

SECTION **WCS**

WARNING CHIME SYSTEM

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

CONTENTS

<p>PRECAUTION 3</p> <p>PRECAUTIONS 3</p> <p style="padding-left: 20px;">Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"3</p> <p style="padding-left: 20px;">Precaution for Battery Service3</p> <p style="padding-left: 20px;">Service Procedure Precautions for Models with a Pop-up Roll Bar3</p> <p>SYSTEM DESCRIPTION 4</p> <p>COMPONENT PARTS 4</p> <p style="padding-left: 20px;">Component Parts Location4</p> <p style="padding-left: 20px;">Component Description4</p> <p style="padding-left: 20px;">Combination Meter5</p> <p>WARNING CHIME SYSTEM 6</p> <p>WARNING CHIME SYSTEM6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : System Diagram6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : System Description6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : Fail-Safe7</p> <p>LIGHT REMINDER WARNING CHIME8</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : System Diagram8</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : System Description8</p> <p>SEAT BELT WARNING CHIME8</p> <p style="padding-left: 20px;">SEAT BELT WARNING CHIME : System Diagram8</p> <p style="padding-left: 20px;">SEAT BELT WARNING CHIME : System Description8</p> <p>PARKING BRAKE RELEASE WARNING CHIME.....9</p> <p style="padding-left: 20px;">PARKING BRAKE RELEASE WARNING CHIME : System Diagram9</p> <p style="padding-left: 20px;">PARKING BRAKE RELEASE WARNING CHIME : System Description9</p>	<p>KEY WARNING CHIME 9</p> <p style="padding-left: 20px;">KEY WARNING CHIME : System Diagram10</p> <p style="padding-left: 20px;">KEY WARNING CHIME : System Description10</p> <p>DIAGNOSIS SYSTEM (METER)11</p> <p style="padding-left: 20px;">CONSULT Function11</p> <p>DIAGNOSIS SYSTEM (BCM)15</p> <p>COMMON ITEM15</p> <p style="padding-left: 20px;">COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)15</p> <p>BUZZER16</p> <p style="padding-left: 20px;">BUZZER : CONSULT Function (BCM - BUZZER)...16</p> <p>ECU DIAGNOSIS INFORMATION18</p> <p>COMBINATION METER18</p> <p style="padding-left: 20px;">Reference Value18</p> <p style="padding-left: 20px;">Fail-Safe23</p> <p style="padding-left: 20px;">DTC Index24</p> <p>BCM (BODY CONTROL MODULE)25</p> <p style="padding-left: 20px;">List of ECU Reference25</p> <p>WIRING DIAGRAM26</p> <p>WARNING CHIME SYSTEM26</p> <p style="padding-left: 20px;">Wiring Diagram26</p> <p>BASIC INSPECTION27</p> <p>DIAGNOSIS AND REPAIR WORKFLOW27</p> <p style="padding-left: 20px;">Work Flow27</p> <p>DTC/CIRCUIT DIAGNOSIS29</p> <p>POWER SUPPLY AND GROUND CIRCUIT29</p> <p>COMBINATION METER29</p> <p style="padding-left: 20px;">COMBINATION METER : Diagnosis Procedure29</p> <p>METER BUZZER CIRCUIT30</p>
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WCS

Description	30	Description	33
Component Function Check	30	Diagnosis Procedure	33
Diagnosis Procedure	30		
SEAT BELT BUCKLE SWITCH SIGNAL CIR- CUIT	31	THE LIGHT REMINDER WARNING DOES NOT SOUND	34
Description	31	Description	34
Component Function Check	31	Diagnosis Procedure	34
Diagnosis Procedure	31		
Component Inspection	32	THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND	35
SYMPTOM DIAGNOSIS	33	Description	35
		Diagnosis Procedure	35
THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND	33	THE KEY WARNING DOES NOT SOUND	36
		Description	36
		Diagnosis Procedure	36

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000007565159

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.

Precaution for Battery Service

INFOID:000000007565160

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Service Procedure Precautions for Models with a Pop-up Roll Bar

INFOID:000000007565161

WARNING:

Always observe the following items for preventing accidental activation.

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative, all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

A
B
C
D
E
F
G
H
I
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L
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WCS

