

# SECTION **WCS**

## WARNING CHIME SYSTEM

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# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

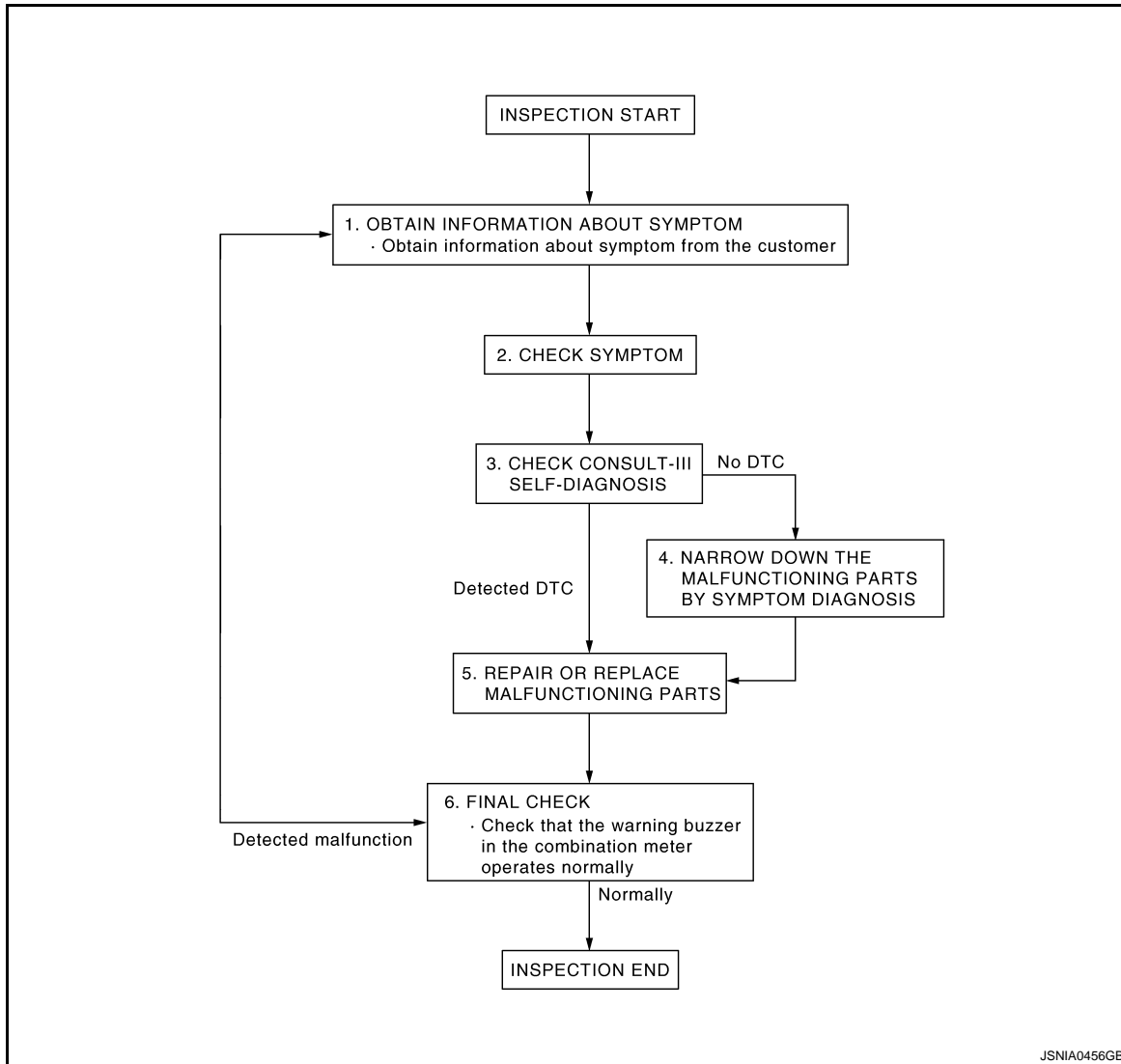
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000003135078

#### 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 that any other malfunctions are present.

>> GO TO 3.

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

Connect CONSULT-III and perform self-diagnosis. Refer to [MWI-40, "CONSULT-III Function \(METER/M&A\)"](#).

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# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

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Are self-diagnosis results normal?

YES >> GO TO 4.

NO >> GO TO 5.

## 4. NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

---

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

## 5. REPAIR OR REPLACE MALFUNCTIONING PARTS

---

Repair or replace malfunctioning parts.

**NOTE:**

If DTC is displayed, erase DTC after 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 >

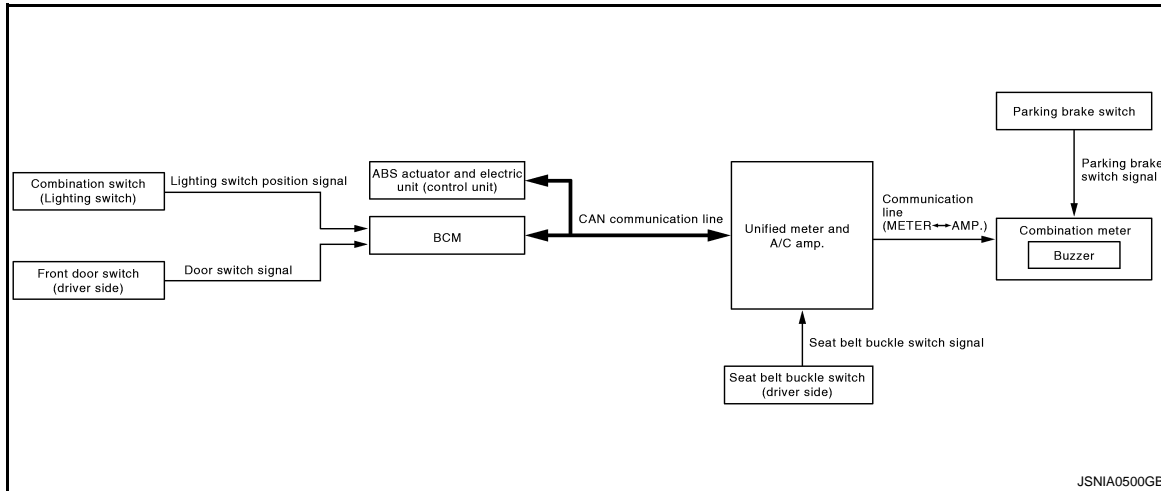
## FUNCTION DIAGNOSIS

### WARNING CHIME SYSTEM

### WARNING CHIME SYSTEM

### WARNING CHIME SYSTEM : System Diagram

INFOID:000000003135079

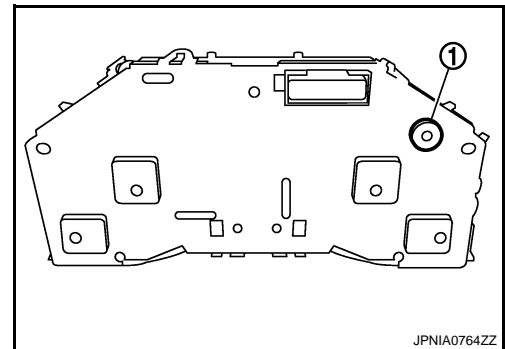


### WARNING CHIME SYSTEM : System Description

INFOID:000000003135080

#### COMBINATION METER

- The buzzer (1) for warning chime system is installed in the combination meter.
- The buzzer sounds when the combination meter receives buzzer output signal from each unit through unified meter and A/C amp.



#### UNIFIED METER AND A/C AMP.

The unified meter and A/C amp. transmits the buzzer output signal received from BCM with CAN communication line to the combination meter.

#### BCM

BCM receives signals from various units and transmits a buzzer output signal to the unified meter and A/C amp. with CAN communication line if it judges that the warning buzzer should be activated.

#### BCM warning function list

Warning functions	Signal name
Light reminder warning chime	<ul style="list-style-type: none"> <li>• Lighting switch position signal</li> <li>• Door switch signal</li> </ul>
Seat belt warning chime	Seat belt buckle switch signal

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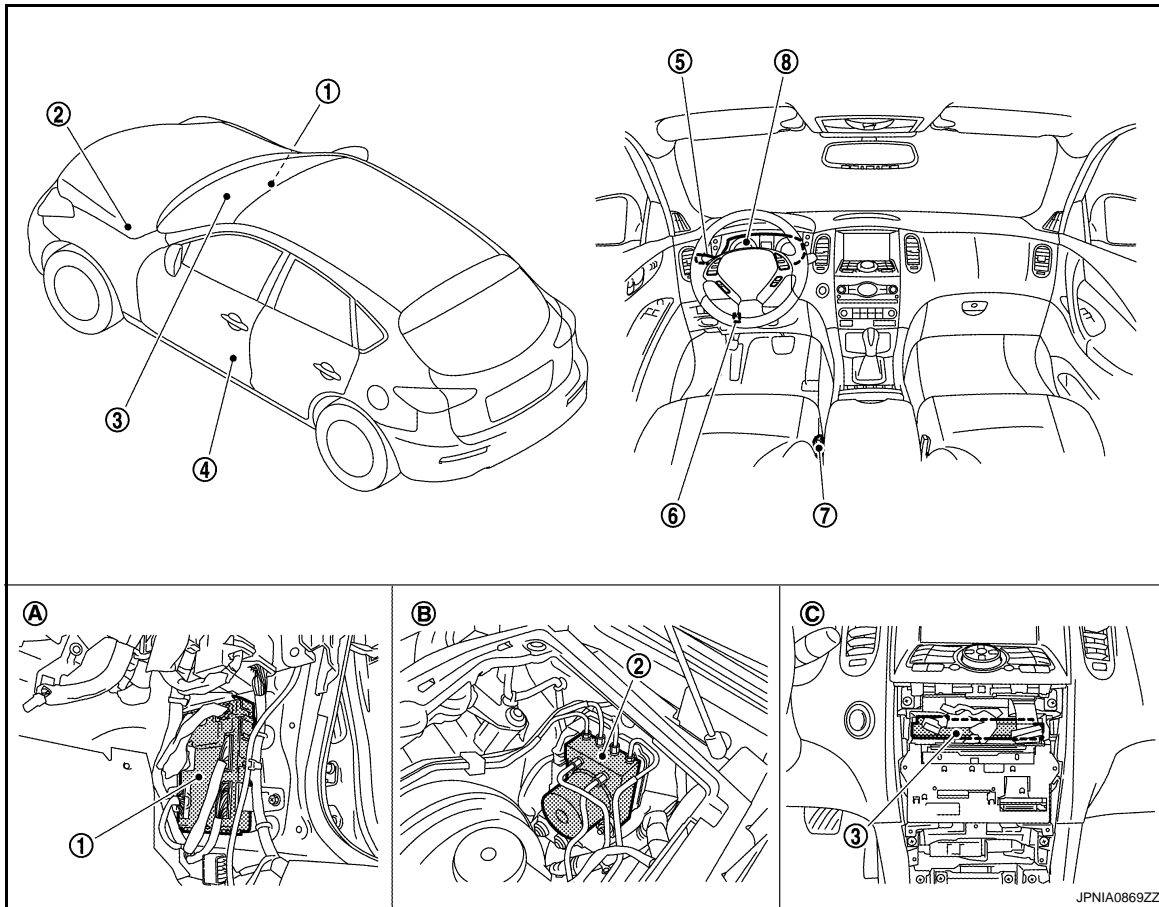
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# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## WARNING CHIME SYSTEM : Component Parts Location

INFOID:000000003135081



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|--|--|-------------------------------|
| 1. BCM                                   | 2. ABS actuator and electric unit (control unit) | 3. Unified meter and A/C amp. |
| 4. Front door switch (driver side)       | 5. Combination switch (Lighting switch)          | 6. Parking brake switch       |
| 7. Seat belt buckle switch (driver side) | 8. Combination meter                             |                               |
| A. Dash side lower (passenger side)      | B. Hoodledge cover (LH)                          | C. Behind cluster lid C       |

## WARNING CHIME SYSTEM : Component Description

INFOID:000000003135082

Unit	Description
Combination meter	<ul style="list-style-type: none"> <li>Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.</li> <li>Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.</li> </ul>
Unified meter and A/C amp.	<ul style="list-style-type: none"> <li>Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM with CAN communication line.</li> <li>Receives a buzzer output signal from BCM with CAN communication line and transmits it to the combination meter by means of communication line.</li> </ul>
BCM	Transmits signals provided by various units to the unified meter and A/C amp. with CAN communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to BCM with CAN communication line.
Seat belt buckle switch (driver side)	Transmits a seat belt buckle switch signal to the unified meter and A/C amp.

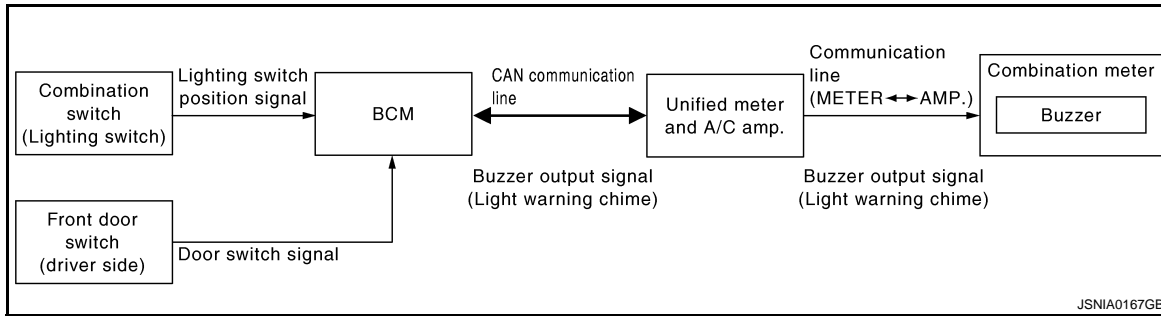
# WARNING CHIME SYSTEM

## < FUNCTION DIAGNOSIS >

Unit	Description
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the door switch signal to BCM.
Parking brake switch	Refer to <a href="#">MWI-65. "Description"</a> .

## LIGHT REMINDER WARNING CHIME

### LIGHT REMINDER WARNING CHIME : System Diagram



### LIGHT REMINDER WARNING CHIME : System Description

INFOID:000000003135084

#### DESCRIPTION

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

- BCM detects ignition switch in OFF or ACC 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 unified meter and A/C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (light reminder warning chime) to combination meter with 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 is at 1st or 2nd position
- Ignition switch is at OFF or ACC
- Front door switch (driver side) is ON

#### WARNING CANCEL CONDITIONS

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

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

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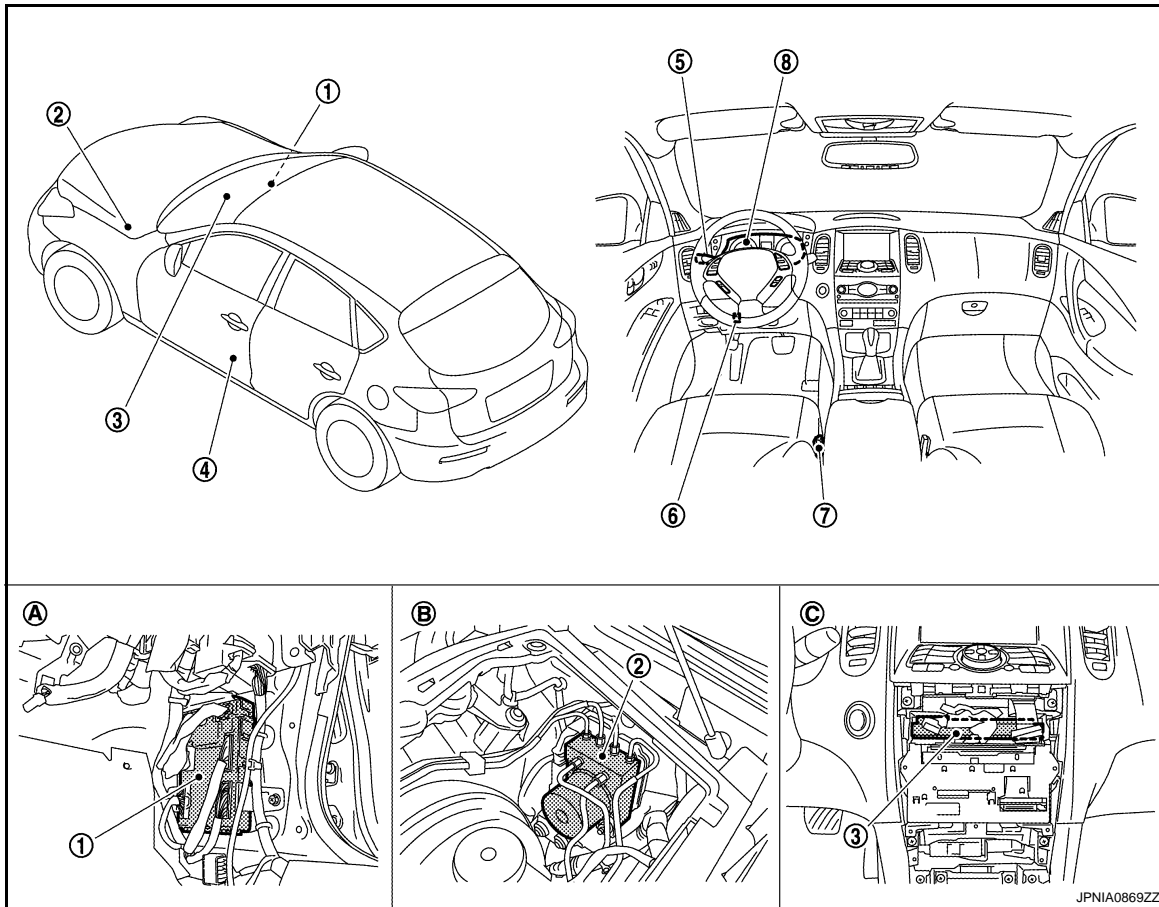
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# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## LIGHT REMINDER WARNING CHIME : Component Parts Location

INFOID:000000003566465



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| 1. BCM                                   | 2. ABS actuator and electric unit (control unit) | 3. Unified meter and A/C amp. |
| 4. Front door switch (driver side)       | 5. Combination switch (Lighting switch)          | 6. Parking brake switch       |
| 7. Seat belt buckle switch (driver side) | 8. Combination meter                             |                               |
| A. Dash side lower (passenger side)      | B. Hoodledge cover (LH)                          | C. Behind cluster lid C       |

## LIGHT REMINDER WARNING CHIME : Component Description

INFOID:0000000003135086

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

## SEAT BELT WARNING CHIME

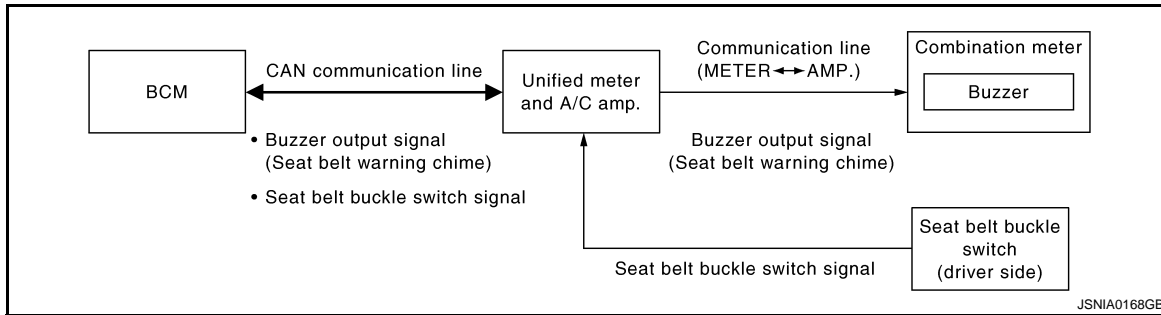


# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## SEAT BELT WARNING CHIME : System Diagram

