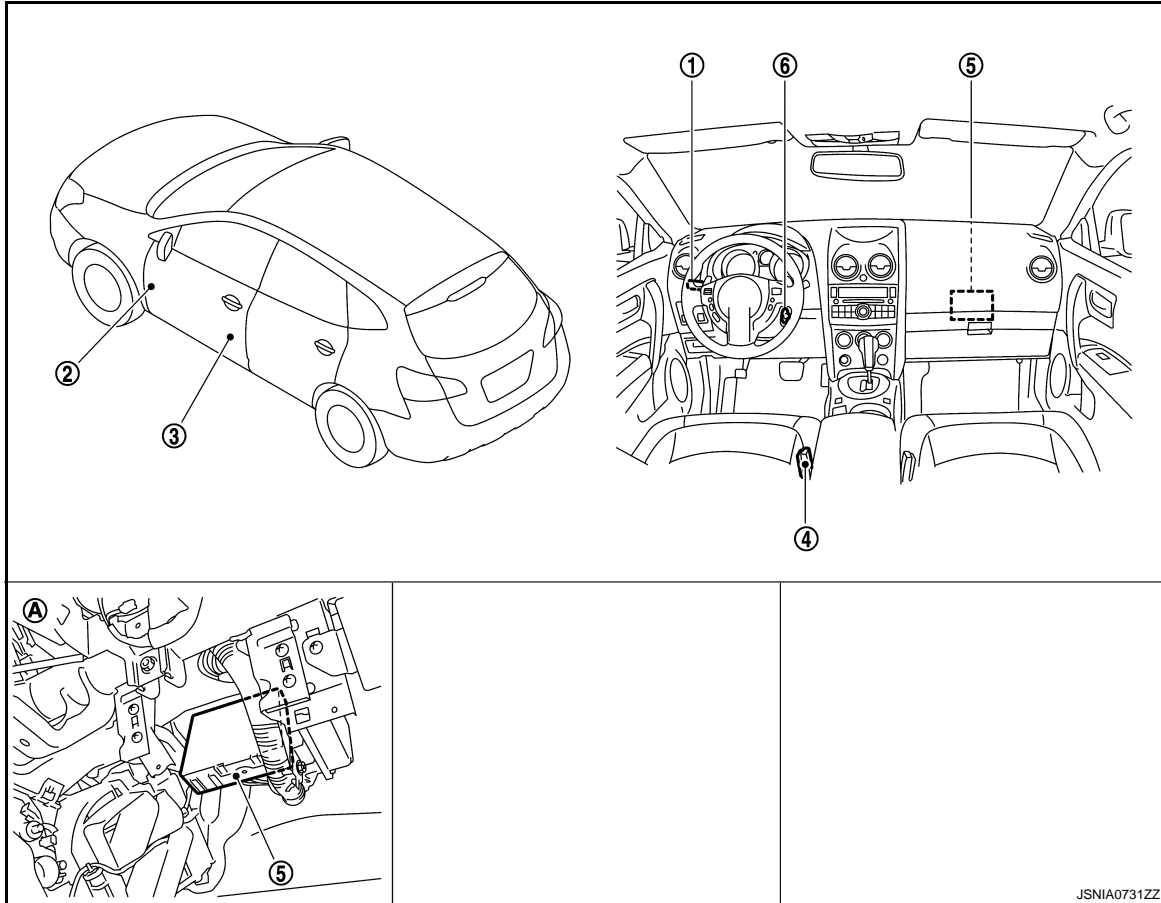
# WARNING CHIME SYSTEM

## < FUNCTION DIAGNOSIS >

Warning functions	Signal name	Warning chime judge unit
Parking brake release warning chime	<ul style="list-style-type: none"> <li>Vehicle speed signal</li> <li>Parking brake switch signal</li> </ul>	Combination meter
Intelligent Key warning chime	Refer to <a href="#">DLK-320, "KEY REMINDER : System Description"</a> .	Intelligent Key unit

## WARNING CHIME SYSTEM : Component Parts Location

INFOID:000000001686509



JSNIA0731ZZ

- |  |                         |                                    |
|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch)  | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM                  | 6. Key switch                      |
| A. Over the glove box                    |                         |                                    |

## WARNING CHIME SYSTEM : Component Description

INFOID:000000001686510

Unit	Description
Combination meter	<ul style="list-style-type: none"> <li>Receives the buzzer output signal from BCM and Intelligent Key unit with the CAN communication line and sounds the buzzer.</li> <li>Judges the parking brake release warning 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.</li> </ul>
BCM	Transmits signals received from each unit to the combination meter with the CAN communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter with the CAN communication line.
Seat belt buckle switch (driver side)	Transmits the seat belt buckle switch (driver side) signal to the combination meter.

# WARNING CHIME SYSTEM

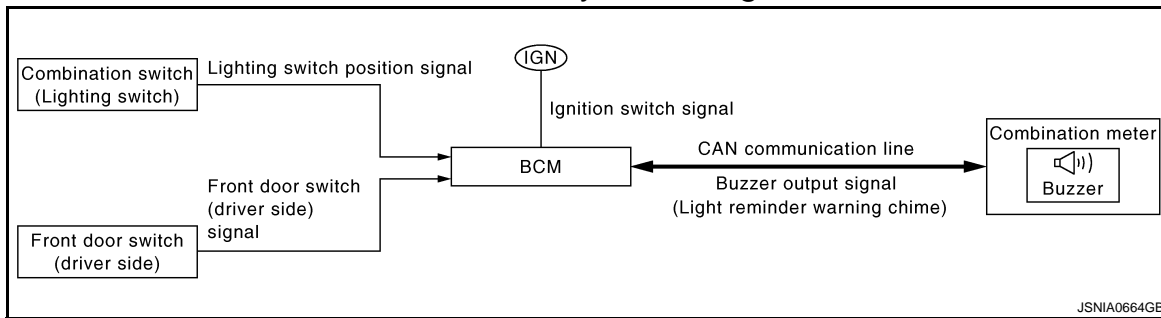
## < FUNCTION DIAGNOSIS >

Unit	Description
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the front door switch (driver side) signal to BCM.
Key switch	Transmits the key switch signal to BCM and Intelligent Key unit.
Parking brake switch	Refer to <a href="#">WCS-24. "Description"</a> .

## LIGHT REMINDER WARNING CHIME

### LIGHT REMINDER WARNING CHIME : System Diagram

INFOID:000000001686511



### LIGHT REMINDER WARNING CHIME : System Description

INFOID:000000001695843

#### DESCRIPTION

With ignition switch except in ON or START position, driver door open, and lighting switch in 1ST or 2ND position, the light reminder warning chime will sound.

- BCM detects ignition switch except in ON or START position, front door switch (driver side) ON, and lighting switch in 1ST or 2ND position. And then transmits 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.

- Lighting switch at 1ST or 2ND position
- Ignition switch except at ON or START
- Front door switch (driver side) 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) OFF

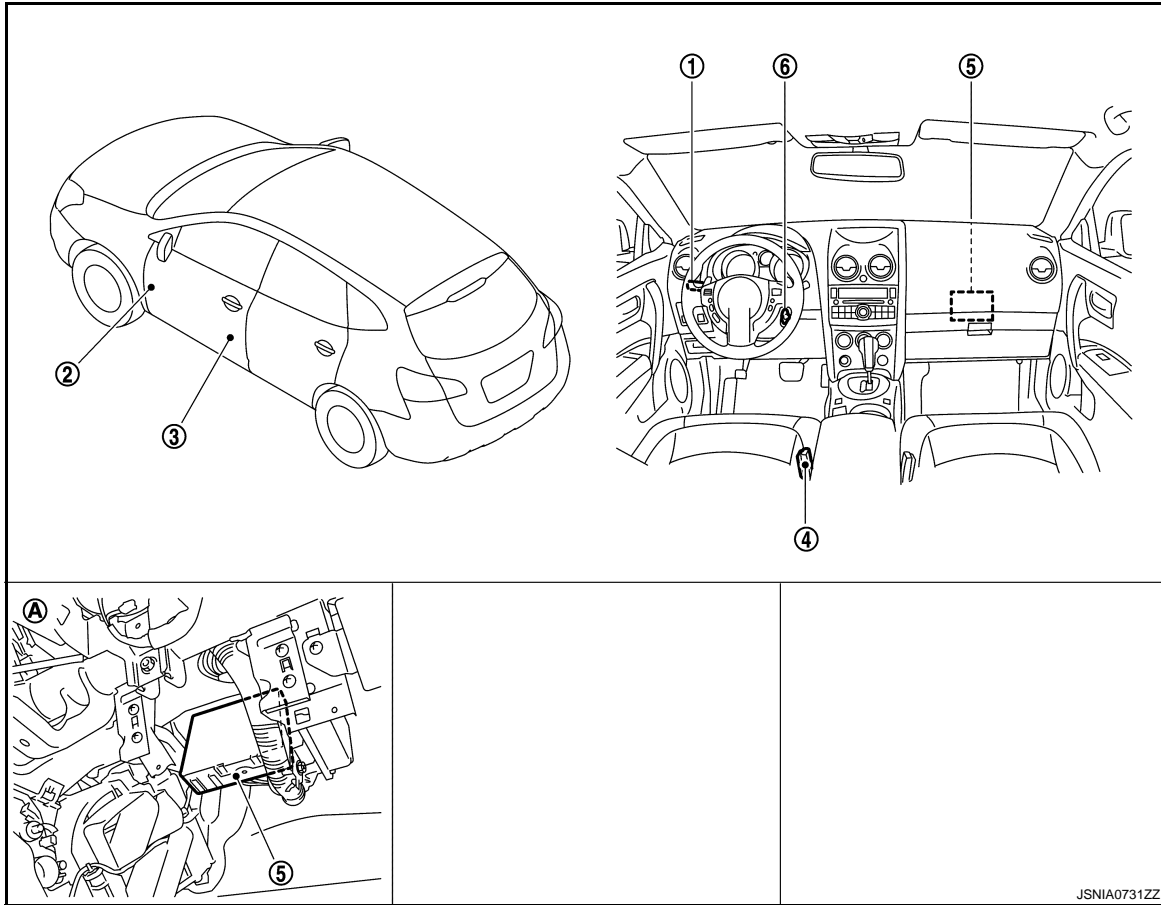
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# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## LIGHT REMINDER WARNING CHIME : Component Parts Location

INFOID:000000001747408



JSNIA0731ZZ

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|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch)  | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM                  | 6. Key switch                      |
| A. Over the glove box                    |                         |                                    |

## LIGHT REMINDER WARNING CHIME : Component Description

INFOID:000000001686514

Unit	Description
Combination meter	Receives a buzzer output signal from the BCM and sounds the buzzer.
BCM	Judges light reminder warning according to the front door switch (driver side) signal from the front door switch (driver side) and the lighting position signal from the combination switch (lighting switch) and transmits the buzzer output signal to the combination meter via CAN communication.
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the front door switch (driver side) signal to BCM.

## SEAT BELT REMINDER WARNING CHIME

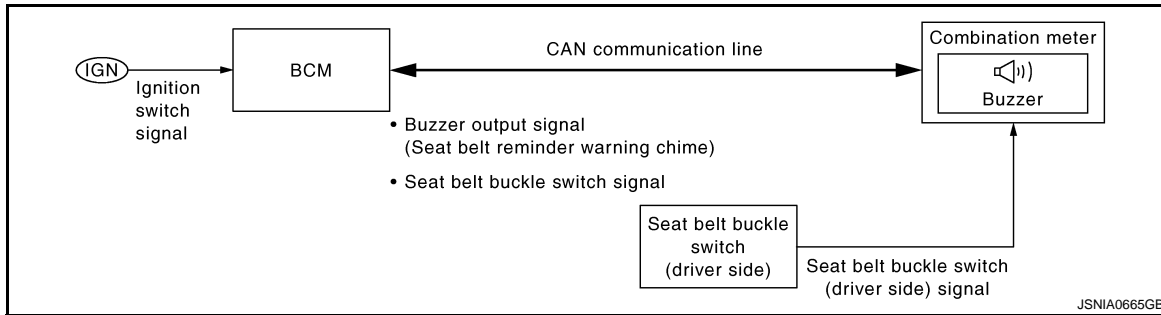


# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## SEAT BELT REMINDER WARNING CHIME : System Diagram

INFOID:000000001686515



## SEAT BELT REMINDER WARNING CHIME : System Description

INFOID:000000001695867

### DESCRIPTION

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

- BCM receives seat belt buckle switch signal from combination meter with CAN communication line.
- BCM detects ignition switch turned ON and seat belt buckle switch (driver side) ON. And then transmits buzzer output signal (seat belt warning chime) to combination meter with CAN communication line.
- When combination meter receives buzzer output signal (seat belt warning chime), it sounds the buzzer.

### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Ignition switch OFF→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 is fulfilled.

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

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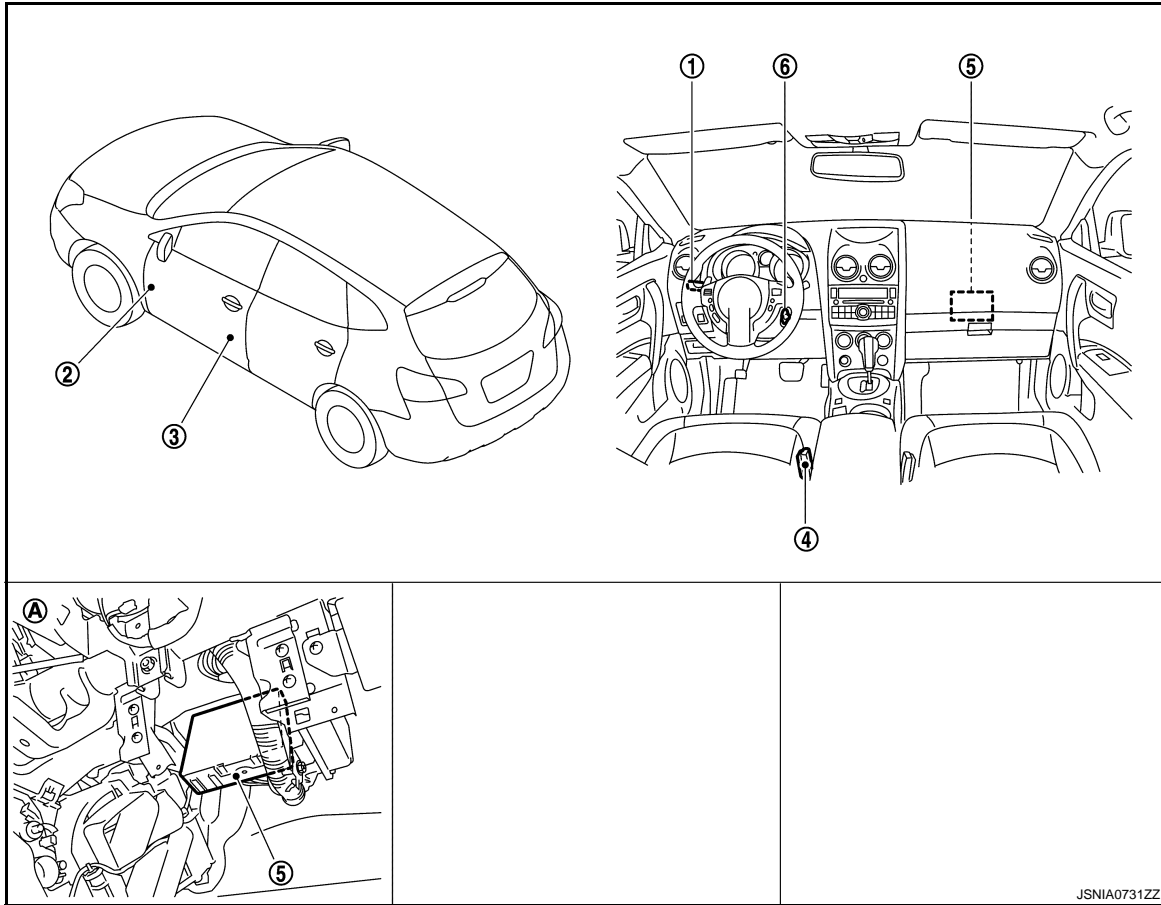
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# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## SEAT BELT REMINDER WARNING CHIME : Component Parts Location

INFOID:000000001747409



JSNIA0731ZZ

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|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch)  | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM                  | 6. Key switch                      |
| A. Over the glove box                    |                         |                                    |

## SEAT BELT REMINDER WARNING CHIME : Component Description

INFOID:000000001686518

Unit	Description
Combination meter	Receives a buzzer output signal from the BCM and sounds the buzzer.
BCM	Judges the seat belt warning condition from the seat belt buckle switch (driver side) signal received from the combination meter and transmits a buzzer output signal to the combination meter via CAN communication line if necessary.
Seat belt buckle switch (driver side)	Refer to <a href="#">WCS-22. "Description"</a> .

