

SECTION **WCS**

WARNING CHIME SYSTEM

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

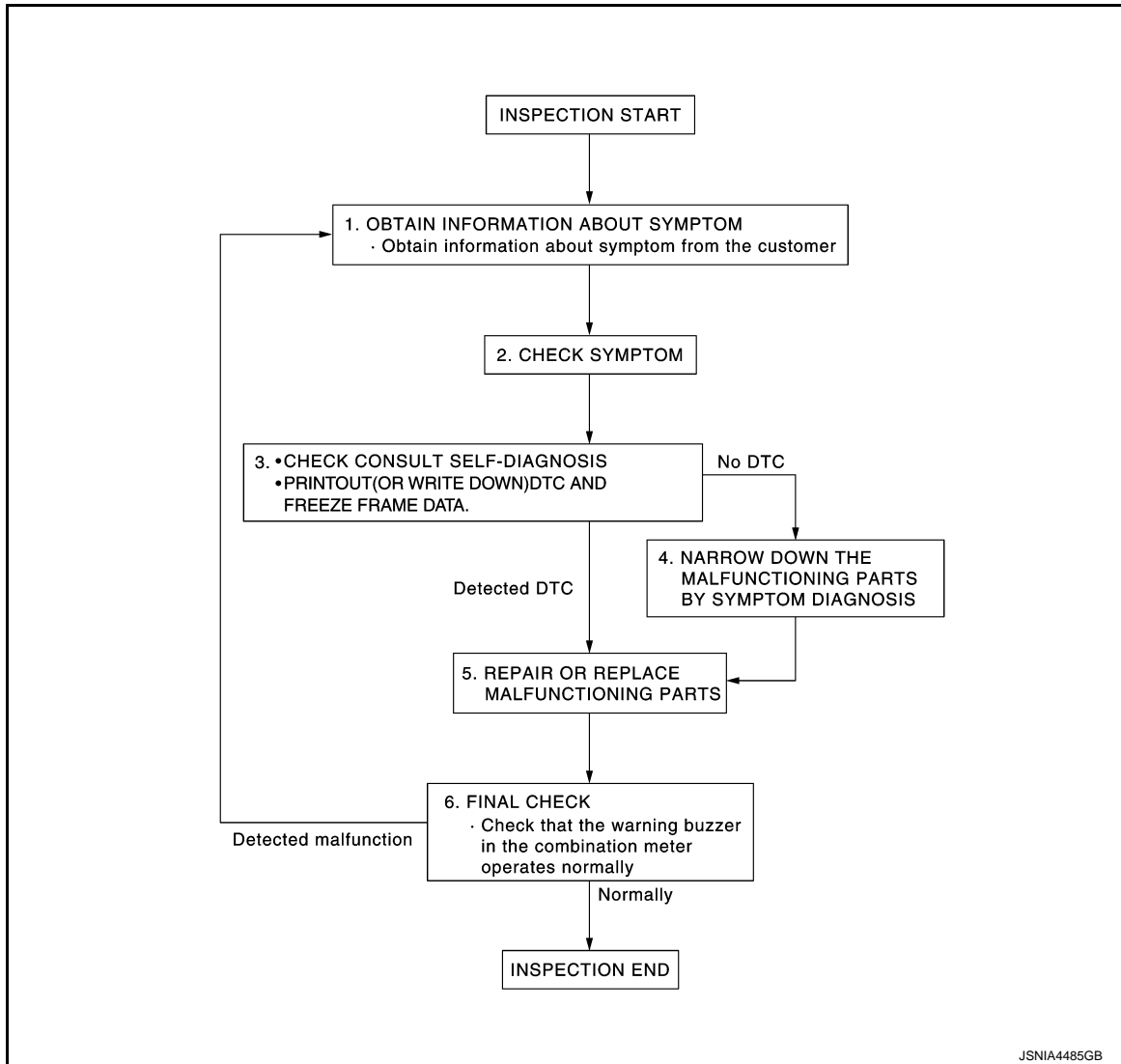
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000007543175

OVERALL SEQUENCE



DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK SYMPTOM

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

>> GO TO 3.

3.CHECK CONSULT SELF-DIAGNOSIS RESULTS

1. Connect CONSULT and perform self-diagnosis. Refer to [WCS-37. "DTC Index"](#).

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

2. When DTC is detected, follow the instructions below:

- Record DTC and Freeze Frame Data.

Are self-diagnosis results normal?

YES >> GO TO 4.

NO >> GO TO 5.

4.NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

5.REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

NOTE:

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

>> GO TO 6.

6.FINAL CHECK

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

Does it operate normally?

YES >> INSPECTION END

NO >> GO TO 1.

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

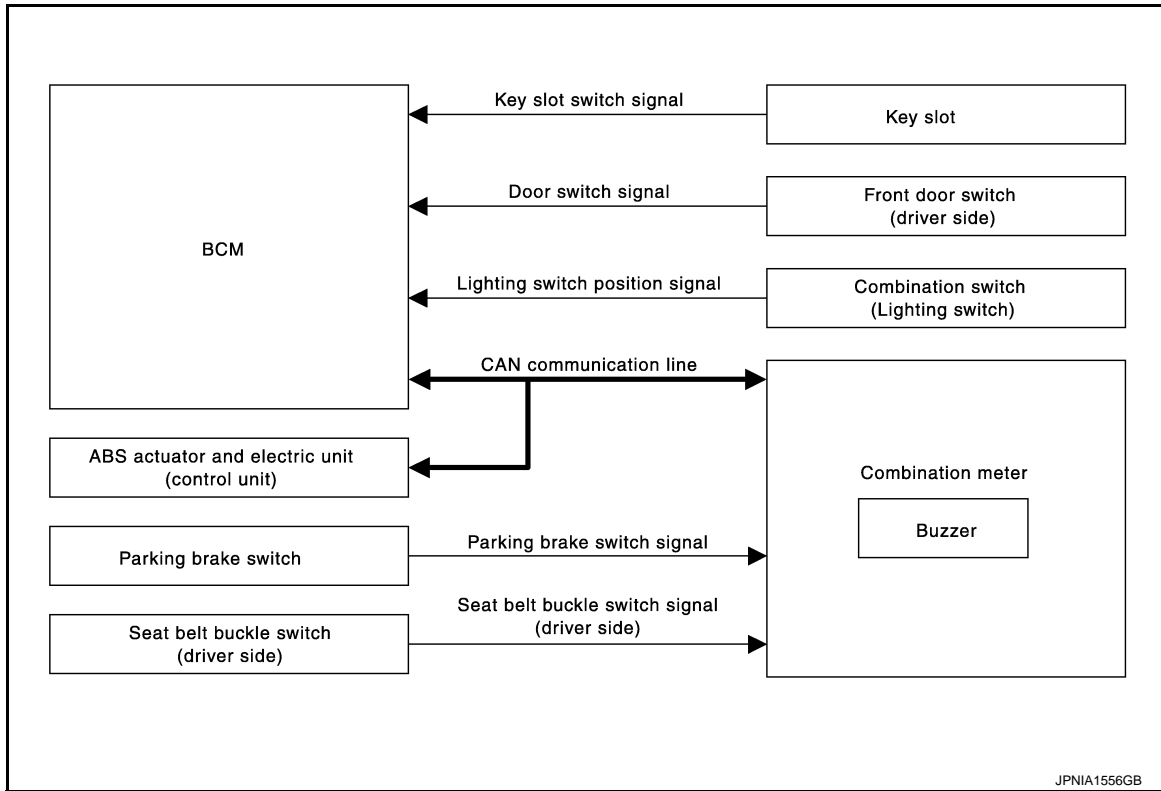
SYSTEM DESCRIPTION

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM : System Diagram

INFOID:000000007543176



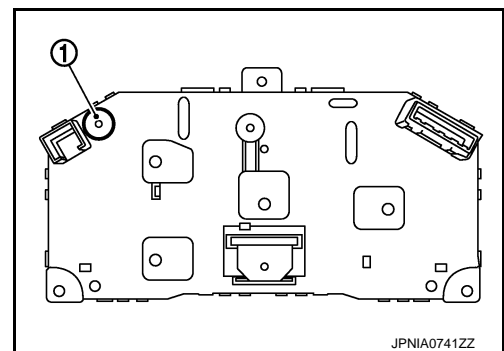
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WARNING CHIME SYSTEM : System Description

INFOID:000000007543177

COMBINATION METER

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



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BCM

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

BCM Warning Function List

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WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

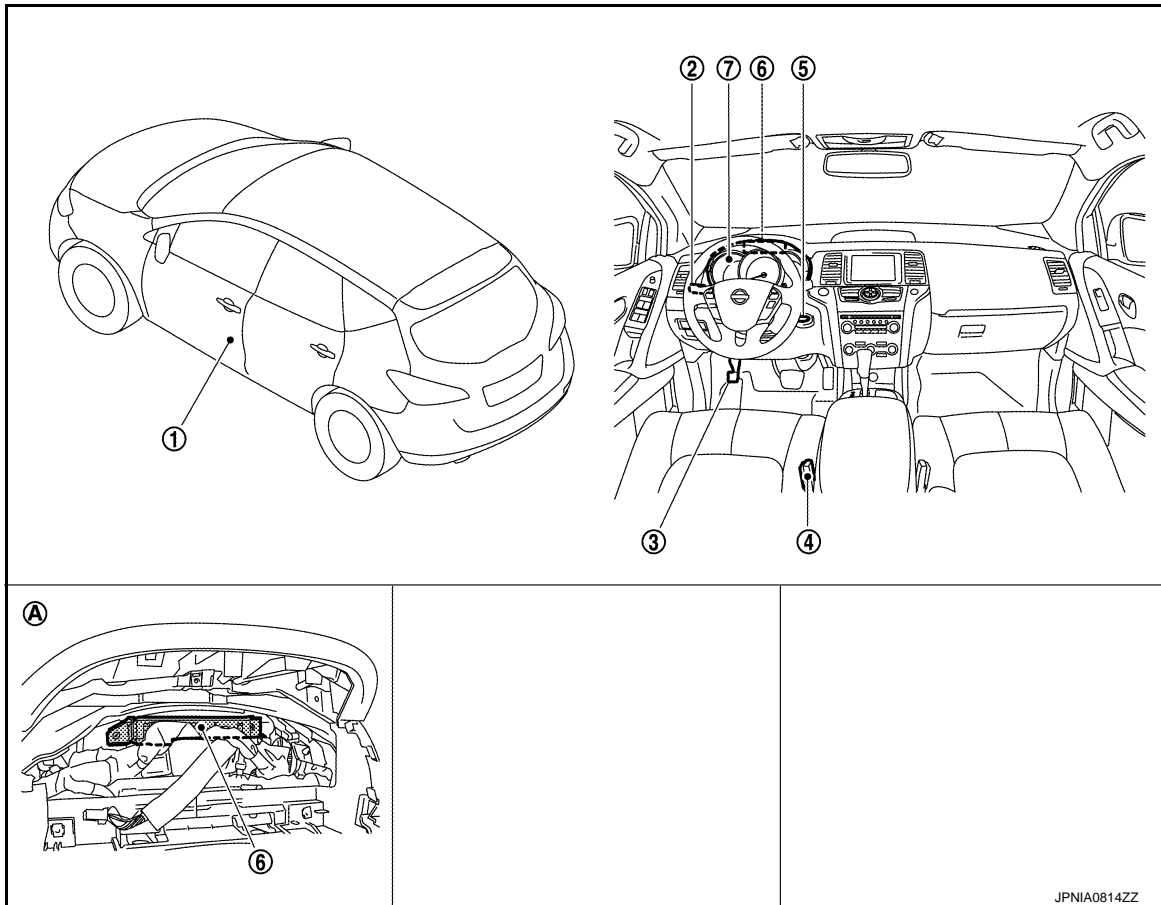
Warning functions	Signal name
Light reminder warning chime	<ul style="list-style-type: none"> • Ignition switch signal • Lighting switch position signal • Door switch signal (driver side)
Seat belt warning chime	<ul style="list-style-type: none"> • Ignition switch signal • Seat belt buckle switch signal (driver side)
Key warning chime	<ul style="list-style-type: none"> • Ignition signal • Key slot switch signal • Door switch signal (driver side)

NOTE:

Parking brake release warning chime is detected by combination meter.

WARNING CHIME SYSTEM : Component Parts Location

INFOID:000000007543178



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

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

WARNING CHIME SYSTEM : Component Description

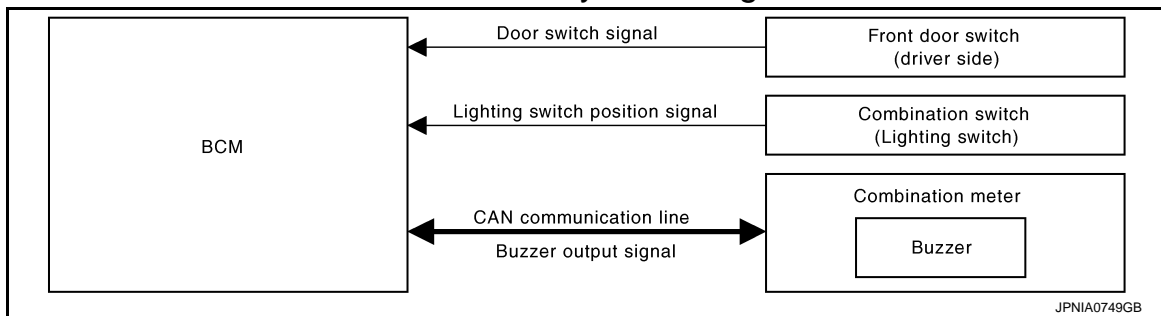
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Unit	Description
Combination meter	<ul style="list-style-type: none"> Receives a buzzer output signal from the BCM with CAN communication line and sounds the buzzer. Judges whether the parking brake is released from the vehicle speed signal received from the ABS actuator and electric unit (control unit) with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary. Receives the seat belt buckle switch signal (driver side) from the seat belt buckle switch (driver side) and transmits it to BCM with CAN communication line.
BCM	Transmits signals provided by various units to the combination meter with CAN communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter with CAN communication line.
Seat belt buckle switch (driver side)	Transmits a seat belt buckle switch signal (driver side) to the combination meter.
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the door switch signal (driver side) to BCM.
Parking brake switch	Refer to MWI-54, "Description" .
Key slot	Transmits the key slot switch signal to BCM.