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P

COMPONENT PARTS

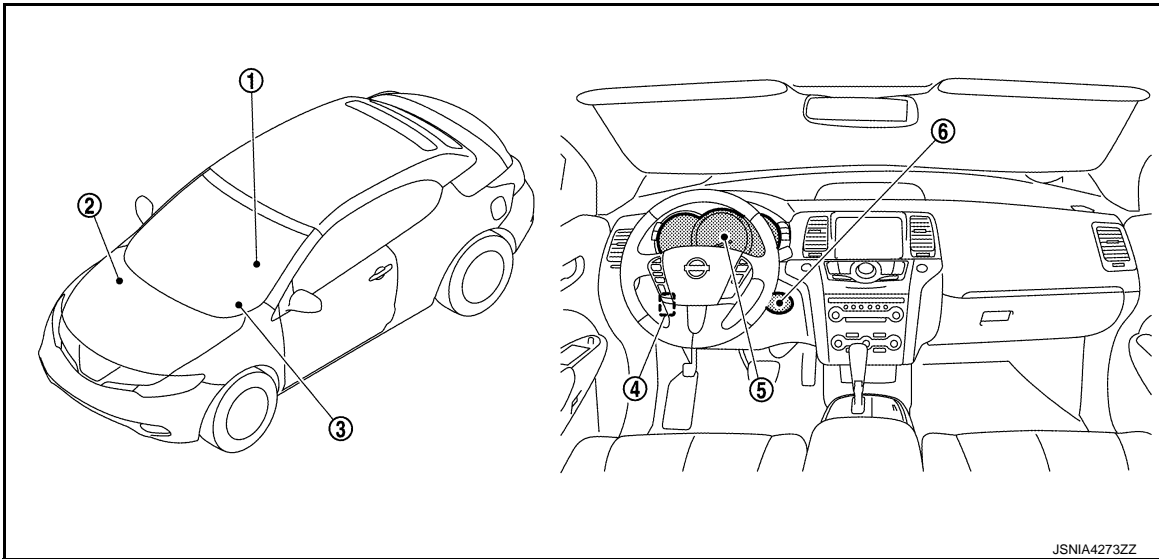
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:000000007565162



JSNIA4273ZZ

- | | | |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1. Seat belt buckle switch (driver side) | 2. ABS actuator and electric unit (control unit)
Refer to BRC-8, "Component Parts Location" | 3. BCM
Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location" |
| 4. Parking brake | 5. Combination meter | 6. Key slot |

Component Description

INFOID:000000007565163

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.
BCM	Based on the signals received from various units and switches, transmits the buzzer output signal to the combination meter via CAN communication.
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.
Parking brake switch	Transmits the parking brake switch signal to the combination meter.
Key slot	Transmits the key slot switch signal to BCM.

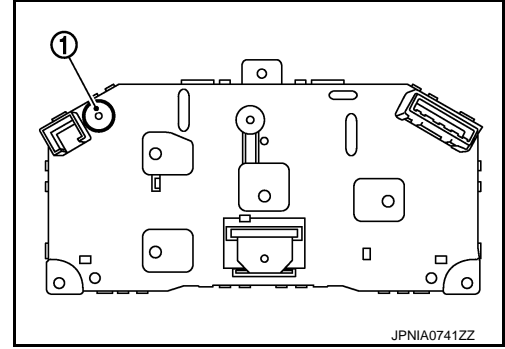
COMPONENT PARTS

< SYSTEM DESCRIPTION >

Combination Meter

INFOID:000000007565164

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



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I
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M
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WCS

WARNING CHIME SYSTEM

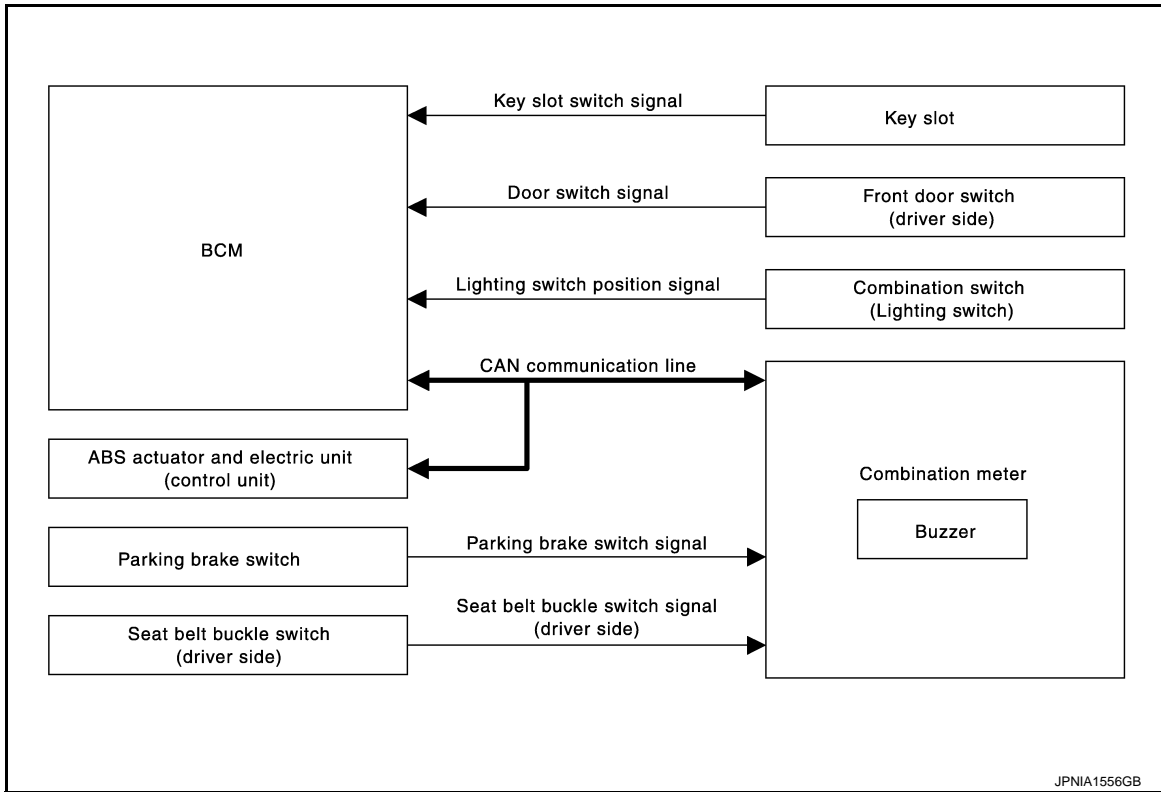
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WARNING CHIME SYSTEM