INFOID:000000003135087



## SEAT BELT WARNING CHIME : System Description

INFOID:000000003135088

### 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 unified meter and A/C amp. 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 unified meter and A/C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (seat belt warning chime) to combination meter with 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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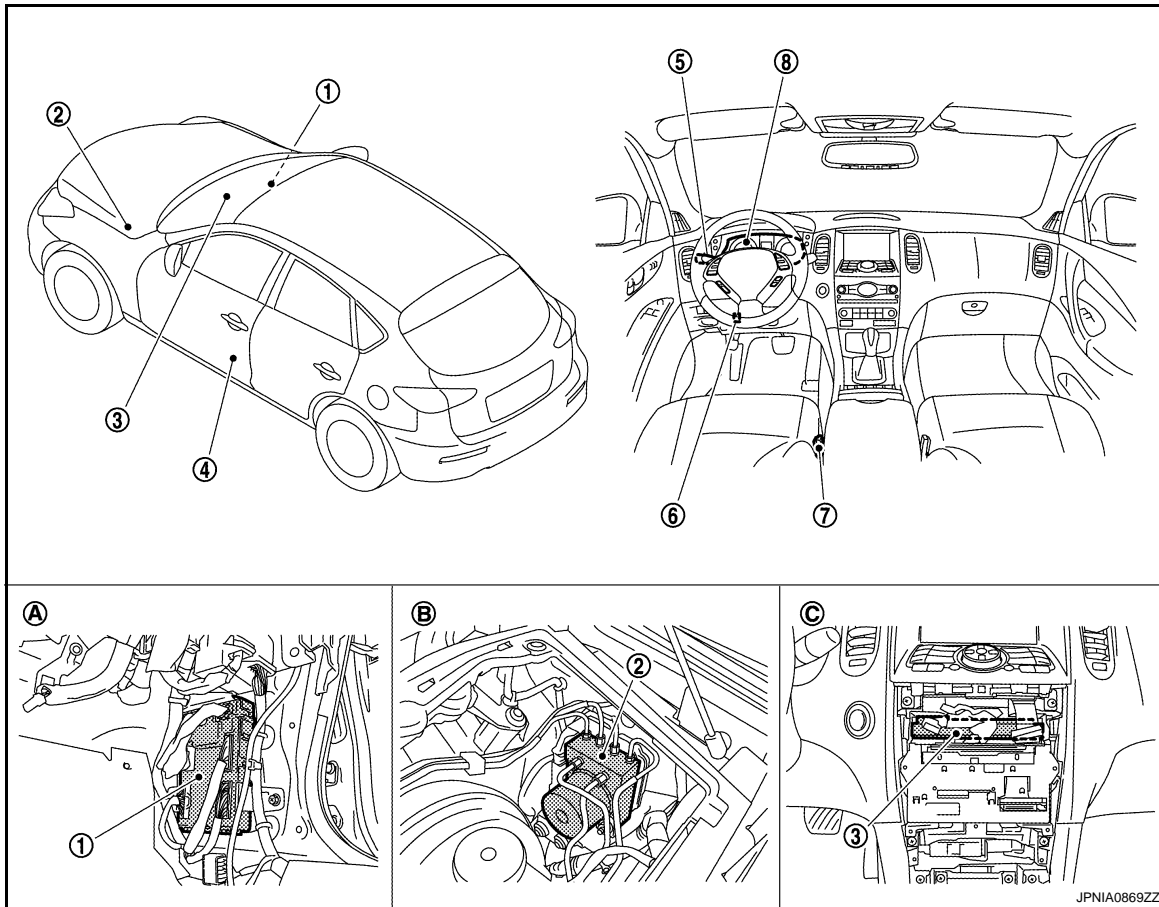
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# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## SEAT BELT WARNING CHIME : Component Parts Location

INFOID:000000003566466



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| 1. BCM                                   | 2. ABS actuator and electric unit (control unit) | 3. Unified meter and A/C amp. |
| 4. Front door switch (driver side)       | 5. Combination switch (Lighting switch)          | 6. Parking brake switch       |
| 7. Seat belt buckle switch (driver side) | 8. Combination meter                             |                               |
| A. Dash side lower (passenger side)      | B. Hoodledge cover (LH)                          | C. Behind cluster lid C       |

## SEAT BELT WARNING CHIME : Component Description

INFOID:000000003135090

Unit	Description
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.
Unified meter and A/C amp.	<ul style="list-style-type: none"> <li>Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM via CAN communication line.</li> <li>Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line.</li> </ul>
BCM	Judges the seat belt warning condition from the seat belt buckle switch signal received from the unified meter and A/C amp. and transmits a buzzer output signal to the unified meter and A/C amp. via CAN communication line if necessary.
Seat belt buckle switch (driver side)	Refer to <a href="#">WCS-24. "Description"</a> .

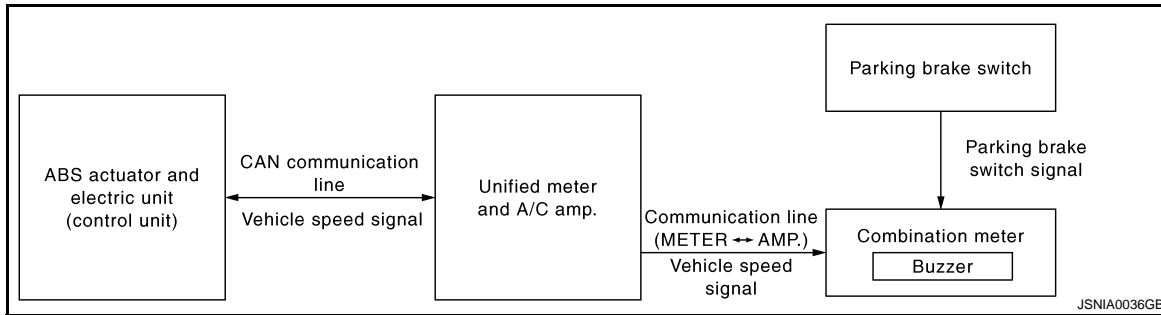
## PARKING BRAKE RELEASE WARNING CHIME

# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:000000003135091



## PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:000000003135092

### DESCRIPTION

- The unified meter and A/C amp. receives the vehicle speed signal from the ABS actuator and electric unit (control unit) via CAN communication line and transmits it to the combination meter by means of communication line.
- The combination meter judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. and the parking brake switch signal from the parking brake switch, and sounds the warning buzzer if necessary.

### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Vehicle speed is 7 km/h (4.3 MPH) or higher
- Parking brake switch ON

### WARNING CANCEL CONDITIONS

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

- Vehicle speed is approximately 3 km/h (1.9 MPH) or less
- Parking brake switch OFF

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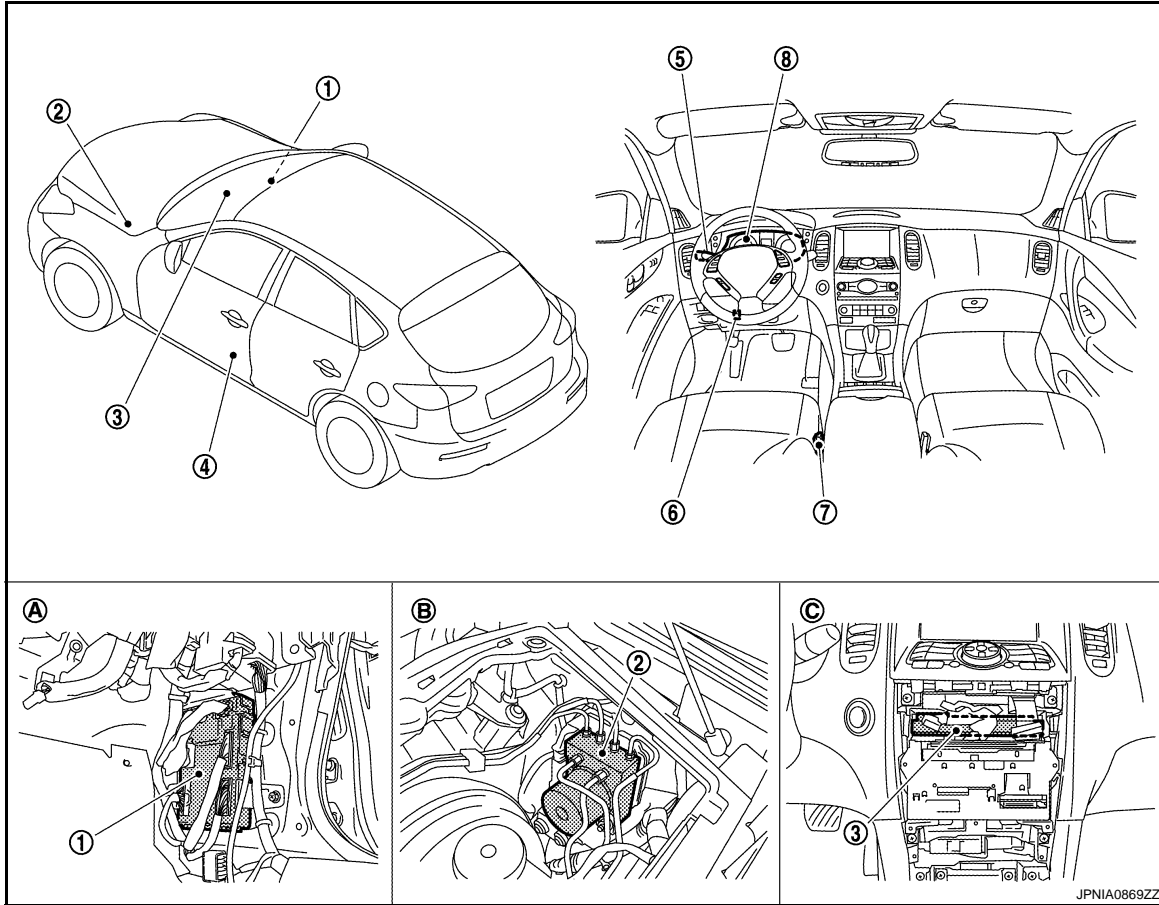
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# WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

## PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location

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| 1. BCM                                   | 2. ABS actuator and electric unit (control unit) | 3. Unified meter and A/C amp. |
| 4. Front door switch (driver side)       | 5. Combination switch (Lighting switch)          | 6. Parking brake switch       |
| 7. Seat belt buckle switch (driver side) | 8. Combination meter                             |                               |
| A. Dash side lower (passenger side)      | B. Hoodledge cover (LH)                          | C. Behind cluster lid C       |

## PARKING BRAKE RELEASE WARNING CHIME : Component Description

INFOID:000000003135094

Unit	Description
Combination meter	Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. via CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.
Unified meter and A/C amp.	Receives a vehicle speed signal from ABS actuator and electric unit (control unit) via CAN communication line and transmits it to the combination meter by means of communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter via CAN communication line.
Parking brake switch	Refer to <a href="#">MWI-65</a> . "Description".

# DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

< FUNCTION DIAGNOSIS >

## DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

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

INFOID:000000003554656

#### CONSULT-III APPLICATION ITEMS

CONSULT-III can perform the following diagnosis modes with CAN communication with the unified meter and A/C amp.

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

#### SELF DIAG RESULT

Refer to [MWI-101, "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 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.

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## DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

### < FUNCTION DIAGNOSIS >

Display item [Unit]	MAIN SIGNALS	Description
TURN IND [On/Off]		Status of turn indicator lamp judged from turn indicator signal received from BCM with CAN communication line.
FR FOG IND [On/Off]		This item is displayed, but cannot be monitored.
RR FOG IND [Off]		This item is displayed, but cannot be monitored.
LIGHT IND [On/Off]		Status of light indicator lamp judged from position light request signal received from BCM with CAN communication line.
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.
MIL [On/Off]		Status of malfunction indicator lamp judged from malfunctioning indicator lamp signal received from ECM with CAN communication line.
GLOW IND [On/Off]		This item is displayed, but cannot be monitored.
C-ENG2 W/L [On/Off]		This item is displayed, but cannot be monitored.
CRUISE IND [On/Off]		Status of CRUISE indicator judged from ASCD status signal received from ECM with CAN communication line.
SET IND [On/Off]		<ul style="list-style-type: none"> <li>• Status of set indicator judged from ASCD status signal received from ECM with CAN communication line.</li> <li>• Status of set indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.</li> </ul>
CRUISE W/L [On/Off]		Status of CRUISE warning lamp judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
BA W/L [Off]		This item is displayed, but cannot be monitored.
ATC/T-AMT W/L [On/Off]		Status of A/T check warning lamp judged from A/T check indicator signal received from TCM with CAN communication line.
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.
4WD LOCK IND [Off]		This item is displayed, but cannot be monitored.
FUEL W/L [On/Off]		Low-fuel warning status judged by the identified fuel level.
WASHER W/L [On/Off]		Status of washer warning judged from washer level switch input to combination meter.
AIR PRES W/L [On/Off]		Status of low tire pressure warning lamp judged from tire pressure signal received from BCM with CAN communication line.
KEY G/Y W/L [On/Off]		Status of key warning lamp (G/Y) judged from key warning signal received from BCM with CAN communication line.
AFS OFF IND [On/Off]		Status of AFS OFF indicator lamp judged from AFS OFF indicator lamp signal received from AFS control unit with CAN communication line.
4WAS/RAS W/L [On/Off]		This item is displayed, but cannot be monitored.
DDS W/L [On/Off]		This item is displayed, but cannot be monitored.
LANE W/L [On/Off]		Status of lane departure warning lamp judged from lane departure warning lamp signal received from lane camera unit with CAN communication line.
LDP IND [On/Off]		Status of LDP ON indicator lamp judged from LDP ON indicator lamp signal received from lane camera unit with CAN communication line.

## DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

### < FUNCTION DIAGNOSIS >

Display item [Unit]	MAIN SIGNALS	Description	A
LCD [B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY,OUTKY, LK WN]		Displays status of Intelligent Key system warning judged from meter display signal received from BCM with CAN communication line.	B
ACC TARGET [On/Off]		Status of vehicle ahead detection indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	C
ACC DISTANCE [Off, SHOR, MID, LONG]		Status of set distance indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	D
ACC OWN VHL [On/Off]		Status of own vehicle indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	E
ACC SET SPEED [On/Off]		Status of set vehicle speed indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	F
ACC UNIT [On/Off]		Status of display unit judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	G
SHIFT IND [P, R, N, D, M1, M2, M3, M4, M5]		Status of A/T position indicator judged from shift position signal and manual mode indicator signal received from TCM with CAN communication line.	H
O/D OFF SW [On/Off]		This item is displayed, but cannot be monitored.	I
AT S MODE SW [On/Off]		Status of snow mode switch.	J
AT P MODE SW [On/Off]		This item is displayed, but cannot be monitored.	K
M RANGE SW [On/Off]		Status of manual mode switch.	L
NM RANGE SW [On/Off]		Status of not manual mode switch.	M
AT SFT UP SW [On/Off]		Status of A/T shift up switch.	WCS
AT SFT DWN SW [On/Off]		Status of A/T shift down switch.	O
ST SFT UP SW [On/Off]		This item is displayed, but cannot be monitored.	P
ST SFT DWN SW [On/Off]		This item is displayed, but cannot be monitored.	
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the water temperature and the acceleration degree.	
4WD LOCK SW [Off]		This item is displayed, but cannot be monitored.	
PKB SW [On/Off]		Status of parking brake switch.	
BUCKLE SW [On/Off]		Status of seat belt buckle switch.	
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.	
DISTANCE [km]		Value of possible driving distance calculated by unified meter and A/C amp.	
OUTSIDE TEMP [°C or °F]		Ambient air 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.)	

## DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

### < FUNCTION DIAGNOSIS >

Display item [Unit]	MAIN SIGNALS	Description
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) is judged with the buzzer output signal received from each unit with CAN communication line 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:000000003733163

#### APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

#### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER		×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
<ul style="list-style-type: none"> <li>• Intelligent Key system</li> <li>• Engine start system</li> </ul>	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
—	TRUNK*		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

#### NOTE:

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

#### FREEZE FRAME DATA (FFD) AND IGN COUNTER

Freeze Frame Data

# DIAGNOSIS SYSTEM (BCM)

## < FUNCTION DIAGNOSIS >

The BCM records the following condition at the moment a particular DTC is detected.

- Vehicle Speed
- Odd Trip Meter
- Vehicle Condition (BCM detected condition)

CONSULT screen terms	Description
SLEEP>LOCK	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")
SLEEP>OFF	While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
LOCK>ACC	While turning power supply position from "LOCK" to "ACC"
ACC>ON	While turning power supply position from "ACC" to "IGN"
RUN>ACC	While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
CRANK>RUN	While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
RUN>URGENT	While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
ACC>OFF	While turning power supply position from "ACC" to "OFF"
OFF>LOCK	While turning power supply position from "OFF" to "LOCK"
OFF>ACC	While turning power supply position from "OFF" to "ACC"
ON>CRANK	While turning power supply position from "IGN" to "CRANKING"
OFF>SLEEP	While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
LOCK>SLEEP	While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode
LOCK	Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)
OFF	Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
ACC	Power supply position is "ACC" (Ignition switch ACC)
ON	Power supply position is "IGN" (Ignition switch ON with engine stopped)
ENGINE RUN	Power supply position is "RUN" (Ignition switch ON with engine running)
CRANKING	Power supply position is "CRANKING" (At engine cranking)

### IGN Counter

IGN counter indicates the number of times that ignition switch is turned ON after DTC is detected.

- The number is 0 when a malfunction is detected now.
- The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

### BUZZER

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

INFOID:000000003135097

#### CONSULT-III APPLICATION ITEMS

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

### DATA MONITOR

# DIAGNOSIS SYSTEM (BCM)

## < FUNCTION DIAGNOSIS >

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

## ACTIVE TEST

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

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# POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

## COMPONENT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

#### COMBINATION METER : Diagnosis Procedure

INFOID:000000003554658

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	11
Ignition switch ACC or ON	19
Ignition switch ON or START	4

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

Terminals			Ignition switch position	Value (Approx.)
(+)		(-)		
Combination meter	Terminal		Signal name	
M53	1	Battery power supply	OFF	Battery voltage
	23	ACC power supply	ACC	Battery voltage
	21	Ignition signal	ON	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 and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M53	5		Existed
	15		Existed
	22		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

### UNIFIED METER AND A/C AMP.

#### UNIFIED METER AND A/C AMP. : Diagnosis Procedure

INFOID:000000003554659

#### 1.CHECK FUSE

Check for blown fuses.

# POWER SUPPLY AND GROUND CIRCUIT

## < COMPONENT DIAGNOSIS >

Power source	Fuse No.
Battery	6
Ignition switch ACC or ON	19
Ignition switch ON or START	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 unified meter and A/C amp. harness connector and ground.

Terminals			Ignition switch position	Value (Approx.)
(+)		(-)		
Unified meter A/C amp.	Terminal	Signal name		
M67	54	Battery power supply	OFF	Battery voltage
	41	ACC power supply	ACC	Battery voltage
	53	Ignition signal	ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between unified meter and A/C amp. and fuse.

### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect unified meter and A/C amp. connector.
3. Check continuity between unified meter and A/C amp. harness connector and ground.

Unified meter A/C amp.		Ground	Continuity
Connector	Terminal		
M67	55		Existed
	71		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## BCM (BODY CONTROL MODULE)

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

INFOID:000000003733151

### 1.CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

### 2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.

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## POWER SUPPLY AND GROUND CIRCUIT

### < COMPONENT DIAGNOSIS >

3. Check voltage between BCM harness connector and ground.

Terminals		Voltage (Approx.)
(+)	(-)	
BCM		Ground
Connector	Terminal	
M118	1	
M119	11	
		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		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

# METER BUZZER CIRCUIT

< COMPONENT DIAGNOSIS >

## METER BUZZER CIRCUIT

### Description

INFOID:000000003135102

- 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:000000003135103

#### 1. CHECK OPERATION OF METER BUZZER

1. Select "BUZZER" of "BCM" on CONSULT-III.
2. Perform "LIGHT WARN ALM" of "ACTIVE TEST".

##### Does meter buzzer beep?

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

#### 2. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

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

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

##### Is the inspection result normal?

- YES >> Replace combination meter.  
NO >> Replace BCM. Refer to [BCS-84, "Removal and Installation"](#).