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME : System Diagram

INFOID:000000007543180



LIGHT REMINDER WARNING CHIME : System Description

INFOID:000000007543181

DESCRIPTION

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

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

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

WARNING CANCEL CONDITIONS

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

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

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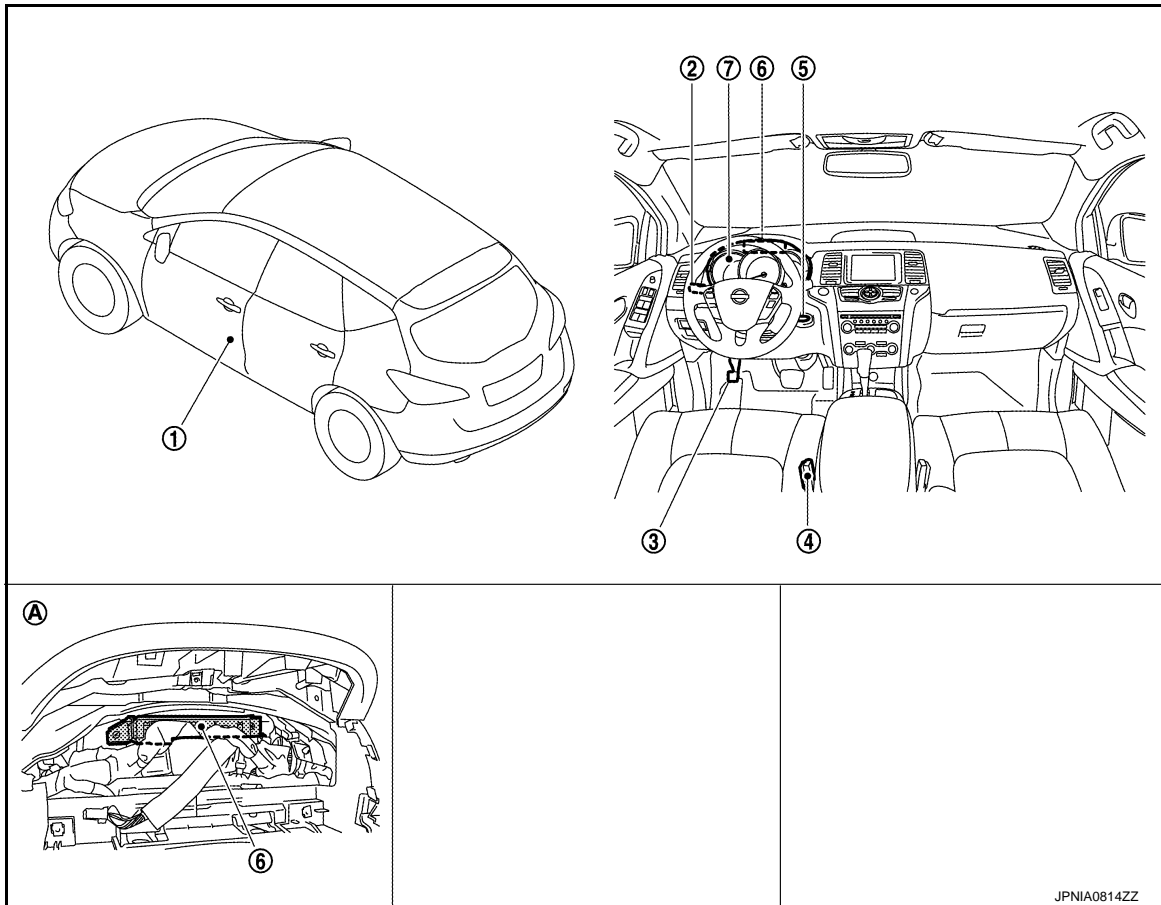
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WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

LIGHT REMINDER WARNING CHIME : Component Parts Location

INFOID:000000007706091



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

LIGHT REMINDER WARNING CHIME : Component Description

INFOID:000000007543183

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

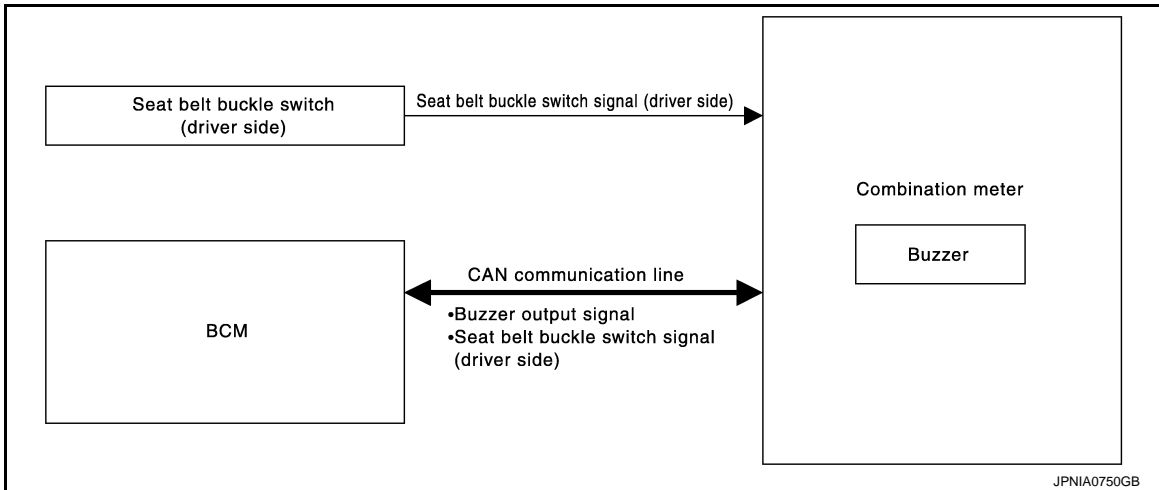
SEAT BELT WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

SEAT BELT WARNING CHIME : System Diagram

INFOID:000000007543184



SEAT BELT WARNING CHIME : System Description

INFOID:000000007543185

DESCRIPTION

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

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

WARNING OPERATION CONDITIONS

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

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

WARNING CANCEL CONDITIONS

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

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

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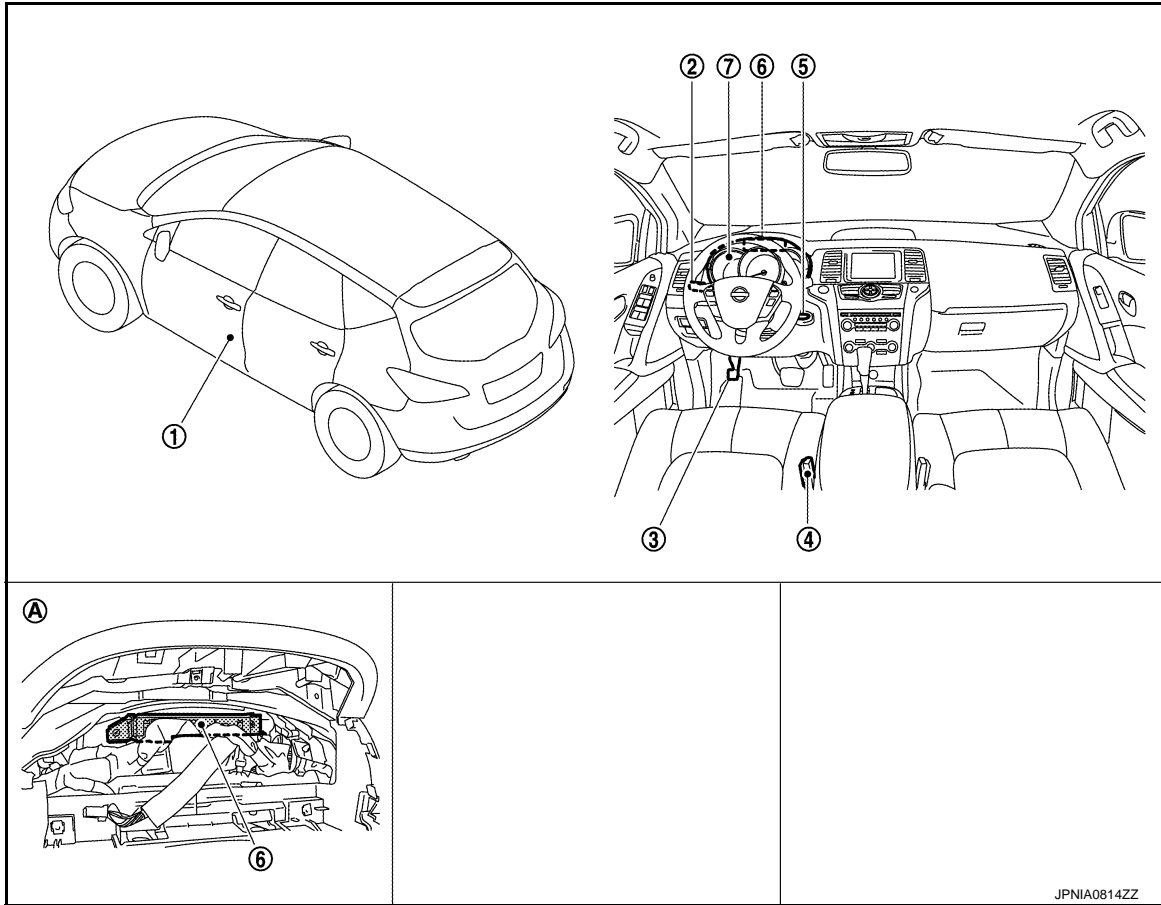
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WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

SEAT BELT WARNING CHIME : Component Parts Location

INFOID:000000007706092



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

SEAT BELT WARNING CHIME : Component Description

INFOID:000000007543187

Unit	Description
Combination meter	<ul style="list-style-type: none"> Receives the seat belt buckle switch signal (driver side) from the seat belt buckle switch (driver side) and transmits it to BCM via CAN communication line. Receives a buzzer output signal from the BCM and sounds the buzzer.
BCM	Judges the seat belt warning condition according to the seat belt buckle switch signal (driver side) received from the combination meter via CAN communication and transmits a buzzer output signal to the combination meter via CAN communication line if necessary.
Seat belt buckle switch (driver side)	Transmits the seat belt buckle switch signal (driver side) to the combination meter.

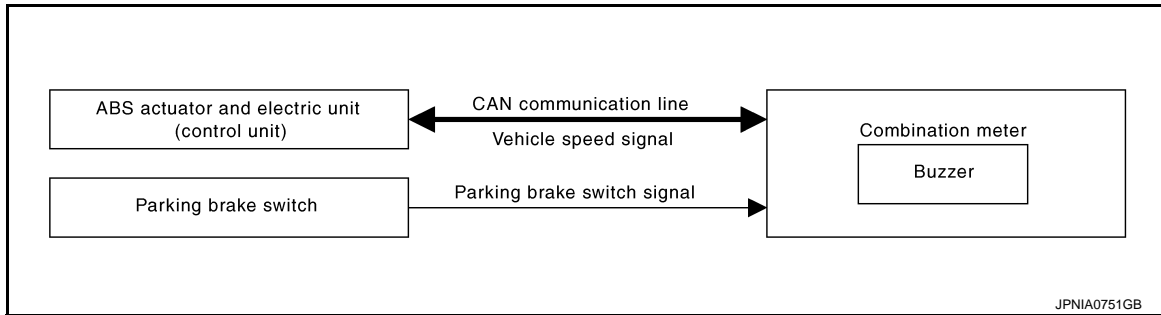
PARKING BRAKE RELEASE WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:000000007543188



PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:000000007543189

DESCRIPTION

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

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

WARNING CANCEL CONDITIONS

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

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

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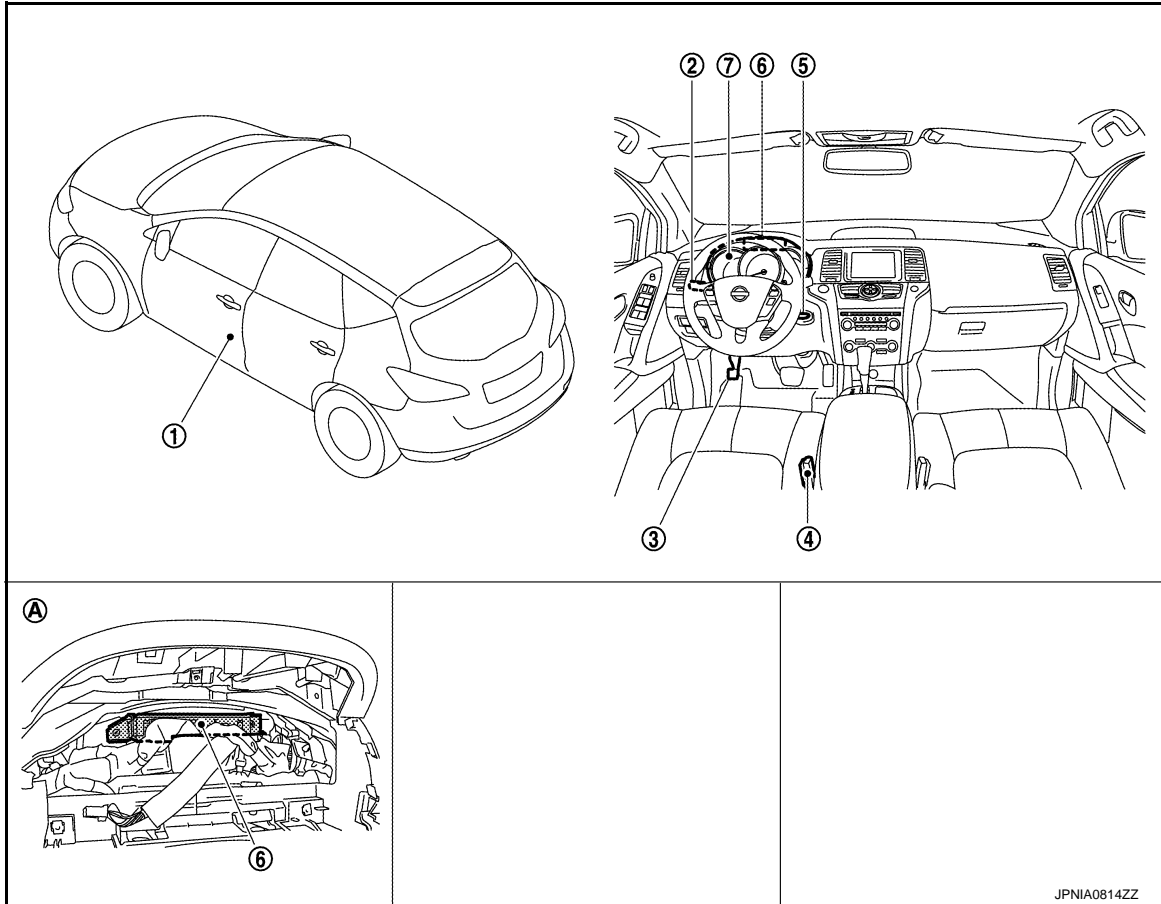
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WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location