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM : System Diagram

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WARNING CHIME SYSTEM : System Description

INFOID:000000007565166

COMBINATION METER

The combination meter sounds the alarm buzzer installed in the combination meter when receiving the buzzer output signal transmitted from each unit.

BCM

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

WARNING CHIME FUNCTION LIST

Warning functions	Out line	Warning judgment unit	Refer to
Light reminder warning chime	The warning chime sounds when the ignition switch is in OFF or ACC position with the combination switch (lighting switch) in the 1st or 2nd position and the driver side door open.	BCM	WCS-8. "LIGHT REMINDER WARNING CHIME : System Description"
Seat belt warning chime	The warning chime sounds when the driver seat belt is unfastened with the ignition switch in ON position.	BCM	WCS-8. "SEAT BELT WARNING CHIME : System Description"

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

Warning functions	Out line	Warning judgment unit	Refer to
Parking brake release warning chime	The warning chime sounds when the ignition switch is in ON position with the parking brake in operation and the vehicle speed 7 km/h (4.3 MPH) or more.	Combination meter	WCS-9, "PARKING BRAKE RELEASE WARNING CHIME : System Description"
Key warning chime	The warning chime sounds when the ignition switch is in OFF or ACC position with the key inserted and the driver side door open.	BCM	WCS-10, "KEY WARNING CHIME : System Description"

WARNING CHIME SYSTEM : Fail-Safe

INFOID:000000007565167

FAIL-SAFE

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

Function	Specifications		
Speedometer	Reset to zero by suspending communication.		
Tachometer			
Engine coolant temperature gauge			
Illumination control	When suspending communication, changes to nighttime mode.		
Information display	Door open warning		
	Trunk open warning		
	Parking brake release warning	The display turns off by suspending communication.	
	Low tire pressure warning		
	Fuel filler cap warning		
	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		
	VDC warning lamp		
	Brake warning lamp	The lamp turns on by suspending communication.	
	AWD warning lamp		
	Malfunction indicator lamp		
	Low tire pressure warning lamp	The lamp turns ON after flashing for 1 minute.	
	High beam indicator lamp	The lamp turns off by suspending communication.	
	Turn signal indicator lamp		
	Light indicator lamp		
	Oil pressure warning lamp		
	CRUISE indicator lamp		
	O/D OFF indicator lamp		
	VDC OFF indicator lamp		
AWD LOCK indicator lamp			
Key warning lamp			

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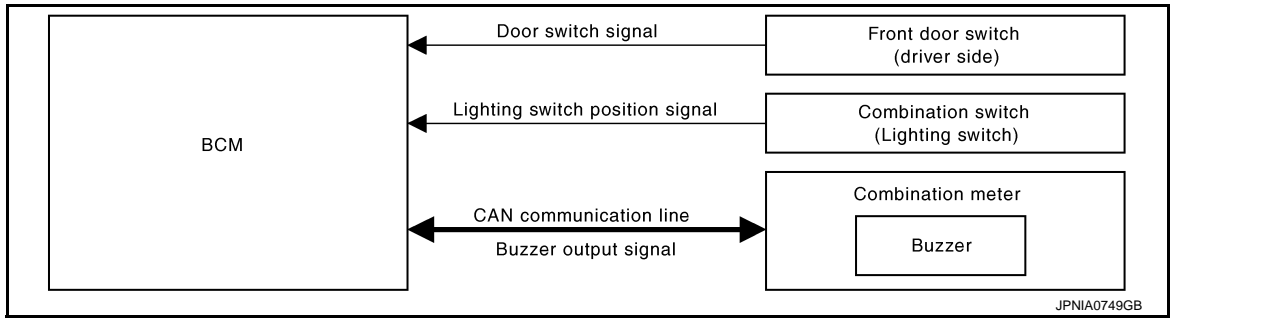
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WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME : System Diagram