### Diagnosis Procedure

INFOID:000000003135104

#### 1. CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to [WCS-20, "COMBINATION METER : Diagnosis Procedure"](#).

##### Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair power supply circuit of combination meter.

#### 2. CHECK POWER SUPPLY OF UNIFIED METER AND A/C AMP.

Check power supply of unified meter and A/C amp. Refer to [WCS-20, "UNIFIED METER AND A/C AMP. : Diagnosis Procedure"](#).

##### Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Repair power supply circuit of unified meter and A/C amp.

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# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

## SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

### Description

INFOID:000000003135105

Transmits a seat belt buckle switch signal to the unified meter and A/C amp.

### Component Function Check

INFOID:000000003135106

#### 1.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

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

BUCKLE SW

When seat belt is fastened : Off

When seat belt is unfastened : On

>> INSPECTION END

### Diagnosis Procedure

INFOID:000000003135107

#### 1.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

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

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
Unified meter and A/C amp.		Ground	
Connector	Terminal		
M66	9		
		When driver seat belt is fastened	12 V
		When driver seat belt is unfastened	0 V

Is the inspection result normal?

YES >> Replace unified meter and A/C amp.

NO >> GO TO 2.

#### 2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect unified meter and A/C amp. connector and seat belt buckle switch (driver side) connector.
3. Check continuity between unified meter and A/C amp. harness connector and seat belt buckle switch (driver side) harness connector.

Unified meter and A/C amp.		Seat belt buckle switch (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M66	9	B13	1	Existed

4. Check harness continuity between unified meter and A/C amp. harness connector and ground.

Unified meter and A/C amp.		Ground	Continuity
Connector	Terminal		
M66	9		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

#### 3.CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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



# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

## < COMPONENT DIAGNOSIS >

Seat belt buckle switch (driver side)		Ground	Continuity
Connector	Terminal		
B13	2		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## Component Inspection

INFOID:000000003135108

### 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.

Terminal		Condition	Continuity
1	2	When seat belt is fastened	Not existed
		When seat belt is unfastened	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the seat belt buckle. Refer to [SB-7, "SEAT BELT BUCKLE : Removal and Installation"](#).

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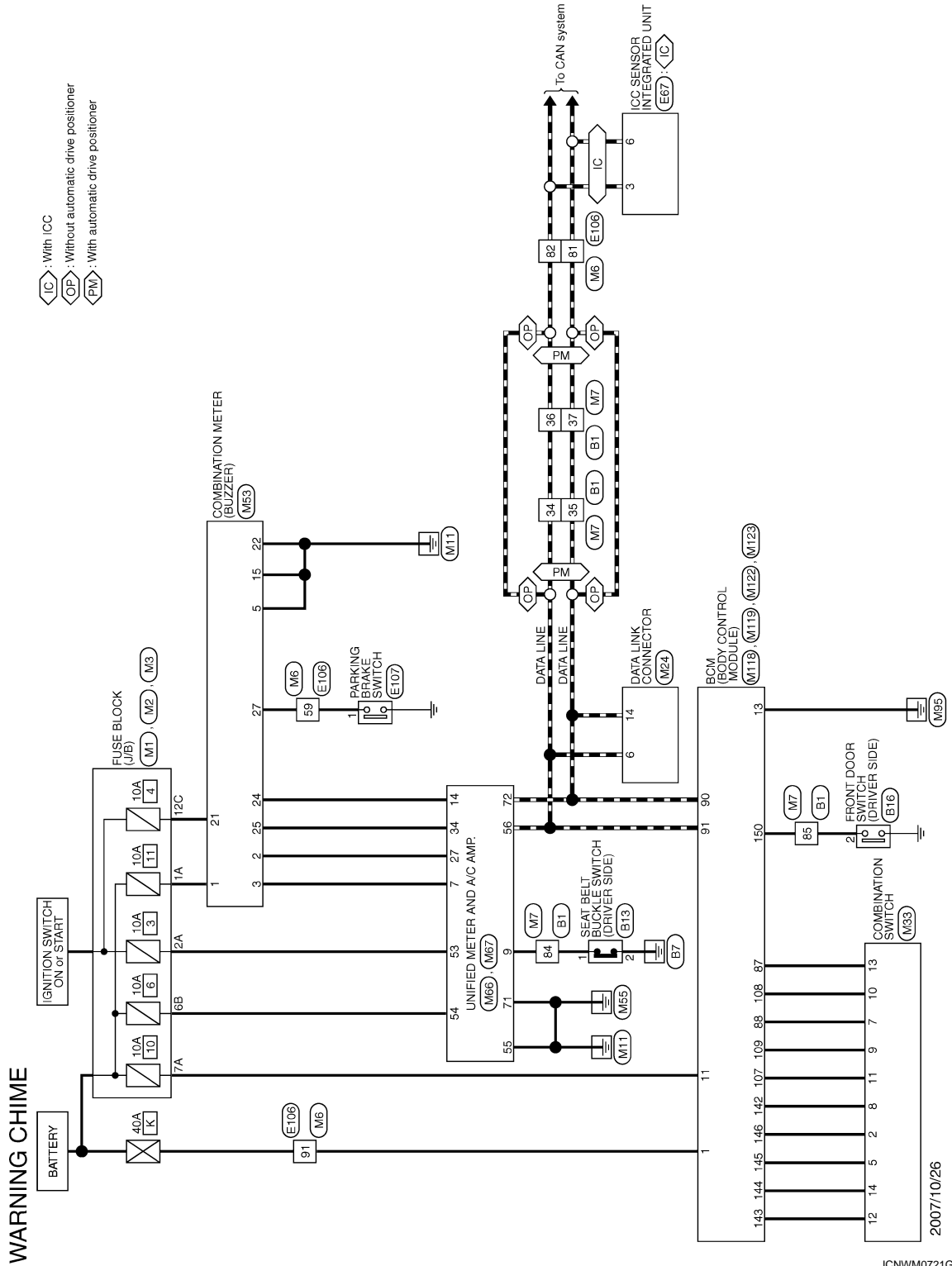
# WARNING CHIME SYSTEM

< COMPONENT DIAGNOSIS >

## WARNING CHIME SYSTEM

### Wiring Diagram - WARNING CHIME -

INFOID:000000003135109



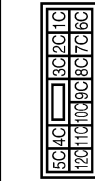


# WARNING CHIME SYSTEM

## < COMPONENT DIAGNOSIS >

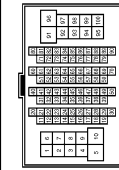
### WARNING CHIME

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	HS12FW-CS



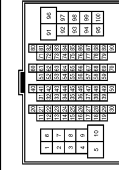
Terminal No.	Color of Wire	Signal Name [Specification]
12C	O	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH40MP-CS16-TM4



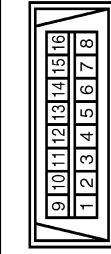
Terminal No.	Color of Wire	Signal Name [Specification]
59	V	-
81	P	-
82	L	-
91	W	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH20MP-CS16-TM4



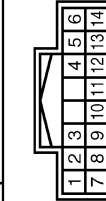
Terminal No.	Color of Wire	Signal Name [Specification]
34	L	-
35	P	-
36	L	-
37	P	-
84	SB	-
85	LG	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



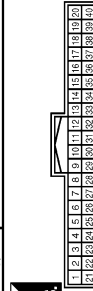
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



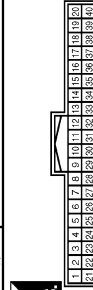
Terminal No.	Color of Wire	Signal Name [Specification]
2	SB	OUTPUT 4
5	L	OUTPUT 3
7	V	INPUT 3
8	O	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



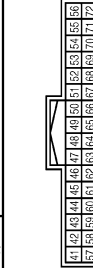
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	LG	COMM (METER->AMP)
3	GR	COMM (AMP->METER)
5	B	GND
15	B	GND
21	O	IGN
22	B	GND
24	BR	COMM (LGD->AMP)
25	Y	COMM (AMP->LGD)
27	V	PARKING BRAKE SW

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
7	GR	COMM (AMP->METER)
9	SB	SEAT BELT BUCKLE SW (DRIVER SIDE)
14	BR	COMM (LGD->AMP)
27	LG	COMM (METER->AMP)
34	Y	COMM (AMP->LGD)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
53	G	IGN
54	Y	BAT
55	B	GND
56	L	CAN-H
71	B	GND
72	P	CAN-L

# WARNING CHIME SYSTEM

## < COMPONENT DIAGNOSIS >

### WARNING CHIME

Connector No.	M118	M119	M122	M123
Connector Name	BCM (BODY CONTROL MODULE)	BCM (BODY CONTROL MODULE)	BCM (BODY CONTROL MODULE)	BCM (BODY CONTROL MODULE)
Connector Type	M02EP-LC	NS1EP1V-CS	TH40FB-NH	TH40FG-NH
Terminal No.	1	11 13	87 88 90 91 107 108 109	142 143 144 145 146 150
Color of Wire	W	R B	BR V P L LG R Y	O P G L SB LG
Signal Name [Specification]	BAT (F/L)	BAT (FUSE) GND	COMBI SW INPUT 5 COMBI SW INPUT 3 CAN-L CAN-H COMBI SW INPUT 1 COMBI SW INPUT 4 COMBI SW INPUT 2	COMBI SW OUTPUT 5 COMBI SW OUTPUT 1 COMBI SW OUTPUT 2 COMBI SW OUTPUT 3 COMBI SW OUTPUT 4 DRIVER DOOR SW



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# COMBINATION METER

< ECU DIAGNOSIS >

## ECU DIAGNOSIS

### COMBINATION METER

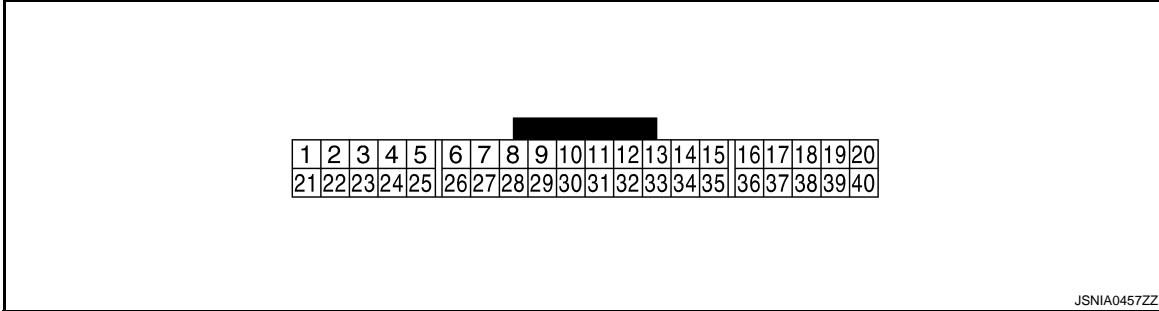
Reference Value

INFOID:000000003554724

VALUES ON THE DIAGNOSIS TOOL

Refer to [WCS-43. "Reference Value"](#).

TERMINAL LAYOUT

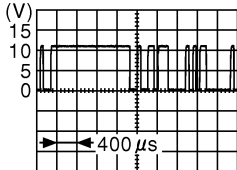
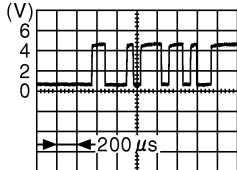
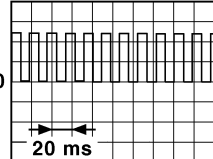
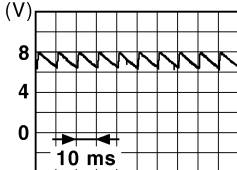


### PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
2 (LG)	Ground	Communication signal (METER→ AMP.)	Output	Ignition switch ON	—	 <small>JSNIA0027GB</small>
3 (GR)	Ground	Communication signal (AMP.→ METER)	Input	Ignition switch ON	—	 <small>JSNIA0027GB</small>
5 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
6 (P)	Ground	Alternator signal	Input	Ignition switch ON	Charge warning lamp ON	0 V
					Charge warning lamp OFF	Battery voltage
7 (LG)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON	4 V
					Air bag warning lamp OFF	0 V
10 (G)	Ground	Security signal	Input	Ignition switch OFF	Security warning lamp ON	0 V
					Security warning lamp OFF	12 V

# COMBINATION METER

## < ECU DIAGNOSIS >

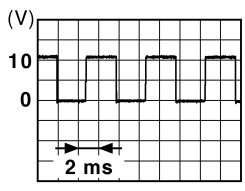


Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
15 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
16 (B)	Ground	Meter control switch ground	—	Ignition switch ON	—	0 V
21 (O)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
22 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
23 (L)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
24 (BR)	Ground	Communication signal (LCD→ AMP.)	Output	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">JSNIA0028GB</p>
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">JSNIA0027GB</p>
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	<p><b>NOTE:</b> The maximum voltage varies de- pending on the specification (destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>
27 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	 <p style="text-align: right; font-size: small;">JSNIA0007GB</p>
28 (W)	Ground	Brake fluid level switch sig- nal	Input	Ignition switch ON	Brake fluid level is normal.	5 V
					The brake fluid level is low- er than the low level	0 V

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# COMBINATION METER

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
29 (SB)	Ground	Seat belt buckle switch signal (driver side)	Input	Ignition switch ON	When driver seat belt is fastened	12 V
					When driver seat belt is unfastened	0 V
30 (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
31 (L)	Ground	Washer level switch signal	Input	Ignition switch ON	Washer level switch ON	0 V
					Washer level switch OFF	5 V
33 (B)	Ground	Illumination control signal	Output	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;">JSNIA0010GB</p>
36 (LG)	16 (B)	Select switch signal	Input	Ignition switch ON	When ● is pressed	0 V
					Other than the above	5 V
37 (SB)	16 (B)	Enter switch signal	Input	Ignition switch ON	When □ is pressed	0 V
					Other than the above	5 V
38 (L)	16 (B)	Trip A/B reset switch signal	Input	Ignition switch ON	When trip A/B reset switch is pressed	0 V
					Other than the above	5 V
39 (P)	16 (B)	Illumination control switch signal (-)	Input	Ignition switch ON	When  switch is pressed	0 V
					Other than the above	5 V
40 (O)	16 (B)	Illumination control switch signal (+)	Input	Ignition switch ON	When  switch is pressed	0 V
					Other than the above	5 V



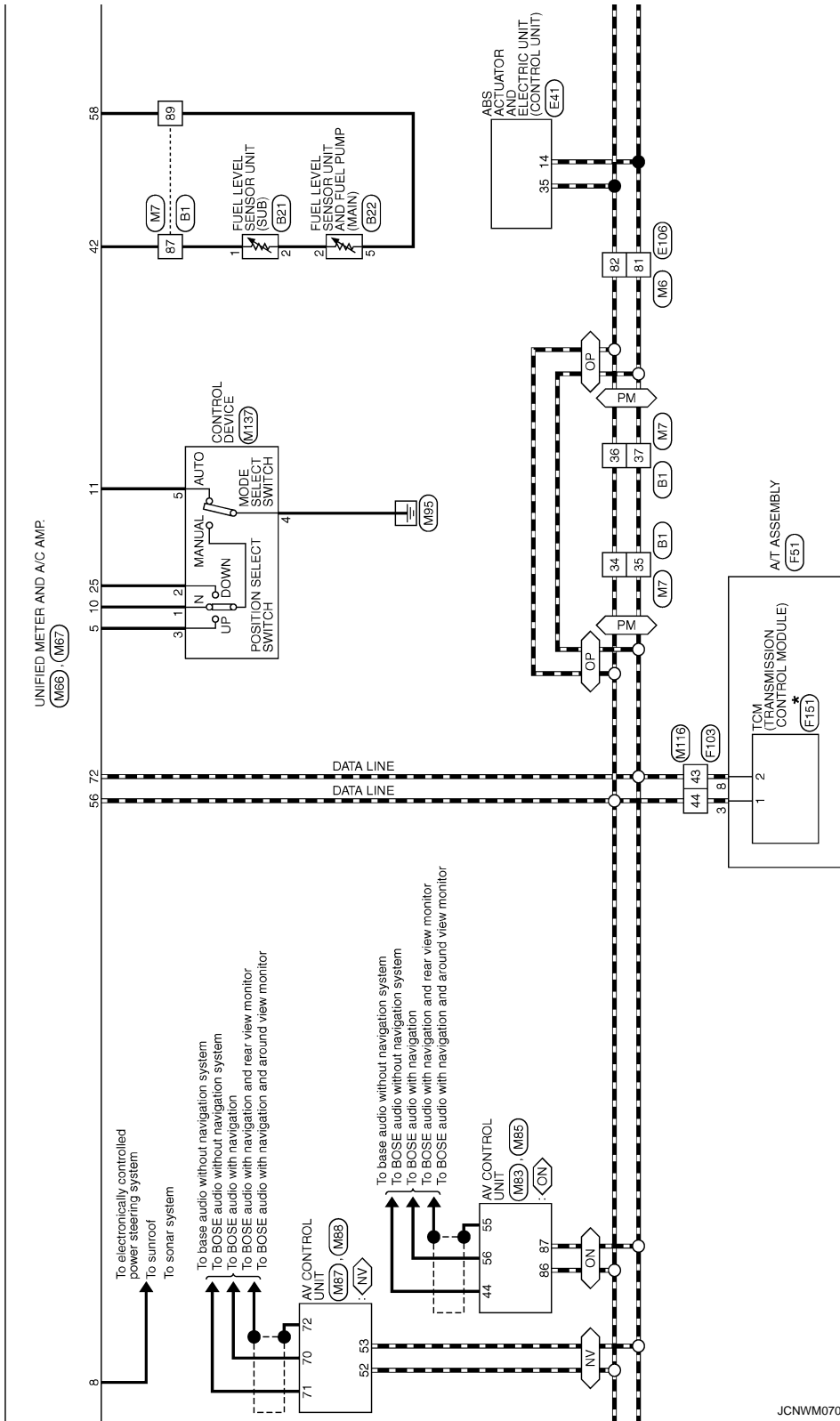


# COMBINATION METER

< ECU DIAGNOSIS >

NV : With NAVI  
CN : Without NAVI  
PM : With automatic drive positioner  
OP : Without automatic drive positioner

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

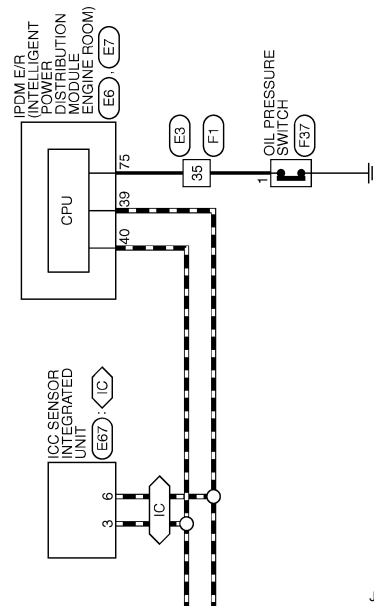
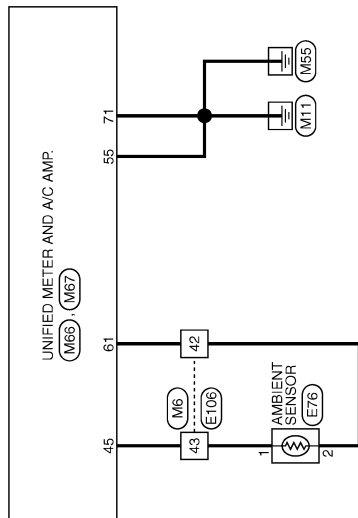