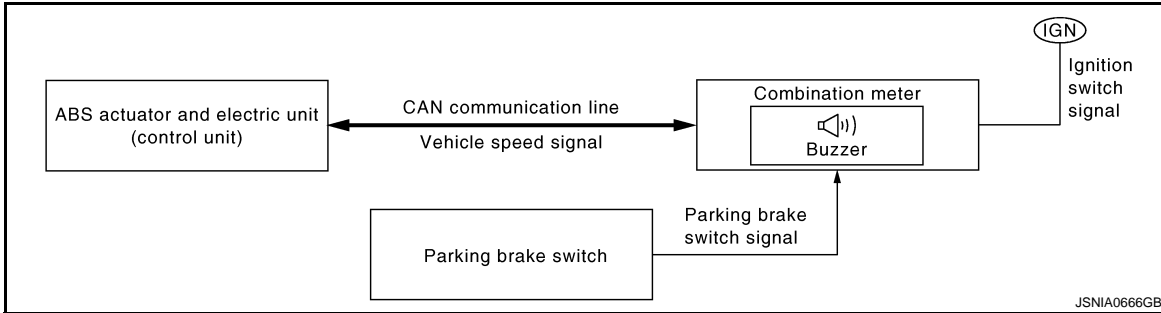
## PARKING BRAKE RELEASE WARNING CHIME

# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:000000001686519



## PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:000000001686520

### 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 more
- Parking brake switch ON

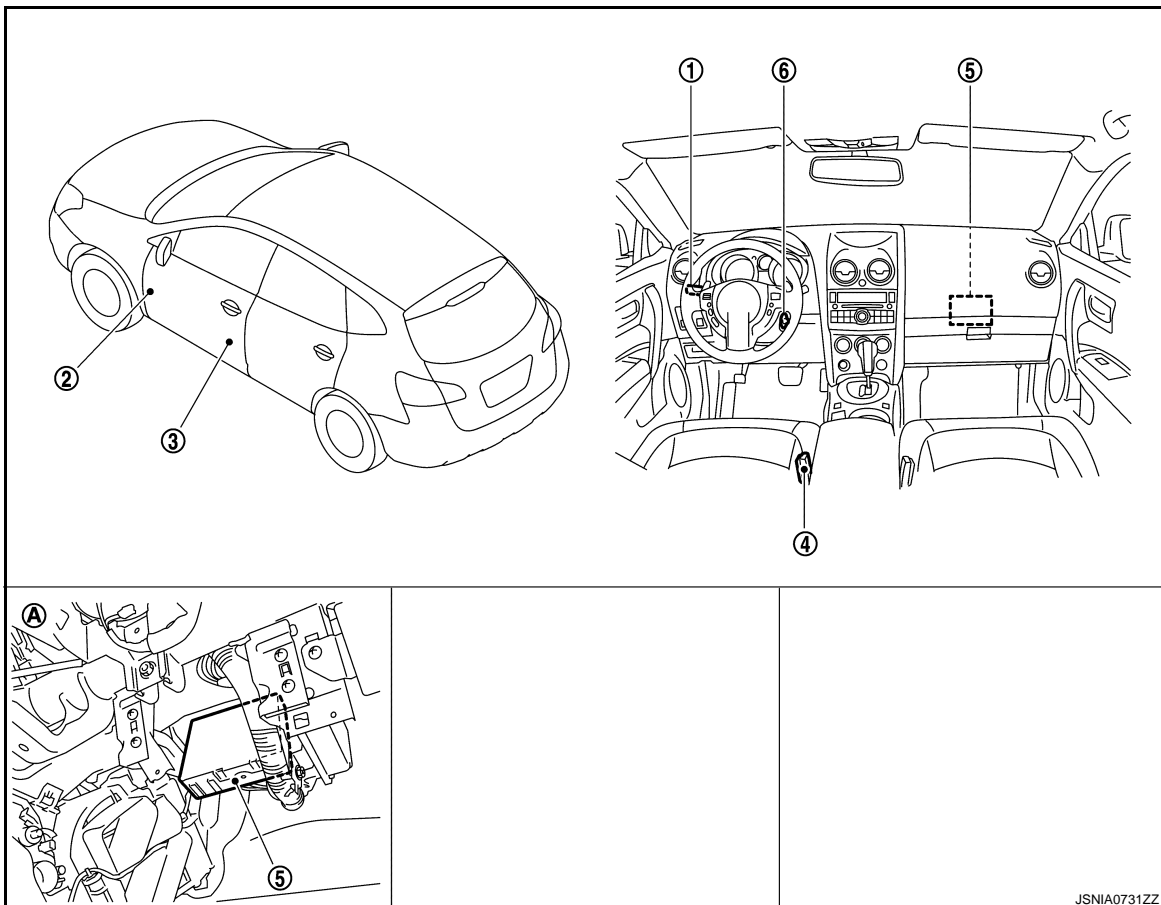
### WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is 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:000000001747410



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# WARNING CHIME SYSTEM

## < FUNCTION DIAGNOSIS >

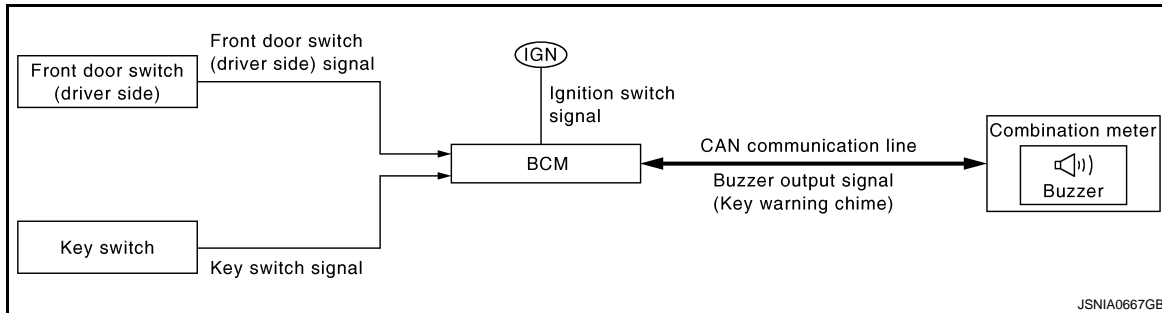
- |  |                         |                                    |
|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch)  | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM                  | 6. Key switch                      |
| A. Over the glove box                    |                         |                                    |

## PARKING BRAKE RELEASE WARNING CHIME : Component Description INFOID:000000001686522

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	Refer to <a href="#">WCS-24, "Description"</a> .

## KEY WARNING CHIME

### KEY WARNING CHIME : System Diagram INFOID:000000001686523



### KEY WARNING CHIME : System Description INFOID:000000001686003

#### DESCRIPTION

With the key inserted into the ignition key cylinder, and the ignition switch except in ON or START position, when driver door open, the key warning chime will sound.

- BCM detects key inserted into the ignition key cylinder, ignition switch except in ON or START position, front door switch (driver side) ON. And then transmits buzzer output signal (Key warning chime) to combination meter with CAN communication line.
- When combination meter receives buzzer output signal (Key warning chime), it sounds the buzzer.

#### NOTE:

With Intelligent Key system: refer to [DLK-35, "System Description"](#).

#### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Key inserted into the ignition key cylinder (Key switch signal ON)
- Ignition switch except in ON or START (Ignition switch signal OFF)
- Front door switch (driver side) open [Front door switch (driver side) signal ON]

#### WARNING CANCEL CONDITIONS

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

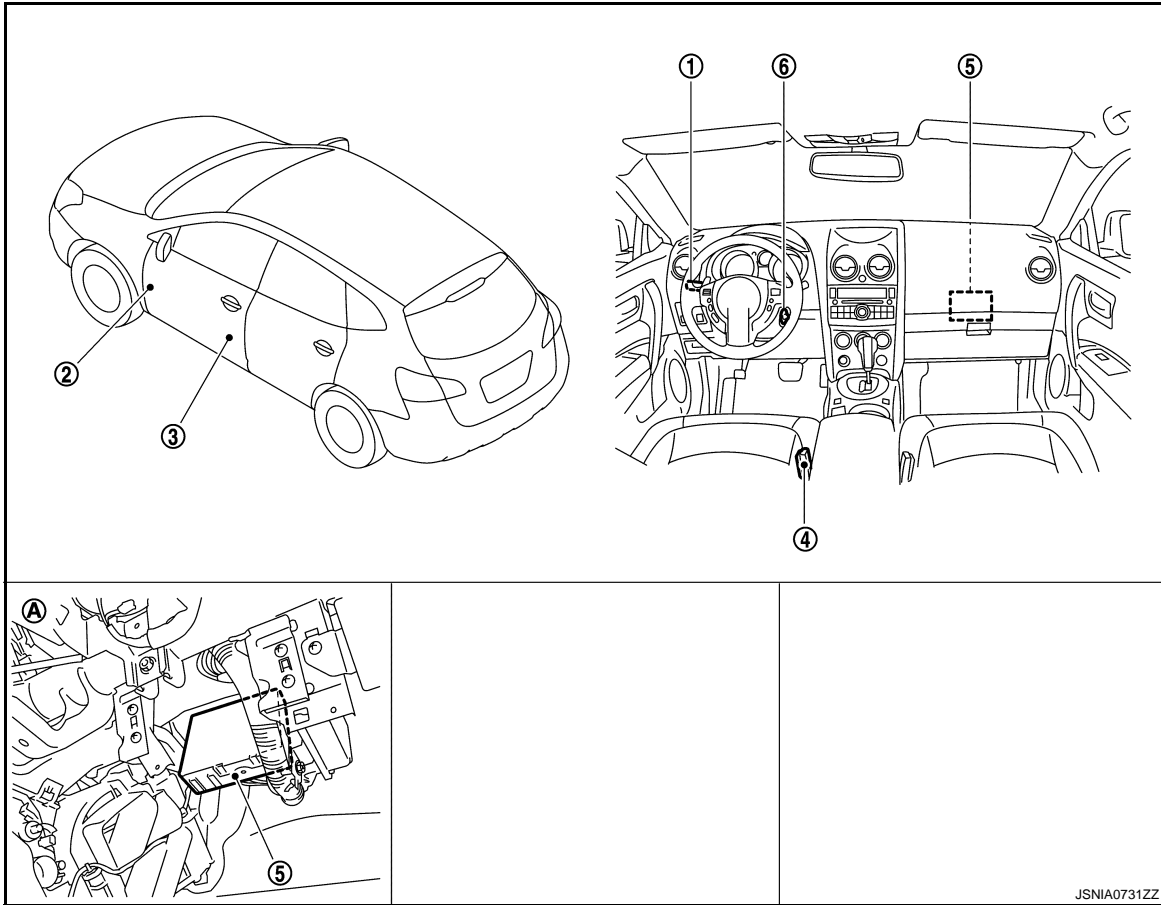
- Key removed from key cylinder (Key switch signal OFF)
- Ignition switch in ON or START (Ignition switch signal ON)
- Front door switch (driver side) close [Front door switch (driver side) signal OFF]

# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## KEY WARNING CHIME : Component Parts Location

INFOID:000000001747411



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|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch)  | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM                  | 6. Key switch                      |
| A. Over the glove box                    |                         |                                    |

## KEY WARNING CHIME : Component Description

INFOID:000000001686526

Unit	Description
Combination meter	Received a buzzer output signal from the BCM and sounds the buzzer.
BCM	Judges key warning according to the door switch signal from the front door switch (driver side) and the key switch signal from the key switch and transmits the buzzer output signal to the combination meter via CAN communication.
Front door switch (driver side)	Transmits the door switch signal to BCM.
Key switch	Transmits the key switch signal to BCM and Intelligent Key unit.

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# DIAGNOSIS SYSTEM (METER)

< FUNCTION DIAGNOSIS >

## DIAGNOSIS SYSTEM (METER)

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

INFOID:000000001754022

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

System	Diagnosis mode	Description
METER/M&A	Self Diagnostic Result	Combination meter checks the conditions and displays memorized error.
	Data Monitor	Displays combination meter input/output data in real time.

### SELF DIAGNOSTIC RESULT

Refer to [WCS-42, "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) with CAN communication line. <b>NOTE:</b> 655.35 is displayed when the malfunction signal is received.
SPEED OUTPUT [km/h]	X	Vehicle speed signal value transmitted to other units with CAN communication line. <b>NOTE:</b> 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [km/h or mph]		Odometer signal value transmitted to other units with CAN communication line.
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM with CAN communication line. <b>NOTE:</b> 8191.875 is displayed when the malfunction signal is received.
FUEL METER [lit.]	X	Fuel level indicated on combination meter.
W TEMP METER [°C]	X	Value of engine coolant temperature signal received from ECM with CAN communication line. <b>NOTE:</b> 215 is displayed when the malfunction signal is input.
ABS W/L [On/Off]		Status of ABS warning lamp judged from ABS warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp judged from VDC OFF indicator lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
SLIP IND [On/Off]		Status of slip indicator lamp judged from slip indicator lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
BRAKE W/L [On/Off]		Status of brake warning lamp judged from brake warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line. <b>NOTE:</b> 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 lamp judged from door switch signal received from BCM with CAN communication line.
HI -BEAM IND [On/Off]		Status of high beam indicator lamp judged from high beam request signal received from BCM with CAN communication line.
TURN IND [On/Off]		Status of turn indicator lamp judged from turn indicator signal received from BCM with CAN communication line.

## DIAGNOSIS SYSTEM (METER)

### < FUNCTION DIAGNOSIS >

Display item [Unit]	MAIN SIGNALS	Description	A
LIGHT IND [On/Off]		Status of light indicator lamp judged from position light request signal received from BCM with CAN communication line.	A
OIL W/L [On/Off]		Status of oil pressure warning lamp judged from oil pressure switch signal received from IPDM E/R with CAN communication line.	B
MIL [On/Off]		Status of malfunction indicator lamp judged from malfunctioning indicator lamp signal received from ECM with CAN communication line.	C
CRUISE IND [On/Off]		Status of CRUISE indicator judged from ASCD CRUISE lamp signal received from ECM with CAN communication line.	D
SET IND [On/Off]		Status of set indicator judged from ASCD SET indicator signal received from ECM with CAN communication line.	D
CVT IND [On/Off]		Status of CVT indicator lamp or SPORT indicator lamp judged from CVT indicator lamp signal or SPORT indicator signal received from TCM with the CAN communication line.	E
4WD W/L [On/Off]		Status of AWD warning lamp judged from AWD warning lamp signal received from AWD control unit with CAN communication line.	F
4WD LOCK IND [On/Off]		Status of AWD lock indicator judged from AWD signal received from AWD control unit with the CAN communication line.	F
FUEL W/L [On/Off]		Status of Low-fuel warning lamp judged from identified fuel level.	G
AIR PRESS W/L [On/Off]		Status of low tire pressure warning lamp judged from the tire pressure signal received from BCM with CAN communication line.	H
KEY G W/L [On/Off]		Status of key warning lamp (G) judged from key warning signal received from Intelligent Key unit with CAN communication line.	H
KEY R W/L [On/Off]		Status of key warning lamp (R) judged from key warning signal received from Intelligent Key unit with CAN communication line.	I
KEY KNOB W/L [On/Off]		Status of Key knob switch received from Intelligent Key unit with the CAN communication line.	J
EPS W/L [On/Off]		Status of EPS warning lamp judged from EPS warning lamp signal received from EPS control unit with the CAN communication line.	J
SHIFT IND [P/ R/ N/ D/ M1/ M2/ M3/ M4/ M5/ M6]		Status of shift position indicator judged from shift position signal and manual mode indicator signal received from TCM with CAN communication line.	K
O/D OFF SW [On/Off]		Status of O/D OFF switch.	L
M RANGE SW [On/Off]		Status of mode select switch (manual).	L
NM RANGE SW [On/Off]		Status of mode select switch (auto).	M
AT SFT UP SW [On/Off]		Status of position select switch (up).	WCS
AT SFT DWN SW [On/Off]		Status of position select switch (down).	WCS
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.	O
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.	P
PKB SW [On/Off]		Status of parking brake switch.	P
BUCKLE SW [On/Off]		Status of seat belt buckle switch (driver side).	P
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.	P

## DIAGNOSIS SYSTEM (METER)

### < FUNCTION DIAGNOSIS >

Display item [Unit]	MAIN SIGNALS	Description
DISTANCE [km]		Value of possible driving distance calculated by combination meter.
OUTSIDE TEMP [°C or °F]		Ambient temperature value converted from ambient sensor signal received from ambient sensor. <b>NOTE:</b> 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 with CAN communication line.
BUZZER [On/Off]	X	Buzzer status (in the combination meter) judged with the buzzer output signal received from BCM via CAN communication and the warning output condition of the combination meter.