INFOID:000000007706093



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

PARKING BRAKE RELEASE WARNING CHIME : Component Description

INFOID:000000007543191

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

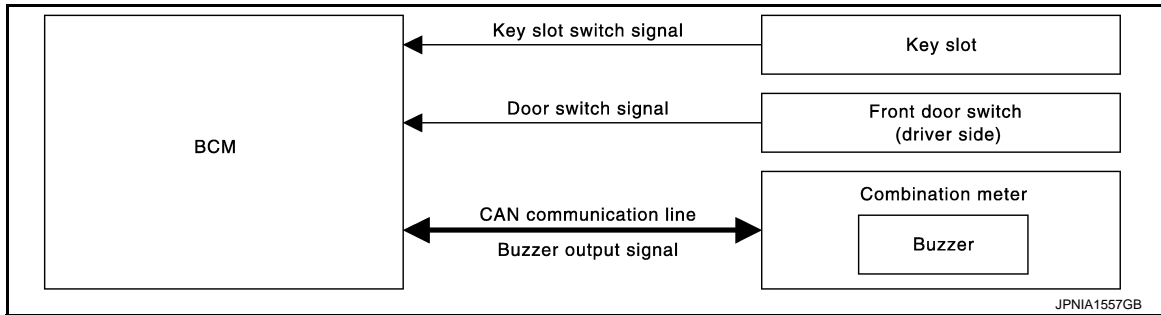
KEY WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

KEY WARNING CHIME : System Diagram

INFOID:000000007543192



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KEY WARNING CHIME : System Description

INFOID:000000007543193

DESCRIPTION

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

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WARNING OPERATION CONDITIONS

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

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

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WARNING CANCEL CONDITIONS

Warning canceled if any of the following conditions are fulfilled.

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

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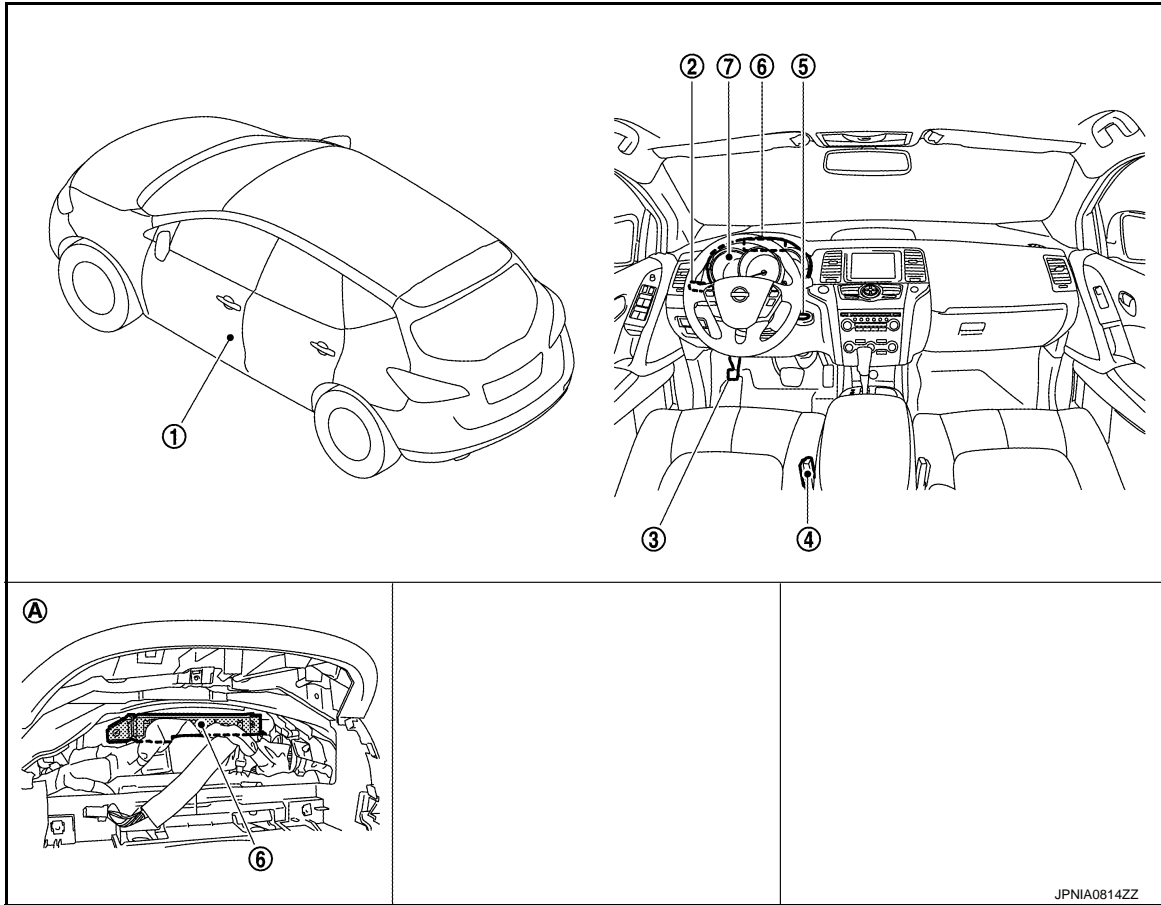
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WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

KEY WARNING CHIME : Component Parts Location

INFOID:000000007706094



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

KEY WARNING CHIME : Component Description

INFOID:000000007543195

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

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (METER)

CONSULT Function (METER/M&A)

INFOID:000000007706095

CONSULT APPLICATION ITEMS

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

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

SELF DIAG RESULT

Refer to [MWI-67, "DTC Index"](#).

DATA MONITOR

Display Item List

X: Applicable

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



DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
TURN IND [On/Off]		Status of turn indicator lamp detected from turn indicator signal is received from BCM via CAN communication.
LIGHT IND [On/Off]		Status of light indicator lamp detected from position light request signal is received from BCM via CAN communication.
OIL W/L [On/Off]		Status of oil pressure warning lamp detected from oil pressure switch signal is received from BCM via CAN communication.
MIL [On/Off]		Status of malfunction indicator lamp detected from malfunctioning indicator lamp signal is received from ECM via CAN communication.
CRUISE IND [On/Off]		Status of CRUISE indicator detected from ASCD status signal is received from ECM via CAN communication.
O/D OFF IND [On/Off]		Status of O/D OFF indicator detected from O/D OFF indicator signal is received from CVT shift selector.
4WD W/L [On/Off]		Status of AWD warning lamp detected from AWD warning lamp signal is received from AWD control unit via CAN communication.
4WD LOCK IND [On/Off]		Status of AWD LOCK warning lamp detected from AWD LOCK warning lamp signal is received from AWD control unit via CAN communication.
FUEL W/L [On/Off]		Low-fuel warning lamp status detected by the identified fuel level.
WASHER W/L [On/Off]		Status of washer warning lamp judged from washer level switch input to combination meter.
AIR PRES W/L [On/Off]		Status of low tire pressure warning lamp detected from TPMS malfunction warning lamp signal is received from BCM via CAN communication.
KEY G/W W/L [On/Off]		Status of key warning lamp (G/Y) detected from key warning signal is received from BCM via CAN communication.
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 detected from meter display signal is received from BCM via CAN communication.
SHIFT IND [P, R, N, D, L]		Status of shift position indicator detected from shift position signal is received from TCM via CAN communication.
O/D OFF SW [On/Off]		Status of O/D OFF switch.
M RANGE SW [Off]		This item is displayed, but cannot be monitored.
NM RANGE SW [Off]		This item is displayed, but cannot be monitored.
AT SFT UP SW [Off]		This item is displayed, but cannot be monitored.
AT SFT DWN SW [Off]		This item is displayed, but cannot be monitored.
ST SFT UP SW [Off]		This item is displayed, but cannot be monitored.
ST SFT DWN 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 (driver side).
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.
DISTANCE [km]		Value of possible driving distance calculated by combination meter.

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

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

NOTE:

Some items are not available according to vehicle specification.

WARNING HISTORY

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

NOTE:

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

Display Item

Display item	Description
ABS W/L	Lighting history of ABS warning lamp.
VDC/TCS IND	Lighting history of VDC OFF indicator lamp.
SLIP IND	Lighting history of VDC warning lamp.
BRAKE W/L	Lighting history of brake warning lamp.
DOOR W/L	Lighting history of door warning.
OIL W/L	Lighting history of oil pressure warning lamp.
C-ENG W/L	Lighting history of malfunction indicator lamp.
CRUISE IND	Lighting history of CRUISE indicator lamp.
SET IND	Lighting history of SET indicator.
O/D OFF IND	Lighting history of O/D OFF indicator lamp.
4WD W/L	Lighting history of AWD warning lamp.
FUEL W/L	Lighting history of low fuel level warning.
WASHER W/L	Lighting history of low washer fluid warning
AIR PRES W/L	Lighting history of low tire pressure warning lamp.
KEY G/Y W/L	Lighting history of key warning lamp (green/yellow).

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

Display item	Description
KEY R W/L	Lighting history of key warning lamp (red).
CHAGE W/L	Lighting history of charge warning lamp.

NOTE:

In items displayed on the CONSULT screen, only those listed in the above table are used.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000007793825

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×*1	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*2			
<ul style="list-style-type: none"> • Intelligent Key system • Engine start system 	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

- *1: For models with rain sensor this mode is displayed, but is not used.
- *2: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*
	OFF>ACC		While turning power supply position from "OFF" to "ACC"
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*) to low power consumption mode
	LOCK		Power supply position is "LOCK"*
	OFF		Power supply position is "OFF" (Ignition switch OFF)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)
CRANKING	Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • 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. 	

NOTE:

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

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

BUZZER

BUZZER : CONSULT Function (BCM - BUZZER)

INFOID:000000007543198

CONSULT APPLICATION ITEMS

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

DATA MONITOR

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

ACTIVE TEST

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

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER : Diagnosis Procedure

INFOID:000000007706089

1. CHECK FUSE

Check for blown fuses.

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

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector terminals and ground.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

3. CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:000000007814157

1. CHECK FUSE AND FUSIBLE LINK

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

WCS

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Description

INFOID:000000007543201

- 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:000000007543202

1.CHECK OPERATION OF METER BUZZER

1. Select "BUZZER" of "BCM" on CONSULT.
2. Perform "LIGHT WARN ALM" of "Active Test".

Does meter buzzer beep?

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

2.CHECK COMBINATION METER INPUT SIGNAL

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

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

Is the inspection result normal?

- YES >> Replace combination meter.
NO >> Replace BCM. Refer to [BCS-83, "Removal and Installation"](#).

Diagnosis Procedure

INFOID:000000007543203

1.CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to [MWI-44, "COMBINATION METER : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Repair power supply circuit of combination meter. Refer to [MWI-44, "COMBINATION METER : Diagnosis Procedure"](#).

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description

INFOID:000000007543204

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

Component Function Check

INFOID:000000007543205

1.CHECK COMBINATION METER INPUT SIGNAL

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

BUCKLE SW

When seat belt is fastened : Off

When seat belt is unfastened : On

>> INSPECTION END

Diagnosis Procedure

INFOID:000000007543206

1.CHECK COMBINATION METER INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace combination meter

NO >> GO TO 2.

2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

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

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

• *1 : Without automatic drive positioner

• *2 : With automatic drive positioner

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

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SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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

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

• *1 : Without automatic drive positioner

• *2 : With automatic drive positioner

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

Component Inspection

INFOID:000000007543207

1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

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

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

*1: Without automatic drive positioner

*2: With automatic drive positioner

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the seat belt buckle. Refer to [SB-9, "SEAT BELT BUCKLE : Removal and Installation"](#).