JCNWM0709GI

# COMBINATION METER

< ECU DIAGNOSIS >

⬡ : With ICC



JCNWM0710GI

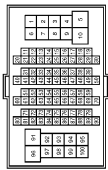





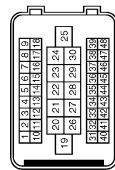



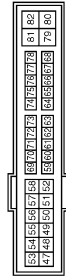



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# COMBINATION METER

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## METER

Connector No. B1 WIRE TO WIRE TH80FW-GS16-TM4		Terminal No.	Color of Wire	Signal Name [Specification]
Connector Name		34	L	-
Connector Type		35	P	-
		36	L	-
		37	P	-
		84	SB	-
		87	Y	-
		88	B	-
Connector No. B21 FUEL LEVEL SENSOR UNIT (SUB) E30FGY-RS		Terminal No.	Color of Wire	Signal Name [Specification]
Connector Name		1	Y	-
Connector Type		2	W	-
Connector No. B22 FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN) E05FGY-RS		Terminal No.	Color of Wire	Signal Name [Specification]
Connector Name		2	W	-
Connector Type		5	B	-
Connector No. E3 WIRE TO WIRE SAA36MB-RS10-SJ22		Terminal No.	Color of Wire	Signal Name [Specification]
Connector Name				
Connector Type				
Connector No. E6 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) TH80FW-NH		Terminal No.	Color of Wire	Signal Name [Specification]
Connector Name		39	P	-
Connector Type		40	L	-
Connector No. E7 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) TH20FW-GS12-M4		Terminal No.	Color of Wire	Signal Name [Specification]
Connector Name		75	Y	-
Connector Type				
Connector No. E8 WASHER LEVEL SWITCH Z02FBR		Terminal No.	Color of Wire	Signal Name [Specification]
Connector Name		1	LG	-
Connector Type		2	B	-

JCNWM0711GE

# COMBINATION METER

< ECU DIAGNOSIS >

## METER

Connector No. E41	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	Connector No. E67	ICC SENSOR INTEGRATED UNIT	Connector No. E76	AMBIENT SENSOR
Connector Name BAK42PE-AH24-LH		Connector Name RS08FB-FR		Connector Name RS02FB	
Connector Type H.S.		Connector Type H.S.		Connector Type H.S.	
Terminal No. 14 35	Color of Wire P L	Terminal No. 3 6	Color of Wire L P	Terminal No. 1 2	Color of Wire G P
Signal Name [Specification] CAN-L CAN-H	Signal Name [Specification] CAN-L CAN-H	Signal Name [Specification] CAN-H CAN-L	Signal Name [Specification] CAN-H CAN-L	Signal Name [Specification] -	Signal Name [Specification] -
Connector No. E108	WIRE TO WIRE	Connector No. F1	WIRE TO WIRE	Connector No. F36	ALTERNATOR
Connector Name TH80FW-CS16-TM4		Connector Name SAA38FB-RS1P-SJZ2		Connector Name HS03FB	
Connector Type H.S.		Connector Type H.S.		Connector Type H.S.	
Terminal No. 41 42 43 59 60 81 82	Color of Wire W P G O LG P L	Terminal No. 35	Color of Wire Y	Terminal No. 2	Color of Wire G
Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] L	Signal Name [Specification] -
Connector No. E107	PARKING BRAKE SWITCH	Connector No. E107	PARKING BRAKE SWITCH	Connector No. E107	PARKING BRAKE SWITCH
Connector Name TB01FW		Connector Name TB01FW		Connector Name TB01FW	
Connector Type H.S.		Connector Type H.S.		Connector Type H.S.	
Terminal No. 1	Color of Wire O	Terminal No. 1	Color of Wire O	Terminal No. 1	Color of Wire O
Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -
Connector No. E107	BRAKE FLUID LEVEL SWITCH	Connector No. E107	BRAKE FLUID LEVEL SWITCH	Connector No. E107	BRAKE FLUID LEVEL SWITCH
Connector Name Y102FGY		Connector Name Y102FGY		Connector Name Y102FGY	
Connector Type H.S.		Connector Type H.S.		Connector Type H.S.	
Terminal No. 1 2	Color of Wire W B	Terminal No. 1 2	Color of Wire W B	Terminal No. 1 2	Color of Wire W B
Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -	Signal Name [Specification] -

JCNWM0712GI


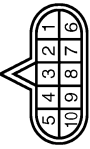
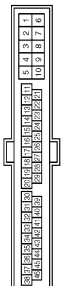





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# COMBINATION METER

< ECU DIAGNOSIS >

## METER

Connector No. F37	OIL PRESSURE SWITCH E01EY-RS-AR		Terminal No. 1	Color of Wire Y	Signal Name [Specification] -
Connector No. F31	A/T ASSEMBLY RK10F6-DGY		Terminal No. 3 8	Color of Wire L P	Signal Name [Specification] -
Connector No. F103	WIRE TO WIRE TK3BFW-RS10		Terminal No. 2 35 36 43 44	Color of Wire G L P P L	Signal Name [Specification] -
Connector No. F108	AWD CONTROL UNIT FH16FW-NH		Terminal No. 8 16	Color of Wire L P	Signal Name [Specification] CAN-H CAN-L
Connector No. M1	FUSE BLOCK (J/B) NS00FW-M2		Terminal No. TA 2A 5A	Color of Wire GR G V	Signal Name [Specification] -
Connector No. M2	FUSE BLOCK (J/B) NS10FW-CS		Terminal No. 8B	Color of Wire Y	Signal Name [Specification] -
Connector No. M3	FUSE BLOCK (J/B) NS12FW-CS		Terminal No. 12C	Color of Wire O	Signal Name [Specification] -
Connector No. F151	TOM (TRANSMISSION CONTROL MODULE) SP10FBGY		Terminal No. 1 2	Color of Wire BR L/Y	Signal Name [Specification] CAN-H CAN-L

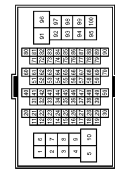
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# COMBINATION METER

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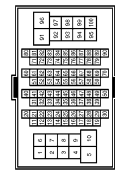
## METER

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS1F-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
41	W	-
42	BR	-
43	P	-
59	V	-
60	L	-
81	P	-
82	L	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS1F-TM4



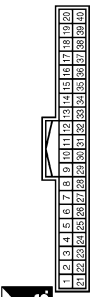
Terminal No.	Color of Wire	Signal Name [Specification]
34	L	-
35	P	-
36	L	-
37	P	-
84	SB	-
87	Y	-
89	BR	-

Connector No.	M16
Connector Name	AFS CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	CAN-L
30	L	CAN-H

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	LG	COMM (METER->AMP.)
3	GR	COMM (AMP->METER)
5	B	GND
6	P	ALTERNATOR
7	LG	AIR BAG
10	G	SECURITY
15	B	GND
16	B	METER CONTROL SW GND
21	O	IGN
22	B	GND

23	L	ACC
24	BR	COMM (LGD->AMP.)
25	Y	COMM (AMP->LCD)
26	R	VEHICLE SPEED (8-PULSE)
27	V	PARKING BRAKE SW
28	W	BRAKE FLUID LEVEL SW
29	SB	SEAT BELT BUCKLE SW (DRIVER SIDE)
30	G	SEAT BELT
31	L	WASHER LEVEL SW
33	B	ILLUMINATION CONTROL
36	LG	SELECT SW
37	SB	ENTER SW
38	L	TRIP A/B RESET SW
39	P	ILLUMINATION CONTROL SW (-)
40	O	ILLUMINATION CONTROL SW (+)

Connector No.	M54
Connector Name	METER CONTROL SWITCH
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-
3	P	-
6	LG	-
7	SB	-

Connector No.	M56
Connector Name	TRIP A/B RESET SWITCH
Connector Type	TK02MW



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

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# COMBINATION METER

< ECU DIAGNOSIS >

## METER

Connector No.	M86
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH

Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Color of Wire	B	R	Y	W	LG	BR	ACC	Y	P	G	B	W	LG	BR	ACC	Y	P	G	B	W	LG
Signal Name [Specification]	SHIF UP SW	COMM (AMP->METER)	VEHICLE SPEED (2-PULSE)	SEAT BELT BUCKLE SW (DRIVER SIDE)	MANUAL MODE SW	AUTO MODE SW	COMM (LCD->AMP)	SHIF DOWN SW	COMM (METER->AMP)	VEHICLE SPEED (8-PULSE)	PARKING BRAKE SW										

Terminal No.	5	7	8	9	10	11	14	25	27	28	30
Color of Wire	L	GR	L	SB	W	G	BR	V	LG	R	V
Signal Name [Specification]	SHIF UP SW	COMM (AMP->METER)	VEHICLE SPEED (2-PULSE)	SEAT BELT BUCKLE SW (DRIVER SIDE)	MANUAL MODE SW	AUTO MODE SW	COMM (LCD->AMP)	SHIF DOWN SW	COMM (METER->AMP)	VEHICLE SPEED (8-PULSE)	PARKING BRAKE SW

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH42FW-NH

Terminal No.	47	46	45	44	43	42	41	40	39	38	37	36
Color of Wire	BR	Y	W	LG	BR	ACC	Y	P	G	B	W	LG
Signal Name [Specification]	COMM (DISP->CONT)	COMM (GONT->DISP)										

Terminal No.	44	55	56
Color of Wire	BR	SHIELD	Y
Signal Name [Specification]	COMM (DISP->CONT)	SHIELD	COMM (GONT->DISP)

Terminal No.	34
Color of Wire	Y
Signal Name [Specification]	COMM (AMP->LCD)

Connector No.	M87
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH

Terminal No.	41	42	45	53	54	55	56	57	58	61	71
Color of Wire	V	Y	P	G	Y	B	L	W	BR	BR	B
Signal Name [Specification]	ACC	FUEL LEVEL SENS	AMB SENS	IGN	BAT	GND	CAN-H	BRAKE FLUID LEVEL SW	FUEL LEVEL SENS GND	AMB SENS GND	GND

Terminal No.	41	42	45	53	54	55	56	57	58	61	71
Color of Wire	V	Y	P	G	Y	B	L	W	BR	BR	B
Signal Name [Specification]	ACC	FUEL LEVEL SENS	AMB SENS	IGN	BAT	GND	CAN-H	BRAKE FLUID LEVEL SW	FUEL LEVEL SENS GND	AMB SENS GND	GND

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH

Terminal No.	21	23	25	27	28	29	31	33	35	37	38	39	41	43	44	45	46	47	48	49	51	53	55	56	57
Color of Wire	L	L	P	G	Y	B	L	W	BR	BR	B	L	W	BR	BR	B	L	W	BR	BR	B	L	W	BR	BR
Signal Name [Specification]																									

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

Terminal No.	72
Color of Wire	P
Signal Name [Specification]	CAN-L

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH

Terminal No.	62	64	66	68	70	72
Color of Wire	BR	Y	W	LG	BR	ACC
Signal Name [Specification]	COMM (DISP->CONT)	COMM (DISP->CONT)	SHIELD			

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




# COMBINATION METER

< ECU DIAGNOSIS >


## METER

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



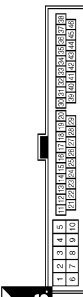
Terminal No.	Color of Wire	Signal Name [Specification]
141	G	SECURITY INDICATOR OUTPUT

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




Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MP-NS10



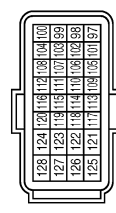
Terminal No.	Color of Wire	Signal Name [Specification]
2	P	-
35	L	-
36	P	-
43	P	-
44	L	-

Connector No.	M147
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC



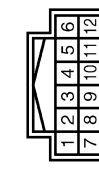
Terminal No.	Color of Wire	Signal Name [Specification]
15	LG	AIR BAG W/L
24	G	SEAT BELT

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FY-R28-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Connector No.	M137
Connector Name	CONTROL DEVICE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	V	-
3	L	-
4	B	-
5	G	-

## Fail-Safe

### FAIL-SAFE

Combination meter performs fail-safe operation when unified meter and A/C amp. communication is malfunction.

Solution for communication error between the unified meter and A/C amp. and combination meter.

JCNWM0716GI

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# COMBINATION METER

## < ECU DIAGNOSIS >

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Fuel gauge		
Water temperature gauge		
Illumination control		When suspending communication, change to nighttime mode.
Information display		The display turns off by suspending communication.
Buzzer		The buzzer turns off by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	The lamp turns on by suspending communication.
	VDC OFF indicator lamp	
	SLIP indicator lamp	
	Brake warning lamp	
	CRUISE warning lamp	
	High beam indicator	The lamp turns off by suspending communication.
	Turn signal indicator lamp	
	Light indicator lamp	
	Oil pressure warning lamp	
	Malfunction indicator lamp	
	A/T CHECK warning lamp	
	AWD warning lamp	
	Low tire pressure warning lamp	
	Key warning lamp	
	AFS OFF indicator lamp	
	Lane departure warning lamp	
	LDP ON indicator lamp	
Master warning lamp		

## DTC Index

INFOID:000000003554727

Refer to [WCS-59, "DTC Index"](#).

# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >

## UNIFIED METER AND A/C AMP.

Reference Value

INFOID:000000003554728

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

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 [km/h] or [mph]	Ignition switch ON	—	Equivalent to odometer reading in combination meter
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading <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 displayed	On
		Door warning not displayed	Off
HI-BEAM IND	Ignition switch ON	Hi-beam indicator lamp ON	On
		Hi-beam indicator lamp OFF	Off
TURN IND	Ignition switch ON	Turn indicator lamp ON	On
		Turn indicator lamp OFF	Off
FR FOG IND	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
RR FOG IND	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	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

## UNIFIED METER AND A/C AMP.

### < ECU DIAGNOSIS >

Monitor Item	Condition		Value/Status
MIL	Ignition switch ON	Malfunction warning lamp ON	On
		Malfunction warning lamp OFF	Off
GLOW IND	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
C-ENG2 W/L	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
CRUISE IND	Ignition switch ON	Cruise indicator displayed	On
		Cruise indicator not displayed	Off
SET IND	Ignition switch ON	Set indicator lamp ON	On
		Set indicator lamp OFF	Off
CRUISE W/L	Ignition switch ON	Cruise warning lamp ON	On
		Cruise warning lamp OFF	Off
BA W/L	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
ATC/T-AMT W/L	Ignition switch ON	A/T check warning lamp ON	On
		A/T check warning 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	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
FUEL W/L	Ignition switch ON	Low-fuel warning lamp displayed	On
		Low-fuel warning lamp not displayed	Off
WASHER W/L	Ignition switch ON	Washer warning displayed	On
		Washer warning not displayed	Off
AIR PRES W/L	Ignition switch ON	Low tire pressure lamp ON	On
		Low tire pressure lamp OFF	Off
KEY G/Y W/L	Ignition switch ON	Key warning lamp ON	On
		Key warning lamp OFF	Off
AFS OFF IND	Ignition switch ON	AFS OFF indicator lamp ON	On
		AFS OFF indicator lamp OFF	Off
4WAS/RAS W/L	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
DDS W/L	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
LANE W/L	Ignition switch ON	Lane departure warning lamp ON	On
		Lane departure warning lamp OFF	Off
LDP IND	Ignition switch ON	LDP ON indicator lamp ON	On
		LDP ON indicator lamp OFF	Off

## UNIFIED METER AND A/C AMP.

### < ECU DIAGNOSIS >

Monitor Item	Condition		Value/Status	
LCD	Ignition switch ON	Engine start information display	B&P I	A
	Ignition switch ACC	Engine start information display	B&P N	B
	Ignition switch LOCK	Key ID warning display	ID NG	
	Ignition switch LOCK	Steering lock information display	ROTAT	C
	Ignition switch LOCK	P position warning display	SFT P	D
	Ignition switch LOCK	Intelligent Key insert information display	INSRT	
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT	E
	Ignition switch ON	Take away warning display	NO KY	F
	Ignition switch LOCK	Key warning display	OUTKY	
	Ignition switch ON	ACC warning display	LK WN	G
ACC TARGET	Ignition switch ON	Vehicle ahead detection indicator displayed	On	
		Vehicle ahead detection indicator not displayed	Off	H
ACC DISTANCE	Ignition switch ON	When following distance set to "LONG"	LONG	
		When following distance set to "MIDDLE"	MID	I
		When following distance set to "SHORT"	SHORT	
		Set distance indicator not displayed	Off	J
ACC OWN VHL	Ignition switch ON	Own vehicle indicator displayed	On	
		Own vehicle indicator not displayed	Off	
ACC SET SPEED	Ignition switch ON	Set vehicle speed indicator not displayed	Off	K
		Set vehicle speed indicator displayed	On	
ACC UNIT	Ignition switch ON	Set vehicle speed indicator unit display ON	On	L
		Set vehicle speed indicator unit display OFF	Off	
SHIFT IND	Ignition switch ON	Shift position indicator P display	P	
		Shift position indicator R display	R	M
		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	O
		Shift position indicator M4 display	M4	
Shift position indicator M5 display	M5			
O/D OFF SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off	P
AT S MODE SW	Ignition switch ON	Snow mode switch ON	On	
		Snow mode switch OFF	Off	

WCS

## UNIFIED METER AND A/C AMP.

### < ECU DIAGNOSIS >

Monitor Item	Condition		Value/Status
AT P MODE SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
M RANGE SW	Ignition switch ON	Selector lever manual mode position	On
		Other than the above	Off
NM RANGE SW	Ignition switch ON	Selector lever manual mode position	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	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
ST SFT DWN SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
COMP F/B SIG	Ignition switch ON	A/C compressor activation condition	On
		A/C compressor deactivation condition	Off
4WD LOCK SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
PKB SW	Ignition switch ON	Parking brake switch ON	On
		Parking brake switch OFF	Off
BUCKLE SW	Ignition switch ON	Seat belt not fastened	On
		Seat belt fastened	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON	On
		Brake fluid level switch OFF	Off
DISTANCE [km]	Ignition switch ON	—	Possible driving distance calculated by unified meter and A/C amp.
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	—	Equivalent to ambient temperature <b>NOTE:</b> This may not match the indicated value on the information display.
FUEL LOW SIG	Ignition switch ON	Low-fuel warning signal output	On
		Low-fuel warning signal not output	Off
BUZZER	Ignition switch ON	Buzzer ON	On
		Buzzer OFF	Off

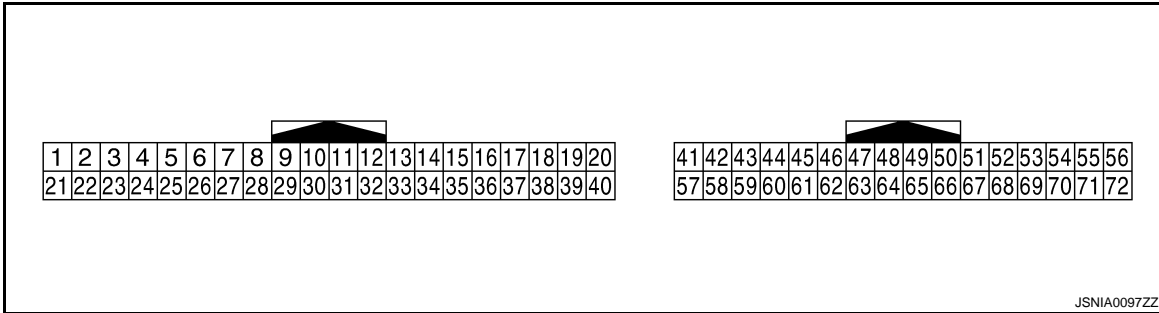
**NOTE:**

Some items are not available according to vehicle specification.

### TERMINAL LAYOUT

# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >



## PHYSICAL VALUES

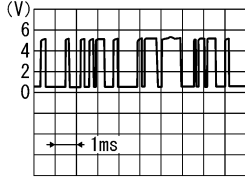
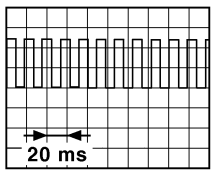
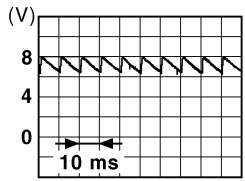
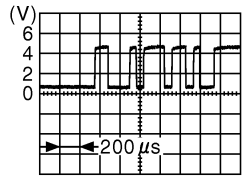
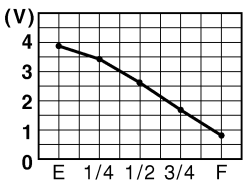
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
5 (L)	Ground	Manual mode shift up signal	Input	Ignition switch ON	Selector lever UP operation	0 V
					Other than the above	12 V
7 (GR)	Ground	Communication signal (AMP. → METER)	Output	Ignition switch ON	—	
8 (L)	Ground	Vehicle speed signal output (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	<p><b>NOTE:</b> The maximum voltage varies depending on the specification (destination unit).</p>
9 (SB)	Ground	Seat belt buckle switch signal (driver side)	Input	Ignition switch ON	When seat belt is fastened	12 V
					When seat belt is not fastened	0 V
10 (W)	Ground	Manual mode signal	Input	Ignition switch ON	Selector lever DS position	0 V
					Other than the above	12 V
11 (G)	Ground	Not manual mode signal	Input	Ignition switch ON	Selector lever DS position	12 V
					Other than the above	0 V
14 (BR)	Ground	Communication signal (LCD → AMP.)	Input	Ignition switch ON	—	

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# UNIFIED METER AND A/C AMP.