**NOTE:**

Some items are not available according to vehicle specification.



# DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

## DIAGNOSIS SYSTEM (BCM)

### COMMON ITEM

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

INFOID:000000001754028

### APPLICATION ITEM

CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnosis mode	Function description
ECU Identification	BCM part number is displayed.
Self-Diagnostic Result	Displays the diagnosis results judged by BCM. Refer to <a href="#">BCS-63, "DTC Index"</a> .
Data Monitor	BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Changes the setting for each system function.
Configuration	<ul style="list-style-type: none"> <li>Read and save the vehicle specification.</li> <li>Write the vehicle specification when replacing BCM.</li> </ul>
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from 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.

x: Applicable item

System	CONSULT-III sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	x	x	x
Rear window defogger	REAR DEFOGGER		x	x
Warning chime	BUZZER		x	x
Interior room lamp control	INT LAMP	x	x	x
Remote keyless entry system	MULTI REMOTE ENT	x	x	x
Exterior lamp	HEAD LAMP	x	x	x
Wiper and washer	WIPER	x	x	x
Turn signal and hazard warning lamps	FLASHER		x	x
Air conditioner	AIR CONDITONER		x	
Intelligent Key system	INTELLIGENT KEY		x	
Combination switch	COMB SW		x	
—	BCM	x		
Immobilizer	IMMU		x	x
Interior room lamp battery saver	BATTERY SAVER	x	x	x
Back door open	TRUNK		x	x
Vehicle security system	THEFT ALM	x	x	x
RAP system	RETAINED PWR	x	x	x
Signal buffer system	SIGNAL BUFFER		x	x
—	FUEL LID*			
TPMS	TPMS (AIR PRESSURE MONITOR)	x	x	x
Panic alarm system	PANIC ALARM			x

\*: This item is displayed, but is not function.

### BUZZER

# DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

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

INFOID:000000001686533

### CONSULT-III FUNCTION (BCM – BUZZER)

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
IGN ON SW [On/Off]	Ignition switch (ON) status judged by ignition power supply input.
KEY ON SW [On/Off]	Key switch status.
DOOR SW -DR [On/Off]	Front door switch (driver side) status judged by BCM.
LIGHT SW 1ST [On/Off]	Lighting switch status judged by the lighting switch signal read with combination switch reading function.
BUCKLE SW [On/Off]	Seat belt buckle switch (driver side) status judged by BCM.

#### ACTIVE TEST

Display item	Description
LIGHT WARN ALM	The light reminder warning chime operation can be checked by operating the relevant function (On/Off).
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 reminder warning chime operation can be checked by operating the relevant function (On/Off). The seat belt warning chime operation can be checked by operating the relevant function (On/Off).

# POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

## COMPONENT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

#### COMBINATION METER : Diagnosis Procedure

INFOID:000000001754030

#### 1. CHECK FUSE

Check for blown fuses.

Signal name	Fuses No.
Battery power supply	9
Ignition signal	3

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 terminal and ground.

Terminals		Ignition switch position	
(+)	(-)		
Combination meter		OFF	ON
Connector	Terminal		
M34	1	Battery voltage	Battery voltage
	2	Approx. 0 V	Battery voltage

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 terminal and ground.

Combination meter		Ground	Continuity
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:000000001754029

#### 1. CHECK FUSES AND FUSIBLE LINK

Check that the following fuses and fusible link are not fusing.

A  
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J  
K  
L  
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O  
P

# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

Signal name	Fuses and fusible link No.
Battery power supply	10
	J
ACC power supply	20
Ignition power supply	1

### 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		(-)	Ignition switch position		
BCM			OFF	ACC	ON
Connector	Terminal	Ground			
M67	70		Battery voltage	Battery voltage	Battery voltage
	57				
M65	11		Approx. 0 V	Battery voltage	Battery voltage
	38	Approx. 0 V	Approx. 0 V	Battery voltage	

### 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		
M67	67		Existed

### Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

# METER BUZZER CIRCUIT

< COMPONENT DIAGNOSIS >

## METER BUZZER CIRCUIT

### Description

INFOID:000000001686536

- 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:000000001686537

#### 1.CHECK OPERATION OF METER BUZZER

1. Connect the CONSULT-III
2. Perform "LIGHT WARN ALM", "KEY WARN ALM" or "SEAT BELT WARN TEST" in "ACTIVE TEST" of "BCM (BUZZER)".

#### Does meter buzzer beep?

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

#### 2.CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" of "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. Refer to [MWI-83, "Removal and Installation"](#).  
NO >> Replace BCM. Refer to [BCS-67, "Exploded View"](#).

### Diagnosis Procedure

INFOID:000000001686538

#### 1.CHECK POWER SUPPLY AND GROUND CIRCUIT OF COMBINATION METER

Check power supply and ground circuit of combination meter. Refer to [WCS-19, "COMBINATION METER : Diagnosis Procedure"](#).

#### Is the inspection result normal?

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

A  
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M  
O  
P

WCS

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

## SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

### Description

INFOID:000000001686539

Transmits a seat belt buckle switch signal to the combination meter.

### Component Function Check

INFOID:000000001686540

#### 1.CHECK COMBINATION METER INPUT SIGNAL

1. Connect the CONSULT-III
2. Select the "Data Monitor" of "METER/M&A" and check the "BUCKLE SW" monitor value.

"BUCKLE SW"

When driver seat belt is fastened : Off

When driver seat belt is unfastened : On

>> INSPECTION END

### Diagnosis Procedure

INFOID:000000001686541

#### 1.CHECK COMBINATION METER INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

#### 2.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) SIGNAL 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 front seat belt buckle switch (driver side) harness connector terminal.

Combination meter		Seat belt buckle switch (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M34	35	B409	1	Existed

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

Combination meter		Ground	Continuity
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 (DRIVER SIDE) GROUND CIRCUIT

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

## < COMPONENT DIAGNOSIS >

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

Seat belt buckle switch (driver side)		Ground	Continuity
Connector	Terminal		
B409	2		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## Component Inspection

INFOID:000000003208739

### 1. CHECK SEAT BELT BUCKLE SWITCH UNIT

1. Turn ignition switch OFF.
2. Disconnect the seat belt buckle switch connector.
3. Check continuity between terminals 1 and 2.

1-2

When seat belt is fastened : Continuity should not exist.

When seat belt is unfastened : Continuity should exist.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the seat belt buckle. Refer to [SB-8. "SEAT BELT BUCKLE : Removal and Installation"](#).

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M  
O  
P

WCS

# PARKING BRAKE SWITCH SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

## PARKING BRAKE SWITCH SIGNAL CIRCUIT

### Description

INFOID:000000001686542

Transmits the parking brake switch signal to the combination meter.

### Diagnosis Procedure

INFOID:000000001686543

#### 1. CHECK COMBINATION METER INPUT SIGNAL

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

Terminal		(-)	Condition	Voltage (Approx.)
(+)				
Combination meter	Connector			
M34	26	Ground	Parking brake ON	0 V
			Parking brake OFF	5 V

Is the inspection result normal?

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

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

1. Turn ignition switch OFF.
2. Disconnect combination meter connector and parking brake switch connector.
3. Check continuity between combination meter harness connector terminal and parking brake switch harness connector terminal.

Combination meter		Parking brake switch		Continuity
Connector	Terminal	Connector	Terminal	
M34	26	E103	1	Existed

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

Combination meter		Ground	Continuity
Connector	Terminal		
M34	26		Not existed

Is the inspection result normal?

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

### Component Inspection

INFOID:000000001686544

Refer to [BRC-45, "Component Inspection"](#).



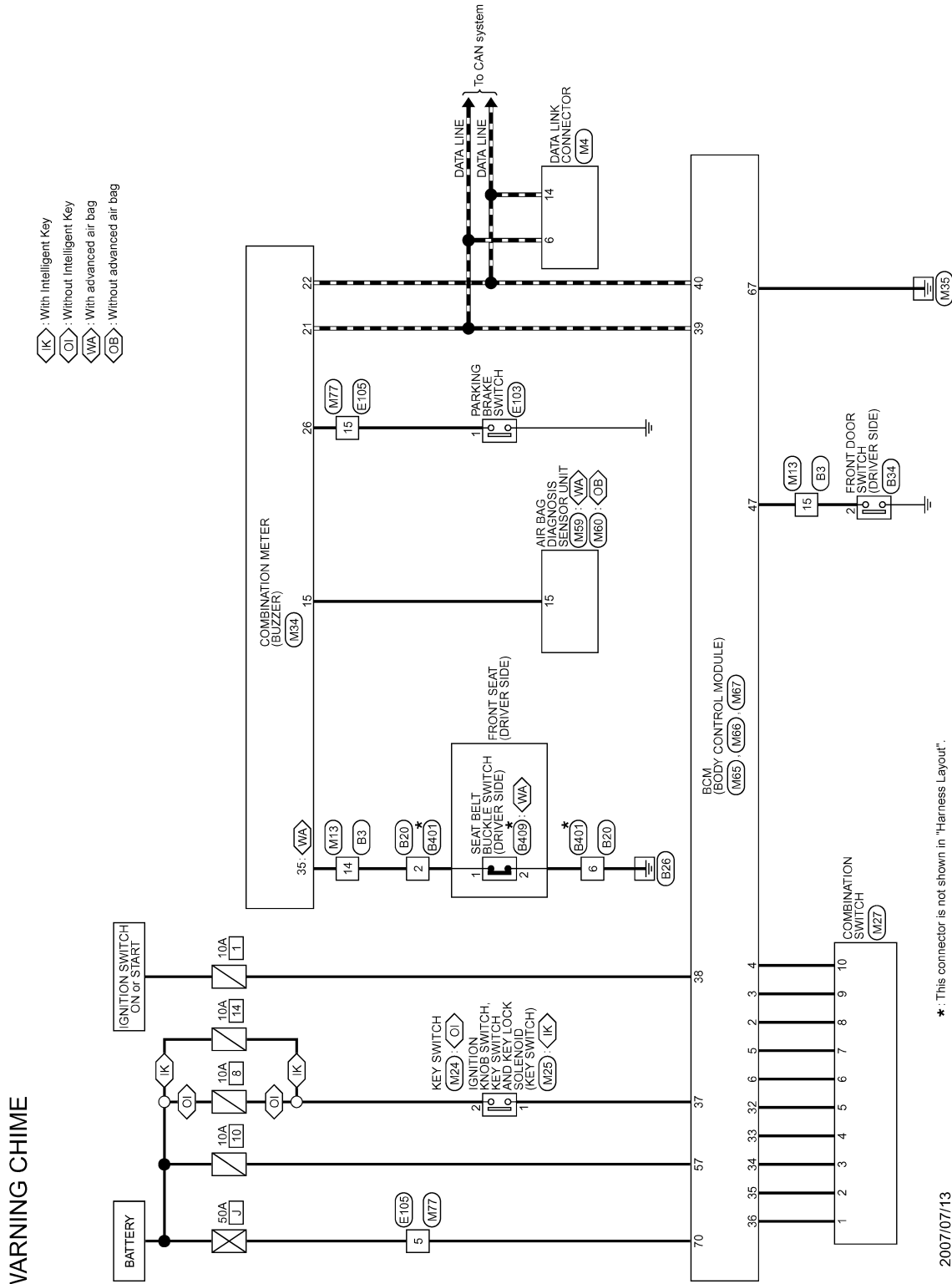
# WARNING CHIME SYSTEM

< COMPONENT DIAGNOSIS >

## WARNING CHIME SYSTEM

### Wiring Diagram - WARNING CHIME -

INFOID:000000001686545



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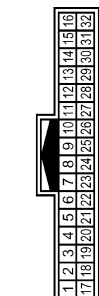
WCS

# WARNING CHIME SYSTEM

## < COMPONENT DIAGNOSIS >

### WARNING CHIME

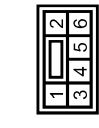
Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH2ZMW-NH



Terminal No.	14	O	P
Terminal No.	15	O	P

Terminal No.	Color of Wire	Signal Name [Specification]
14	O	-
15	P	-


Connector No.	B20
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS



Terminal No.	2	O	B
Terminal No.	6	O	B

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


Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



Terminal No.	2	P	-
--------------	---	---	---

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


Connector No.	B401
Connector Name	WIRE TO WIRE
Connector Type	NS06MM-CS



Terminal No.	2	W/G	GR
Terminal No.	6	W/G	GR

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


Connector No.	B409
Connector Name	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
Connector Type	TK03FW



Terminal No.	1	W/G	GR
Terminal No.	2	W/G	GR

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/G	-
2	GR	-

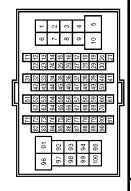
Connector No.	E103
Connector Name	PARKING BRAKE SWITCH
Connector Type	P01FB-A



Terminal No.	1	V	-
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Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

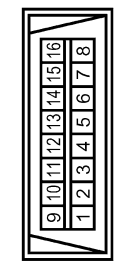
Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH06FW-CS16-TM4



Terminal No.	5	Y	V
Terminal No.	15	Y	V

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
15	V	-

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



Terminal No.	6	L	P
Terminal No.	14	L	P

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



JCNWM0544GI

# WARNING CHIME SYSTEM

## < COMPONENT DIAGNOSIS >



### WARNING CHIME

Connector No.	M27
Connector Name	COMBINATION SWITCH
Connector Type	TK16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	INPUT 1
2	B	INPUT 2
3	L	INPUT 3
4	GR	INPUT 4
5	BR	INPUT 5
6	P	OUTPUT 1
7	R	OUTPUT 2
8	G	OUTPUT 3
9	Y	OUTPUT 4
10	W	OUTPUT 3

Connector No.	M25
Connector Name	IGNITION KNIFE SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK6BMGY



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

Connector No.	M60
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK20FY-EX-SC



Terminal No.	Color of Wire	Signal Name [Specification]
15	LG	A/B W/L

Connector No.	M24
Connector Name	KEY SWITCH
Connector Type	TK20MR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	GR	-

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK2BFY-EX-SC



Terminal No.	Color of Wire	Signal Name [Specification]
15	LG	A/B W/L

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH27V-INI

Terminal No.	Color of Wire	Signal Name [Specification]
14	O	-
15	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW

Terminal No.	Color of Wire	Signal Name [Specification]
15	LG	AIR BAG
21	L	CAN-H
22	P	CAN-L
26	V	PARKING BRAKE SW
35	O	SEAT BELT BUCKLE SW (PASSENGER SIDE)

JCNWM0545GI

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WCS

# WARNING CHIME SYSTEM

## < COMPONENT DIAGNOSIS >

### WARNING CHIME

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40TW



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
2	G	INPUT 5
3	Y	INPUT 4
4	W	INPUT 3
5	R	INPUT 2
6	P	INPUT 1
32	BR	OUTPUT 5
33	GR	OUTPUT 4
34	L	OUTPUT 3
35	B	OUTPUT 2
36	V	OUTPUT 1
37	LG	KEY SW

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS1(F-TM4)