WARNING CHIME SYSTEM

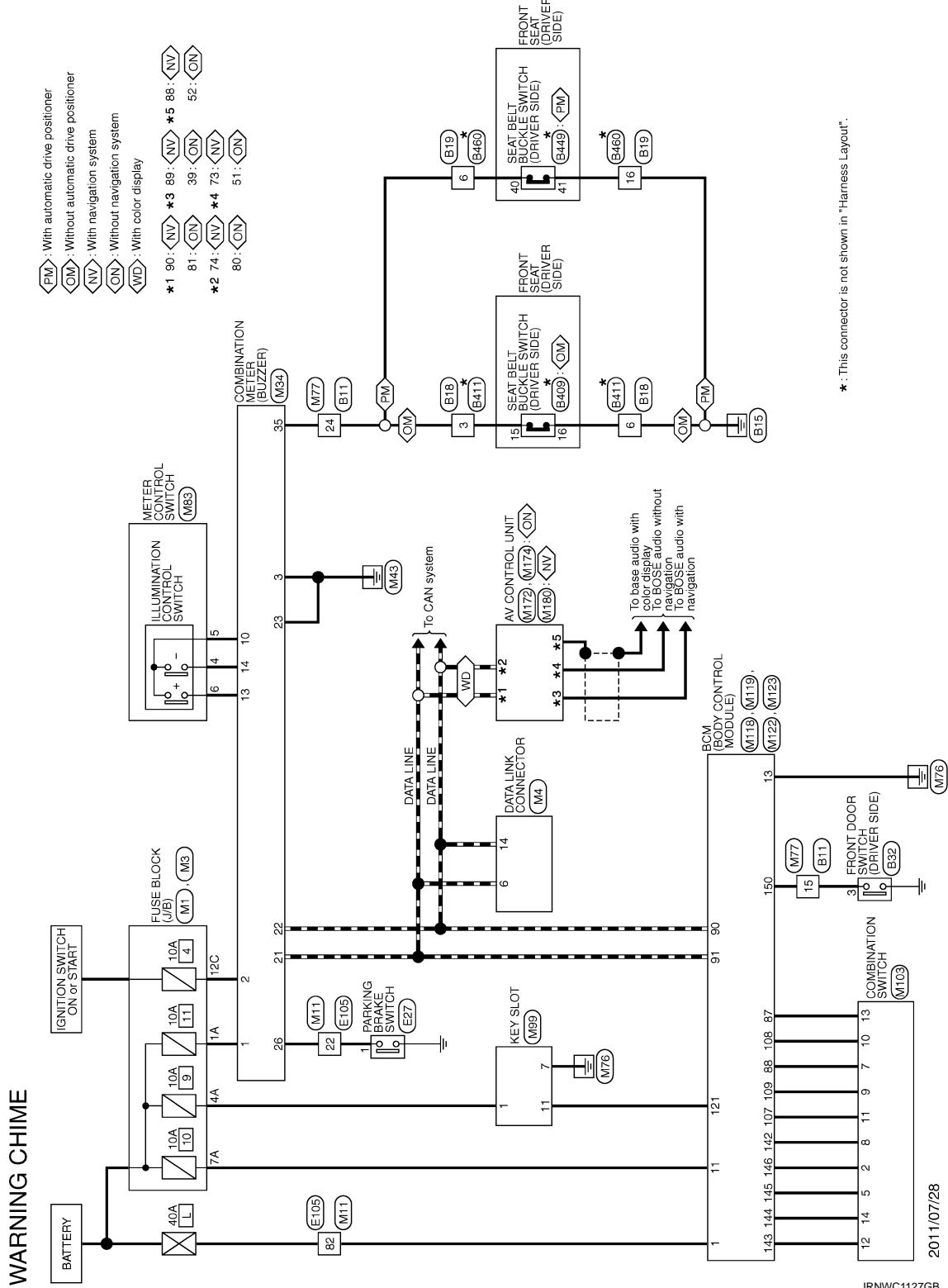
< DTC/CIRCUIT DIAGNOSIS >

WARNING CHIME SYSTEM

Wiring Diagram - WARNING CHIME -

INFOID:000000007543208

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



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COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:000000007706085

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
SPEED METER [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 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 NOTE: 8191.875 is displayed when the malfunction signal is received
FUEL METER [L]	Ignition switch ON	—	Values according to fuel level
W TEMP METER [°C]	Ignition switch ON	—	Values according to engine coolant temperature NOTE: 215 is displayed when the malfunction signal is input
FUEL CAP W/L	Ignition switch ON	Fuel filler cap warning display ON	On
		Fuel filler cap warning display OFF	Off
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	VDC warning lamp ON	On
		VDC warning lamp OFF	Off
BRAKE W/L	Ignition switch ON	Brake warning lamp ON	On
		Brake warning lamp OFF	Off
DOOR W/L	Ignition switch ON	Door warning lamp ON	On
		Door warning lamp OFF	Off
HI-BEAM IND	Ignition switch ON	High-beam indicator lamp ON	On
		High-beam indicator lamp OFF	Off
TURN IND	Ignition switch ON	Turn signal indicator lamp ON	On
		Turn signal indicator lamp OFF	Off
LIGHT IND	Ignition switch ON	Light indicator lamp ON	On
		Light indicator lamp OFF	Off
OIL W/L	Ignition switch ON	Oil pressure warning lamp ON	On
		Oil pressure warning lamp OFF	Off
MIL	Ignition switch ON	Malfunction indicator lamp ON	On
		Malfunction indicator lamp OFF	Off



COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

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

COMBINATION METER

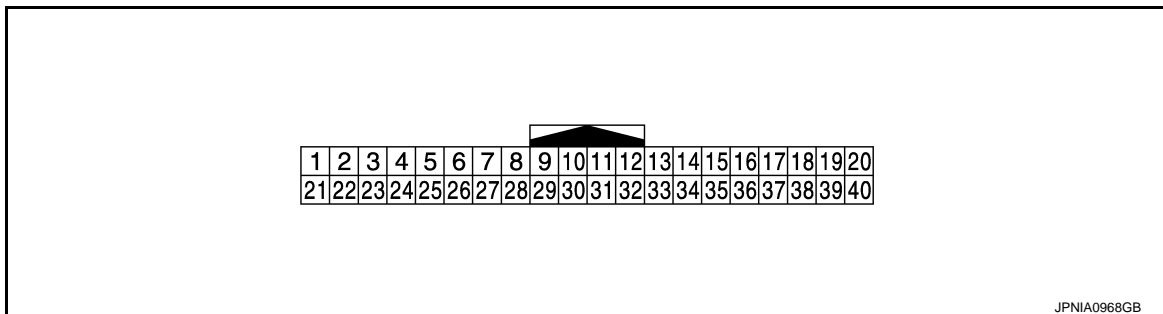
< ECU DIAGNOSIS INFORMATION >

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

NOTE:

Some items are not available according to vehicle specification.

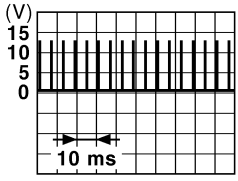
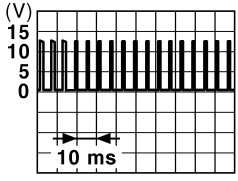




TERMINAL LAYOUT



PHYSICAL VALUES

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

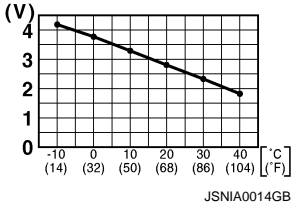
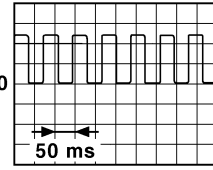
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
2 (LG)	Ground	IGN signal	Input	Ignition switch ON	—	Battery voltage
3 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
5 (SB)	Ground	Illumination control signal	Output	Ignition switch ON	<ul style="list-style-type: none"> Lighting switch 1ST When meter illumination is maximum 	
					<ul style="list-style-type: none"> Lighting switch 1ST When meter illumination is minimum 	
8 (SB)	10 (LG)	Trip reset signal	Input	Ignition switch ON	When trip reset switch is pressed.	0 V
					Other than the above	5 V
10 (LG)	Ground	Meter control switch ground	—	Ignition switch ON	—	0 V
11 (L)	10 (LG)	Enter switch signal	Input	Ignition switch ON	When  is pressed.	0 V
					Other than the above	5 V
12 (R)	10 (LG)	Select switch signal	Input	Ignition switch ON	When  is pressed.	0 V
					Other than the above	5 V
13 (Y*1 or V*2)	10 (LG)	Illumination control switch signal (+)	Input	Ignition switch ON	When  is pressed.	0 V
					Other than the above	5 V
14 (GR)	10 (LG)	Illumination control switch signal (-)	Input	Ignition switch ON	When  is pressed.	0 V
					Other than the above	5 V
15 (BR)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON	4 V
					Air bag warning lamp OFF	0 V

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COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

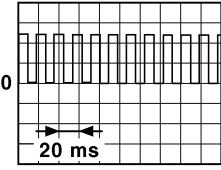
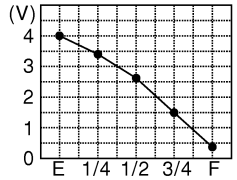
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
18 (L)	Ground	Ambient sensor signal	Input	Ignition switch ON	Changes depending to ambient temperature. 	
19 (P)	Ground	Ambient sensor power	Input	Ignition switch ON	—	
20 (Y)	Ground	Ambient sensor ground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

NOTE:
The maximum voltage varies depending on the specification (destination unit).

JSNIA0015GB

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Input/ Output	Condition	Value (Approx.)
+	-	Signal name				
31 (V)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies de- pending on the specification (destination unit).  <small>JSNIA0012GB</small>
32 (LG)	Ground	Overdrive control switch signal	Input	Ignition switch ON	Overdrive control switch pressed.	0 V
					Overdrive control switch not pressed.	12 V
34 (G)	Ground	Fuel level sensor signal	Input	Ignition switch ON	—	 <small>JPNIA0740ZZ</small>
35 (SB)	Ground	Seat belt buckle switch sig- nal (driver side)	Input	Ignition switch ON	When driver seat belt is fas- tened.	12 V
					When driver seat belt is un- fastened.	0 V
36 (R)	Ground	Seat belt buckle switch sig- nal (passenger side)	Input	Ignition switch ON	<ul style="list-style-type: none"> When getting in the pas- senger seat. When passenger seat belt is fastened. 	12 V
					<ul style="list-style-type: none"> When getting in the pas- senger seat. When passenger seat belt is unfastened. 	0 V

*1: Without automatic drive positioner

*2: With automatic drive positioner

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
WCS

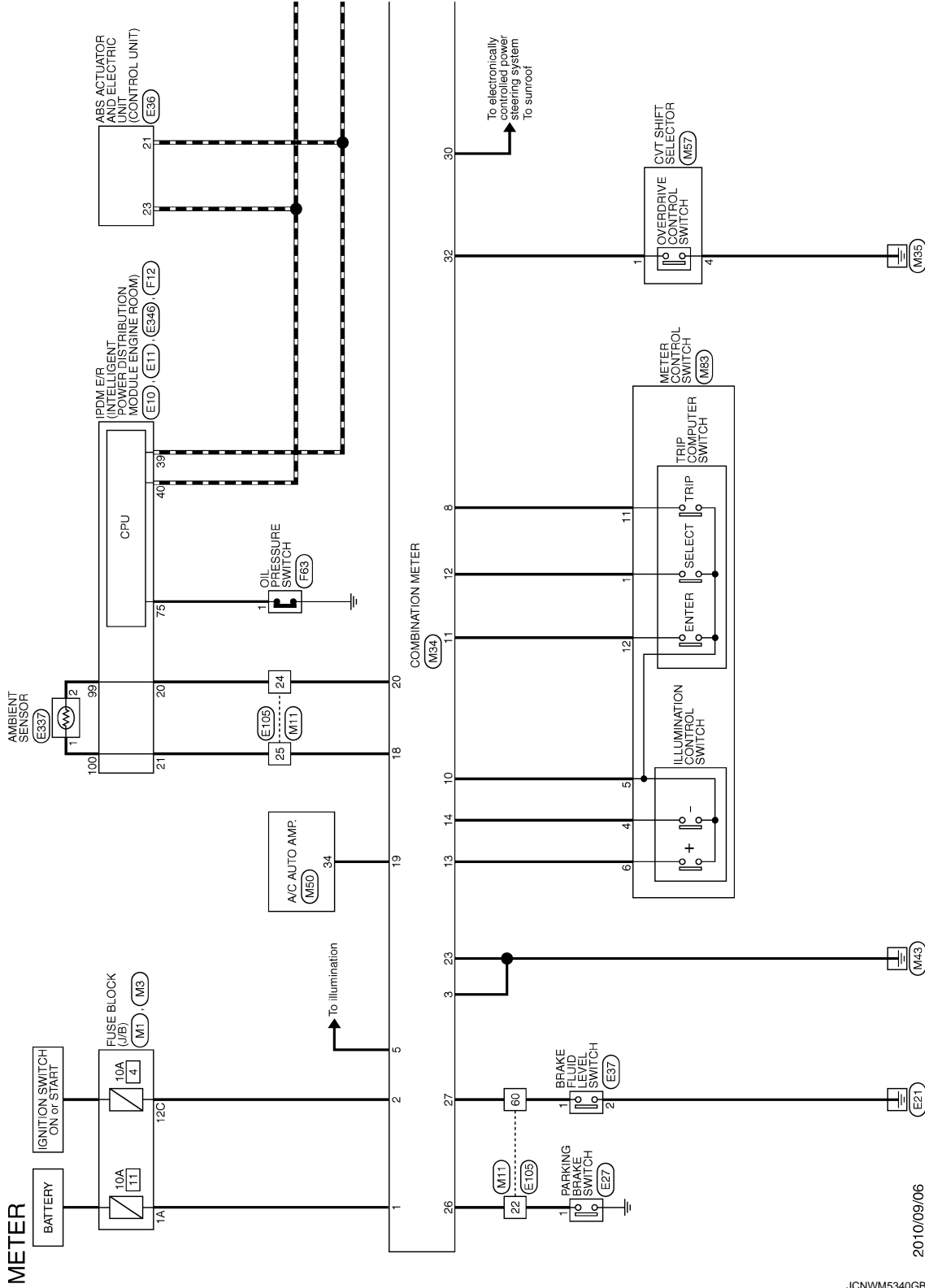
COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - METER -