LIGHT REMINDER WARNING CHIME : System Description

INFOID:000000007565169

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

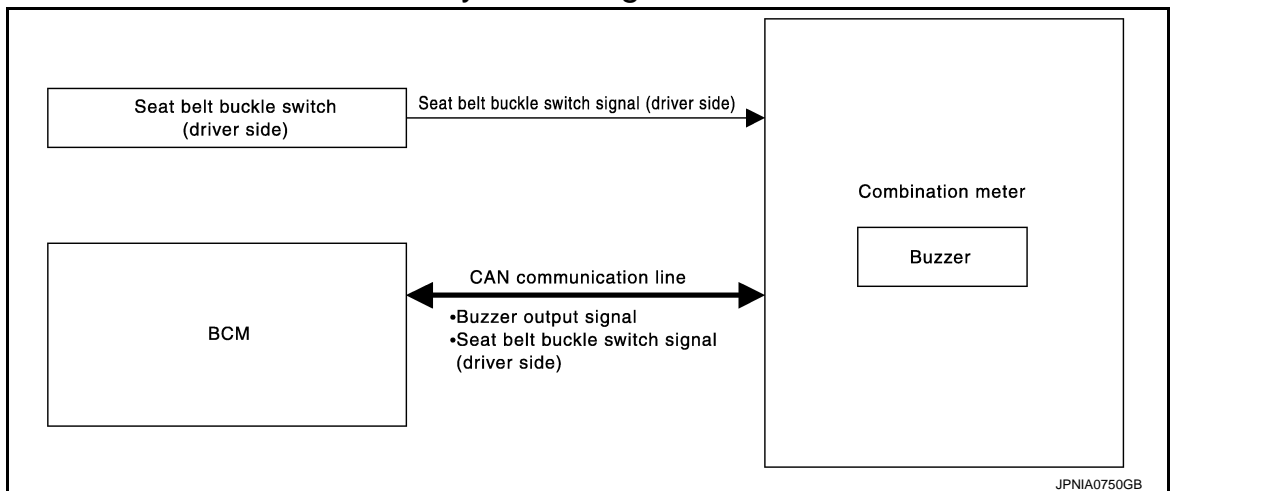
WARNING CANCEL CONDITIONS

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

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

SEAT BELT WARNING CHIME

SEAT BELT WARNING CHIME : System Diagram



SEAT BELT WARNING CHIME : System Description

INFOID:000000007565171

DESCRIPTION

WARNING CHIME SYSTEM

< SYSTEM 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

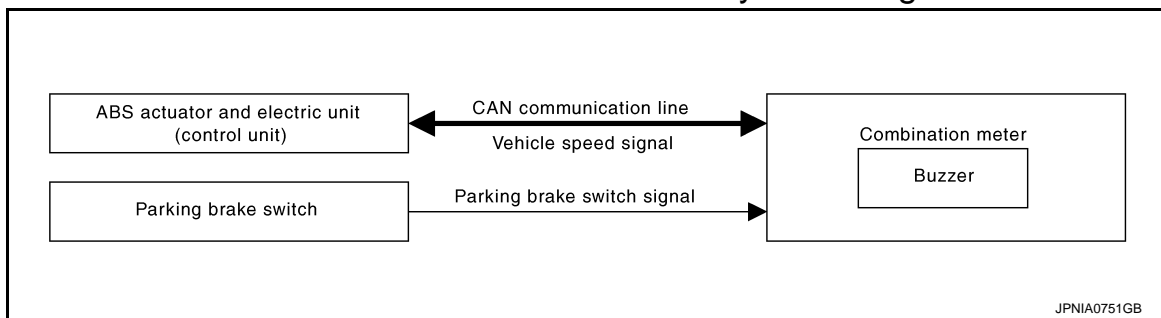
Warning is canceled if any of the following conditions are fulfilled.

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

PARKING BRAKE RELEASE WARNING CHIME

PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:000000007565172



PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:000000007565173

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

KEY WARNING CHIME

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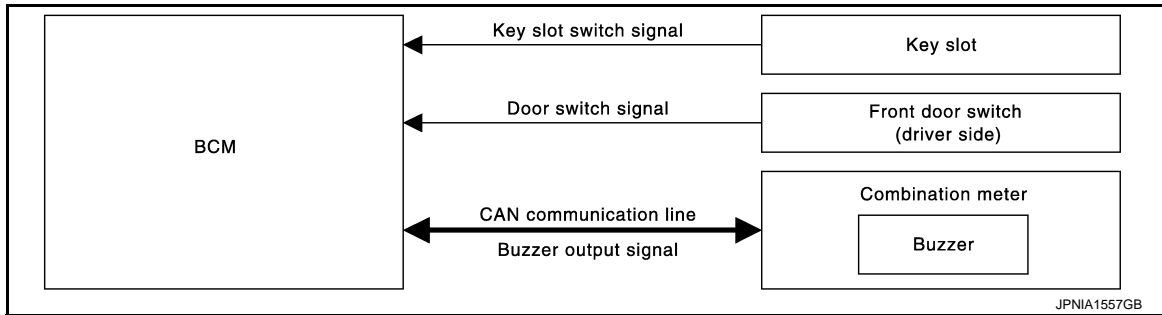
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WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

KEY WARNING CHIME : System Diagram

INFOID:000000007565174



KEY WARNING CHIME : System Description

INFOID:000000007565175

DESCRIPTION

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

WARNING OPERATION CONDITIONS

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

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

WARNING CANCEL CONDITIONS

Warning canceled if any of the following conditions are fulfilled.