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	—
15	V	—

38	G	IGN
39	L	CAN-H
40	P	CAN-L

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA08FW-FHA8-SA



41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name [Specification]
47	W	DR SW DR

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA08FB-FHA6-SA



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name [Specification]
57	G	BAT FUSE
67	B	GRD
70	Y	BAT FL

# COMBINATION METER

< ECU DIAGNOSIS >

## ECU DIAGNOSIS COMBINATION METER

Reference Value

INFOID:000000001754031

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
SPEED METER [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading <b>NOTE:</b> 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading <b>NOTE:</b> 655.35 is displayed when the malfunction signal is received
ODO OUTPUT	Ignition switch ON	—	Equivalent to odometer reading in combination meter
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading <b>NOTE:</b> 8191.875 is displayed when the malfunction signal is received
FUEL METER [lit]	Ignition switch ON	—	Values according to fuel level
W TEMP METER [°C]	Ignition switch ON	—	Values according to engine coolant temperature <b>NOTE:</b> 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

# COMBINATION METER

## < ECU DIAGNOSIS >

Monitor Item	Condition		Value/Status
SET IND	Ignition switch ON	SET indicator lamp ON	On
		SET indicator lamp OFF	Off
CVT IND	Ignition switch ON	CVT or SPORT indicator lamp ON	On
		CVT or SPORT 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	LOCK indicator lamp ON	On
		LOCK indicator lamp OFF	Off
FUEL W/L	Ignition switch ON	Low-fuel warning lamp ON	On
		Low-fuel warning lamp OFF	Off
AIR PRES W/L	Ignition switch ON	Low tire pressure warning lamp ON	On
		Low tire pressure warning lamp OFF	Off
KEY G W/L	Ignition switch ON	KEY warning lamp (green) ON	On
		KEY warning lamp (green) OFF	Off
KEY R W/L	Ignition switch ON	KEY warning lamp (red) ON	On
		KEY warning lamp (red) OFF	Off
KEY KNOB W/L	Ignition switch ON	LOCK warning lamp ON	On
		LOCK warning lamp OFF	Off
EPS W/L	Ignition switch ON	EPS warning lamp ON	On
		EPS warning lamp OFF	Off
DDS W/L *	Ignition switch ON	DDS warning lamp ON	On
		DDS warning lamp OFF	Off
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 M1 display	M1
		Shift position indicator M2 display	M2
		Shift position indicator M3 display	M3
		Shift position indicator M4 display	M4
		Shift position indicator M5 display	M5
Shift position indicator M6 display	M6		
O/D OFF SW	Ignition switch ON	O/D OFF switch pressed	On
		O/D OFF switch not pressed	Off
M RANGE SW	Ignition switch ON	Manual mode	On
		Other than the above	Off
NM RANGE SW	Ignition switch ON	Manual mode	Off
		Other than the above	On
AT SFT UP SW	Ignition switch ON	Selector lever (+) position	On
		Other than the above	Off
AT SFT DWN SW	Ignition switch ON	Selector lever (-) position	On
		Other than the above	Off
ST SFT UP SW	Ignition switch ON	Paddle shifter up operation	On
		Other than the above	Off

# COMBINATION METER

## < ECU DIAGNOSIS >

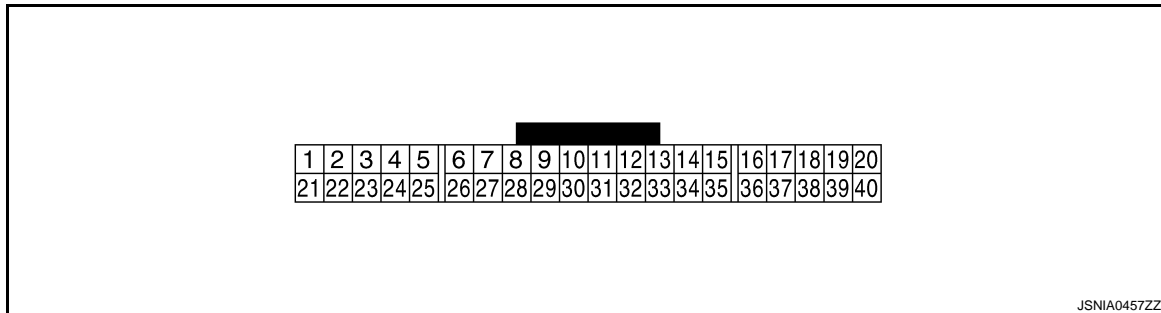
Monitor Item	Condition		Value/Status
ST SFT DWN SW	Ignition switch ON	Paddle shifter down operation	On
		Other than the above	Off
PKB SW	Ignition switch ON	Parking brake switch ON	On
		Parking brake switch OFF	Off
BUCKLE SW	Ignition switch ON	Seat belt buckle switch ON	On
		Seat belt buckle switch OFF	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
OUTSIDE TEMP [°C or °F]	Ignition switch ON	—	Equivalent to ambient air temperature <b>NOTE:</b> 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

\*: DDS (hill descent control)

### NOTE:

Some items are not available according to vehicle specification.

## TERMINAL LAYOUT

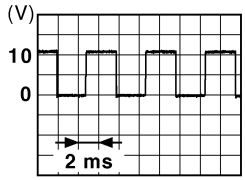
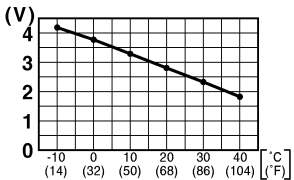


## PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (LG)	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
9 (P)	Ground	O/D OFF switch signal	Input	Ignition switch ON	O/D OFF switch pressed	0 V
					O/D OFF switch not pressed	12 V

# COMBINATION METER

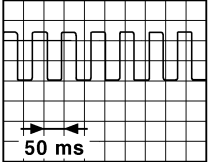
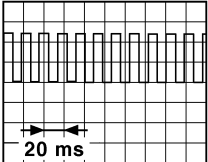
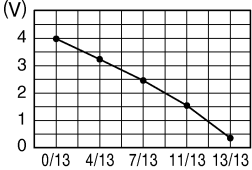
## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
12 (G)	Ground	Paddle shifter down signal	Input	Ignition switch ON	Paddle shifter down operation	0 V
					Other than the above	12 V
13 (Y)	Ground	Illumination control signal	Input	Ignition switch ON	Lighting switch ON, then operate the illumination control switch	<p><b>NOTE:</b> When brightness level is midway</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p>
14 (L)	Ground	Paddle shifter up signal	Input	Ignition switch ON	Paddle shifter up operation	0 V
					Other than the above	5 V
15 (LG)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON	4 V
					Air bag warning lamp OFF	0 V
19 (BR)	Ground	Ambient sensor signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">JSNIA0014GB</p>
20 (SB)	Ground	Ambient sensor ground	—	Ignition switch ON	—	0 V
21 (L)	—	CAN-H	—	—	—	—
22 (P)	—	CAN-L	—	—	—	—
23 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
24 (B)	Ground	Fuel level sensor signal ground	—	Ignition switch ON	—	0 V
25 (SB)	Ground	Alternator signal	Input	Ignition switch ON	Charge warning lamp ON	0 V
					Charge warning lamp OFF	12 V
26 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	5 V
27 (BR)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal	5 V
					Brake fluid level is less than low level	0 V
28 (B)	Ground	Security signal	Input	Ignition switch ON	Security warning lamp ON	0 V
					Security warning lamp OFF	12 V



# COMBINATION METER

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
29 (W)	Ground	Washer level switch signal	Input	Ignition switch ON	Washer level switch ON	0 V
					Washer level switch OFF	12 V
30 (Y)	Ground	Vehicle speed signal (2 pulse)	Output	Ignition switch ON	Vehicle speed is approximately 40 km/h (25 MPH)	<b>NOTE:</b> The maximum voltage varies depending on the specification (destination unit).  <small>JSNIA0015GB</small>
31 (L)	Ground	Vehicle speed signal (8 pulse)	Output	Ignition switch ON	Vehicle speed is approximately 40 km/h (25 MPH)	<b>NOTE:</b> The maximum voltage varies depending on the specification (destination unit).  <small>JSNIA0012GB</small>
34 (G)	Ground	Fuel level sensor signal	Input	Ignition switch ON	—	 <small>JSNIA0423GB</small>
35 (O)	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 (G)	Ground	Seat belt buckle switch signal (passenger side)	Input	Ignition switch ON	<ul style="list-style-type: none"> <li>When getting in the passenger seat</li> <li>When passenger seat belt is fastened</li> </ul>	12 V
					<ul style="list-style-type: none"> <li>When getting in the passenger seat</li> <li>When passenger seat belt is unfastened</li> </ul>	0 V
37 (P)	Ground	Not manual mode signal	Input	Ignition switch ON	Manual mode	12 V
					Other than the above	0 V
38 (O)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Selector lever (-) position	0 V
					Other than the above	12 V
39 (V)	Ground	Manual mode shift up signal	Input	Ignition switch ON	Selector lever (+) position	0 V
					Other than the above	12 V

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WCS

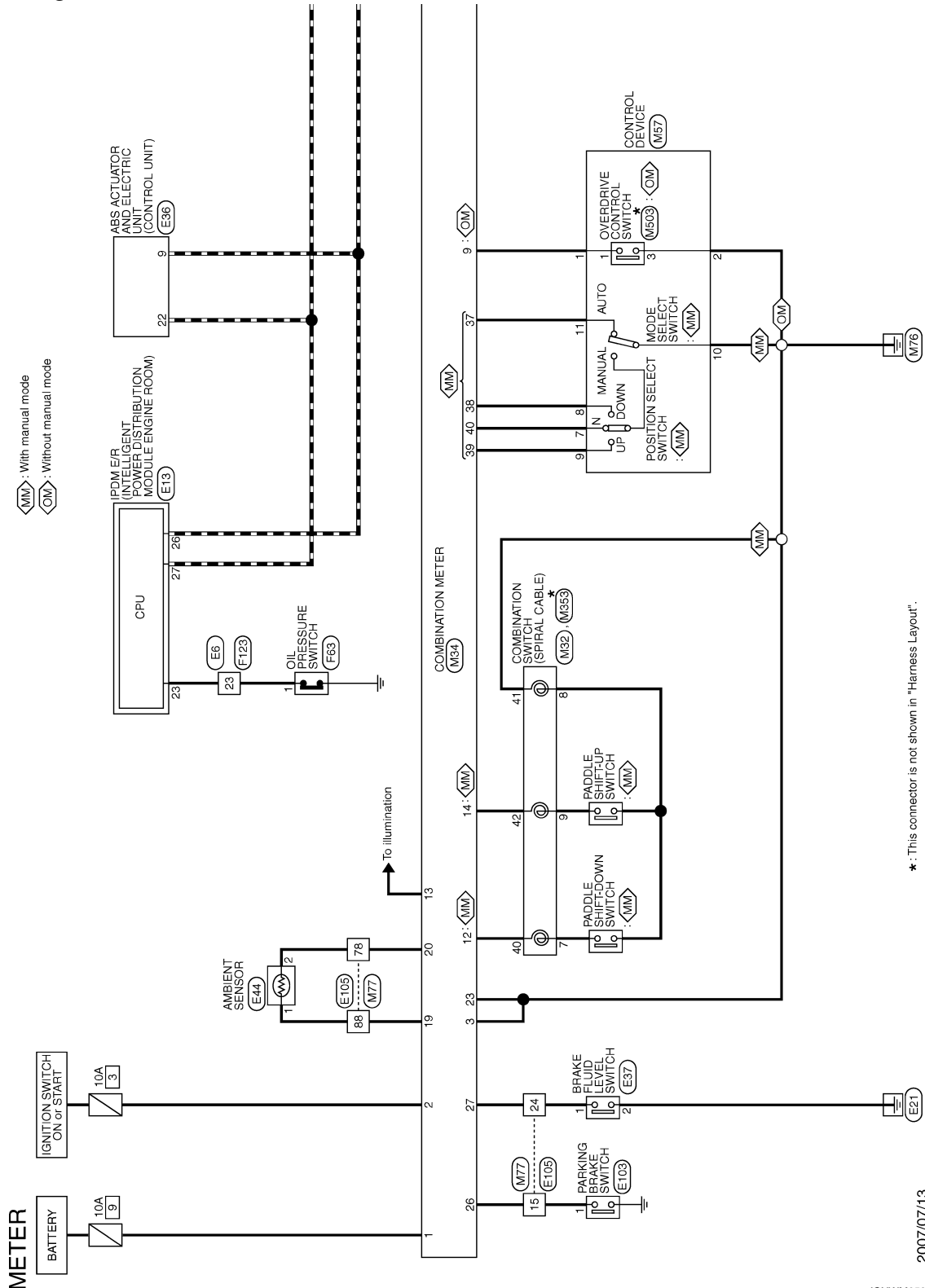
# COMBINATION METER

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
40 (LG)	Ground	Manual mode signal	Input	Ignition switch ON	0 V
				Other than the above	12 V

## Wiring Diagram - METER -

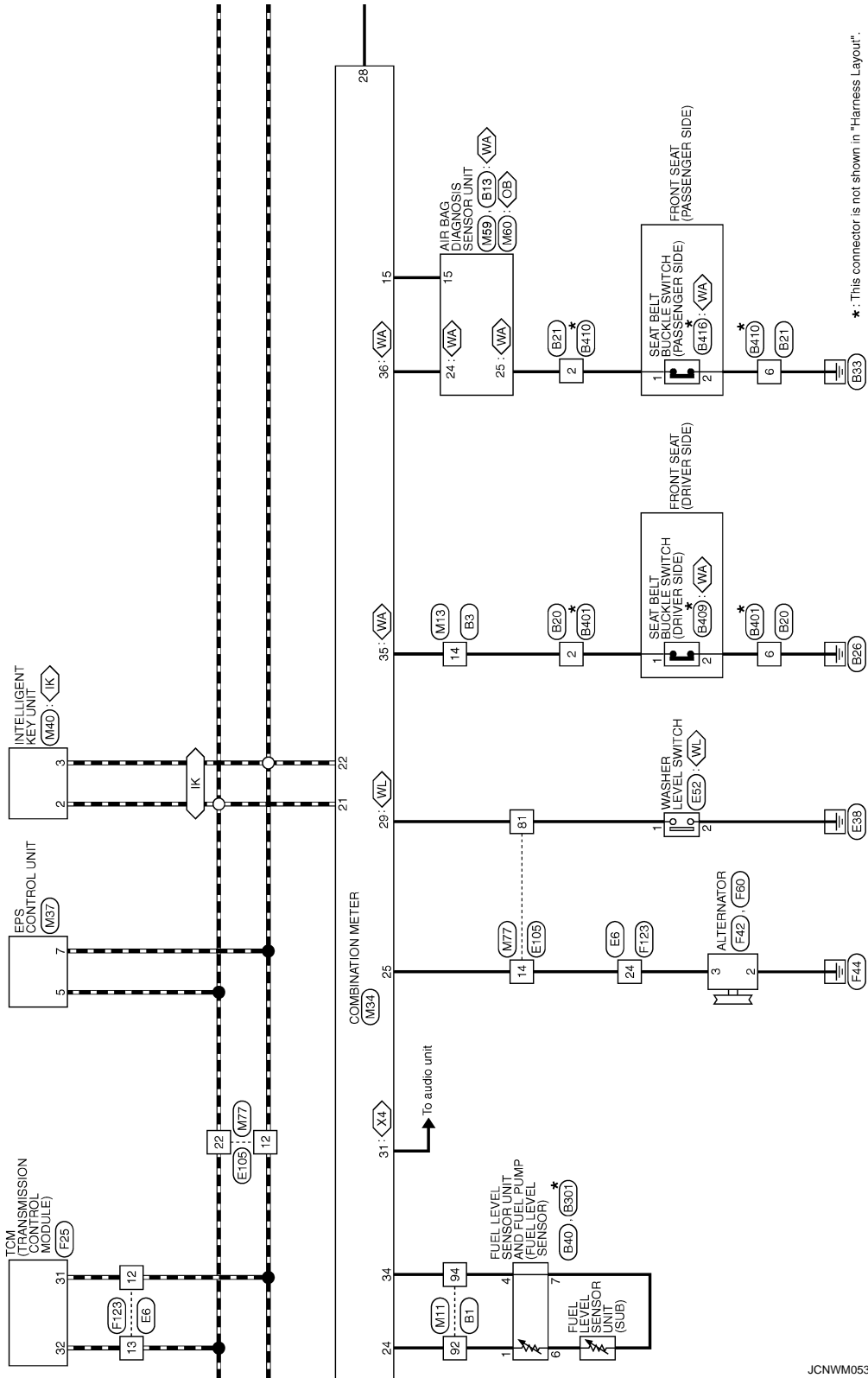
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# COMBINATION METER

< ECU DIAGNOSIS >

- : With intelligent key
- : With advanced air bag
- : Without advanced air bag
- : Except 4-speakers
- : With washer level switch



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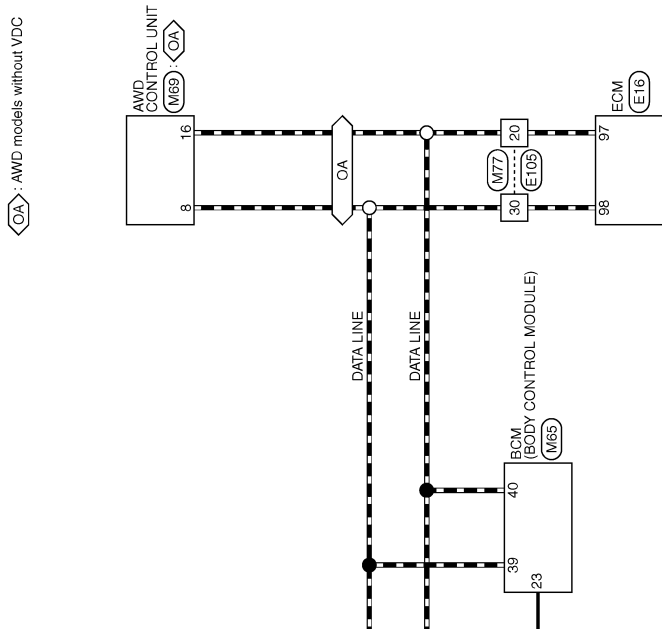
\*: This connector is not shown in "Harness Layout".