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
25 (V)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Selector lever down opera- tion	0 V
					Other than the above	12 V
27 (LG)	Ground	Communication signal (METER → AMP.)	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIA3361E</p>
28 (R)	Ground	Vehicle speed signal output (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	<p><b>NOTE:</b> The maximum voltage varies de- pending on the specification (destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	 <p style="text-align: right; font-size: small;">JSNIA0007GB</p>
34 (Y)	Ground	Communication signal (AMP. → LCD)	Output	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">JSNIA0027GB</p>
41 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
42 (Y)	Ground	Fuel level sensor signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">JSNIA0013GB</p>



# UNIFIED METER AND A/C AMP.

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
45 (P)	Ground	Ambient sensor signal	Input	—	—	<p style="text-align: right; font-size: small;">JSNIA0014GB</p>
53 (G)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
54 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
55 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
56 (L)	Ground	CAN-H	—	—	—	—
57 (W)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal.	5 V
					The brake fluid level is lower than the low level	0 V
58 (BR)	Ground	Fuel level sensor signal ground	—	Ignition switch ON	—	0 V
61 (BR)	Ground	Ambient sensor signal ground	—	Ignition switch ON	—	0 V
71 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
72 (P)	Ground	CAN-L	—	—	—	—

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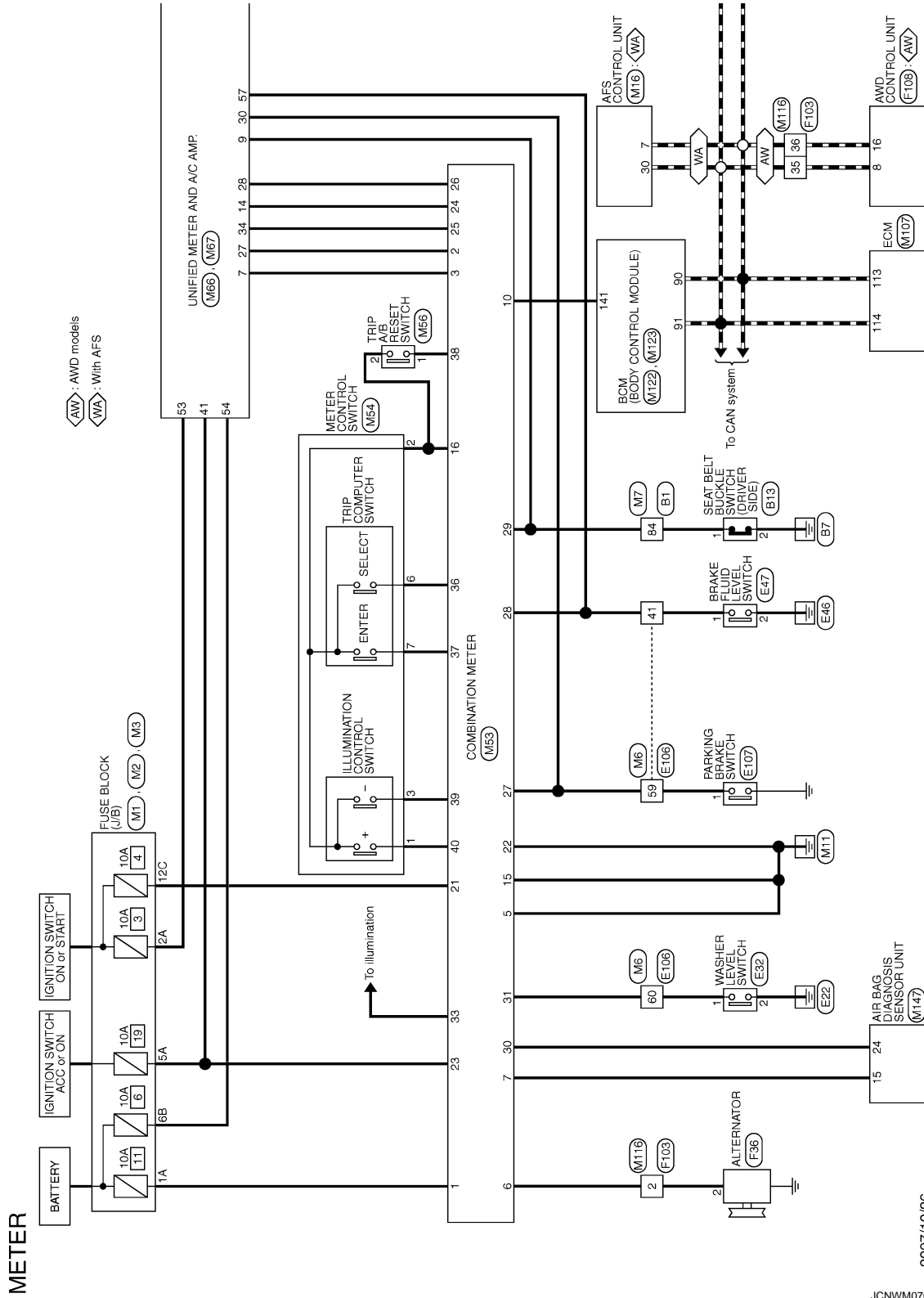
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# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >

## Wiring Diagram - METER -

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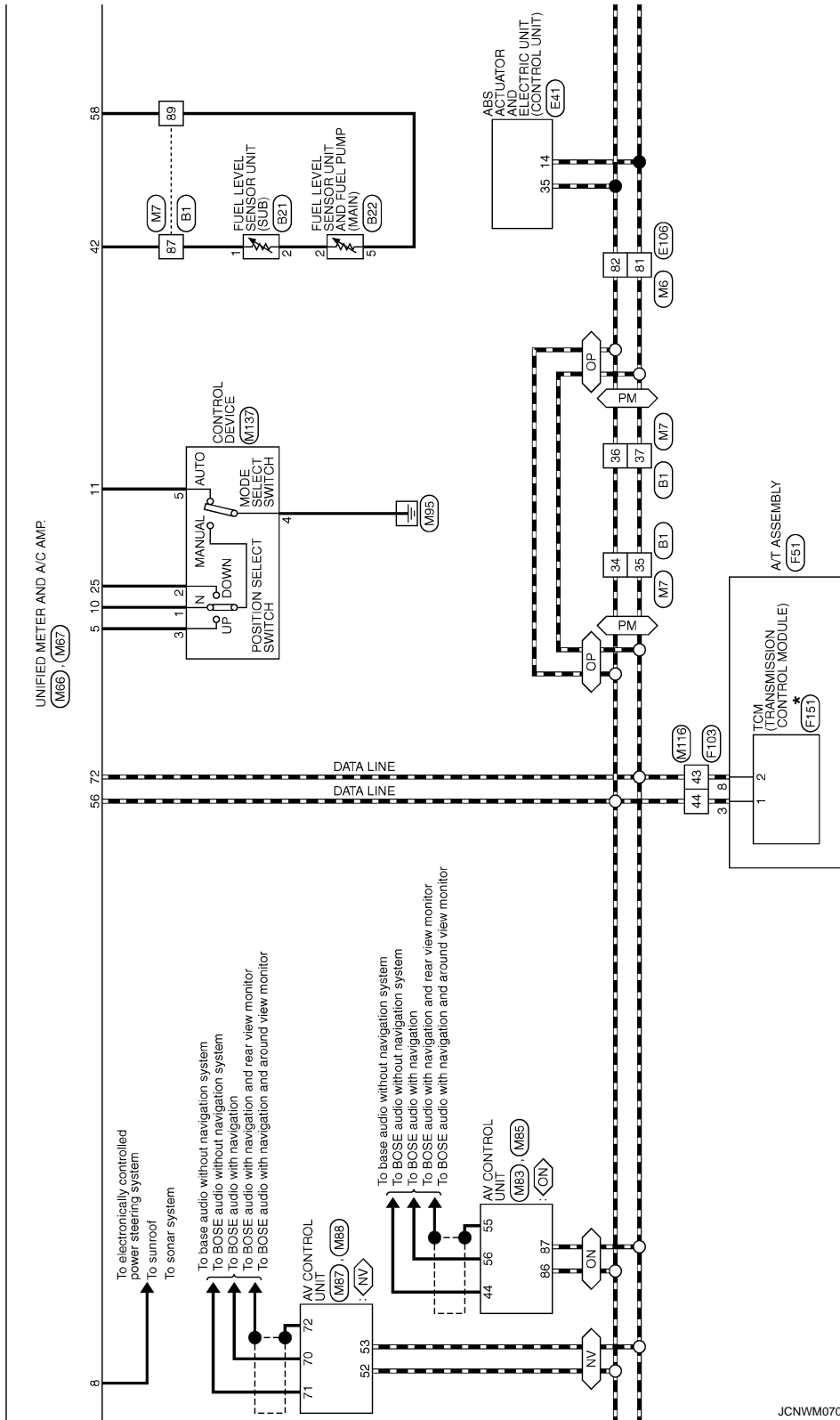


# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >

NV : With NAVI  
ON : Without NAVI  
PM : With automatic drive positioner  
OP : Without automatic drive positioner

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



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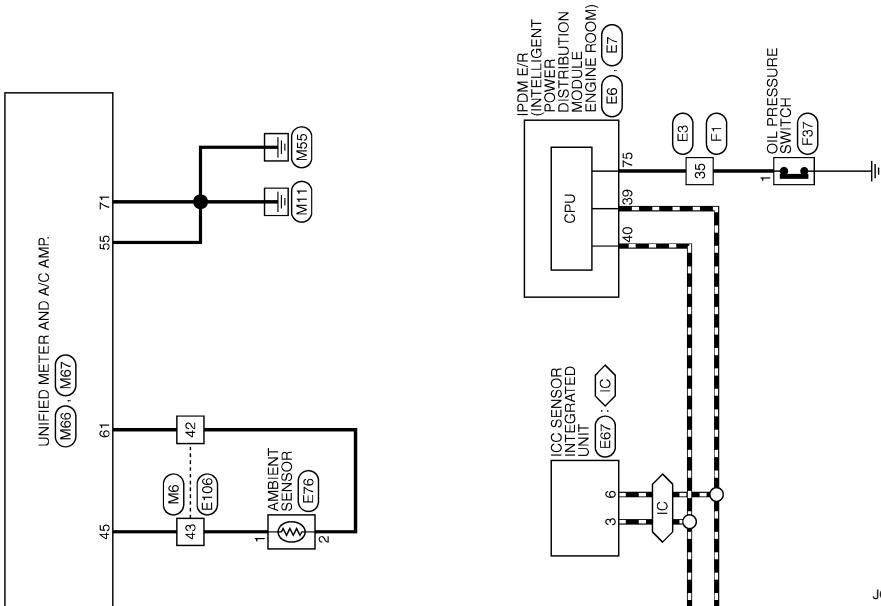
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# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >

⬠ IC ⬠ : With ICC



JCNWM0710GI

# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >

## METER

Connector No. Connector Name Connector Type	B1 WIRE TO WIRE TH80FW-CS16-TM4	Terminal No. Color of Wire Signal Name [Specification]	34 L 35 P 36 L 37 P 84 SB 87 Y 89 B	Terminal No. Color of Wire Signal Name [Specification]	1 SB 2 B	Terminal No. Color of Wire Signal Name [Specification]	1 Y 2 W	Terminal No. Color of Wire Signal Name [Specification]	2 W 5 B	Connector No. Connector Name Connector Type	B22 FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN) E08FGY-RS	Terminal No. Color of Wire Signal Name [Specification]	1 LG 2 B
Connector No. Connector Name Connector Type	B13 SEAT BELT BUCKLE SWITCH DRIVER SIDE A03FW	Terminal No. Color of Wire Signal Name [Specification]	1 SB 2 B	Terminal No. Color of Wire Signal Name [Specification]	1 Y 2 W	Terminal No. Color of Wire Signal Name [Specification]	1 Y 2 W	Terminal No. Color of Wire Signal Name [Specification]	2 W 5 B	Connector No. Connector Name Connector Type	B21 FUEL LEVEL SENSOR UNIT (SUB) E02FGY-RS	Terminal No. Color of Wire Signal Name [Specification]	1 LG 2 B
Connector No. Connector Name Connector Type	E3 WIRE TO WIRE SAA39MB-RS10-SJ22	Terminal No. Color of Wire Signal Name [Specification]	19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	Terminal No. Color of Wire Signal Name [Specification]	75 Y	Terminal No. Color of Wire Signal Name [Specification]	75 Y	Terminal No. Color of Wire Signal Name [Specification]	52 WASHER LEVEL SWITCH Z02FBR	Connector No. Connector Name Connector Type	E32 WASHER LEVEL SWITCH Z02FBR	Terminal No. Color of Wire Signal Name [Specification]	1 LG 2 B
Connector No. Connector Name Connector Type	E6 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) TH08FW-NH	Terminal No. Color of Wire Signal Name [Specification]	42 41 40 39 46 45 44 43	Terminal No. Color of Wire Signal Name [Specification]	75 Y	Terminal No. Color of Wire Signal Name [Specification]	75 Y	Terminal No. Color of Wire Signal Name [Specification]	57 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) TH20FW-CS12-M4	Connector No. Connector Name Connector Type	E7 IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) TH20FW-CS12-M4	Terminal No. Color of Wire Signal Name [Specification]	75 Y

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# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >

## METER

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
41	W	-
42	BR	-
43	P	-
56	V	-
60	L	-
81	P	-
82	L	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
34	L	-
35	P	-
36	L	-
37	P	-
84	SB	-
87	Y	-
89	BR	-

Connector No.	M16
Connector Name	AFS CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
7	P	CAN-L
30	L	CAN-H

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	LG	COMM (METER->AMP.)
3	GR	COMM (AMP->METER)
5	B	GND
6	P	ALTERNATOR
7	LG	AIR BAG
10	G	SECURITY
15	B	GND
16	B	METER CONTROL SW GND
21	O	IGN
22	B	GND

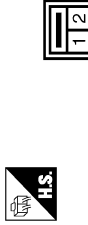
23	L	ACC
24	BR	COMM (LGD->AMP.)
25	Y	COMM (AMP->LGD)
26	R	VEHICLE SPEED (6-PULSE)
27	V	PARKING BRAKE SW
28	W	BRAKE FLUID LEVEL SW
29	SB	SEAT BELT BUCKLE SW (DRIVER SIDE)
30	G	SEAT BELT
31	L	WASHER LEVEL SW
32	B	ILLUMINATION CONTROL
36	LG	SELECT SW
37	SB	ENTER SW
38	L	TRIP A/B RESET SW
39	P	ILLUMINATION CONTROL SW (-)
40	O	ILLUMINATION CONTROL SW (+)

Connector No.	M54
Connector Name	METER CONTROL SWITCH
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-
3	P	-
6	LG	-
7	SB	-

Connector No.	M56
Connector Name	TRIP A / B RESET SWITCH
Connector Type	TK02MW



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

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# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >

## METER

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH46FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
5	L	SHIFT UP SW
7	GR	COMM (AMP->METER)
8	L	VEHICLE SPEED (2-PULSE)
9	SB	SEAT BELT BUCKLE SW (DRIVER SIDE)
10	W	MANUAL MODE SW
11	G	AUTO MODE SW
14	BR	COMM (LCD->AMP)
25	V	SHIFT DOWN SW
27	LG	COMM (METER->AMP)
28	R	VEHICLE SPEED (8-PULSE)
30	V	PARKING BRAKE SW

34	Y	COMM (AMP->LCD)
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Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH42FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
41	V	ACC
42	Y	FUEL LEVEL SENS
45	P	AMB SENS
53	G	IGN
54	V	BAT
55	B	GND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SW
58	BR	FUEL LEVEL SENS GND
61	BR	AMB SENS GND
71	B	GND

72	P	CAN-L
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Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]									
47	46	45	44	43	42	41	40	39	38	37	36
59	58	57	56	55	54	53	52	51	50	49	48

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH

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

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH

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

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]			
62	64	66	68	70	72
61	63	65	67	69	71

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

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

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

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# UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS >


## METER

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



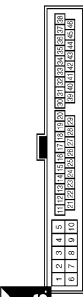
Terminal No.	Color of Wire	Signal Name [Specification]
141	G	SECURITY INDICATOR OUTPUT

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



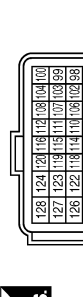
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS10




Terminal No.	Color of Wire	Signal Name [Specification]
2	P	-
35	L	-
36	P	-
43	P	-
44	L	-

Connector No.	M107
Connector Name	ECM
Connector Type	RH24GY-R28-R-LH-Z



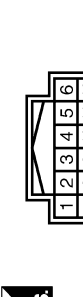
Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Connector No.	M147
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC



Terminal No.	Color of Wire	Signal Name [Specification]
15	LG	AIR BAG W/L
24	G	SEAT BELT

Connector No.	M137
Connector Name	CONTROL DEVICE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	V	-
3	L	-
4	B	-
5	G	-

JCNWM0716G1

## Fail-Safe

### FAIL-SAFE

The unified meter and A/C amp. activates the fail-safe control if CAN communication with each unit is malfunctioning.