INFOID:000000007706086

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

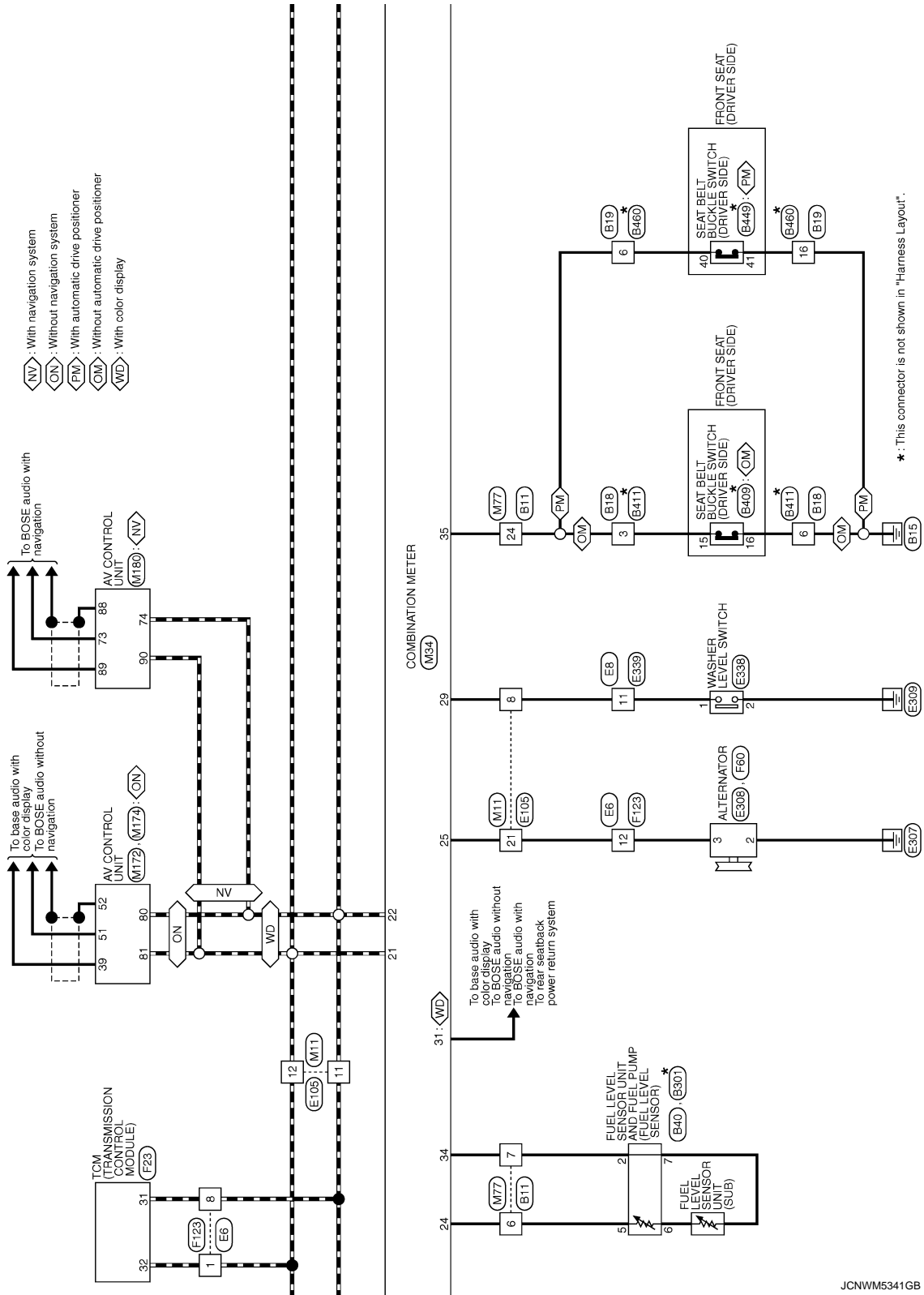


2010/09/06

JCNWM5340GB

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >



JCNWM5341GB

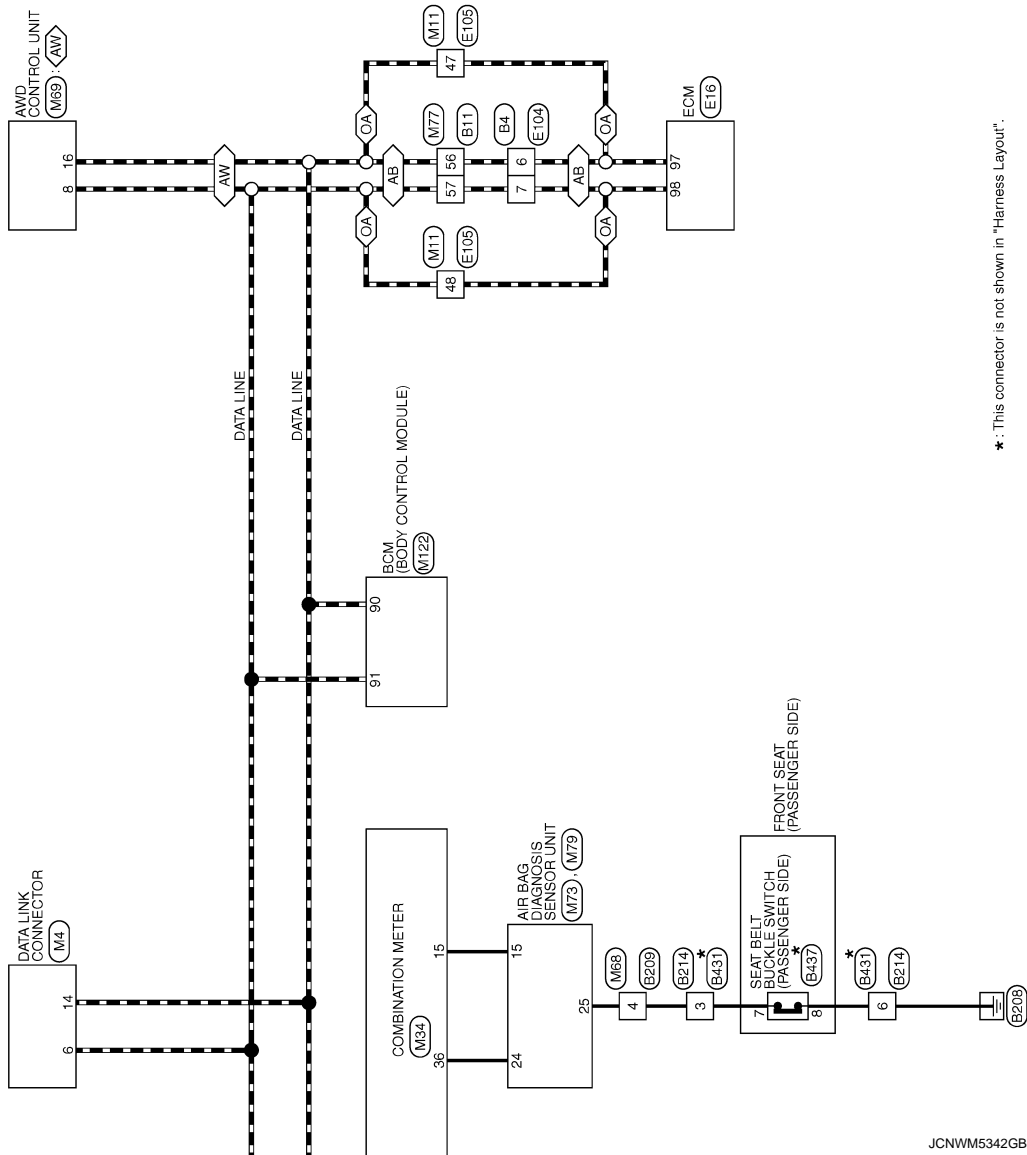
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WCS

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

AW: AWD models
 AB: With automatic back door
 OA: Without automatic back door



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

Fail-Safe

INFOID:000000007706087

FAIL-SAFE

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

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Function		Specifications	
Speedometer		Reset to zero by suspending communication.	A
Tachometer			B
Engine coolant temperature gauge			C
Illumination control		When suspending communication, changes to nighttime mode.	
Information display	Door open warning	The display turns off by suspending communication.	C
	Parking brake release warning		D
	Low tire pressure warning		E
	Fuel filler cap warning		F
	Instantaneous fuel warning	<ul style="list-style-type: none"> When reception time of an abnormal signal is 2 seconds or less, the last received datum is used for calculation to indicate the result. When reception time of an abnormal signal is more than two seconds, the last result calculated during normal condition is indicated. 	
	Average fuel consumption		
	Average vehicle speed		
Travel distance			
Buzzer		The buzzer turns off by suspending communication.	
Warning lamp/indicator lamp	ABS warning lamp	The lamp turns on by suspending communication.	G
	Brake warning lamp		H
	AWD warning lamp		I
	Malfunction indicator lamp		J
	Low tire pressure warning lamp	The lamp turns ON after flashing for 1 minute.	
	High beam indicator lamp	The lamp turns off by suspending communication.	K
	Turn signal indicator lamp		L
	Light indicator lamp		
	Oil pressure warning lamp		
	CRUISE indicator lamp		
	O/D OFF indicator lamp		
	VDC warning lamp		
	VDC OFF indicator lamp		
AWD LOCK indicator lamp			
Key warning lamp			

DTC Index

INFOID:000000007706088

Display contents of CONSULT	Diagnostic item is detected when ...	Refer to	
CAN COMM CIRCUIT [U1000]	When combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-39. "Diagnosis Procedure"	WCS
CONTROL UNIT (CAN) [U1010]	When detecting error during the initial diagnosis of the CAN controller of combination meter.	MWI-40. "Diagnosis Procedure"	O
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from the ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-41. "Diagnosis Procedure"	P

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Diagnostic item is detected when ...	Refer to
ENGINE SPEED [B2267]	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-42. "Diagnosis Procedure"
WATER TEMP [B2268]	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-43. "Diagnosis Procedure"

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000007793827

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW NOTE: For models with BOSE audio system this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of Intelligent Key is not pressed	Off
	LOCK button of Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
	BACK DOOR OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	A
	Dark outside of the vehicle	Close to 0 V	
REQ SW -DR	Driver door request switch is not pressed	Off	B
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	C
	Passenger door request switch is pressed	On	
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	D
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	D
REQ SW -BD/TR	Back door request switch is not pressed	Off	E
	Back door request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	F
	Push-button ignition switch (push switch) is pressed	On	
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off	G
	Ignition switch in ON position	On	
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	G
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off	H
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off	I
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On	
BRAKE SW 2	The brake pedal is not depressed	Off	J
	Stop lamp switch 1 signal circuit is normal	On	
DETE/CANCL SW	Selector lever in P position	Off	K
	Selector lever in any position other than P	On	
SFT PN/N SW	Selector lever in any position other than P and N	Off	K
	Selector lever in P or N position	On	
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off	L
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off	L
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off	M
UNLK SEN -DR	Driver door is unlocked	Off	WCS
	Driver door is locked	On	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	O
	Push-button ignition switch (push-switch) is pressed	On	
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	P
	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	P
	Selector lever in P position	On	
SFT PN -IPDM	Selector lever in any position other than P and N	Off	
	Selector lever in P or N position	On	
SFT P -MET	Selector lever in any position other than P	Off	
	Selector lever in P position	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Power supply position in LOCK position	Reset
	Power supply position in any position other than LOCK	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	Intelligent Key is not inserted into key slot	Off
	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
CONFIRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

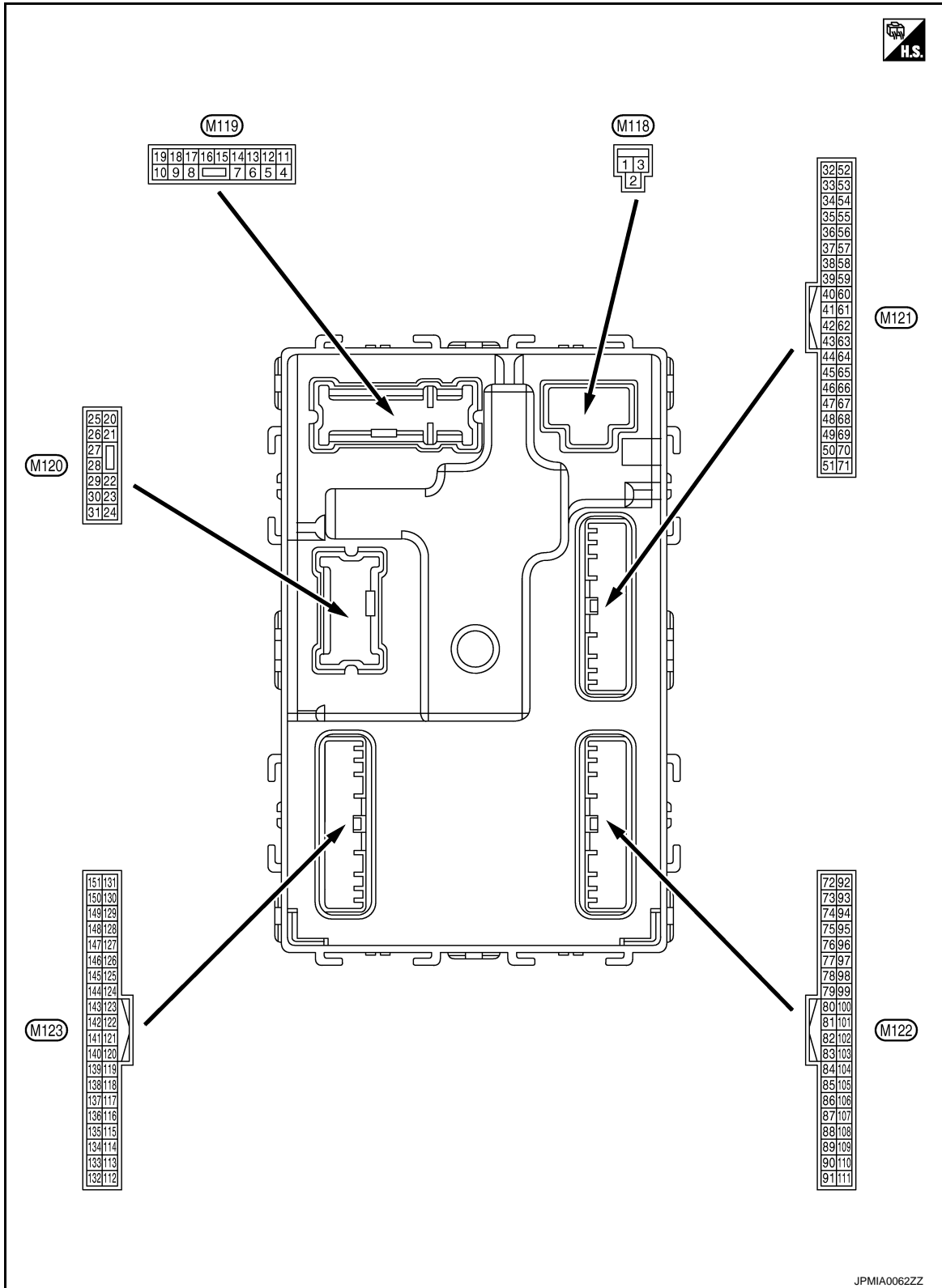
Monitor Item	Condition	Value/Status	
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet	A
	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done	B
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet	C
	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done	
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet	D
	The ID of fourth Intelligent Key is registered to BCM	Done	
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet	E
	The ID of third Intelligent Key is registered to BCM	Done	
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet	F
	The ID of second Intelligent Key is registered to BCM	Done	
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet	G
	The ID of first Intelligent Key is registered to BCM	Done	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	H
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	I
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	J
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	K
ID REGST FL1	ID of front LH tire transmitter is registered	Done	L
	ID of front LH tire transmitter is not registered	Yet	
ID REGST FR1	ID of front RH tire transmitter is registered	Done	M
	ID of front RH tire transmitter is not registered	Yet	
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	N
	ID of rear RH tire transmitter is not registered	Yet	
ID REGST RL1	ID of rear LH tire transmitter is registered	Done	O
	ID of rear LH tire transmitter is not registered	Yet	
WARNING LAMP	Tire pressure indicator OFF	Off	P
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	
	Tire pressure warning alarm is sounding	On	