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# COMBINATION METER

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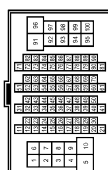



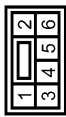





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# COMBINATION METER

< ECU DIAGNOSIS >

## METER

Connector No. B1	WIRE TO WIRE TH80MF-CS (F-TM4)		Terminal No. 92 94	Color of Wire R G	Signal Name [Specification] -- --
Connector No. B3	WIRE TO WIRE TH42MF-NH		Terminal No. 14	Color of Wire O	Signal Name [Specification] --
Connector No. B13	AIR BAG DIAGNOSIS SENSOR UNIT TK12FY-1V-EX		Terminal No. 25	Color of Wire LG	Signal Name [Specification] BUCKLE SW RH
Connector No. B20	WIRE TO WIRE NS08FW-CS		Terminal No. 2 6	Color of Wire O B	Signal Name [Specification] -- --
Connector No. B21	WIRE TO WIRE NS08FW-CS		Terminal No. 2	Color of Wire LG	Signal Name [Specification] --
Connector No. B40	FUEL LEVEL SENSOR UNIT AND FUEL PUMP EG0FGY-RS		Terminal No. 1 4	Color of Wire R G	Signal Name [Specification] -- --
Connector No. B40I	FUEL LEVEL SENSOR UNIT AND FUEL PUMP NS08MF-CS		Terminal No. 6 7	Color of Wire -- --	Signal Name [Specification] -- --
Connector No. B40I	WIRE TO WIRE NS08MF-CS		Terminal No. 2 6	Color of Wire W/G GR	Signal Name [Specification] -- --

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# COMBINATION METER

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## METER








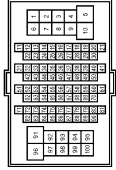

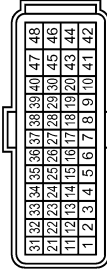






Connector No. B409	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)	TKG3FW		Terminal No. 1	Color of Wire W/G	Signal Name [Specification]	Terminal No. 2	Color of Wire GR	Signal Name [Specification]
Connector No. B410	WIRE TO WIRE	NSG6MF-CS		Terminal No. 2	Color of Wire W/G	Signal Name [Specification]	Terminal No. 6	Color of Wire GR	Signal Name [Specification]
Connector No. B416	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)	TKG3FW		Terminal No. 1	Color of Wire W/G	Signal Name [Specification]	Terminal No. 2	Color of Wire GR	Signal Name [Specification]
Connector No. E6	WIRE TO WIRE	TK2AMF-TV		Terminal No. 12	Color of Wire P	Signal Name [Specification]	Terminal No. 13	Color of Wire L	Signal Name [Specification]
Connector No. E13	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	TH12FW-NH		Terminal No. 23	Color of Wire W	Signal Name [Specification]	Terminal No. 26	Color of Wire P	Signal Name [Specification]
Connector No. E16	ECM	MAA2FB-MEAB-RH		Terminal No. 97	Color of Wire P	Signal Name [Specification]	Terminal No. 98	Color of Wire L	Signal Name [Specification]
Connector No. E36	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	RH28FB-NL4-DH		Terminal No. 9	Color of Wire P	Signal Name [Specification]	Terminal No. 22	Color of Wire L	Signal Name [Specification]
Connector No. E37	BRAKE FLUID LEVEL SWITCH	YV02FGY		Terminal No. 1	Color of Wire LG	Signal Name [Specification]	Terminal No. 2	Color of Wire B	Signal Name [Specification]

JCNWM0537GI

# COMBINATION METER

< ECU DIAGNOSIS >

## METER

Connector No. E44	Connector Name AMBIENT SENSOR	Connector Type RS2FB	 	Terminal No. 1 2	Color of Wire BR L	Signal Name [Specification]
Connector No. E42	Connector Name WASHER LEVEL SWITCH	Connector Type Z0ZFB	 	Terminal No. 1 2	Color of Wire W B	Signal Name [Specification]
Connector No. E103	Connector Name PARKING BRAKE SWITCH	Connector Type F01FB-A	 	Terminal No. 1	Color of Wire V	Signal Name [Specification]
Connector No. E105	Connector Name WIRE TO WIRE	Connector Type FH80FW-CS1P-TM4	 	Terminal No. 12 14 15 20 22 24 30 78 88	Color of Wire L L V P L LG L L W BR	Signal Name [Specification]
Connector No. E25	Connector Name TOM (TRANSMISSION CONTROL MODULE)	Connector Type MAA40FB-MEA8-LH	 	Terminal No. 31 32	Color of Wire P L	Signal Name [Specification] CAN-L CAN-H
Connector No. F42	Connector Name ALTERNATOR	Connector Type -	 	Terminal No. 2	Color of Wire -	Signal Name [Specification]
Connector No. F60	Connector Name ALTERNATOR	Connector Type X02FW	 	Terminal No. 3	Color of Wire L	Signal Name [Specification]
Connector No. F63	Connector Name OIL PRESSURE SWITCH	Connector Type E01FGV-RS-AR	 	Terminal No. 1	Color of Wire W	Signal Name [Specification]

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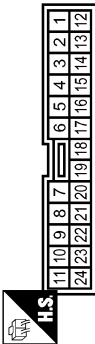
WCS

# COMBINATION METER

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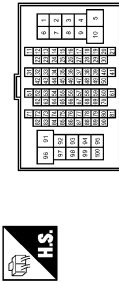
## METER

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK24W-1V



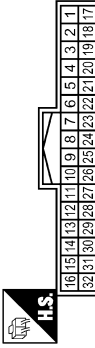
Terminal No.	Color of Wire	Signal Name [Specification]
12	P	-
13	L	-
23	W	-
24	L	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



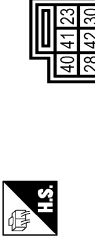
Terminal No.	Color of Wire	Signal Name [Specification]
92	B	-
94	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH22FW-NH



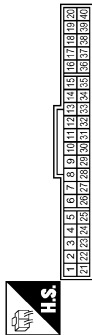
Terminal No.	Color of Wire	Signal Name [Specification]
14	O	-

Connector No.	M32
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FY-EX-1V



Terminal No.	Color of Wire	Signal Name [Specification]
40	G	-
41	B	-
42	L	-

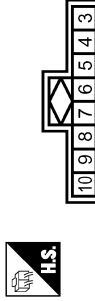
Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	BAT
2	O	IGN
3	B	GND2(POWER)
9	P	O/D OFF SW
12	G	STRG SW DOWN
13	Y	ILL OUT
14	L	STRG SW UP
15	LG	AIR BAG
19	BR	AMBIENT SENS
20	SB	AMBIENT SENS GND
21	L	CAN-H

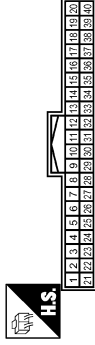
22	P	CAN-L
23	B	GND3(CIRCUIT)
24	B	FUEL LEVEL SENS GND
25	SB	ALTERNATOR
26	V	PARKING BRAKE SW
27	BR	BRAKE FLUID LEVEL SE
28	B	SECURITY
29	W	WASH LIQUID SENS
31	L	VEHICLE SPEED (8-PUL SE)
34	G	FUEL LEVEL SENS
35	O	SEAT BELT BUCKLE SW (PASSENGER SIDE)
36	G	SEAT BELT BUCKLE SW (DRIVER SIDE)
37	P	NOT MANUAL MODE
38	O	SHIFT DOWN
39	V	SHIFT UP
40	LG	MANUAL MODE

Connector No.	M37
Connector Name	EPS CONTROL UNIT
Connector Type	Molex 89545-0001



Terminal No.	Color of Wire	Signal Name [Specification]
5	L	-
7	P	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN H
3	P	CAN L

JCNWM0539GI



# COMBINATION METER

< ECU DIAGNOSIS >

## METER

Connector No. M57	Connector Name CONTROL DEVICE	Connector Type TH16FW-NH		Terminal No. 1	Color of Wire P	Signal Name [Specification] -	Terminal No. 2	Color of Wire B	Signal Name [Specification] -	Terminal No. 7	Color of Wire LG	Signal Name [Specification] -	Terminal No. 8	Color of Wire O	Signal Name [Specification] -	Terminal No. 9	Color of Wire V	Signal Name [Specification] -	Terminal No. 10	Color of Wire B	Signal Name [Specification] -	Terminal No. 11	Color of Wire P	Signal Name [Specification] -																		
Connector No. M59	Connector Name AIR BAG DIAGNOSIS SENSOR UNIT	Connector Type TK2BFY-EX-SC		Terminal No. 15	Color of Wire LG	Signal Name [Specification] A/B W/L	Terminal No. 16	Color of Wire G	Signal Name [Specification] SEATBELT W/L	Terminal No. 24	Color of Wire LG	Signal Name [Specification] A/B W/L	Terminal No. 20	Color of Wire P	Signal Name [Specification] -	Terminal No. 21	Color of Wire P	Signal Name [Specification] -	Terminal No. 22	Color of Wire V	Signal Name [Specification] -	Terminal No. 23	Color of Wire V	Signal Name [Specification] -	Terminal No. 24	Color of Wire P	Signal Name [Specification] -															
Connector No. M60	Connector Name AIR BAG DIAGNOSIS SENSOR UNIT	Connector Type TK2BFY-EX-SC		Terminal No. 15	Color of Wire LG	Signal Name [Specification] A/B W/L	Terminal No. 2	Color of Wire LG	Signal Name [Specification] A/B W/L	Terminal No. 18	Color of Wire LG	Signal Name [Specification] -	Terminal No. 5	Color of Wire V	Signal Name [Specification] -	Terminal No. 6	Color of Wire V	Signal Name [Specification] -	Terminal No. 11	Color of Wire V	Signal Name [Specification] -	Terminal No. 12	Color of Wire V	Signal Name [Specification] -	Terminal No. 19	Color of Wire V	Signal Name [Specification] -	Terminal No. 20	Color of Wire V	Signal Name [Specification] -	Terminal No. 21	Color of Wire V	Signal Name [Specification] -	Terminal No. 22	Color of Wire V	Signal Name [Specification] -	Terminal No. 23	Color of Wire V	Signal Name [Specification] -	Terminal No. 24	Color of Wire V	Signal Name [Specification] -
Connector No. M65	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FW		Terminal No. 23	Color of Wire B	Signal Name [Specification] SECURITY IND OUT PUT	Terminal No. 39	Color of Wire L	Signal Name [Specification] CAN-H	Terminal No. 40	Color of Wire P	Signal Name [Specification] CAN-L	Terminal No. 1	Color of Wire W	Signal Name [Specification] -	Terminal No. 3	Color of Wire W	Signal Name [Specification] -	Terminal No. 7	Color of Wire -	Signal Name [Specification] -	Terminal No. 8	Color of Wire -	Signal Name [Specification] -	Terminal No. 9	Color of Wire -	Signal Name [Specification] -															
Connector No. M69	Connector Name AWD CONTROL UNIT	Connector Type TH16FW-NH		Connector No. M503	Connector Name OVERDRIVE CONTROL SWITCH	Connector Type HRP-03-S		Terminal No. 8	Color of Wire L	Signal Name [Specification] CAN-H	Terminal No. 16	Color of Wire P	Signal Name [Specification] CAN-L	Terminal No. 1	Color of Wire W	Signal Name [Specification] -	Terminal No. 3	Color of Wire W	Signal Name [Specification] -	Terminal No. 7	Color of Wire -	Signal Name [Specification] -	Terminal No. 8	Color of Wire -	Signal Name [Specification] -	Terminal No. 9	Color of Wire -	Signal Name [Specification] -														
Connector No. M77	Connector Name WIRE TO WIRE	Connector Type TH80MW-CS16-TM4		Terminal No. 12	Color of Wire P	Signal Name [Specification] -	Terminal No. 14	Color of Wire SB	Signal Name [Specification] -	Terminal No. 15	Color of Wire V	Signal Name [Specification] -	Terminal No. 20	Color of Wire P	Signal Name [Specification] -	Terminal No. 22	Color of Wire L	Signal Name [Specification] -	Terminal No. 24	Color of Wire BR	Signal Name [Specification] -	Terminal No. 30	Color of Wire L	Signal Name [Specification] -	Terminal No. 78	Color of Wire SB	Signal Name [Specification] -	Terminal No. 81	Color of Wire W	Signal Name [Specification] -	Terminal No. 88	Color of Wire BR	Signal Name [Specification] -									
Connector No. M68	Connector Name AWD CONTROL UNIT	Connector Type TH16FW-NH		Terminal No. 1	Color of Wire L	Signal Name [Specification] CAN-H	Terminal No. 8	Color of Wire L	Signal Name [Specification] CAN-L	Terminal No. 1	Color of Wire W	Signal Name [Specification] -	Terminal No. 3	Color of Wire W	Signal Name [Specification] -	Terminal No. 7	Color of Wire -	Signal Name [Specification] -	Terminal No. 8	Color of Wire -	Signal Name [Specification] -	Terminal No. 9	Color of Wire -	Signal Name [Specification] -	Terminal No. 7	Color of Wire -	Signal Name [Specification] -	Terminal No. 8	Color of Wire -	Signal Name [Specification] -	Terminal No. 9	Color of Wire -	Signal Name [Specification] -									

## Fail Safe

The combination meter activates the fail-safe control if the CAN communication lines between each unit are malfunctioning.