INFOID:000000003554730

# UNIFIED METER AND A/C AMP.

## < ECU DIAGNOSIS >

Function	Specifications	
Speedometer	Reset to zero by suspending communication.	
Tachometer		
Fuel gauge		
Water temperature gauge		
Illumination control	When suspending communication, change to nighttime mode.	
Information display	The display turns off by suspending communication.	
Buzzer	The buzzer turns off by suspending communication.	
Warning lamp/indicator lamp	ABS warning lamp	The lamp turns on by suspending communication.
	VDC OFF indicator lamp	
	SLIP indicator lamp	
	Brake warning lamp	
	CRUISE warning lamp	
	AWD warning lamp	
	Low tire pressure warning lamp	
	AFS OFF indicator lamp	The lamp blinking caused by communication malfunction
	High beam indicator	The lamp turns off by suspending communication.
	Turn signal indicator lamp	
	Light indicator lamp	
	Oil pressure warning lamp	
	Malfunction indicator lamp	
	A/T CHECK warning lamp	
	Key warning lamp	
	Lane departure warning lamp	
LDP ON indicator lamp		
Master warning lamp		

## DTC Index

INFOID:000000003554731

Display contents of CONSULT-III	Time	Diagnostic item is detected when ...	Refer to
CAN COMM CIRCUIT [U1000]	CRNT, 1 - 39	When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	<a href="#">MWI-44</a>
CONTROL UNIT (CAN) [U1010]	CRNT, 1 - 39	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	<a href="#">MWI-45</a>
COMM ERROR 1 [B2201]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	<a href="#">MWI-46</a>
COMM ERROR 2 [B2202]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	<a href="#">MWI-48</a>
VEHICLE SPEED [B2205]	CRNT, 1 - 39	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	<a href="#">MWI-50</a>
ENGINE SPEED [B2267]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	<a href="#">MWI-51</a>
WATER TEMP [B2268]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	<a href="#">MWI-52</a>

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## BCM (BODY CONTROL MODULE)

### Reference Value

INFOID:000000003777744

### VALUES ON THE DIAGNOSIS TOOL

#### CONSULT-III MONITOR ITEM

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

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
DOOR SW-DR	Driver door closed	Off	A
	Driver door opened	On	
DOOR SW-AS	Passenger door closed	Off	B
	Passenger door opened	On	
DOOR SW-RR	Rear RH door closed	Off	C
	Rear RH door opened	On	
DOOR SW-RL	Rear LH door closed	Off	D
	Rear LH door opened	On	
DOOR SW-BK	Back door closed	Off	E
	Back door opened	On	
CDL LOCK SW	Other than power door lock switch LOCK	Off	E
	Power door lock switch LOCK	On	
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off	F
	Power door lock switch UNLOCK	On	
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off	G
	Driver door key cylinder LOCK position	On	
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off	H
	Driver door key cylinder UNLOCK position	On	
KEY CYL SW-TR	<b>NOTE:</b> The item is indicated, but not monitored.	Off	H
HAZARD SW	Hazard switch is OFF	Off	I
	Hazard switch is ON	On	
REAR DEF SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	J
TR CANCEL SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	J
TR/BD OPEN SW	Back door opener switch OFF	Off	K
	While the back door opener switch is turned ON	On	
TRNK/HAT MNTR	<b>NOTE:</b> The item is indicated, but not monitored.	Off	L
RKE-LOCK	LOCK button of the key is not pressed	Off	L
	LOCK button of the key is pressed	On	
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off	M
	UNLOCK button of the key is pressed	On	
RKE-TR/BD	<b>NOTE:</b> The item is indicated, but not monitored.	Off	WCS
RKE-PANIC	PANIC button of the key is not pressed	Off	O
	PANIC button of the key is pressed	On	
RKE-P/W OPEN	UNLOCK button of the key is not pressed	Off	P
	UNLOCK button of the key is pressed and held	On	
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off	P
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On	
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	
	Dark outside of the vehicle	Close to 0 V	

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	<b>NOTE:</b> The item is indicated, but not monitored.	Off
REQ SW -RL	<b>NOTE:</b> The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
CLUCH SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off
BRAKE SW 1	The brake pedal is not depressed	On
	The brake pedal is depressed	Off
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	Steering is locked	Off
	Steering is unlocked	On
S/L -UNLOCK	Steering is unlocked	Off
	Steering is locked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
ENGINE STATE	Engine stopped	Stop	A
	While the engine stalls	Stall	
	At engine cranking	Crank	B
	Engine running	Run	
S/L LOCK-IPDM	Steering is locked	Off	
	Steering is unlocked	On	C
S/L UNLK-IPDM	Steering is unlocked	Off	
	Steering is locked	On	D
S/L RELAY-REQ	Ignition switch in OFF or ACC position	Off	
	Ignition switch in ON position	On	E
VEH SPEED 1	While driving	Equivalent to speedometer reading	
VEH SPEED 2	While driving	Equivalent to speedometer reading	
DOOR STAT-DR	Driver door is locked	LOCK	F
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Driver door is unlocked	UNLOCK	
DOOR STAT-AS	Passenger door is locked	LOCK	G
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Passenger door is unlocked	UNLOCK	
ID OK FLAG	Ignition switch in ACC or ON position	Reset	H
	Ignition switch in OFF position	Set	
PRMT ENG STRT	The engine start is prohibited	Reset	I
	The engine start is permitted	Set	
PRMT RKE STRT	<b>NOTE:</b> The item is indicated, but not monitored.	Reset	J
KEY SW -SLOT	The key is not inserted into key slot	Off	
	The key is inserted into key slot	On	
RKE OPE COUN1	During the operation of the key	Operation frequency of the key	K
RKE OPE COUN2	<b>NOTE:</b> The item is indicated, but not monitored.	—	L
CONFIRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet	
	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE	M
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet	
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE	WCS
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet	O
	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE	
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet	P
	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE	

## BCM (BODY CONTROL MODULE)

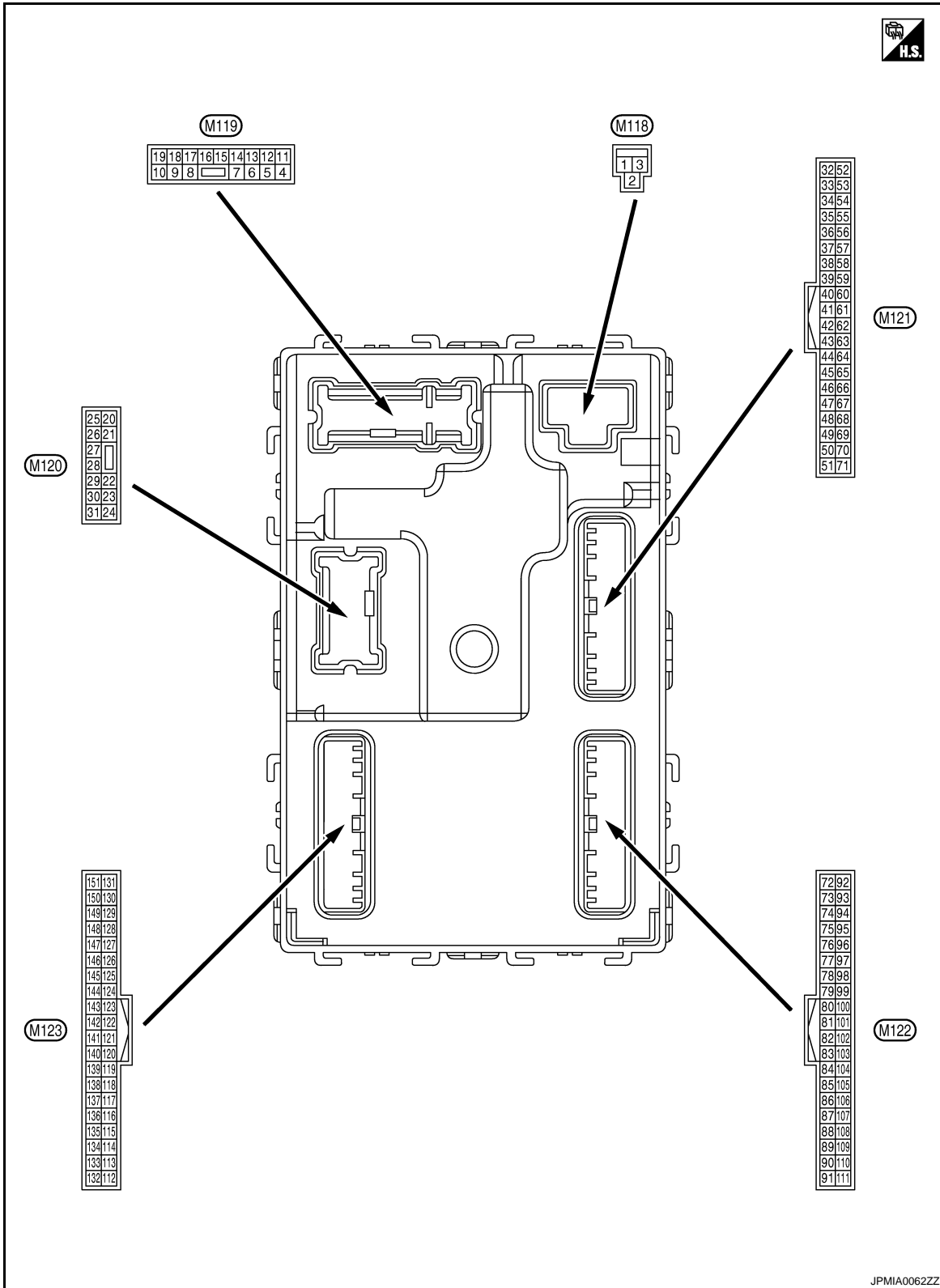
### < ECU DIAGNOSIS >

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



# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >  
 TERMINAL LAYOUT



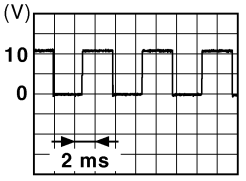
PHYSICAL VALUES

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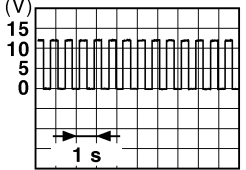
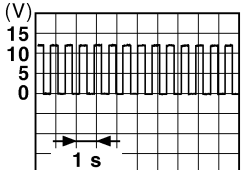
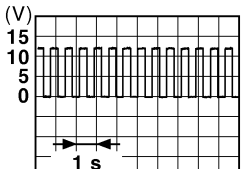
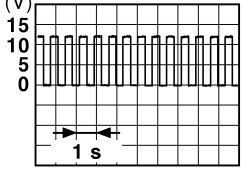
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (LG)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (L)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p><b>NOTE:</b> When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right;">JSNIA0010GB</p>
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF or ON	Battery voltage
					ACC	0 V

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF
				Turn signal switch RH	0 V
					 <p style="text-align: center;">6.5 V</p>
18 (O)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch OFF
				Turn signal switch LH	0 V
					 <p style="text-align: center;">6.5 V</p>
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF
				ON	Battery voltage
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF
				Turn signal switch RH	0 V
					 <p style="text-align: center;">6.5 V</p>
23 (G)	Ground	Back door opening	Output	Back door	OPEN (Back door opener actuator is activated)
				Other than OPEN (Back door opener actuator is not activated)	Battery voltage
					0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF
				Turn signal switch LH	0 V
					 <p style="text-align: center;">6.5 V</p>
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)
				ON (Operated)	Battery voltage

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WCS

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
34 (SB)	Ground	Luggage room antenna 1 (-)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
35 (V)	Ground	Luggage room antenna 1 (+)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
38 (B)	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>

# BCM (BODY CONTROL MODULE)

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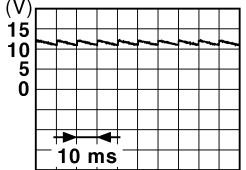
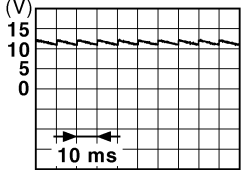
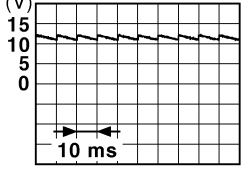
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
39 (W)	Ground	Rear bumper antenna (+)	Output	When the back door request switch is operated with ignition switch OFF	
				When Intelligent Key is not in the antenna detection area	
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC: Battery voltage ON: 0 V
				52 (SB)	Ground
When selector lever is not in P or N position: 0 V					
61 (W)	Ground	Back door opener request switch	Input	Back door request switch	ON (Pressed): 0 V
				OFF (Not pressed)	
64 (V)	Ground	Request switch buzzer	Output	Request switch buzzer	Sounding: 0 V Not sounding: Battery voltage
				65 (O)	Ground
Not in stop position: 0 V					

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WCS

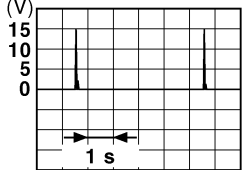
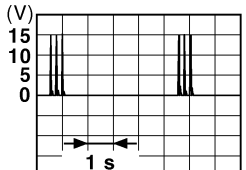
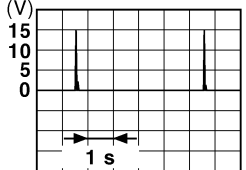
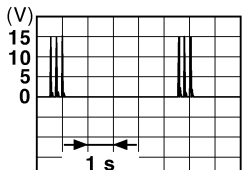
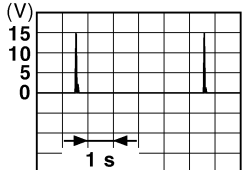
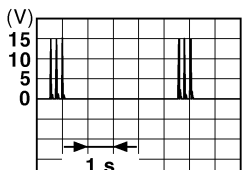
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)  <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Pressed 0 V
					Not pressed
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)  <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)  <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
72 (R)	Ground	Room antenna 2 (-) (Center console)	Output	Ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
74 (SB)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detec- tion area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

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WCS

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
75 (GR)	Ground	Passenger door antenna (+)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
77 (LG)	Ground	Driver door antenna (+)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>



# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

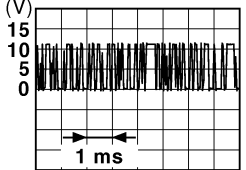
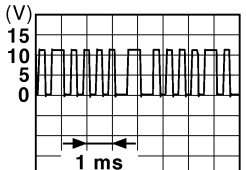

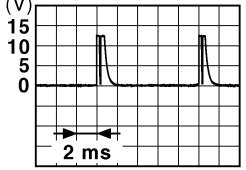

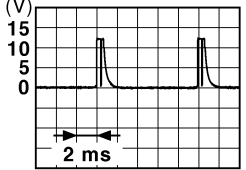
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
78 (Y)	Ground	Room antenna (-) (Instrument panel)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>	
				When Intelligent Key is not in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
79 (BR)	Ground	Room antenna (+) (Instrument panel)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>	
				When Intelligent Key is not in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
80 (GR)	Ground	NATS antenna amp (Built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp (Built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
				ON	Battery voltage	

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# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
83 (Y)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting	 <small>JMKIA0064GB</small>	
				When operating either button on the key	 <small>JMKIA0065GB</small>	
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <small>JPMIA0041GB</small> 1.4 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 <small>JPMIA0037GB</small> 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 <small>JPMIA0039GB</small> 1.3 V
					Any of the conditions 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 6</li> <li>• Wiper intermittent dial 7</li> </ul>	 <small>JPMIA0040GB</small> 1.3 V

# BCM (BODY CONTROL MODULE)

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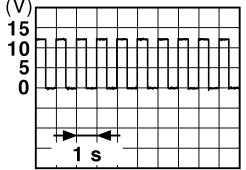
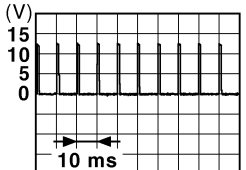
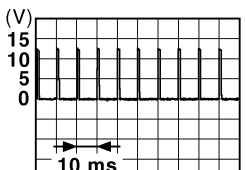
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	<p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	<p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	<p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
					Rear washer switch ON (Wiper intermittent dial 4)	<p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switch OFF	<p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>
89 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button igni- tion switch (push switch)	Pressed	0 V
				Not pressed	Battery voltage	
90 (P)	Ground	CAN-L	Input/ Output	—	—	
91 (L)	Ground	CAN-H	Input/ Output	—	—	

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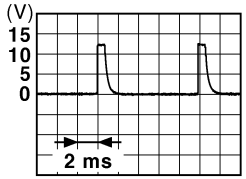
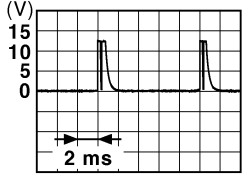
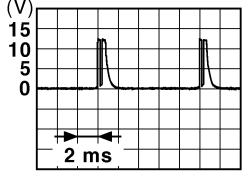
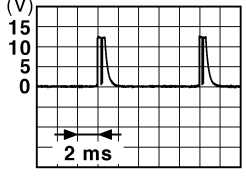
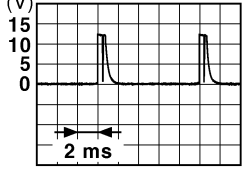
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 <p style="text-align: center;">6.5 V</p> <p style="text-align: right; font-size: small;">JPMIA0015GB</p>
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
94 (Y)	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage
					ON	0 V
95 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (GR)	Ground	Control device (Detention switch) power supply	Output	—	Battery voltage	
97 (L)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98 (P)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p> <p style="text-align: right; font-size: small;">JPMIA0016GB</p>
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p> <p style="text-align: right; font-size: small;">JPMIA0016GB</p>
102 (O)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

# BCM (BODY CONTROL MODULE)

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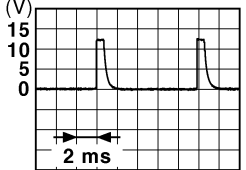
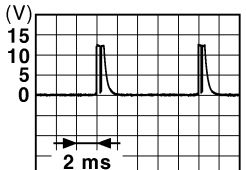
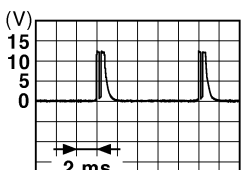
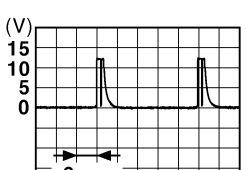
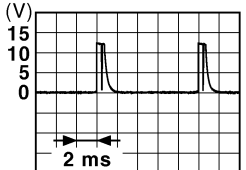
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF	Battery voltage	
106 (W)	Ground	Steering wheel lock unit power supply	Output	Ignition switch	OFF or ACC	
					ON	0 V
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Turn signal switch LH	 <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Front wiper switch LO	 <p style="text-align: right; font-size: small;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p>
					Front washer switch ON	 <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

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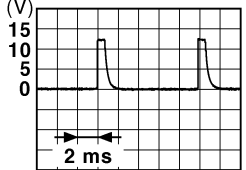
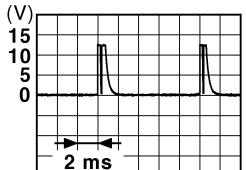

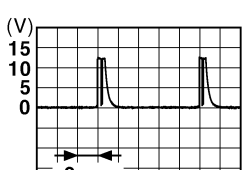

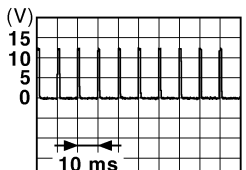
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Rear wiper switch INT (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions 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>  <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

# BCM (BODY CONTROL MODULE)

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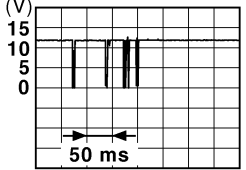
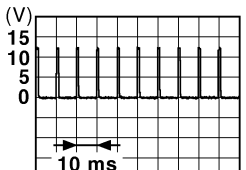
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 1.4 V
					Lighting switch PASS	 1.3 V
					Lighting switch 2ND	 1.3 V
					Front wiper switch INT	 1.3 V
					Front wiper switch HI	 1.3 V
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	 1.1 V

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# BCM (BODY CONTROL MODULE)

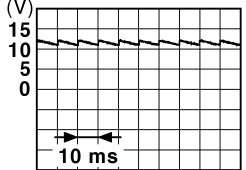
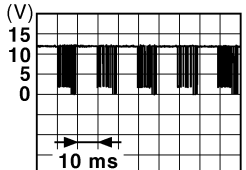
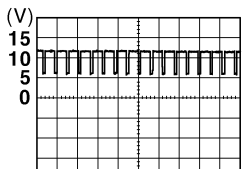
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Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 <p style="text-align: right; font-size: small;">JMkia0066GB</p>
					For 15 seconds after UNLOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
113* (P)	Ground	Optical sensor signal	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (SB)	Ground	Fuse check [Stop lamp switch, ICC brake hold relay (With ICC)]	Input	—	Battery voltage	
118 (P)	Ground	Stop lamp switch (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is depressed)	Battery voltage
		Stop lamp switch and ICC brake hold relay (With ICC)		Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF	0 V	
				Stop lamp switch ON (Brake pedal is depressed) or ICC brake hold relay ON	Battery voltage	
119 (SB)	Ground	Front door lock assembly driver side (unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 <p style="text-align: right; font-size: small;">JPMIA0012GB</p>
					UNLOCK status (Unlock switch sensor ON)	0 V
						1.1 V
121 (BR)	Ground	Key slot switch	Input	When the key is inserted into key slot	Battery voltage	
				When the key is not inserted into key slot	0 V	
122 (V)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
123 (W)	Ground	IGN feedback signal	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage



# BCM (BODY CONTROL MODULE)

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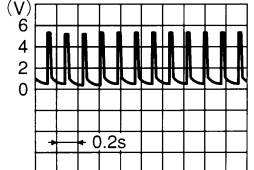