WCS

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

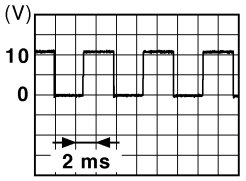
TERMINAL LAYOUT



PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

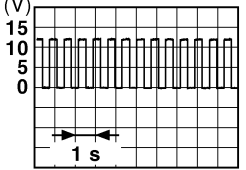
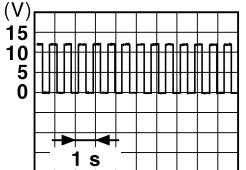
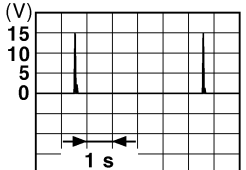
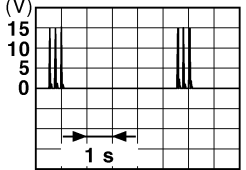
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		Battery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

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
19 (Y)	Ground	Interior room lamp control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
23 (BR)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage
					Other than OPEN (Back door opener actuator is not activated)	0 V
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	Battery voltage
34 (B)	Ground	Luggage room anten- na (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 <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>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

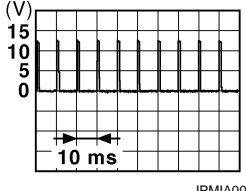
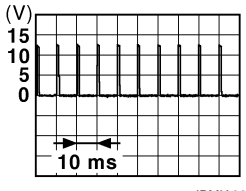
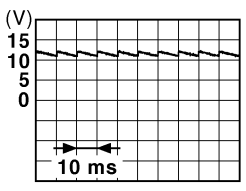
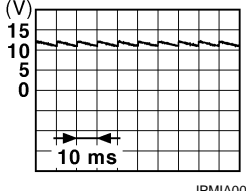
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
35 (W)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	
				When Intelligent Key is in the passenger compartment	
38 (L)	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operated with ignition switch OFF	
				When Intelligent Key is in the antenna detection area	
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the back door request switch is operated with ignition switch OFF	
				When Intelligent Key is in the antenna detection area	
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	Battery voltage
				OFF or ACC	0 V

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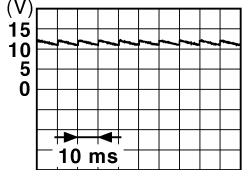
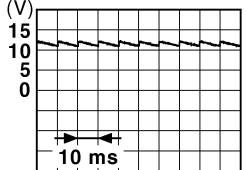
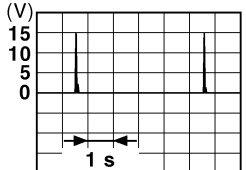
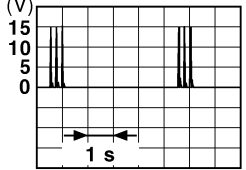
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
52 (R)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0.3 V
				Ignition switch OFF		0 V
60 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (R)	Ground	Back door request switch	Input	Back door re- quest switch	ON (Pressed)	0 V
					OFF (Not pressed)	 1.0 V
64 (GR)	Ground	Intelligent key warn- ing buzzer control	Output	Warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	 11.8 V
					ON (When back door opens)	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 11.8 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)  11.8 V
					ON (When rear RH door opens) 0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)  11.8 V
					ON (When rear LH door opens) 0 V
72 (B)	Ground	Room antenna (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment 
					When Intelligent Key is not in the passenger compart- ment 

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
73 (W)	Ground	Room antenna (+) (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 (Y)	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 detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
75 (LG)	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 detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

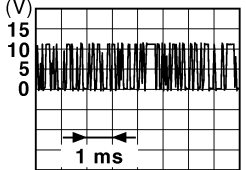
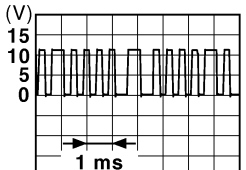

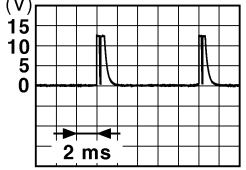

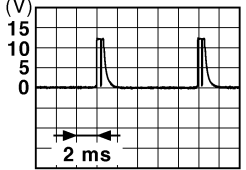
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operated with ignition switch OFF	
				When Intelligent Key is in the antenna detection area	
77 (P)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	
				When Intelligent Key is not in the antenna detection area	
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	
				Ignition switch is pressed while inserting Intelligent Key into the key slot.	
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	
				Ignition switch is pressed while inserting Intelligent Key into the key slot.	
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	0 V
				OFF or ACC	Battery voltage

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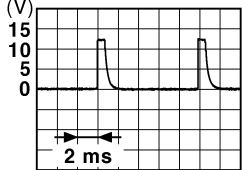
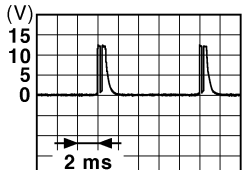

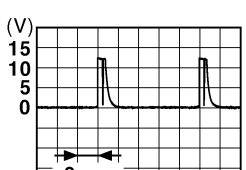

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
83 (P)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting	 <p style="text-align: right; font-size: small;">JMKIA0064GB</p>	
				When operating either button on Intelligent Key	 <p style="text-align: right; font-size: small;">JMKIA0065GB</p>	
87 (R)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Front fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
					Rear wiper 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 switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

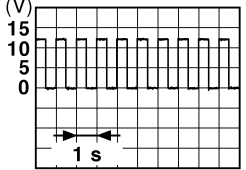
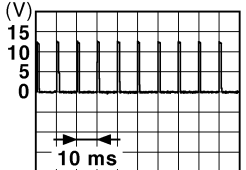
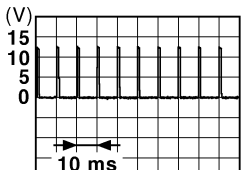
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: right;">1.4 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	 <p style="text-align: right;">1.3 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: right;">1.3 V</p>
					Rear washer switch ON (Wiper intermittent dial 4)	 <p style="text-align: right;">1.3 V</p>
					Any of the conditions below with all switches OFF	 <p style="text-align: right;">1.3 V</p>
					<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 	
90 (P)	Ground	CAN-L	Input/ Output	—	—	
91 (L)	Ground	CAN-H	Input/ Output	—	—	

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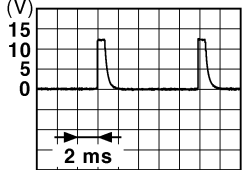
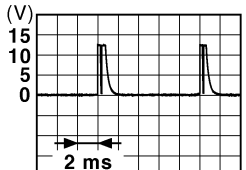

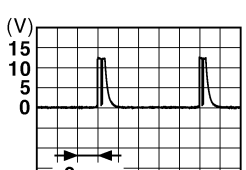

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
92 (R)	Ground	Key slot illumination	Output	OFF	0 V
				Blinking	 <p style="text-align: right; font-size: small;">JPMIA0015GB</p>
				ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
				ON	0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch OFF	0 V
				ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output	—	Battery voltage
99 (V)	Ground	Selector lever P position switch	Input	Selector lever P position	0 V
				Any position other than P	Battery voltage
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch ON (Pressed)	0 V
				OFF (Not pressed)	 <p style="text-align: right; font-size: small;">JPMIA0016GB</p>
101 (W)	Ground	Driver door request switch	Input	Driver door request switch ON (Pressed)	0 V
				OFF (Not pressed)	 <p style="text-align: right; font-size: small;">JPMIA0016GB</p>
102 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch OFF or ACC	0 V
				ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

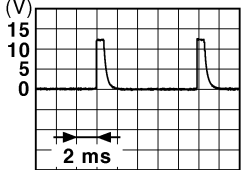
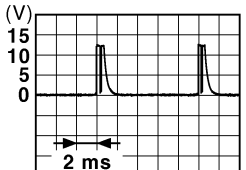
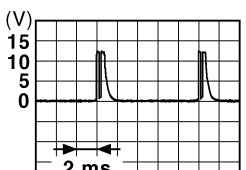
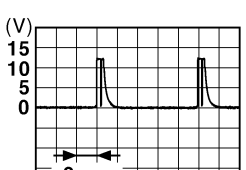
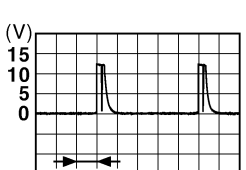
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 <p style="text-align: right;">1.4 V</p>
					Turn signal switch LH	 <p style="text-align: right;">1.3 V</p>
					Turn signal switch RH	 <p style="text-align: right;">1.3 V</p>
					Front wiper switch LO	 <p style="text-align: right;">1.3 V</p>
					Front washer switch ON	 <p style="text-align: right;">1.3 V</p>

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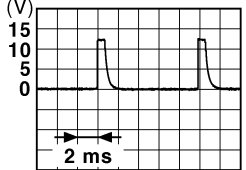
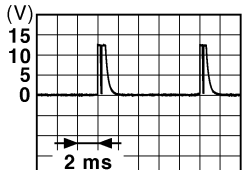

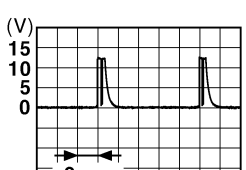

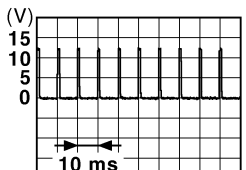
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <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 switches OFF	 <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

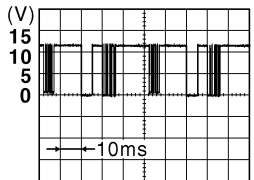
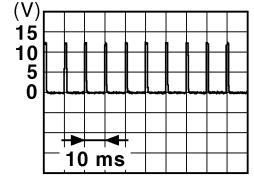
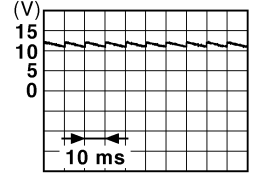
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 1.4 V
					Lighting switch PASS	 1.3 V
					Lighting switch 2ND	 1.3 V
					Front wiper switch INT/ AUTO	 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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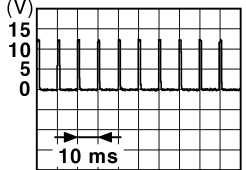
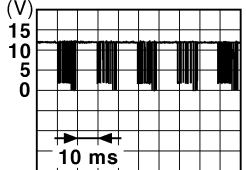
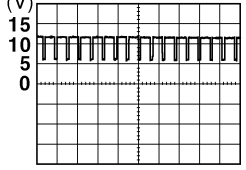
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON	 <p style="text-align: right; font-size: small;">JPMIA0156GB</p> <p style="text-align: center;">8.7 V</p>	
113 (P/B)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
				Ignition switch ON	When dark outside of the vehicle	Close to 0 V
116 (GR)	Ground	Stop lamp switch 1	Input	—	Battery voltage	
118 (L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is depressed)	Battery voltage
119 (W)	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> <p style="text-align: center;">1.1 V</p>
					UNLOCK status (unlock sensor switch ON)	0 V
121 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot	Battery voltage	
				When Intelligent Key is not inserted into key slot	0 V	
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
				Ignition switch	ON	Battery voltage
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p>
					ON (When passenger door opens)	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

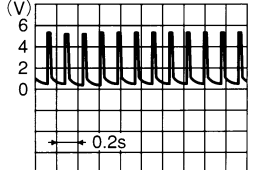

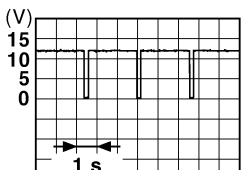
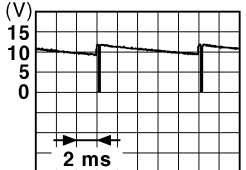
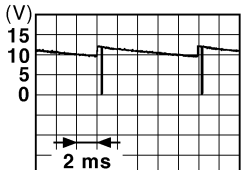
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
130 (BR)	Ground	Rear window defogger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 1.1 V
				Rear window defogger switch ON		0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 10.2 V
				Ignition switch OFF or ACC		Battery voltage
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps OFF)	9.5 V
					ON (When tail lamps ON)	<p style="text-align: center;">NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.</p>  9.5 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF (ACC and ON indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V