JCNWM0540GI

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# COMBINATION METER

## < ECU DIAGNOSIS >

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Meter illumination control		Change to nighttime mode.
Buzzer		Turned off by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	Turned on by suspending communication.
	Brake warning lamp	
	VDC OFF indicator lamp	
	SLIP indicator lamp	
	AWD warning lamp	
	Low tire pressure warning lamp	The lamp turns ON after flashing for 1 minutes
	SPORT/CVT indicator lamp	Turned off by suspending communication.
	AWD indicator lamp	
	AWD LOCK indicator lamp	
	Oil pressure warning lamp	
	Door warning lamp	
	Malfunction indicator lamp	
	CRUISE indicator lamp	
	SET indicator lamp	
	KEY warning lamp	
High beam indicator lamp		
Turn signal indicator lamp		
Tail indicator lamp		

## DTC Index

INFOID:000000001754034

Display contents of CONSULT-III	Time		Diagnostic item is detected when...	Refer to
U1000: CAN COMM CIRCUIT	CRNT	PAST	Combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	<a href="#">MWI-36</a>
U1010: CONTROL UNIT (CAN)	CRNT	PAST	Detecting error during the initial diagnosis of CAN controller of combination meter.	<a href="#">MWI-37</a>
B2205: VEHICLE SPEED	CRNT	PAST	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	<a href="#">MWI-38</a>
B2267: ENGINE SPEED	CRNT	PAST	ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	<a href="#">MWI-39</a>
B2268: WATER TEMP	CRNT	PAST	ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	<a href="#">MWI-40</a>

### NOTE:

The details of TIME display are as follows.

- CRNT: The malfunctions that are detected now.
- PAST: The malfunctions was detected in the past. IGN counter is displayed on FED (Freeze Frame data).
  - 1 - 39: The number is indicated when it is normal at past and a malfunction was detected in the past. It increases like 0 → 1 → 2 ... 38 → 39 after returning to the normal condition whenever IGN OFF → ON. It is fixed to 39 until the self-diagnosis results are erased if it is over 39. It returns to 0 when a malfunction is detected again in the process.

## BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

### BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000001724022

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	On
CDL LOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the lock side	On
CDL UNLOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the unlock side	On
DOOR SW-DR	Driver's door closed	Off
	Driver's 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
BACK DOOR SW	Back door closed	Off
	Back door opened	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
KEYLESS LOCK	"LOCK" button of key fob is not pressed	Off
	"LOCK" button of key fob is pressed	On
KEYLESS UNLOCK	"UNLOCK" button of key fob is not pressed	Off
	"UNLOCK" button of key fob is pressed	On
I-KEY LOCK	"LOCK" button of Intelligent Key or door request switch are not pressed	Off
	"LOCK" button of Intelligent Key or door request switch are pressed	On
I-KEY UNLOCK	"UNLOCK" button of Intelligent Key or door request switch are not pressed	Off
	"UNLOCK" button of Intelligent Key or door request switch are pressed	On
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
LIGHT SW 1ST	Lighting switch OFF	Off
	Lighting switch 1ST	On

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## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
BUCKLE SW	The seat belt (driver side) is unfastened. [Seat belt switch (driver side) OFF]	Off
	The seat belt (driver side) is fastened. [Seat belt switch (driver side) ON]	On
KEYLESS PANIC	PANIC button of key fob is not pressed	Off
	PANIC button of key fob is pressed	On
KEYLESS TRUNK	<b>NOTE:</b> The item is indicated, but not monitored.	Off
TRNK OPN MNTR	<b>NOTE:</b> The item is indicated, but not monitored.	Off
RKE LCK-UNLCK	LOCK/UNLOCK button of key fob is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of key fob is pressed and held simultaneously	On
RKE KEEP UNLK	UNLOCK button of key fob is not pressed	Off
	UNLOCK button of key fob is pressed and held	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Lighting switch OFF	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Lighting switch OFF	Off
	Lighting switch 2ND	On
AUTO LIGHT SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
ENGINE RUN	Engine stopped	Off
	Engine running	On
PKB SW	Parking brake switch is OFF	Off
	Parking brake switch is ON	On
CARGO LAMP SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off
OPTICAL SENSOR	<b>NOTE:</b> The item is indicated, but not monitored.	0 V
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
FR WIPER INT	Front wiper switch OFF	Off	A
	Front wiper switch INT	On	
FR WASHER SW	Front washer switch OFF	Off	B
	Front washer switch ON	On	
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7	
FR WIPER STOP	Any position other than front wiper stop position	Off	C
	Front wiper stop position	On	
VEHICLE SPEED	While driving	Equivalent to speedometer reading	D
RR WIPER ON	Rear wiper switch OFF	Off	
	Rear wiper switch ON	On	
RR WIPER INT	Rear wiper switch OFF	Off	E
	Rear wiper switch INT	On	
RR WASHER SW	Rear washer switch OFF	Off	F
	Rear washer switch ON	On	
RR WIPER STOP	Rear wiper stop position	Off	
	Other than rear wiper stop position	On	G
RR WIPER STP2	<b>NOTE:</b> The item is indicated, but not monitored.	Off	
H/L WASH SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	H
HAZARD SW	Hazard switch OFF	Off	
	Hazard switch ON	On	I
BRAKE SW	Brake pedal is not depressed	Off	
	Brake pedal is depressed	On	J
FAN ON SIG	Blower fan motor switch OFF	Off	
	Blower fan motor switch ON (other than OFF)	On	
AIR COND SW	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	Off	K
	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	On	L
I-KEY TRUNK	<b>NOTE:</b> The item is indicated, but not monitored.	Off	
I-KEY PW DWN	UNLOCK button of Intelligent Key is not pressed	Off	M
	UNLOCK button of Intelligent Key is pressed and held	On	
I-KEY PANIC	PANIC button of Intelligent Key is not pressed	Off	WCS
	PANIC button of Intelligent Key is pressed	On	
PUSH SW	Return to ignition switch to "LOCK" position	Off	
	Press ignition switch	On	O
TRNK OPNR SW	When back door opener switch is not pressed	Off	
	When back door opener switch is pressed	On	
TRUNK CYL SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	P
HOOD SW	Close the hood	Off	
	<b>NOTE:</b> Vehicles of except for Mexico are OFF-fixed Open the hood	On	

## BCM (BODY CONTROL MODULE)

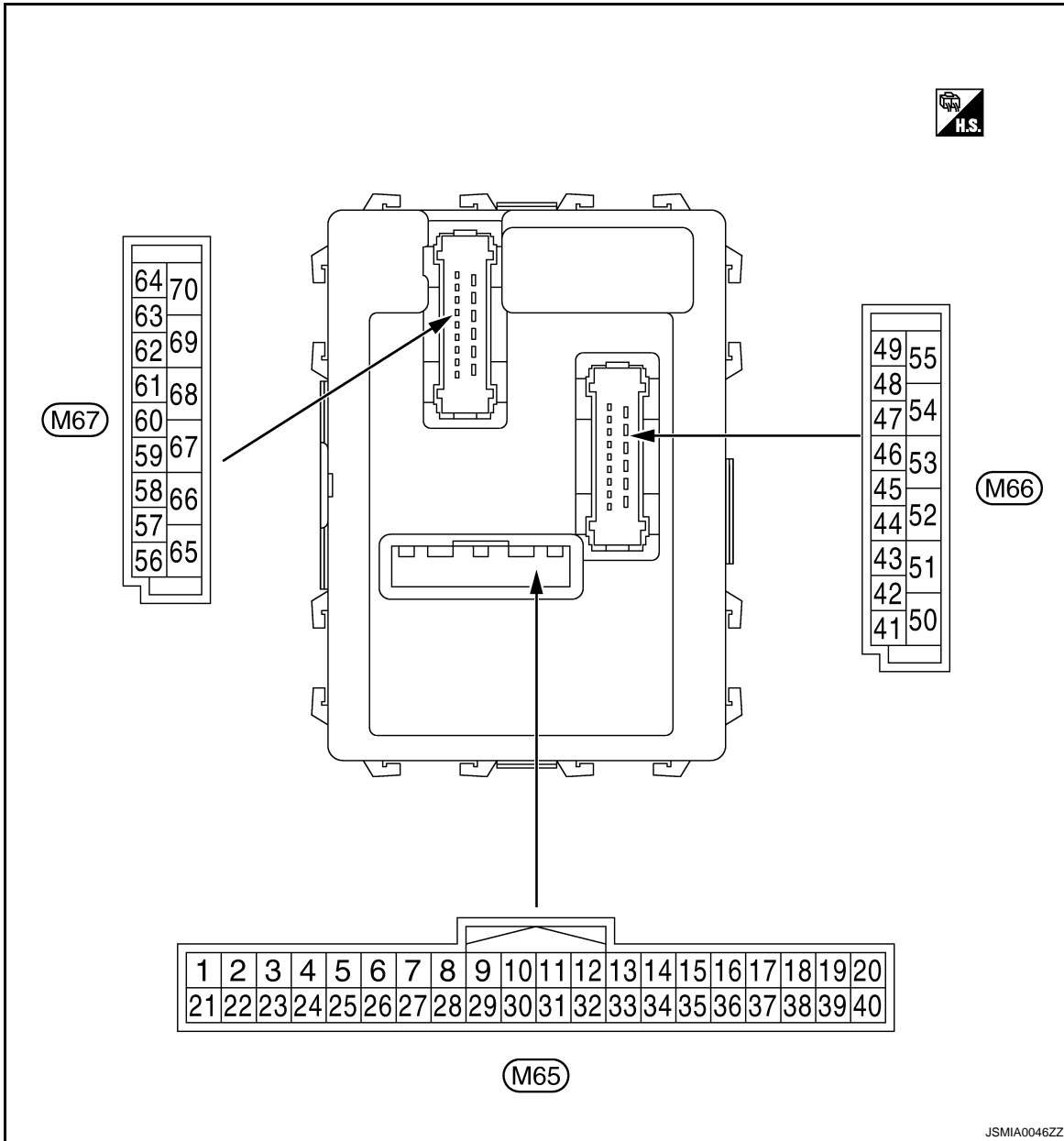
### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
OIL PRESS SW	<ul style="list-style-type: none"> <li>• Ignition switch OFF or ACC</li> <li>• Engine running</li> </ul>	Off
	Ignition switch ON	On
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

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## TERMINAL LAYOUT



### PHYSICAL VALUES

**CAUTION:**

- Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.
- Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT-III. Refer to [BCS-26. "COMB SW : CONSULT-III Function \(BCM - COMB SW\)".](#)
- BCM reads the status of the combination switch at 10 ms internal normally. Refer to [BCS-9. "System Diagram".](#)

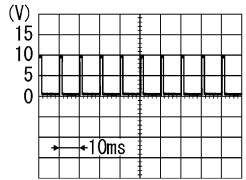
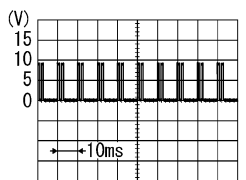
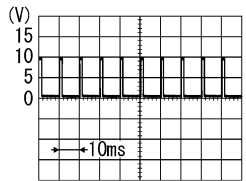
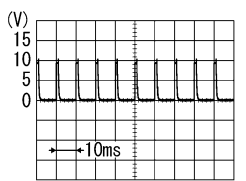
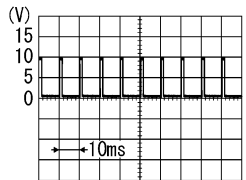
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output	Ignition key hole illumination		
1 (V)	Ground	Ignition key hole illumination control	Output		OFF	Battery voltage
				ON	0 V	

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
2 (G)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Turn signal switch RH	
					Lighting switch HI	
					Lighting switch 1ST	
					1.0 V	
						2.0 V
3 (Y)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Turn signal switch LH	
					Lighting switch PASS	
					Lighting switch 2ND	
					1.0 V	
						0.8 V
4 (W)	Ground	Combination switch INPUT 3	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Front wiper switch LO	
					Front wiper switch MIST	
					Front wiper switch INT	
					1.0 V	



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

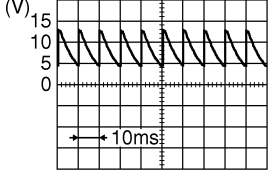
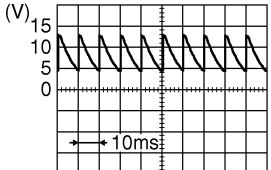
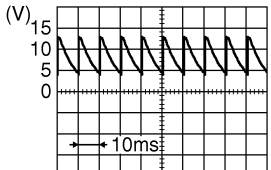
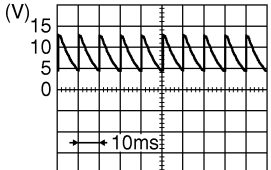
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
5 (R)	Ground	Combination switch INPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch (Wiper intermittent dial 4)	
					Rear washer ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> <li>• Wiper intermittent dial 1</li> <li>• Wiper intermittent dial 5</li> <li>• Wiper intermittent dial 6</li> </ul>	
					Rear wiper switch ON (Wiper intermittent dial 4)	
6 (P)	Ground	Combination switch INPUT 1	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Wiper intermittent dial 3 (All switch OFF)	
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> <li>• Wiper intermittent dial 6</li> <li>• Wiper intermittent dial 7</li> </ul>	

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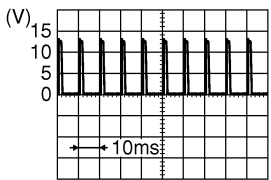
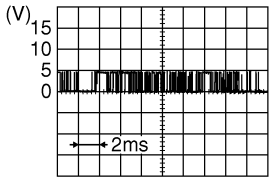
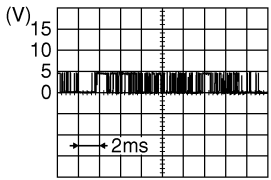
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
7 (L)	Ground	Door key cylinder switch UNLOCK signal	Input	Door key cylinder switch	NEUTRAL position	 <p style="text-align: right; font-size: small;">JPMIA0587GB</p> <p style="text-align: center;">8.0 - 8.5 V</p>
					UNLOCK position	0 V
8 (R)	Ground	Door key cylinder switch LOCK signal	Input	Door key cylinder switch	NEUTRAL position	 <p style="text-align: right; font-size: small;">JPMIA0587GB</p> <p style="text-align: center;">8.0 - 8.5 V</p>
					LOCK position	0 V
9 (R)	Ground	Stop lamp switch	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
10 (SB)	Ground	Rear window defog- ger switch	Input	Rear window defogger switch	Not pressed	Battery voltage
					Pressed	0 V
11 (SB)	Ground	Ignition switch ACC	Input	Ignition switch OFF	0 V	
				Ignition switch ACC or ON	Battery voltage	
12 (P)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 <p style="text-align: right; font-size: small;">JPMIA0586GB</p> <p style="text-align: center;">7.5 - 8.0 V</p>
					ON (When passenger door opened)	0 V
13 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 <p style="text-align: right; font-size: small;">JPMIA0587GB</p> <p style="text-align: center;">8.0 - 8.5 V</p>
					ON (When rear door RH opened)	0 V

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

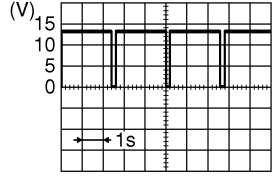
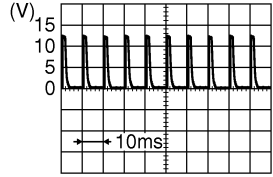
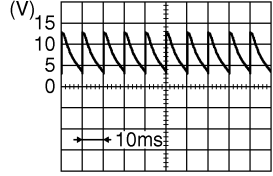
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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15*1 (O)	Ground	TPMS mode trigger switch	Input	Ignition switch OFF	 <p style="text-align: right; font-size: small;">JPMIA0588GB</p> <p style="text-align: center;">1.5 V</p>	
18*1 (O)	Ground	Remote keyless entry receiver ground	Input	Ignition switch ON	0 V	
19*1 (V)	Ground	Remote keyless entry receiver power supply	Input	Without Intelligent Key system	At any condition	5 V
				With Intelligent Key system	• Ignition switch OFF • For 3 seconds after ignition switch OFF to ON	0 V
					3 seconds or later after ignition switch OFF to ON	5 V
20*1 (GR)	Ground	Remote keyless entry receiver signal	Input	Without Intelligent Key system	At any condition	 <p style="text-align: right; font-size: small;">JPMIA0589GB</p> <p><b>NOTE:</b> The wave form changes according to signal-receiving condition.</p>
				With Intelligent Key system	• Ignition switch OFF • For 3 seconds after ignition switch OFF to ON	0 V
					3 seconds or later after ignition switch OFF to ON	 <p style="text-align: right; font-size: small;">JPMIA0589GB</p> <p><b>NOTE:</b> The wave form changes according to signal-receiving condition.</p>
21 (G)	Ground	Immobilizer antenna signal (Clock)	Input/ Output	Ignition switch OFF	Battery voltage	