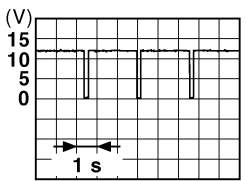
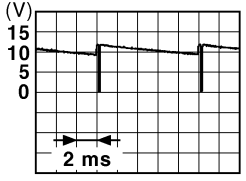
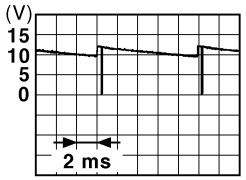
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 <small>JPMIA0011GB</small> 11.8 V
					ON (Door open)	0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch ON	 <small>JPMIA0013GB</small> 10.2 V	
				Ignition switch OFF or ACC	Battery voltage	
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumina- tion	ON (Tail lamps OFF)	9.5 V
					ON (Tail lamps ON)	<b>NOTE:</b> The pulse width of this wave is varied by the illumination bright- ening/dimming level.  <small>JPMIA0159GB</small>
				OFF	0 V	
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (O)	Ground	Receiver and sensor ground	Input	Ignition switch ON	0 V	
138 (Y)	Ground	Sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V

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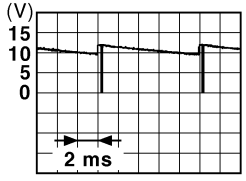
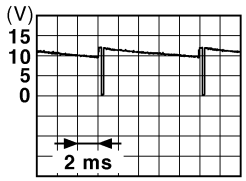
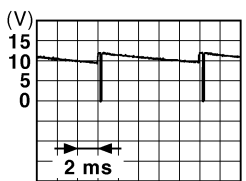
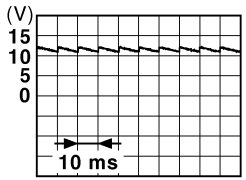
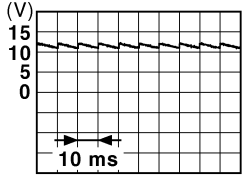
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
139 (L)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state  OCC3881D
				When receiving the signal from the transmitter  OCC3880D	
140 (GR)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position Battery voltage
				Except P and N positions	0 V
141 (G)	Ground	Security indicator signal	Output	Security indicator	ON 0 V
				Blinking  11.3 V JPMIA0014GB	
				OFF	Battery voltage
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF 0 V
				Lighting switch 1ST	 10.7 V JPMIA0031GB
				Lighting switch HI	
				Lighting switch 2ND	
Turn signal switch RH					
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4) 0 V
				Front wiper switch HI (Wiper intermittent dial 4)	 10.7 V JPMIA0032GB
				Rear wiper switch INT (Wiper intermittent dial 4)	
				Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)		
		Signal name	Input/ Output				
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144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V	
					Front washer switch ON (Wiper intermittent dial 4)		
					Rear wiper switch ON (Wiper intermittent dial 4)		
					Rear washer switch ON (Wiper intermittent dial 4)		
					Any of the conditions 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>		10.7 V
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V	
					Front wiper switch INT		
					Front wiper switch LO		
					Lighting switch AUTO		10.7 V
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V	
					Front fog lamp switch ON		
					Lighting switch 2ND		
					Lighting switch PASS		
					Turn signal switch LH	10.7 V	
149 (W)	Ground	Tire pressure warn- ing check switch	Input	Ignition switch ON		11.8 V	
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)		11.8 V
					ON (Door open)	0 V	
151 (G)	Ground	Rear window defog- ger relay	Output	Rear window de- fogger	Active	0 V	
					Not activated	Battery voltage	

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# BCM (BODY CONTROL MODULE)

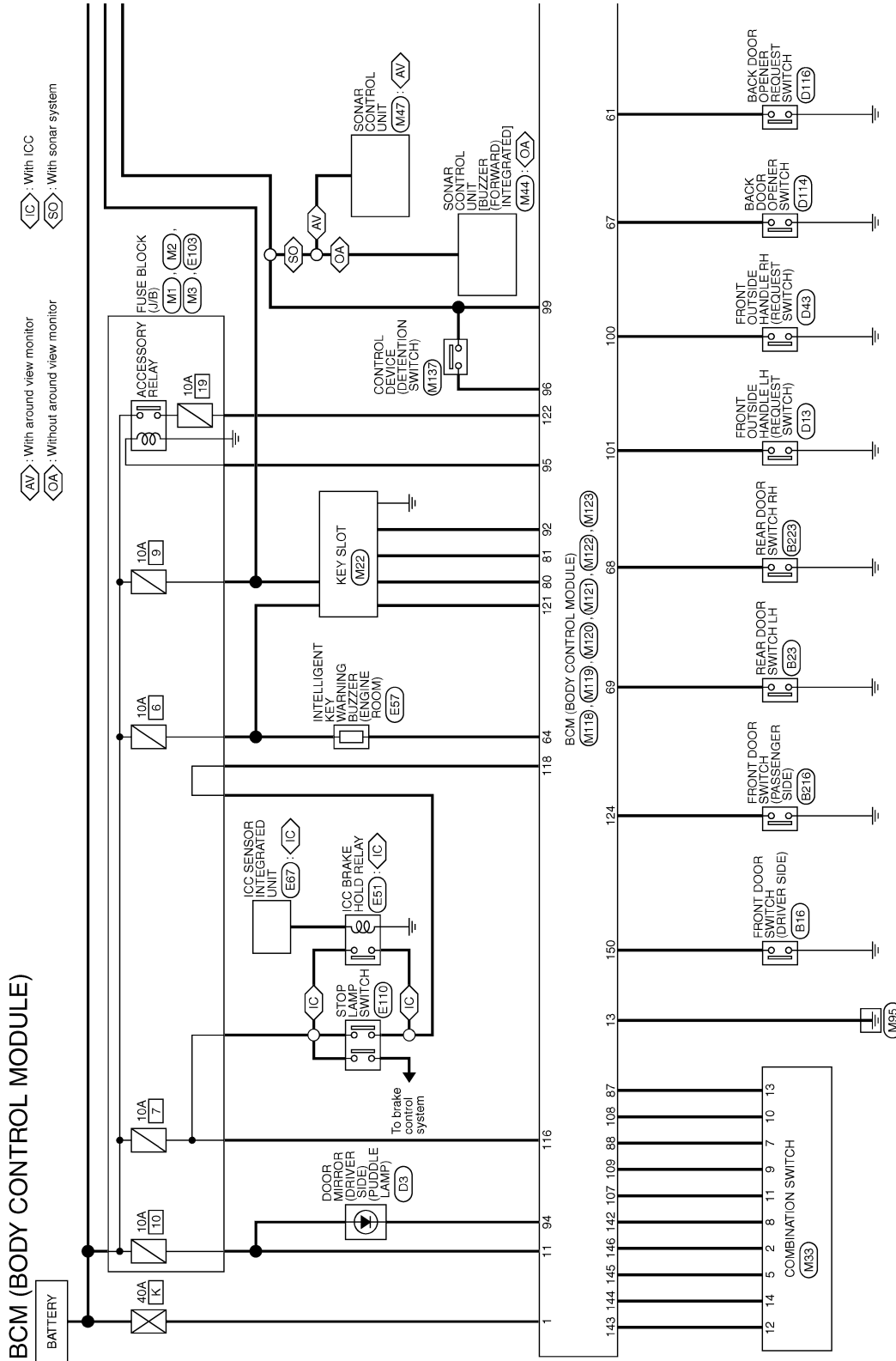
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NOTE:

\*: With auto light system

## Wiring Diagram - BCM -

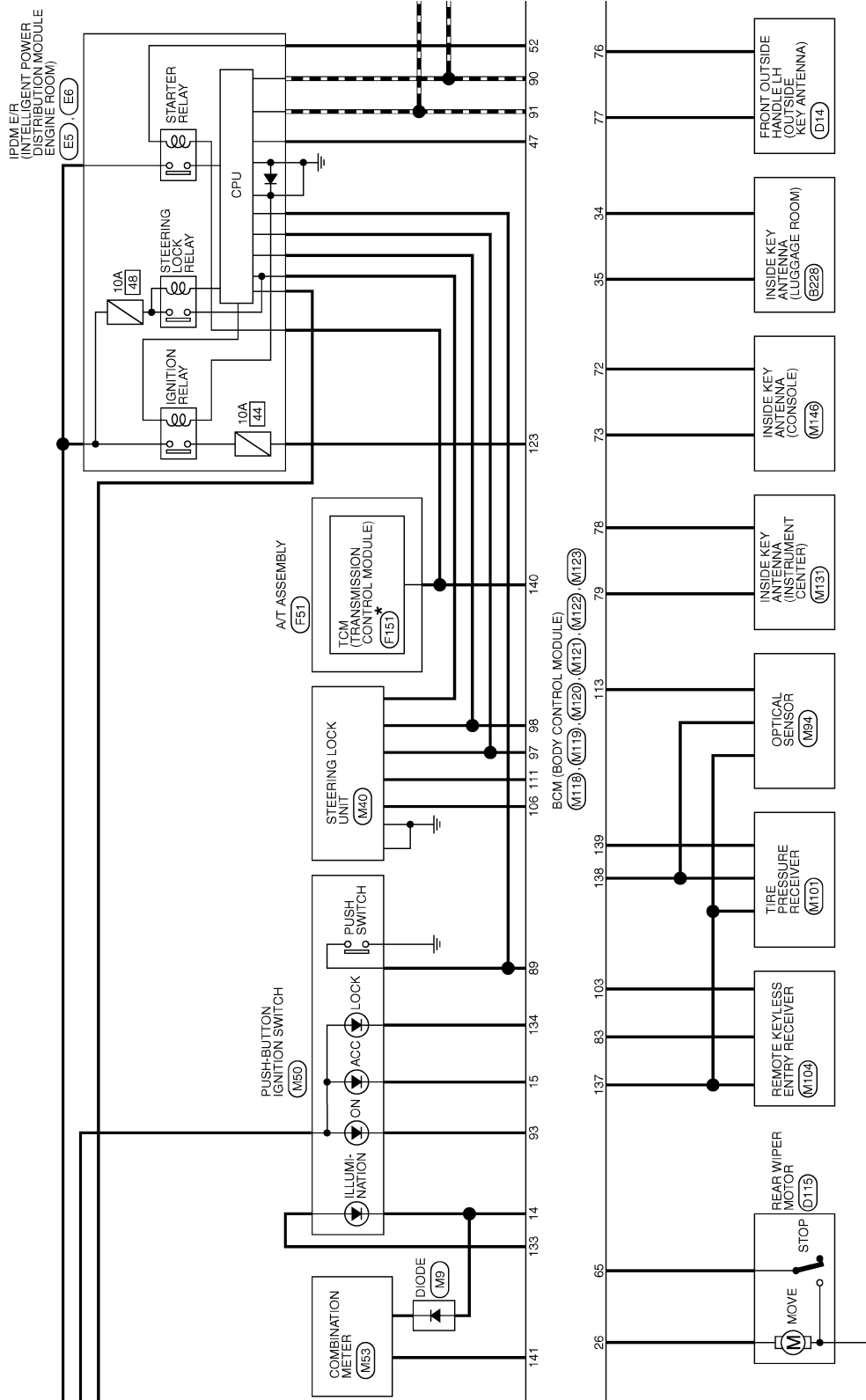
INFOID:000000003777745



2007/10/26  
JCMWM1398G

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >



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

JCMWM1399GI

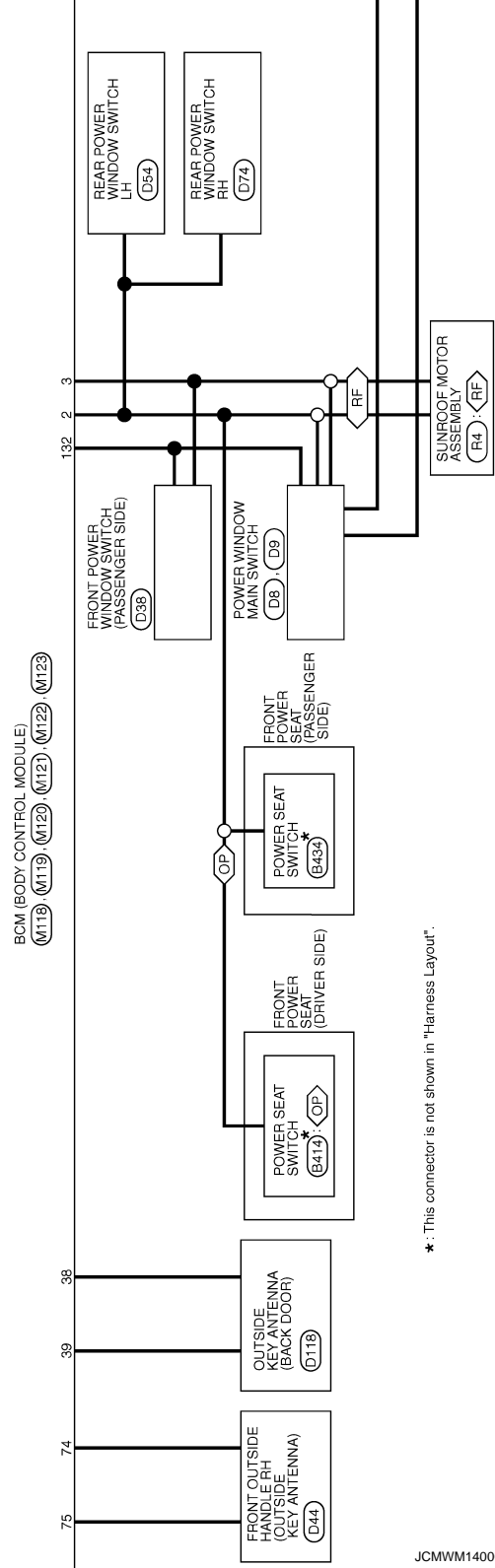
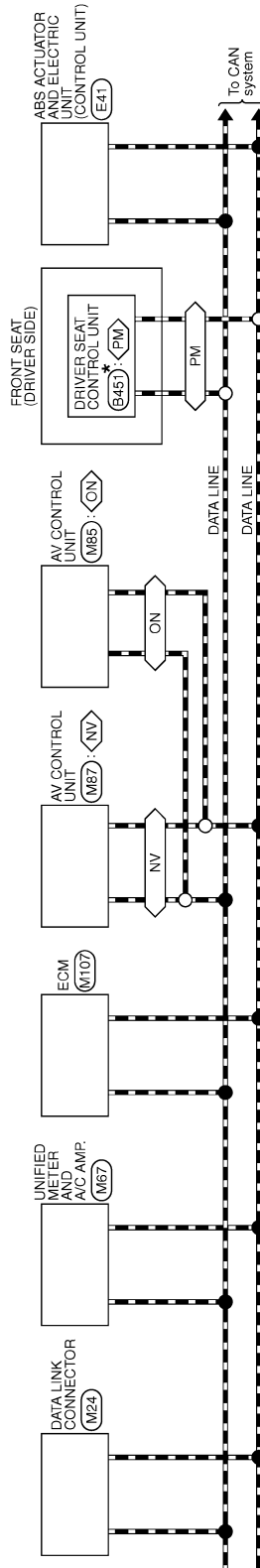
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WCS

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

- ◊NV◊ : With NAVI
- ◊ON◊ : Without NAVI
- ◊RF◊ : With sunroof
- ◊PM◊ : With automatic drive positioner
- ◊OP◊ : Without automatic drive positioner

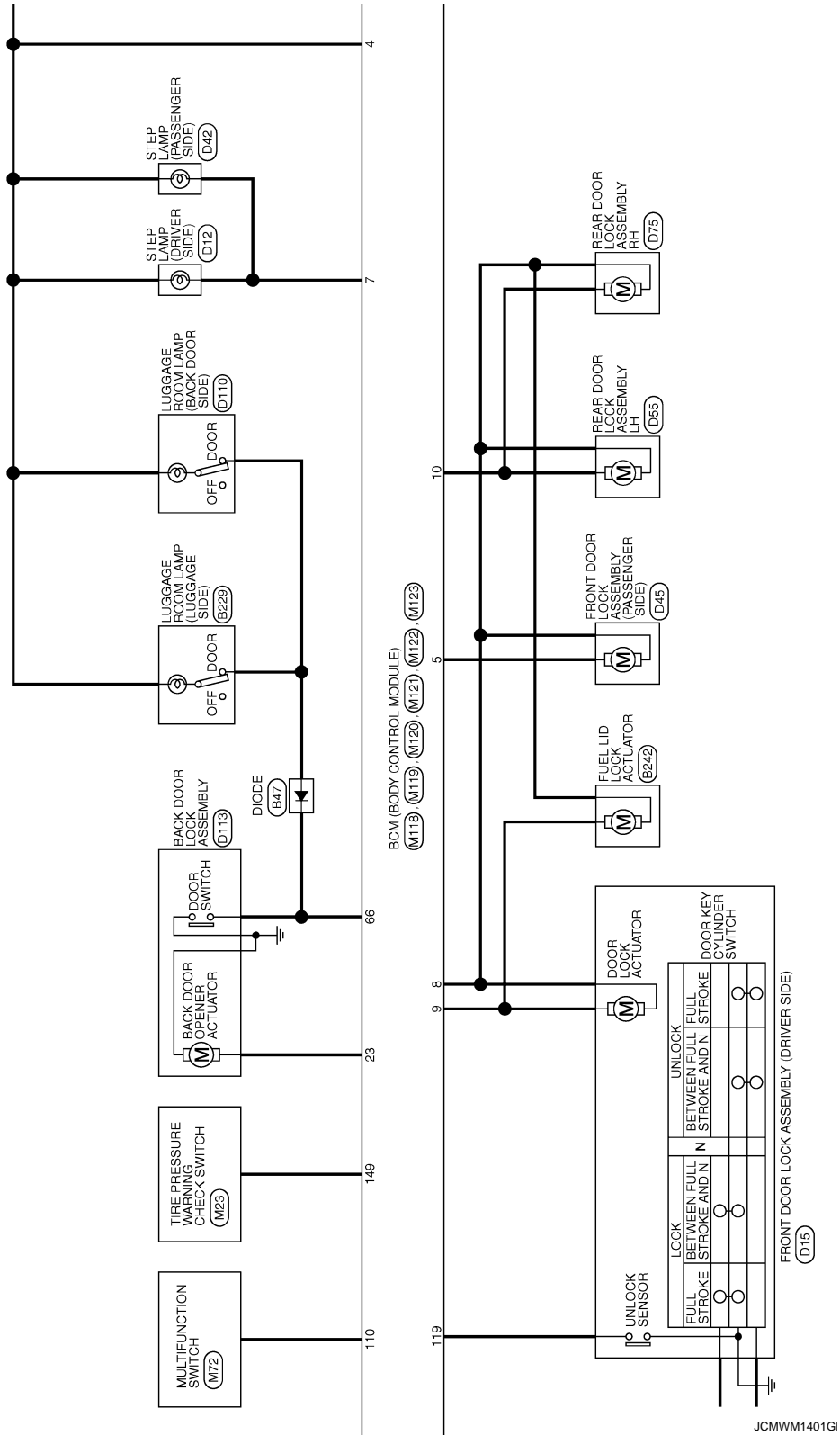


\* : This connector is not shown in "Harness Layout".