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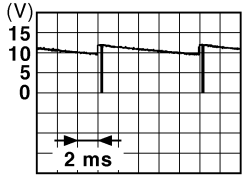
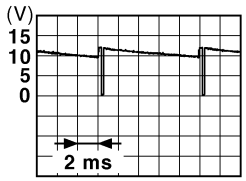
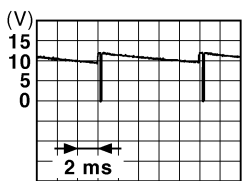
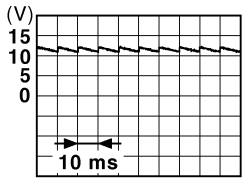
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
139 (O)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state  OCC3881D
				When receiving the signal from the transmitter  OCC3880D	
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position Battery voltage
				Except P and N positions	0 V
141 (O)	Ground	Security indicator	Output	Security indicator	ON 0 V
				Blinking  JPMA0014GB 11.3 V	
				OFF Battery voltage	
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF 0 V
				Lighting switch 1ST	 JPMA0031GB 10.7 V
				Lighting switch HI	
				Lighting switch 2ND	
Turn signal switch RH					
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) 0 V
				Front wiper switch HI (Wiper intermittent dial 4)	 JPMA0032GB 10.7 V
				Rear wiper switch INT (Wiper intermittent dial 4)	
				Any of the conditions below with all switches 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)

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Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
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144 (P)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
145 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	
					Front wiper switch LO	
					Lighting switch AUTO	
146 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	 11.8 V
					ON (When driver door opens)	0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

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
WCS

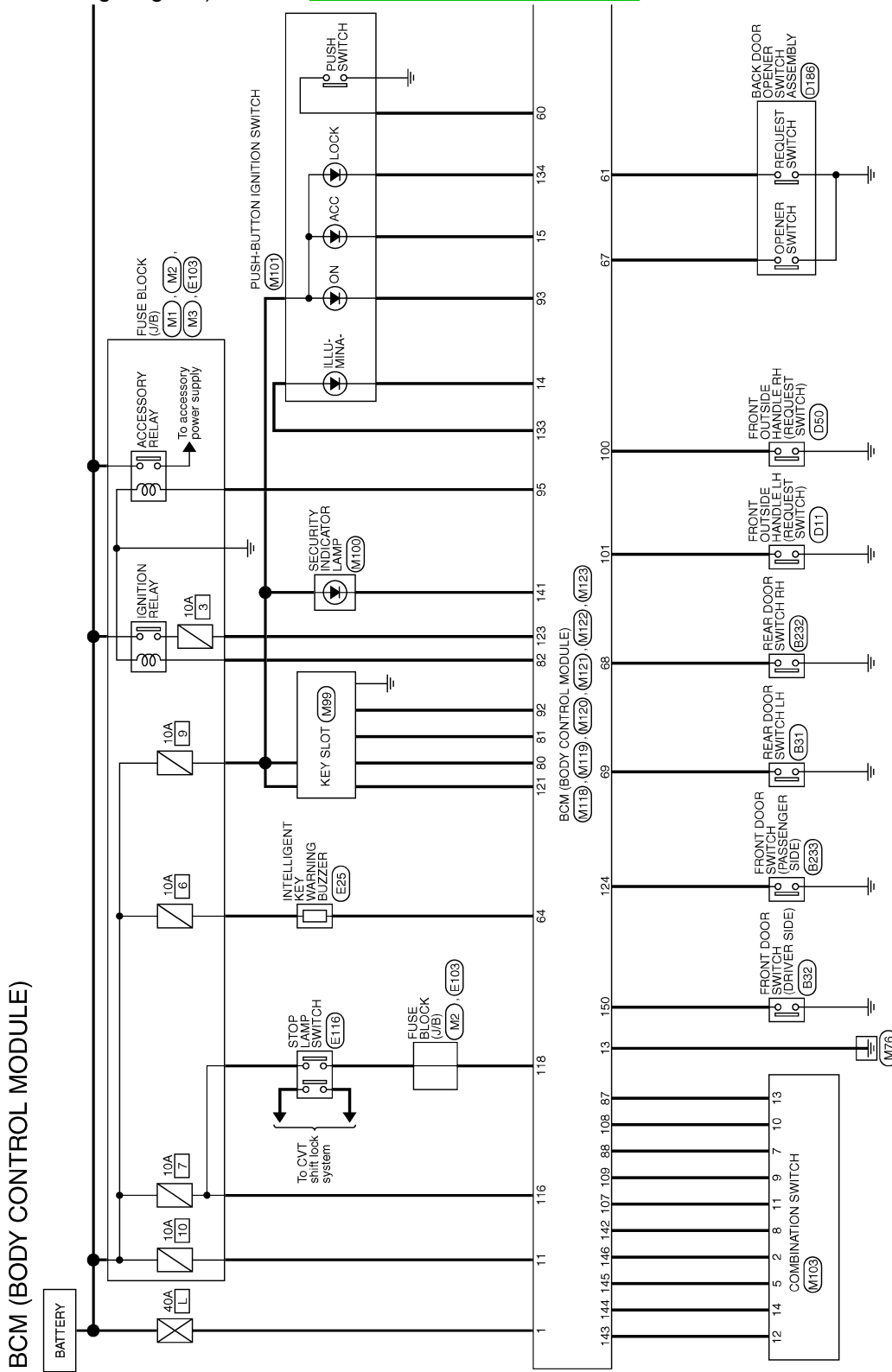
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

INFOID:000000007793828

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



JRMWC5024GB

2011/07/28

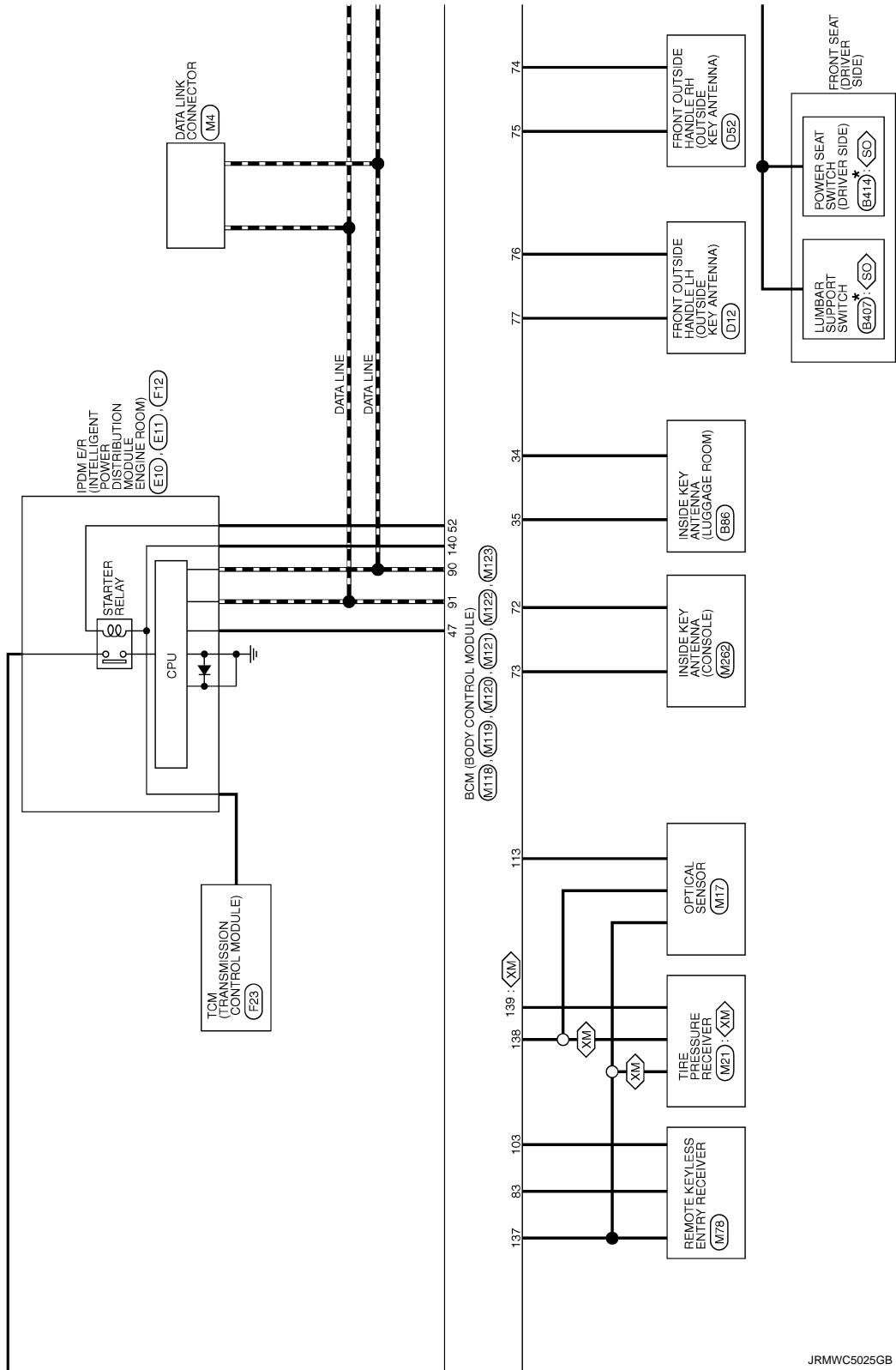
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

XM: Except for Mexico

SO: With power seat without automatic drive positioner

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



JRMWC5025GB

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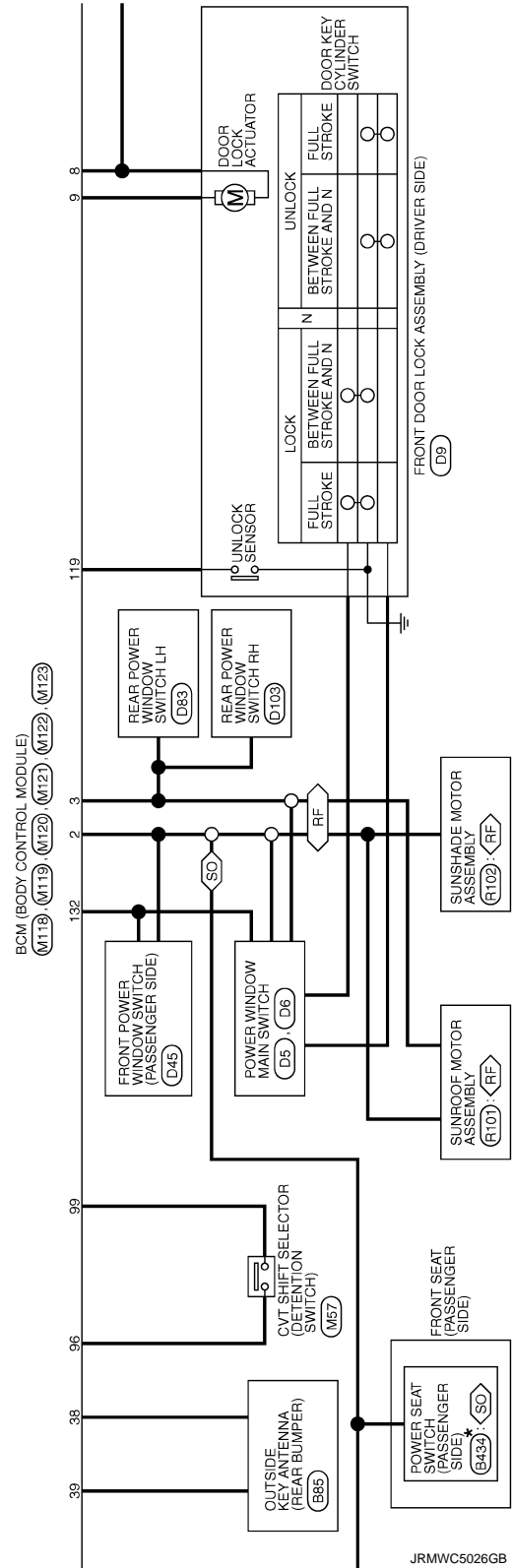
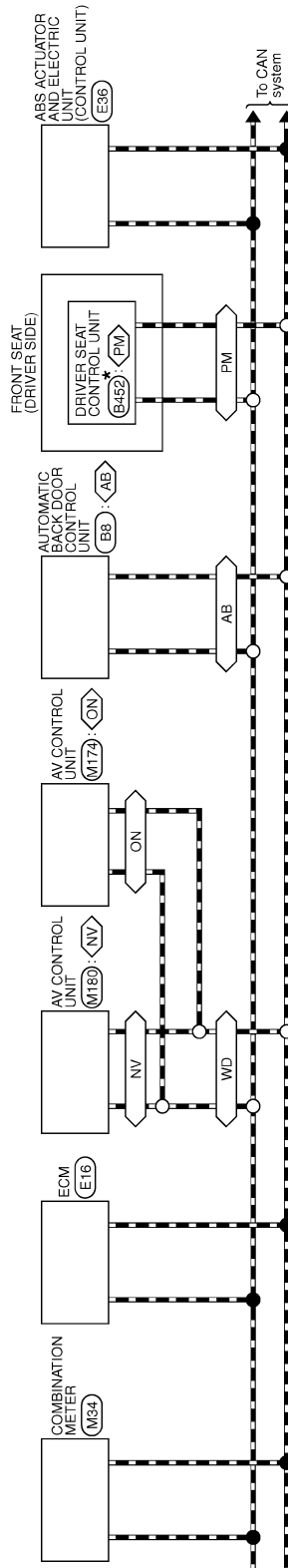
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

- <NV>: With navigation system
- <ON>: Without navigation system
- <RF>: With sunroof
- <PM>: With automatic drive positioner
- <SO>: With power seat without automatic drive positioner
- <AB>: With automatic back door
- <WD>: With color display