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

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (METER)

CONSULT Function

INFOID:000000007710086

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-31, "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.
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.
TRUNK/GLAS-H [On/Off]		Status of trunk warning detected from trunk 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.

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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.
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.
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.
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.
A/C AMP CONN [On/Off]		Status of A/C auto amp. connection recognition signal.
ENTER SW [On/Off]		Status of  (ENTER) switch.

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
SELECT SW [On/Off]		Status of ● (SELECT) switch.
DISTANCE [km]		Value of possible driving distance calculated by combination meter.
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.
TPMS PRESS L [On/Off]		Status of check low tire pressure warning detected from low tire pressure warning lamp signal received from BCM via CAN communication.

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 the parking 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.
TRUNK/GLAS-H	Lighting history of trunk 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:000000007793832

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	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
<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	×	×	×
Trunk lid opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

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

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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:000000007565178

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).

WCS

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:000000007709436

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
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 ON	On
		Door warning OFF	Off
TRUNK/GLAS-H	Ignition switch ON	Trunk warning ON	On
		Trunk warning 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 warning lamp ON	On	G
		Low tire pressure warning 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	
FUEL CAP W/L	Ignition switch ON	Fuel filler cap warning display ON	On	P
		Fuel filler cap warning display OFF	Off	
O/D OFF SW	Ignition switch ON	Overdrive control switch ON	On	
		Overdrive control switch OFF	Off	
M RANGE SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	

COMBINATION METER

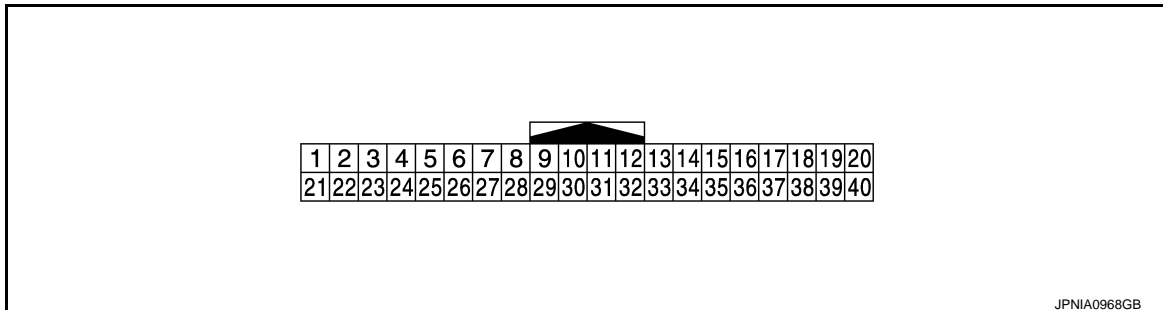
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
NM RANGE SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
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
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
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
DISTANCE [km]	Ignition switch ON	—	Distance to empty calculated by combination meter
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
TPMS PRESS L	Power switch ON	During check tire pressure warning indication	On
		Other than the above	Off

NOTE:

Some items are not available according to vehicle specification.

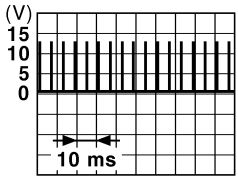
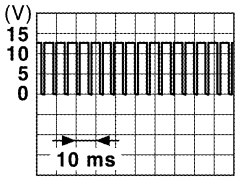
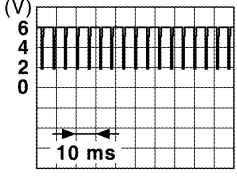
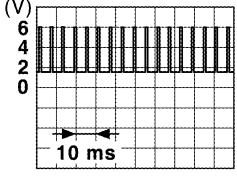

TERMINAL LAYOUT



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 (O)	Ground	Ignition signal	Input	Ignition switch ON —	Battery voltage	
3 (B)	Ground	Ground	—	Ignition switch ON —	0 V	
4 (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  <p style="text-align: right; font-size: small;">JPNIA0828GB</p>	
					<ul style="list-style-type: none"> Lighting switch 1ST When meter illumination is minimum  <p style="text-align: right; font-size: small;">JSNIA4277GB</p>	
8 (SB)	10 (O)	Trip reset signal	Input	Ignition switch ON	When trip reset switch is pressed.	0 V
					Other than the above	5 V
9 (W)	Ground	Illumination control signal (illumination control switch)	Output	Ignition switch ON	<ul style="list-style-type: none"> Lighting switch 1ST When meter illumination is maximum  <p style="text-align: right; font-size: small;">JSNIA4278GB</p>	
					<ul style="list-style-type: none"> Lighting switch 1ST When meter illumination is minimum  <p style="text-align: right; font-size: small;">JSNIA4279GB</p>	
10 (O)	Ground	Meter control switch ground	—	Ignition switch ON —	0 V	
11 (L)	10 (O)	Enter switch signal	Input	Ignition switch ON	When  is pressed.	0 V
					Other than the above	5 V