JCMWM1400G

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

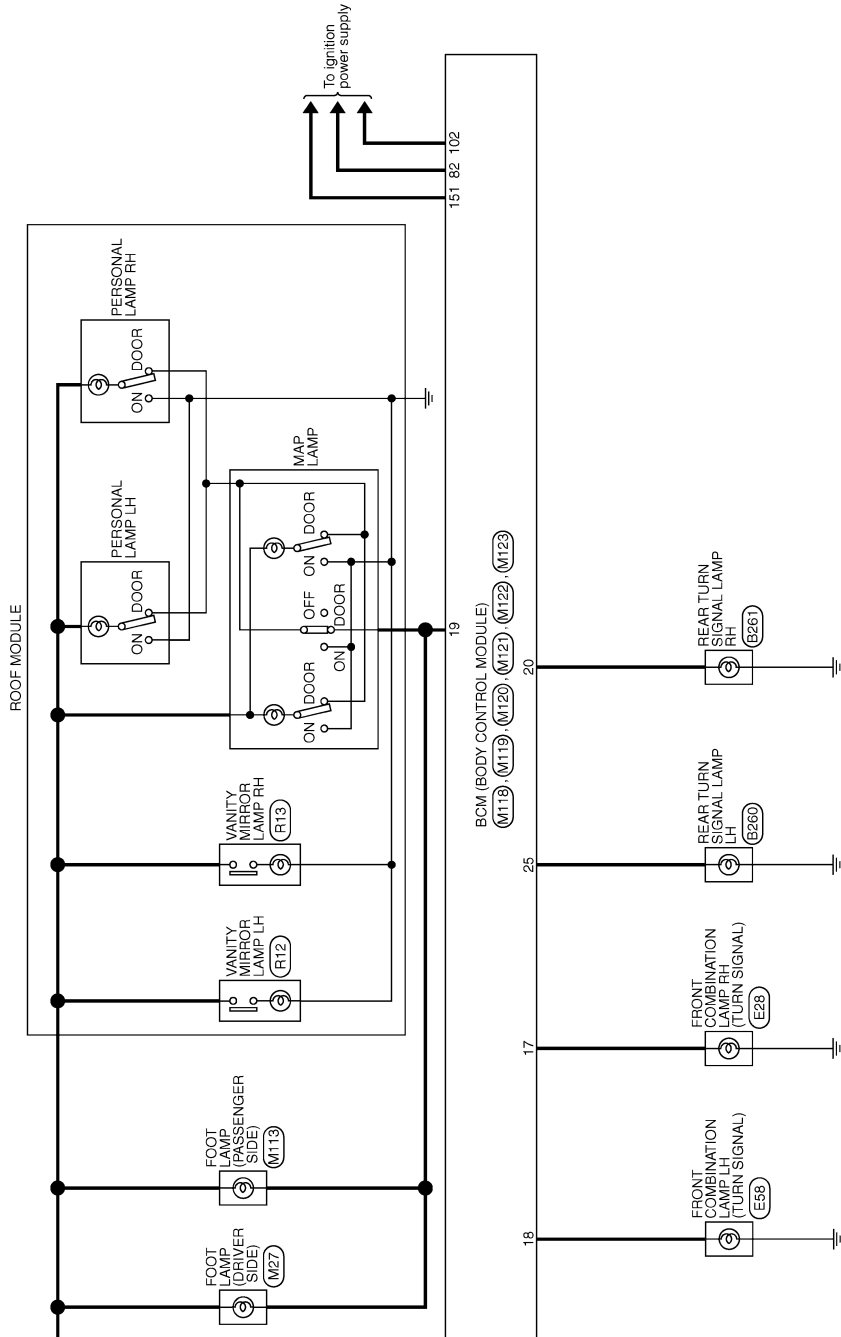


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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >



JCMWM1402G

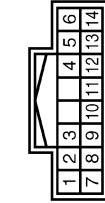


# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

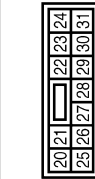
## BCM (BODY CONTROL MODULE)

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



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

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



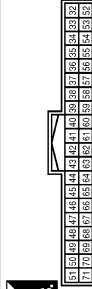
Terminal No.	Color of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
23	G	BACK DOOR OPEN OUTPUT
25	G	TURN SIGNAL LH (REAR)
26	G	REAR WIPER OUTPUT

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M33FB-LC



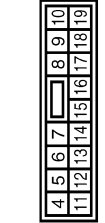
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	Y	POWER WINDOW POWER SUPPLY(BAT)
3	O	POWER WINDOW POWER SUPPLY(RAP)

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



Terminal No.	Color of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANTI-
35	V	LUGGAGE ROOM ANTI+
38	B	REAR BUMPER ANTI-
39	W	REAR BUMPER ANTI+
47	Y	IGN RELAY (PDM E/R CONT)
52	SB	STARTER RELAY CONT
61	W	BACK DOOR OPENER REQUEST SW
64	V	REQUEST SW BUZZER
65	O	REAR WIPER STOP POSITION
66	R	BACK DOOR SW
67	GR	BACK DOOR OPENER SW

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FW-CS



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

Connector No.	68
Connector Name	REAR RH DOOR SW
Connector Type	69
Connector Name	REAR LH DOOR SW
Connector Type	

18	O	TURN SIGNAL LH (FRONT)
19	V	ROOM LAMP TIMER CONTROL

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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## BCM (BODY CONTROL MODULE)

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



18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82
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Terminal No.	Color of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	W	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/B) CONT

83	Y	KEYLESS TUNER SIGNAL
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL
93	Y	ON IND
94	V	PUDDLE LAMP CONT
95	O	ACC RELAY CONT
96	GR	A/T DEVICE POWER SUPPLY
97	L	S/L CONDITION 1
98	P	S/L CONDITION 2
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	O	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	W	S/L POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	Y	S/L COMM

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



112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151
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Terminal No.	Color of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	FUSE CHECK
118	P	STOP LAMP SW
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
122	V	ACC F/B
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	V	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND

137	O	RECEIVER/SENSOR GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
139	L	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT UP
141	G	SECURITY INDICATOR OUTPUT
142	O	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

## Fail-safe

### FAIL-SAFE CONTROL BY DTC

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

JCMWM1404G

INFOID:000000003777746

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation	
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC	A
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC	
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC	B
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC	
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC	C
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC	
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms	D
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent <ul style="list-style-type: none"> <li>• Starter control relay signal</li> <li>• Starter relay status signal</li> </ul>	E
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent <ul style="list-style-type: none"> <li>• Selector lever P position switch signal</li> <li>• P range signal (CAN)</li> </ul>	F
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> <li>• Ignition switch is in the ON position</li> <li>• Selector lever P position switch signal: Except P position (battery voltage)</li> <li>• Vehicle speed: 4 km/h (2.5 MPH) or more</li> </ul>	G
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> <li>• Ignition switch is in the ON position</li> <li>• Selector lever P position switch signal: Except P position (battery voltage)</li> <li>• Selector lever P/N position signal: Except P and N positions (0 V)</li> </ul>	H
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled <ul style="list-style-type: none"> <li>• Status 1 <ul style="list-style-type: none"> <li>- Ignition switch is in the ON position</li> <li>- Selector lever P/N position signal: P and N position (battery voltage)</li> <li>- P range signal or N range signal (CAN): ON</li> </ul> </li> <li>• Status 2 <ul style="list-style-type: none"> <li>- Ignition switch is in the ON position</li> <li>- Selector lever P/N position signal: Except P and N positions (0 V)</li> <li>- P range signal and N range signal (CAN): OFF</li> </ul> </li> </ul>	I
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled <ul style="list-style-type: none"> <li>• Ignition switch is in the ON position <ul style="list-style-type: none"> <li>- Power position: IGN</li> <li>- Selector lever P/N position signal: Except P and N positions (0 V)</li> <li>- Interlock/PNP switch signal (CAN): OFF</li> </ul> </li> <li>• Status 2 <ul style="list-style-type: none"> <li>- Ignition switch is in the ON position</li> <li>- Selector lever P/N position signal: P or N position (battery voltage)</li> <li>- PNP switch signal (CAN): ON</li> </ul> </li> </ul>	J
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent <ul style="list-style-type: none"> <li>• Steering lock relay signal (Request signal)</li> <li>• Steering lock relay signal (Condition signal)</li> </ul>	K
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent <ul style="list-style-type: none"> <li>• Steering lock relay signal (Request signal)</li> <li>• Steering lock relay signal (Condition signal)</li> </ul>	L

WCS

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> <li>• Starter motor relay control signal</li> <li>• Starter relay status signal (CAN)</li> </ul>
B2609: S/L STATUS	<ul style="list-style-type: none"> <li>• Inhibit engine cranking</li> <li>• Inhibit steering lock</li> </ul>	When the following steering lock conditions agree <ul style="list-style-type: none"> <li>• BCM steering lock control status</li> <li>• Steering lock condition No. 1 signal status</li> <li>• Steering lock condition No. 2 signal status</li> </ul>
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> <li>• IGN relay (IPDM E/R) control signal: OFF (Battery voltage)</li> <li>• Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>• Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled <ul style="list-style-type: none"> <li>• Power position changes to ACC</li> <li>• Receives engine status signal (CAN)</li> </ul>
B2612: S/L STATUS	<ul style="list-style-type: none"> <li>• Inhibit engine cranking</li> <li>• Inhibit steering lock</li> </ul>	When any of the following conditions is fulfilled <ul style="list-style-type: none"> <li>• Steering lock unit status signal (CAN) is received normally</li> <li>• The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)</li> </ul>
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled <ul style="list-style-type: none"> <li>• Power position changes to ACC</li> <li>• Receives engine status signal (CAN)</li> </ul>
B26E9: S/L STATUS	<ul style="list-style-type: none"> <li>• Inhibit engine cranking</li> <li>• Inhibit steering lock</li> </ul>	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions is fulfilled <ul style="list-style-type: none"> <li>• Steering condition No. 1 signal: LOCK (0V)</li> <li>• Steering condition No. 2 signal: LOCK (Battery voltage)</li> </ul>

### 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:00000000377747

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> <li>• U1000: CAN COMM CIRCUIT</li> <li>• U1010: CONTROL UNIT (CAN)</li> </ul>
3	<ul style="list-style-type: none"> <li>• B2190: NATS ANTENNA AMP</li> <li>• B2191: DIFFERENCE OF KEY</li> <li>• B2192: ID DISCORD BCM-ECM</li> <li>• B2193: CHAIN OF BCM-ECM</li> </ul>

# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS >

Priority	DTC	A		
4	<ul style="list-style-type: none"> <li>• B2013: ID DISCORD BCM-S/L</li> <li>• B2014: CHAIN OF S/L-BCM</li> <li>• B2553: IGNITION RELAY</li> <li>• B2555: STOP LAMP</li> <li>• B2556: PUSH-BTN IGN SW</li> <li>• B2557: VEHICLE SPEED</li> <li>• B2560: STARTER CONT RELAY</li> <li>• B2601: SHIFT POSITION</li> <li>• B2602: SHIFT POSITION</li> <li>• B2603: SHIFT POSI STATUS</li> <li>• B2604: PNP SW</li> <li>• B2605: PNP SW</li> <li>• B2606: S/L RELAY</li> <li>• B2607: S/L RELAY</li> <li>• B2608: STARTER RELAY</li> <li>• B2609: S/L STATUS</li> <li>• B260A: IGNITION RELAY</li> <li>• B260B: STEERING LOCK UNIT</li> <li>• B260C: STEERING LOCK UNIT</li> <li>• B260D: STEERING LOCK UNIT</li> <li>• B260F: ENG STATE SIG LOST</li> <li>• B2612: S/L STATUS</li> <li>• B2614: ACC RELAY CIRC</li> <li>• B2615: BLOWER RELAY CIRC</li> <li>• B2616: IGN RELAY CIRC</li> <li>• B2617: STARTER RELAY CIRC</li> <li>• B2618: BCM</li> <li>• B2619: BCM</li> <li>• B261A: PUSH-BTN IGN SW</li> <li>• B261E: VEHICLE TYPE</li> <li>• B26E1: ENG STATE NO RECIV</li> <li>• B26E9: S/L STATUS</li> <li>• B26EA: KEY REGISTRATION</li> <li>• C1729: VHCL SPEED SIG ERR</li> <li>• U0415: VEHICLE SPEED SIG</li> </ul>	B		
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	5	<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: [PRESSDATA ERR] FL</li> <li>• C1717: [PRESSDATA ERR] FR</li> <li>• C1718: [PRESSDATA ERR] RR</li> <li>• C1719: [PRESSDATA 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>• C1734: CONTROL UNIT</li> </ul>	K	
		L		
		M		
		O		
		P		
		6	<ul style="list-style-type: none"> <li>• B2621: INSIDE ANTENNA</li> <li>• B2622: INSIDE ANTENNA</li> <li>• B2623: INSIDE ANTENNA</li> </ul>	WCS

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

## DTC Index

INFOID:00000000377748

### NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data and IGN Counter, refer to [BCS-16, "COMMON ITEM : CONSULT-III Function \(BCM - COMMON ITEM\)"](#).

CONSULT display	Fail-safe	Freeze Frame Data	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	—	<a href="#">BCS-37</a>
U1010: CONTROL UNIT (CAN)	—	—	—	—	<a href="#">BCS-38</a>
U0415: VEHICLE SPEED SIG	—	—	—	—	<a href="#">BCS-39</a>
B2013: ID DISCORD BCM-S/L	×	×	—	—	<a href="#">SEC-48</a>
B2014: CHAIN OF S/L-BCM	×	×	—	—	<a href="#">SEC-49</a>
B2190: NATS ANTENNA AMP	×	—	—	—	<a href="#">SEC-42</a>
B2191: DIFFERENCE OF KEY	×	—	—	—	<a href="#">SEC-45</a>
B2192: ID DISCORD BCM-ECM	×	—	—	—	<a href="#">SEC-46</a>
B2193: CHAIN OF BCM-ECM	×	—	—	—	<a href="#">SEC-47</a>
B2553: IGNITION RELAY	—	×	—	—	<a href="#">PCS-49</a>
B2555: STOP LAMP	—	×	—	—	<a href="#">SEC-52</a>
B2556: PUSH-BTN IGN SW	—	×	×	—	<a href="#">SEC-54</a>
B2557: VEHICLE SPEED	×	×	×	—	<a href="#">SEC-56</a>
B2560: STARTER CONT RELAY	×	×	×	—	<a href="#">SEC-57</a>
B2562: LOW VOLTAGE	—	×	—	—	<a href="#">BCS-40</a>
B2601: SHIFT POSITION	×	×	×	—	<a href="#">SEC-58</a>
B2602: SHIFT POSITION	×	×	×	—	<a href="#">SEC-61</a>
B2603: SHIFT POSI STATUS	×	×	×	—	<a href="#">SEC-63</a>
B2604: PNP SW	×	×	×	—	<a href="#">SEC-66</a>
B2605: PNP SW	×	×	×	—	<a href="#">SEC-68</a>
B2606: S/L RELAY	×	×	×	—	<a href="#">SEC-70</a>
B2607: S/L RELAY	×	×	×	—	<a href="#">SEC-71</a>
B2608: STARTER RELAY	×	×	×	—	<a href="#">SEC-73</a>
B2609: S/L STATUS	×	×	×	—	<a href="#">SEC-75</a>
B260A: IGNITION RELAY	×	×	×	—	<a href="#">PCS-51</a>
B260B: STEERING LOCK UNIT	—	×	×	—	<a href="#">SEC-79</a>
B260C: STEERING LOCK UNIT	—	×	×	—	<a href="#">SEC-80</a>
B260D: STEERING LOCK UNIT	—	×	×	—	<a href="#">SEC-81</a>
B260F: ENG STATE SIG LOST	×	×	×	—	<a href="#">SEC-82</a>
B2612: S/L STATUS	×	×	×	—	<a href="#">SEC-86</a>
B2614: ACC RELAY CIRC	—	×	×	—	<a href="#">PCS-53</a>
B2615: BLOWER RELAY CIRC	—	×	×	—	<a href="#">PCS-57</a>
B2616: IGN RELAY CIRC	—	×	×	—	<a href="#">PCS-59</a>
B2617: STARTER RELAY CIRC	×	×	×	—	<a href="#">SEC-90</a>

## BCM (BODY CONTROL MODULE)

### < ECU DIAGNOSIS >

CONSULT display	Fail-safe	Freeze Frame Data	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	
B2618: BCM	×	×	×	—	<a href="#">PCS-61</a>	A
B2619: BCM	×	×	×	—	<a href="#">SEC-92</a>	B
B261A: PUSH-BTN IGN SW	—	×	×	—	<a href="#">SEC-93</a>	
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	<a href="#">SEC-96</a>	C
B2621: INSIDE ANTENNA	—	×	—	—	<a href="#">DLK-56</a>	
B2622: INSIDE ANTENNA	—	×	—	—	<a href="#">DLK-58</a>	D
B2623: INSIDE ANTENNA	—	×	—	—	<a href="#">DLK-60</a>	
B26E1: ENG STATE NO RES	×	×	×	—	<a href="#">SEC-83</a>	
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	—	<a href="#">SEC-84</a>	E
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	<a href="#">SEC-85</a>	F
C1704: LOW PRESSURE FL	—	—	—	×	<a href="#">WT-16</a>	G
C1705: LOW PRESSURE FR	—	—	—	×		
C1706: LOW PRESSURE RR	—	—	—	×		
C1707: LOW PRESSURE RL	—	—	—	×		
C1708: [NO DATA] FL	—	—	—	×	<a href="#">WT-18</a>	H
C1709: [NO DATA] FR	—	—	—	×		
C1710: [NO DATA] RR	—	—	—	×		
C1711: [NO DATA] RL	—	—	—	×		
C1712: [CHECKSUM ERR] FL	—	—	—	×	<a href="#">WT-21</a>	I
C1713: [CHECKSUM ERR] FR	—	—	—	×		
C1714: [CHECKSUM ERR] RR	—	—	—	×		
C1715: [CHECKSUM ERR] RL	—	—	—	×		
C1716: [PRESSDATA ERR] FL	—	—	—	×	<a href="#">WT-24</a>	J
C1717: [PRESSDATA ERR] FR	—	—	—	×		
C1718: [PRESSDATA ERR] RR	—	—	—	×		
C1719: [PRESSDATA ERR] RL	—	—	—	×		
C1720: [CODE ERR] FL	—	—	—	×	<a href="#">WT-26</a>	K
C1721: [CODE ERR] FR	—	—	—	×		
C1722: [CODE ERR] RR	—	—	—	×		
C1723: [CODE ERR] RL	—	—	—	×		
C1724: [BATT VOLT LOW] FL	—	—	—	×	<a href="#">WT-29</a>	L
C1725: [BATT VOLT LOW] FR	—	—	—	×		
C1726: [BATT VOLT LOW] RR	—	—	—	×		
C1727: [BATT VOLT LOW] RL	—	—	—	×		
C1729: VHCL SPEED SIG ERR	—	—	—	×	<a href="#">WT-32</a>	M
C1734: CONTROL UNIT	—	—	—	×	<a href="#">WT-33</a>	O

WCS

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

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

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

#### Description

INFOID:000000003135123

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

#### Diagnosis Procedure

INFOID:000000003135124

#### 1. CHECK PARKING BRAKE WARNING LAMP

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

Parking brake applied	: ON
Parking brake released	: OFF

#### Is the inspection result normal?

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

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

Perform a check for the parking brake switch signal circuit. Refer to [MWI-65, "Diagnosis Procedure"](#).

#### Is the inspection result normal?

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

#### 3. CHECK PARKING BRAKE SWITCH UNIT

Perform a unit check for the parking brake switch. Refer to [BRC-77, "Component Inspection"](#).

#### Is the inspection result normal?

- YES >> Replace the combination meter.
- NO >> Replace the parking brake switch. Refer to [PB-5, "Removal and Installation"](#).



# THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

## THE LIGHT REMINDER WARNING DOES NOT SOUND

### Description

INFOID:000000003135125

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

### Diagnosis Procedure

INFOID:000000003135126

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

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

Do they operate normally?

YES >> GO TO 2.

NO >> Refer to [EXL-183, "Diagnosis Procedure"](#).

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

Perform the check for the front door switch (driver side) signal circuit. Refer to [DLK-63, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-84, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

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

< SYMPTOM DIAGNOSIS >

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

### Description

INFOID:000000003135127

- Seat belt warning does not sound even though driver seat belt is not fastened.
- Seat belt warning sounds even though driver seat belt is fastened.

### Diagnosis Procedure

INFOID:000000003135128

#### 1. CHECK SEAT BELT WARNING LAMP

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

Seat belt fastened	: OFF
Seat belt not fastened	: ON

Is the inspection result normal?

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

#### 2. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

Check the buckle switch input signal with the "Data Monitor". Refer to [WCS-24, "Component Function Check"](#).

Is the inspection result normal?

- YES >> Replace the unified meter and A/C amp.  
NO >> GO TO 3.

#### 3. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

Perform the check for the seat belt buckle switch circuit. Refer to [WCS-24, "Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> Replace the unified meter and A/C amp.  
NO >> Repair harness or connector.

#### 4. CHECK SEAT BELT BUCKLE SWITCH UNIT

Perform a unit check for the seat belt buckle switch. Refer to [WCS-25, "Component Inspection"](#).

Is the inspection result normal?

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

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

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

INFOID:000000003733159

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.

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