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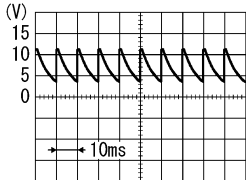
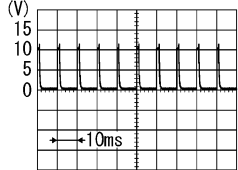
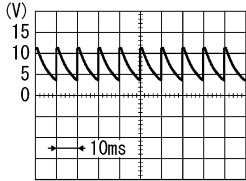
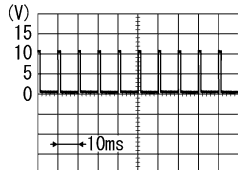
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
23 (B)	Ground	Security indicator signal	Input	Security indica- tor	ON	0 V
				Blinking (Ignition switch OFF)	 <p style="text-align: center;">12.0 V</p> <p style="text-align: right; font-size: small;">JPMIA0590GB</p>	
25 (BR)	Ground	Immobilizer anten- na signal (Rx, Tx)	Input/ Output	Ignition switch OFF	Battery voltage	
27 (Y)	Ground	A/C switch	Input	Ignition switch OFF		
				Ignition switch ON	A/C switch OFF	 <p style="text-align: center;">1.6 V</p> <p style="text-align: right; font-size: small;">JPMIA0591GB</p>
28 (LG)	Ground	Blower fan switch	Input	Ignition switch OFF		
				Ignition switch ON	Blower fan switch OFF	 <p style="text-align: center;">7.0 - 7.5 V</p> <p style="text-align: right; font-size: small;">JPMIA0592GB</p>
29 (W)	Ground	Hazard switch	Input	Hazard switch	OFF	Battery voltage
				ON	0 V	
30 (G)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	Battery voltage
				Pressed	0 V	

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

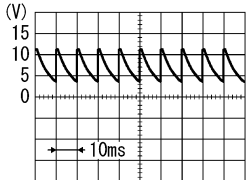
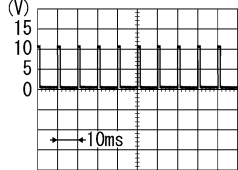
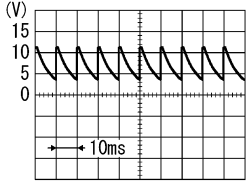
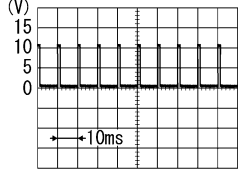
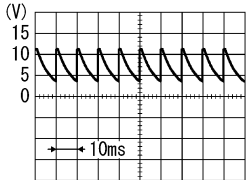
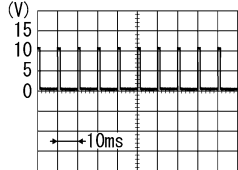
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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32 (BR)	Ground	Combination switch OUTPUT 5	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">7.2 V</p>
					Front fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.0 V</p>
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF	
33 (GR)	Ground	Combination switch OUTPUT 4	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">7.2 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.2 V</p>
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF	

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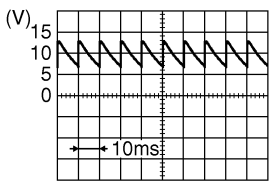
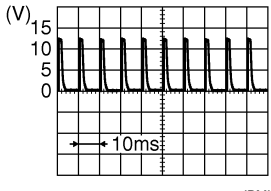
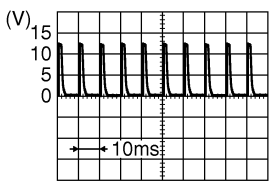
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
34 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">PKIB4960J</p> <p style="text-align: center;">7.2 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
Any of the condition below with all switch OFF <ul style="list-style-type: none"> <li>Wiper intermittent dial 1</li> <li>Wiper intermittent dial 2</li> <li>Wiper intermittent dial 3</li> </ul>						
35 (B)	Ground	Combination switch OUTPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p style="text-align: right; font-size: small;">PKIB4960J</p> <p style="text-align: center;">7.2 V</p>
					Lighting switch 2ND	 <p style="text-align: right; font-size: small;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Lighting switch PASS	
					Front wiper switch INT	
Front wiper switch HI						
36 (V)	Ground	Combination switch OUTPUT 1	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p style="text-align: right; font-size: small;">PKIB4960J</p> <p style="text-align: center;">7.2 V</p>
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Turn signal switch LH	
					Front wiper switch LO (Front wiper switch MIST)	
Front washer switch ON						

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

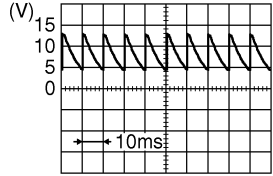
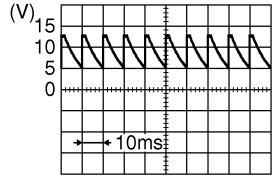
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
37 (LG)	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder	Battery voltage
				Remove mechanical key from ignition key cylinder	0 V
38 (G)	Ground	Ignition switch ON	Input	Ignition switch OFF or ACC	0 V
				Ignition switch ON or START	Battery voltage
39 (L)	Ground	CAN-H	Input/ Output	—	—
40 (P)	Ground	CAN-L	Input/ Output	—	—
43 (V)	Ground	Back door switch	Input	Back door switch	 <p style="text-align: center;">9.5 - 10.0 V</p>
				OFF (When back door closed)	
				ON (When back door opened)	0 V
44 (B)	Ground	Rear wiper auto stop	Input	Ignition switch ON	Rear wiper stop position
					Any position other than rear wiper stop position
45 (P)	Ground	Door lock and unlock switch LOCK signal	Input	Door lock and unlock switch	 <p style="text-align: center;">1.6 V</p>
				NEUTRAL position	
				LOCK position	0 V
46 (BR)	Ground	Door lock and unlock switch UNLOCK signal	Input	Door lock and unlock switch	 <p style="text-align: center;">1.6 V</p>
				NEUTRAL position	
				UNLOCK position	0 V

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
47 (W)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 <p style="text-align: right; font-size: small;">JPMA0587GB</p> <p style="text-align: center;">8.0 - 8.5 V</p>
					ON (When driver door opened)	0 V
48 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	 <p style="text-align: right; font-size: small;">JPMA0594GB</p> <p style="text-align: center;">8.5 - 9.0 V</p>
					ON (When rear door LH opened)	0 V
49 (L)	Ground	Back door lamp control	Output	Back door lamp switch DOOR position	Back door is closed (Back door lamp turns OFF)	Battery voltage
					Back door is opened (Back door lamp turns ON)	0 V
53 (V)	Ground	Back door open	Output	Back door opener switch	Not pressed (Back door actuator is activated)	0 V
					Pressed (Back door actuator is activated)	Battery voltage
55 (SB)	Ground	Rear wiper motor	Output	Ignition switch ON	Rear wiper switch OFF	0 V
					Rear wiper switch ON	Battery voltage
56 (Y)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time	0 V	
				Any other time after passing the interior room lamp battery saver operation time	Battery voltage	
57 (G)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage	
59 (L)	Ground	Driver door UN-LOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
60 (BR)	Ground	Turn signal LH	Output	Ignition switch OFF	0 V	
				Ignition switch ON	Turn signal switch LH	
61 (GR)	Ground	Turn signal RH	Output	Ignition switch OFF	0 V	
				Ignition switch ON	Turn signal switch RH	
63 (R)	Ground	Interior room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
				ON	0 V	
65 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
				Other then LOCK (Actuator is not activated)	0 V	
66 (G)	Ground	Passenger door and rear door UNLOCK	Output	Passenger door and rear door	UNLOCK (Actuator is activated)	Battery voltage
					Other then UNLOCK (Actuator is not activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch ON	0 V	
68 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON	Battery voltage	
69 (R) <sup>*2</sup> (P) <sup>*3</sup>	Ground	P/W power supply (BAT)	Output	Ignition switch OFF	Battery voltage	
70 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage	

**NOTE:**

- \*1: Except for Mexico
- \*2: Without anti-pinch system
- \*3: With anti-pinch system

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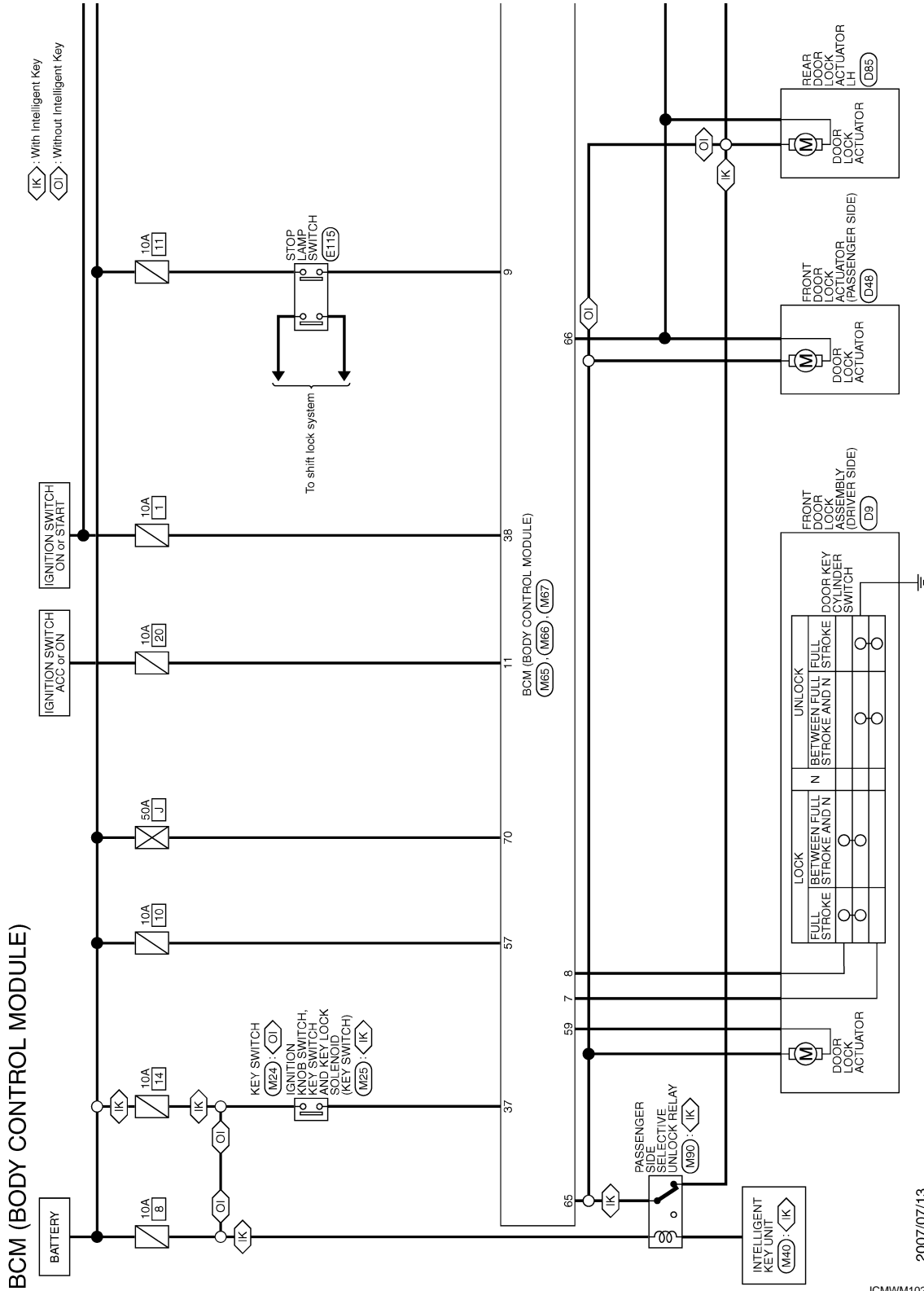
WCS

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## Wiring Diagram - BCM -

INFOID:000000001724023



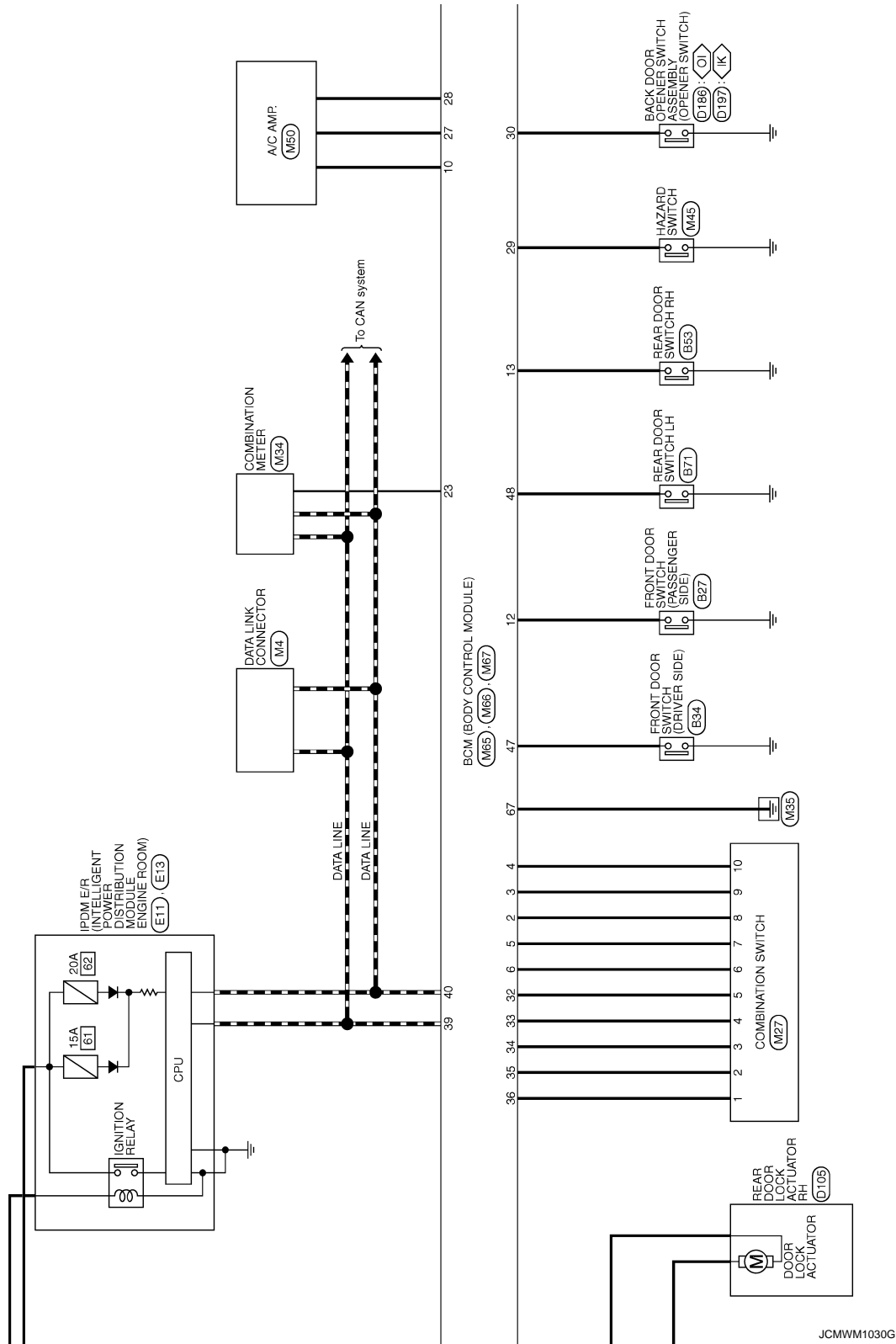
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JCMWM1029G