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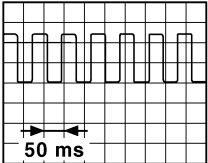
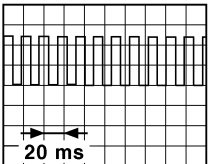
COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
12 (R)	10 (O)	Select switch signal	Input	Ignition switch ON	When ● is pressed.	0 V
					Other than the above	5 V
13 (V)	10 (O)	Illumination control switch signal (+)	Input	Ignition switch ON	When ⚡+ is pressed.	0 V
					Other than the above	5 V
14 (GR)	10 (O)	Illumination control switch signal (-)	Input	Ignition switch ON	When ⚡- is pressed.	0 V
					Other than the above	5 V
15 (BR)	—	Air bag signal	Input	—	—	—
18 (L)	Ground	Ambient sensor signal	Input	Ignition switch ON	Changes depending to amb- ient temperature.	<p style="text-align: center;">JSNIA0014GB</p>
19 (P)	Ground	A/C auto amp. connection recognition signal	Input	Ignition switch ON	—	5 V
20 (Y)	Ground	Ambient sensor ground	Input	Ignition switch ON	—	0 V
21 (L)	—	CAN-H	—	—	—	—
22 (P)	—	CAN-L	—	—	—	—
23 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
24 (W)	Ground	Fuel level sensor ground	—	Ignition switch ON	—	0 V
25 (BR)	Ground	Alternator signal	Input	Ignition switch ON	Charge warning lamp ON	2 V
					Charge warning lamp OFF	12 V
26 (G)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	5 V
27 (V)	Ground	Brake fluid level switch sig- nal	Input	Ignition switch ON	Brake fluid level is normal	12 V
					Brake fluid level is less than LOW level	0 V
28 (R)	Ground	Roof status signal	Input	Ignition switch ON	Soft top indicator lamp ON	0 V
					Soft top indicator lamp OFF	12 V
29 (R)	Ground	Washer level switch signal	Input	Ignition switch ON	Washer level switch ON	0 V
					Washer level switch OFF	5 V

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
30 (P)	Ground	Vehicle speed signal (2-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>JSNIA0015GB</small>	
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
				Ignition switch OFF	Overdrive control switch not pressed.	5 V
34 (G)	Ground	Fuel level sensor signal	Input	Ignition switch ON	—	MWI-49, "Component Inspec- tion"
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)	—	Seat belt buckle switch sig- nal (passenger side)	Input	—	—	—

Fail-Safe

INFOID:000000007709437

FAIL-SAFE

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

WCS

Function	Specifications
Speedometer	Reset to zero by suspending communication.
Tachometer	
Engine coolant temperature gauge	
Illumination control	When suspending communication, changes to nighttime mode.

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Function		Specifications	
Information display	Door open warning	The display turns off by suspending communication.	
	Trunk open warning		
	Parking brake release warning		
	Low tire pressure warning		
	Fuel filler cap warning		
	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.	
	VDC warning lamp		
	Brake warning lamp		
	AWD warning lamp		
	Malfunction indicator lamp		
	Low tire pressure warning lamp	The lamp turns ON after flashing for 1 minute.	
	High beam indicator lamp	The lamp turns off by suspending communication.	
	Turn signal indicator lamp		
	Light indicator lamp		
	Oil pressure warning lamp		
	CRUISE indicator lamp		
	O/D OFF indicator lamp		
	VDC OFF indicator lamp		
	AWD LOCK indicator lamp		
Key warning lamp			

DTC Index

INFOID:000000007709438

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-42. "Diagnosis Procedure"
CONTROL UNIT (CAN) [U1010]	When detecting error during the initial diagnosis of the CAN controller of combination meter.	MWI-43. "Diagnosis Procedure"
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from the ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-44. "Diagnosis Procedure"
ENGINE SPEED [B2267]	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-45. "Diagnosis Procedure"
WATER TEMP [B2268]	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-46. "Diagnosis Procedure"

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:000000007565182

ECU	Reference
BCM	BCS-31. "Reference Value"
	BCS-53. "Fail-safe"
	BCS-53. "DTC Inspection Priority Chart"
	BCS-54. "DTC Index"