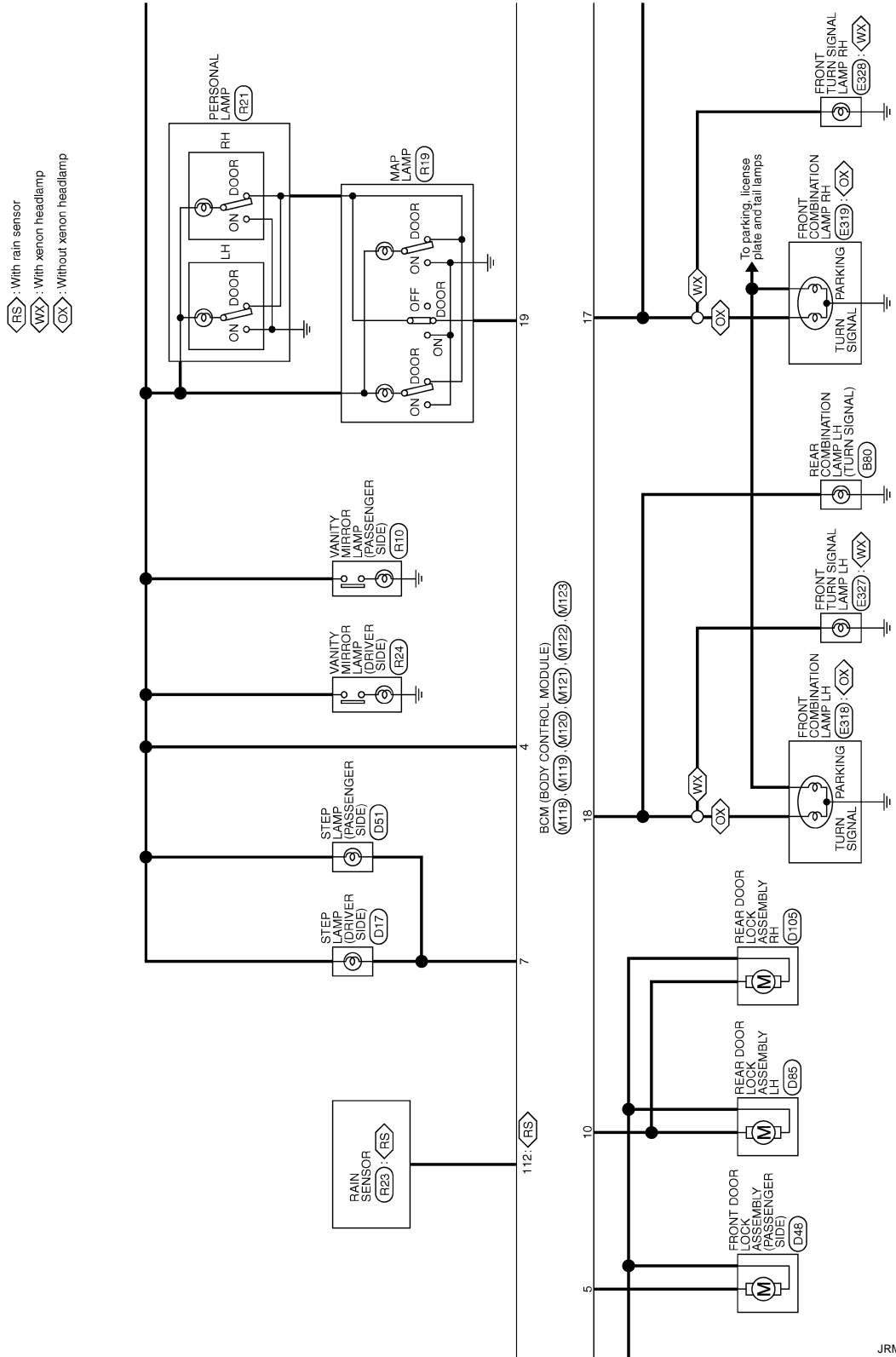
*: This connector is not shown in "Harness Layout".



JRMWC5026GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



JRMWC5027GB

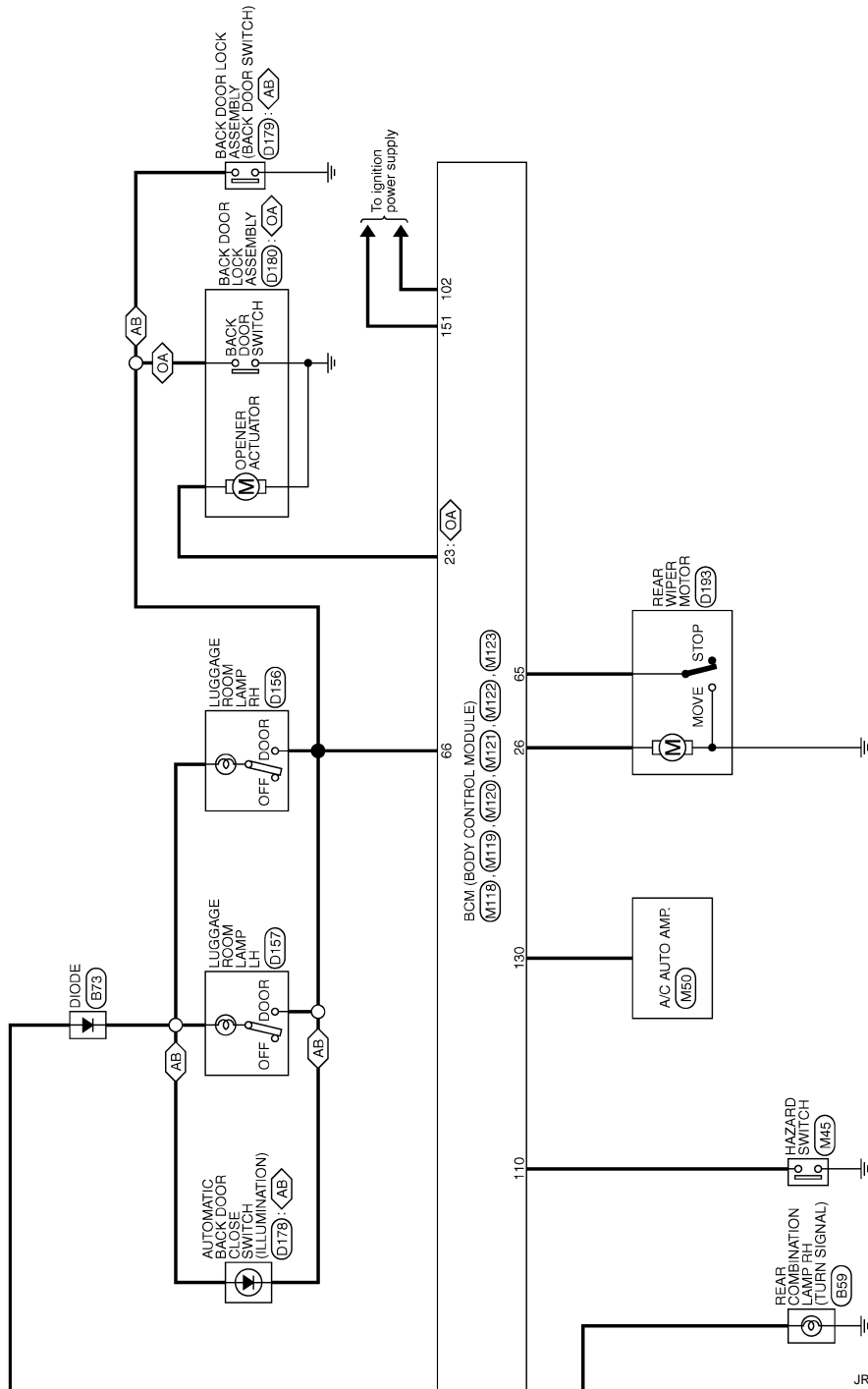
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

◊AB◊ : With automatic back door
 ◊OA◊ : Without automatic back door



JRMWC5028GB

Fail-safe

INFOID:000000007793829

FAIL-SAFE CONTROL BY DTC

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

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

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

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

NOTE:

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

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

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

Condition of cancellation

1. More than 1 minute is passed after the rear wiper stop.
2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:000000007793830

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

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> • U1000: CAN COMM • U1010: CONTROL UNIT(CAN)
3	<ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING
4	<ul style="list-style-type: none"> • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	<ul style="list-style-type: none"> • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:000000007793831

NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [BCS-18. "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-38
U1010: CONTROL UNIT(CAN)	—	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-40
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-42
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-45
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-46
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-48
B2195: ANTI SCANNING	×	—	—	—	SEC-49
B2553: IGNITION RELAY	—	×	—	—	PCS-47
B2555: STOP LAMP	—	×	—	—	SEC-50
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-52
B2557: VEHICLE SPEED	×	×	×	—	SEC-54
B2560: STARTER CONT RELAY	×	×	×	—	SEC-55
B2562: LOW VOLTAGE	—	×	—	—	BCS-41
B2601: SHIFT POSITION	×	×	×	—	SEC-56
B2602: SHIFT POSITION	×	×	×	—	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-61
B2604: PNP SW	×	×	×	—	SEC-64
B2605: PNP SW	×	×	×	—	SEC-66
B2608: STARTER RELAY	×	×	×	—	SEC-68
B260A: IGNITION RELAY	×	×	×	—	PCS-49
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-70
B2614: ACC RELAY CIRC	—	×	×	—	PCS-51
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-54
B2616: IGN RELAY CIRC	—	×	×	—	PCS-57
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-72
B2618: BCM	×	×	×	—	PCS-60
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-75
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-78
B2622: INSIDE ANTENNA	—	×	—	—	DLK-91
B2623: INSIDE ANTENNA	—	×	—	—	DLK-93
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-71
C1704: LOW PRESSURE FL	—	—	—	×	WT-20
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1708: [NO DATA] FL	—	—	—	×	WT-22
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-25
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-26
C1734: CONTROL UNIT	—	—	—	×	WT-27

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:000000007543218

- 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:000000007543219

1.CHECK PARKING BRAKE WARNING LAMP

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

When parking brake is applied : ON

When parking brake is released : OFF

Is the inspection result normal?

YES >> Replace the combination meter.

NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK PARKING BRAKE SWITCH

Perform a unit check for the parking brake switch. Refer to [MWI-54, "Component Inspection"](#).

Is the inspection result normal?

YES >> Replace the combination meter.

NO >> Replace the parking brake switch. Refer to [PB-6, "Exploded View"](#).

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THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description

INFOID:000000007543220

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

Diagnosis Procedure

INFOID:000000007543221

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-117, "Symptom Table"](#) (xenon type) or [EXL-264, "Symptom Table"](#) (halogen type).

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

Perform the check for the front door switch (driver side) signal circuit. Refer to [DLK-97, "WITH AUTOMATIC BACK DOOR : Diagnosis Procedure"](#) (with automatic back door) or [DLK-99, "WITHOUT AUTOMATIC BACK DOOR : Diagnosis Procedure"](#) (without automatic back door).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Perform a unit check for the front door switch (driver side). Refer to [DLK-98, "WITH AUTOMATIC BACK DOOR : Component Inspection"](#) (with automatic back door) or [DLK-101, "WITHOUT AUTOMATIC BACK DOOR : Component Inspection"](#) (without automatic back door).

Is the inspection result normal?

YES >> Replace the BCM. Refer to [BCS-83, "Removal and Installation"](#).

NO >> Replace the front door switch (driver side). Refer to [DLK-313, "Removal and Installation"](#).

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

Description

INFOID:000000007543222

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

Diagnosis Procedure

INFOID:000000007543223

1. CHECK SEAT BELT WARNING LAMP

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

Seat belt fastened	: OFF
Seat belt not fastened	: ON

Is the inspection result normal?

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

2. CHECK BCM OUTPUT SIGNAL

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

Is the inspection result normal?

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

3. CHECK COMBINATION METER INPUT SIGNAL

Check if buzzer switches to proper condition (On/Off) on data monitor of combination meter. Refer to [MWI-35, "CONSULT Function \(METER/M&A\)"](#).

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

Is the inspection result normal?

- YES >> Replace the combination meter.
NO >> Replace the BCM. Refer to [BCS-83, "Removal and Installation"](#).

4. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

Perform the check for the seat belt buckle switch circuit. Refer to [WCS-25, "Diagnosis Procedure"](#).

Is the inspection result normal?

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

5. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

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

Is the inspection result normal?

- YES >> Replace the combination meter.
NO >> Replace the seat belt buckle. Refer to [SB-9, "SEAT BELT BUCKLE : Removal and Installation"](#).

THE KEY WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE KEY WARNING DOES NOT SOUND

Description

INFOID:000000007543224

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

- Key inserted into the key slot. (Key slot switch ON)
- Ignition switch is not in ON or START. (Ignition switch signal OFF)
- Front door switch (driver side) is open. [Door switch signal (driver side) ON]

Diagnosis Procedure

INFOID:000000007543225

1. CHECK BCM INPUT SIGNAL

-
1. Connect CONSULT.
 2. Select the "Data Monitor" of "BCM (BUZZER)" and check the "KEY SW-SLOT" monitor value. Refer to [BCS-47, "Reference Value"](#).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-83, "Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK KEY SLOT SWITCH SIGNAL CIRCUIT

Check the key slot switch signal circuit. Refer to [DLK-129, "Diagnosis Procedure"](#).

Is the inspection result normal?

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

3. CHECK DOOR SWITCH SIGNAL (DRIVER SIDE) CIRCUIT

Check the door switch signal (driver side) circuit. Refer to [DLK-97, "WITH AUTOMATIC BACK DOOR : Diagnosis Procedure"](#) (with automatic back door) or [DLK-99, "WITHOUT AUTOMATIC BACK DOOR : Diagnosis Procedure"](#) (without automatic back door).

Is the inspection result normal?

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

4. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check the front door switch (driver side). Refer to [DLK-98, "WITH AUTOMATIC BACK DOOR : Component Inspection"](#) (with automatic back door) or [DLK-101, "WITHOUT AUTOMATIC BACK DOOR : Component Inspection"](#) (without automatic back door).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-83, "Removal and Installation"](#).
NO >> Replace front door switch (driver side). Refer to [DLK-313, "Removal and Installation"](#).

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

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

INFOID:000000007543226

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR MEXICO

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

INFOID:000000007814633

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

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PRECAUTIONS

< PRECAUTION >

Always observe the following items for preventing accidental activation.

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