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

◊IK◊ : With Intelligent Key  
 ◊OI◊ : Without Intelligent Key



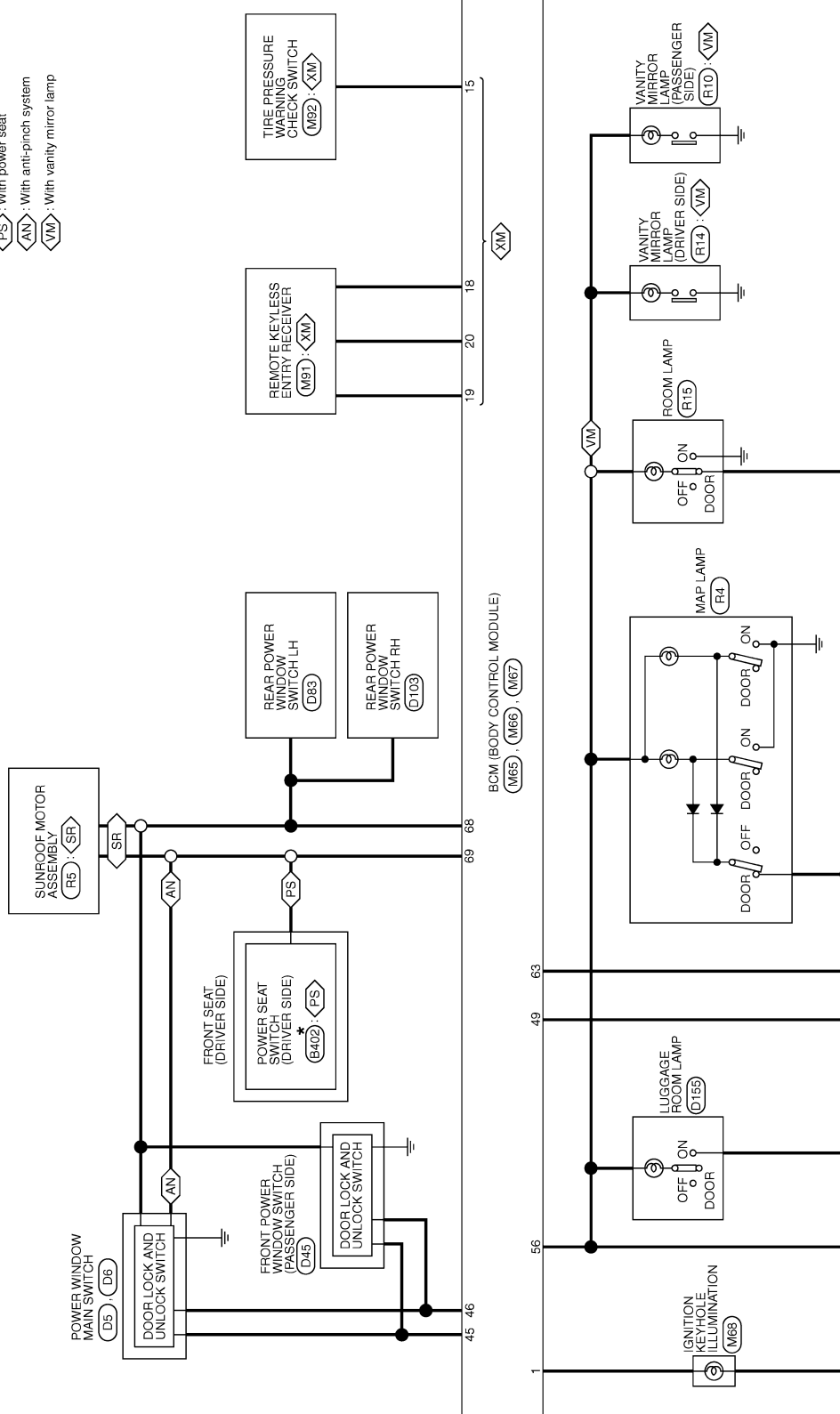
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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

- ◊XM◊ : Except for Mexico
- ◊SR◊ : With sunroof
- ◊PS◊ : With power seat
- ◊AN◊ : With anti-pinch system
- ◊VM◊ : With vanity mirror lamp

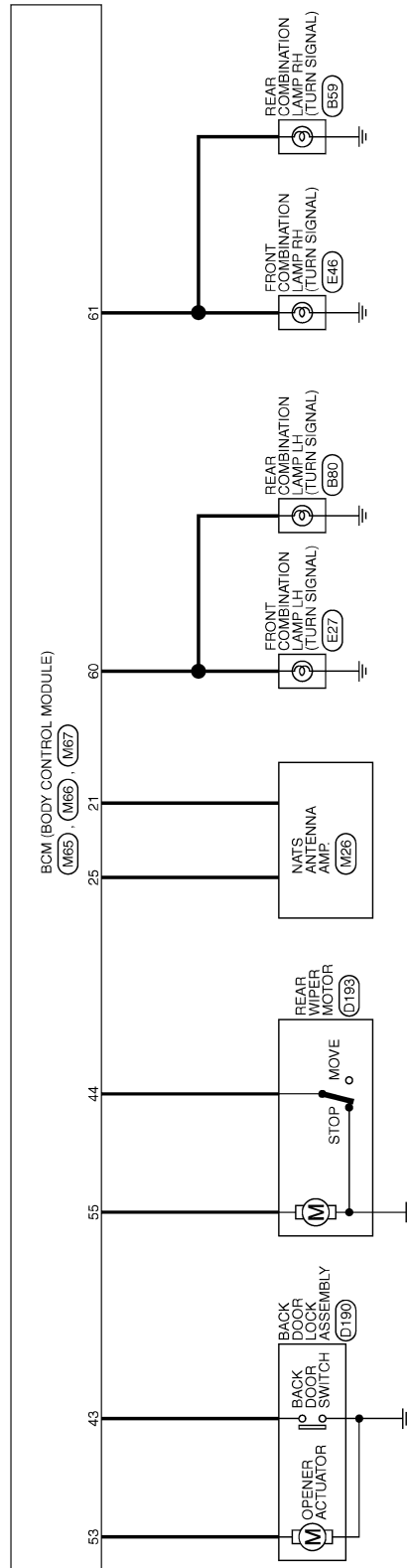


\*: This connector is not shown in "Harness Layout".

JCMWM1031G

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >



JCMWM1032G1

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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## BCM (BODY CONTROL MODULE)

Connector No.	M27
Connector Name	COMBINATION SWITCH
Connector Type	TK16FW



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	INPUT 1
2	B	INPUT 2
3	L	INPUT 3
4	GR	INPUT 4
5	BR	INPUT 5
6	P	OUTPUT 1
7	R	OUTPUT 2
8	G	OUTPUT 5
9	Y	OUTPUT 4
10	W	OUTPUT 3

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA08FB-FHA6-SA



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name [Specification]
56	Y	BATTERY/SAVEROUTPUT
57	G	BAT FUSE
59	L	D/L UNLOCK DR
60	BR	FLASHER OUT PUT (LEFT)
61	GR	FLASHER OUT PUT (RIGHT)
63	R	ROOMLAMPOUTPUT
65	V	D/L LOCK ALL
66	G	D/L UNLOCK OTHER
67	B	GND
68	L	POWER WDM OUTPUT(RAP)
68	R	POWER WDM OUTPUT(BAT)(Without electrical system)
68	P	POWER WDM OUTPUT(BAT)(With electrical system)
70	Y	BAT FL

Terminal No.	Color of Wire	Signal Name [Specification]
12	P	DR SW AS
13	LG	DR SW RR
15	O	TPMS MODE TRIGGER SW
18	O	KEYLESS TUNER SEQS GND
18	V	KEYLESS TUNER POWER
20	GR	KEYLESS TUNER SIGNAL
21	G	IMMOBI ANT(CLOCK)
23	B	SECURITY IND OUTPUT
23	BR	IMMOBI ANT(RX, TX)
27	Y	AIRCORN SW
28	LG	BLOWER FAN SW
28	W	HAZARD SW
29	G	BACK DOOR OPEN SW
32	BR	OUTPUT 5
33	GR	OUTPUT 4
34	L	OUTPUT 3
35	B	OUTPUT 2
36	V	OUTPUT 1
37	LG	KEY SW
38	G	IGN
38	L	KEY CYC UNLOCK
38	R	KEY CYC LOCK SW
9	R	BRAKE SW
10	SB	RR DEF SW
11	SB	ACC

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA08FW-FHA6-SA



41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name [Specification]
43	V	BACK DOOR SW
44	B	RR WIP AUTO STOP
45	P	CDL LOCK SW
46	BR	CDL UNLOCK SW
47	W	DR SW DR
48	GR	DR SW RL
49	L	LUGGAGE LAMP OUTPUT
53	V	BACK DOOR PEPPER OUTPUT
55	SB	RR WIP MTR OUT

## Fail Safe

### REAR WIPER MOTOR PROTECTION

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

Condition of cancellation

JCMWM1033G

INFOID:000000001724024

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

1. Pass more than 1 minute after the rear wiper stop.
2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

### 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.

### DTC Inspection Priority Chart

INFOID:000000001724025

Priority	DTC
1	U1000: CAN COMM CIRCUIT
2	C1735: IGN CIRCUIT OPEN
3	<ul style="list-style-type: none"> <li>• C1704: LOW PRESSURE FL</li> <li>• C1705: LOW PRESSURE FR</li> <li>• C1706: LOW PRESSURE RR</li> <li>• C1707: LOW PRESSURE RL</li> <li>• C1708: [NO DATA] FL</li> <li>• C1709: [NO DATA] FR</li> <li>• C1710: [NO DATA] RR</li> <li>• C1711: [NO DATA] RL</li> <li>• C1712: [CHECKSUM ERR] FL</li> <li>• C1713: [CHECKSUM ERR] FR</li> <li>• C1714: [CHECKSUM ERR] RR</li> <li>• C1715: [CHECKSUM ERR] RL</li> <li>• C1716: [PRESS DATA ERR] FL</li> <li>• C1717: [PRESS DATA ERR] FR</li> <li>• C1718: [PRESS DATA ERR] RR</li> <li>• C1719: [PRESS DATA ERR] RL</li> <li>• C1720: [CODE ERR] FL</li> <li>• C1721: [CODE ERR] FR</li> <li>• C1722: [CODE ERR] RR</li> <li>• C1723: [CODE ERR] RL</li> <li>• C1724: [BATT VOLT LOW] FL</li> <li>• C1725: [BATT VOLT LOW] FR</li> <li>• C1726: [BATT VOLT LOW] RR</li> <li>• C1727: [BATT VOLT LOW] RL</li> <li>• C1729: VHCL SPEED SIG ERR</li> </ul>

### DTC Index

INFOID:000000001724026

**NOTE:**

- Details of time display
- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

DTC	Tire pressure monitor warning lamp ON	Reference
U1000: CAN COMM CIRCUIT	—	<a href="#">BCS-35</a>
C1704: LOW PRESSURE FL	×	<a href="#">WT-14</a>
C1705: LOW PRESSURE FR	×	
C1706: LOW PRESSURE RR	×	
C1707: LOW PRESSURE RL	×	

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## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

DTC	Tire pressure monitor warning lamp ON	Reference
C1708: [NO DATA] FL	×	<a href="#">WT-16</a>
C1709: [NO DATA] FR	×	
C1710: [NO DATA] RR	×	
C1711: [NO DATA] RL	×	
C1712: [CHECKSUM ERR] FL	×	<a href="#">WT-19</a>
C1713: [CHECKSUM ERR] FR	×	
C1714: [CHECKSUM ERR] RR	×	
C1715: [CHECKSUM ERR] RL	×	
C1716: [PRESS DATA ERR] FL	×	<a href="#">WT-22</a>
C1717: [PRESS DATA ERR] FR	×	
C1718: [PRESS DATA ERR] RR	×	
C1719: [PRESS DATA ERR] RL	×	
C1720: [CODE ERR] FL	×	<a href="#">WT-24</a>
C1721: [CODE ERR] FR	×	
C1722: [CODE ERR] RR	×	
C1723: [CODE ERR] RL	×	
C1724: [BATT VOLT LOW] FL	—	<a href="#">WT-27</a>
C1725: [BATT VOLT LOW] FR	—	
C1726: [BATT VOLT LOW] RR	—	
C1727: [BATT VOLT LOW] RL	—	
C1729: VHCL SPEED SIG ERR	×	<a href="#">WT-30</a>
C1735: IGN CIRCUIT OPEN	—	<a href="#">BCS-36</a>



# THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### THE LIGHT REMINDER WARNING DOES NOT SOUND

#### Description

INFOID:000000001696892

The light reminder warning chime does not sound under the following conditions.

- Lighting switch 1ST or 2ND position
- Driver door open
- Ignition switch except ON or START

#### Diagnosis Procedure

INFOID:000000001696893

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

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

Do they operate normally?

YES >> GO TO 2.

NO >> Refer to [EXL-106. "Symptom Table"](#) (xenon type), [EXL-243. "Symptom Table"](#) (halogen type).

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

Check the front door switch (driver side) signal circuit. Refer to [DLK-57. "Diagnosis Procedure"](#) (with intelligent key system), [DLK-339. "Diagnosis Procedure"](#) (without intelligent key system).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

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

Check the front door switch (driver side). Refer to [DLK-59. "Component Inspection"](#) (with intelligent key system), [DLK-341. "Component Inspection"](#) (without intelligent key system).

Is the inspection result normal?

YES >> Replace the BCM. Refer to [BCS-67. "Removal and Installation"](#).

NO >> Replace the front door switch (driver side). Refer to [DLK-301. "Removal and Installation"](#).

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# THE SEAT BELT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

---

## THE SEAT BELT REMINDER WARNING DOES NOT SOUND

### Description

INFOID:000000001686557

Seat belt reminder warning chime does not sound.

### Trouble diagnosis procedure

INFOID:000000001686558

#### 1. CHECK COMBINATION METER INPUT SIGNAL

---

1. Connect the CONSULT-III.
2. Select the "Data Monitor" of "METER/M&A" and check the "BUCKLE SW" monitor value. Refer to [WCS-22. "Component Function Check"](#).

Is the inspection result normal?

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

#### 2. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

---

Check the seat belt buckle switch (driver side) signal circuit. Refer to [WCS-22. "Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Repair the harnesses or connectors.

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

---

Check the seat belt buckle switch (driver side). Refer to [WCS-23. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace combination meter.  
NO >> Replace the seat belt buckle switch (driver side). Refer to [SB-8. "SEAT BELT BUCKLE : Removal and Installation"](#).

# THE PARKING BRAKE RELEASE WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

## THE PARKING BRAKE RELEASE WARNING DOES NOT SOUND

### Description

INFOID:000000001686559

The parking brake warning chime does not sound at all even though driving the vehicle with the parking brake applied.

### Diagnosis Procedure

INFOID:000000001686560

#### 1. CHECK PARKING BRAKE WARNING LAMP OPERATION

1. Connect the CONSULT-III.
2. Select the "Data Monitor" of "METER/M&A" and check the "PKB SW" monitor value. Refer to [WCS-22. "Component Function Check"](#).

Is the inspection result normal?

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

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

Check the parking brake switch signal circuit. Refer to [WCS-24. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

#### 3. CHECK PARKING BRAKE SWITCH

Check the parking brake switch. Refer to [WCS-24. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-83. "Removal and Installation"](#).
- NO >> Replace parking brake switch.

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# THE KEY WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

---

## THE KEY WARNING DOES NOT SOUND

### Description

INFOID:000000001686561

The key warning chime does not sound under the following conditions.

- Key inserted into the ignition key cylinder (Key switch signal ON)
- Ignition switch except in ON or START (Ignition switch signal OFF)
- Front door switch (driver side) open. [Front door switch (driver side) signal ON]

### Diagnosis Procedure

INFOID:000000001686562

#### 1. CHECK BCM INPUT SIGNAL

---

1. Connect the CONSULT-III.
2. Select the "Data Monitor" of "BCM (BUZZER)" and check the "KEY ON SW" monitor value. Refer to [WCS-43. "Reference Value"](#).

Is the inspection result normal?

- YES >> Replace Intelligent Key unit. Refer to [DLK-309. "Exploded View"](#).  
NO >> GO TO 2.

#### 2. CHECK KEY SWITCH SIGNAL CIRCUIT

---

Check the key switch signal circuit. Refer to [DLK-347. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

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

---

Check the front door switch (driver side) signal circuit. Refer to [DLK-339. "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-341. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace the BCM. Refer to [BCS-67. "Exploded View"](#).  
NO >> Replace the front door switch (driver side). Refer to [DLK-499. "Exploded View"](#).

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS FOR USA AND CANADA

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

INFOID:000000003258586

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

### FOR MEXICO

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

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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.

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