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WARNING CHIME SYSTEM


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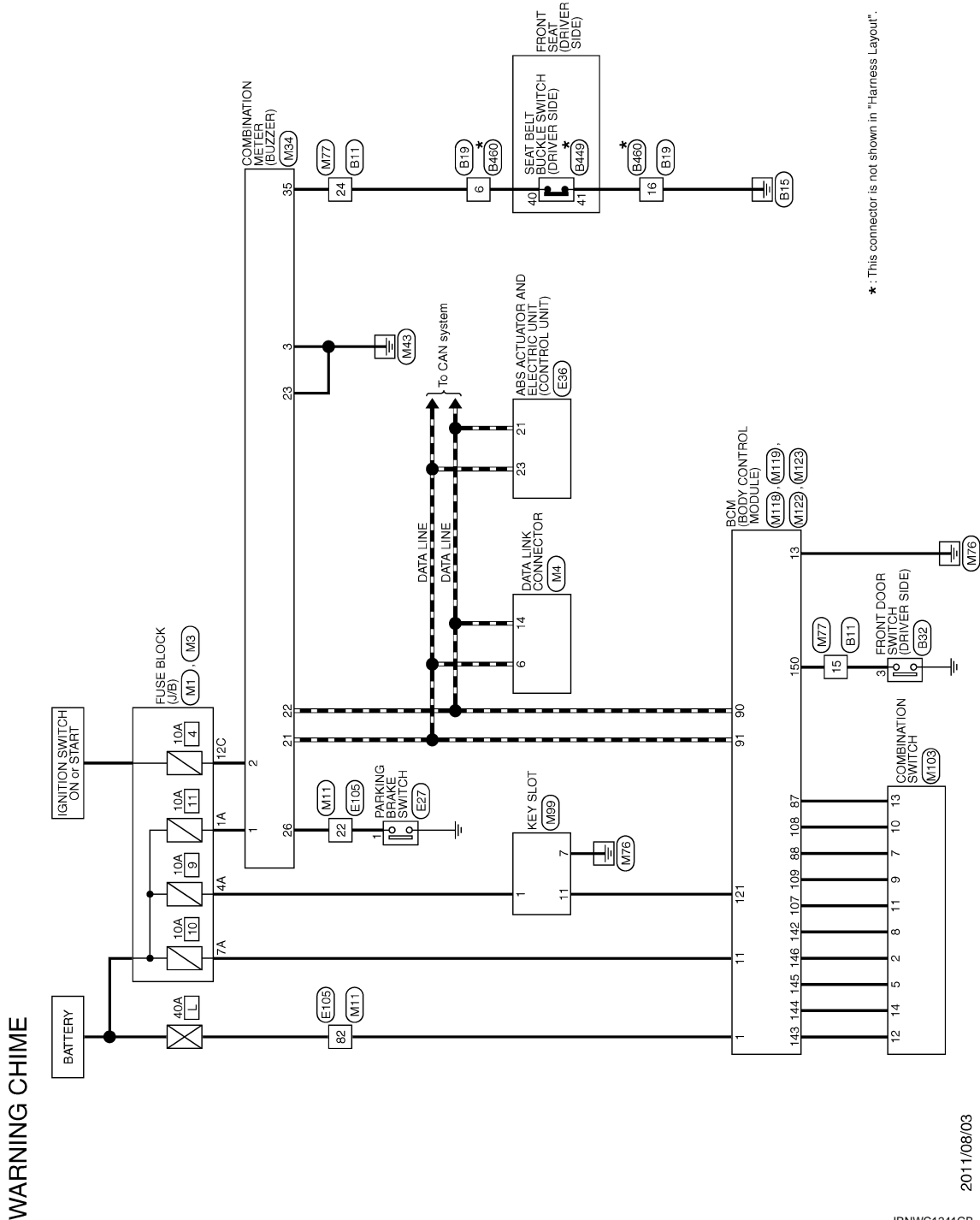
WIRING DIAGRAM

WARNING CHIME SYSTEM

Wiring Diagram

INFOID:000000007565183

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



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

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

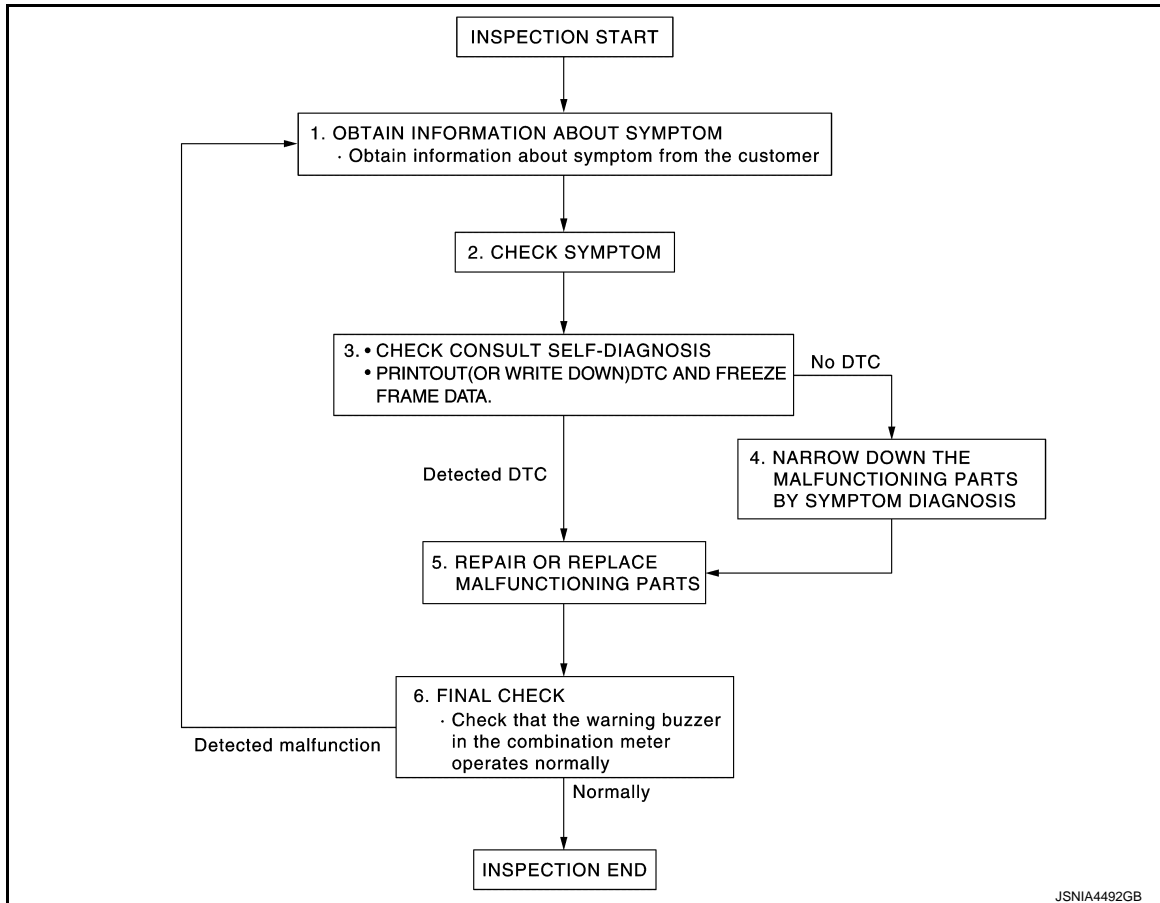
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000007565184

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-24. "DTC Index"](#).
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.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

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.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER : Diagnosis Procedure

INFOID:000000007710087

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		

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	
	4	
	23	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Description

INFOID:000000007565186

- 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:000000007565187

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-76, "Removal and Installation"](#).

Diagnosis Procedure

INFOID:000000007565188

1. CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to [MWI-47, "COMBINATION METER : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Repair power supply circuit of combination meter. Refer to [MWI-47, "COMBINATION METER : Diagnosis Procedure"](#).

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description

INFOID:000000007565189

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

Component Function Check

INFOID:000000007565190

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:000000007565191

1.CHECK COMBINATION METER INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> Replace combination meter. Refer to [MWI-70. "Removal and Installation"](#).

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	B449	40	

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

Terminals		Ground	Continuity
(+)	(-)		
Combination meter			
Connector	Terminal		
M34	35		

Is the inspection result normal?

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WCS

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- 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		Ground	Continuity
(+)	(-)		
Combination meter		Ground	Exist
Connector	Terminal		
B449	41		

Is the inspection result normal?

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

Component Inspection

INFOID:000000007565192

1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

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

Terminals				Condition	Continuity
(+)		(-)			
Seat belt buckle switch (driver side)				When seat belt is fastened	Not existed
Connector	Terminal	Connector	Terminal		
B449	40	B449	41		

Is the inspection result normal?

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

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:000000007565193

- 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:000000007565194

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. Refer to [MWI-70. "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform a check for the parking brake switch signal circuit. Refer to [MWI-56. "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-56. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace the combination meter. Refer to [MWI-70. "Removal and Installation"](#).
NO >> Replace the parking brake switch. Refer to [PB-6. "Exploded View"](#).

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WCS

THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description

INFOID:000000007565195

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

Diagnosis Procedure

INFOID:000000007565196

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-57, "Symptom Table"](#).

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

Perform the check for the front door switch (driver side) signal circuit. Refer to [DLK-55, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Perform a unit check for the front door switch (driver side). Refer to [DLK-56, "Component Inspection"](#).

Is the inspection result normal?

YES >> Replace the BCM. Refer to [BCS-76, "Removal and Installation"](#).

NO >> Replace the front door switch (driver side). Refer to [DLK-171, "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:000000007565197

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

Diagnosis Procedure

INFOID:000000007565198

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-16, "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-21, "CONSULT Function"](#).

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

Is the inspection result normal?

- YES >> Replace the combination meter. Refer to [MWI-70, "Removal and Installation"](#).
NO >> Replace the BCM. Refer to [BCS-76, "Removal and Installation"](#).

4.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

Perform the check for the seat belt buckle switch circuit. Refer to [WCS-31, "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-32, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace the combination meter. Refer to [MWI-70, "Removal and Installation"](#).
NO >> Replace the seat belt buckle. Refer to [SB-7, "SEAT BELT BUCKLE : Removal and Installation"](#).

THE KEY WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE KEY WARNING DOES NOT SOUND

Description

INFOID:000000007565199

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:000000007565200

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-31, "Reference Value"](#).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK KEY SLOT SWITCH SIGNAL CIRCUIT

Check the key slot switch signal circuit. Refer to [DLK-91, "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-55, "Diagnosis Procedure"](#).

Is the inspection result normal?

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

4. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check the front door switch (driver side). Refer to [DLK-56, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).
NO >> Replace front door switch (driver side). Refer to [DLK-171, "Removal and Installation"](#).