

# SECTION **WCS**

## WARNING CHIME SYSTEM

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# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

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

INFOID:000000010340080

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 SR and SB section of this Service Manual.

**WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

**WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT 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 three minutes before performing any service.

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# COMPONENT PARTS

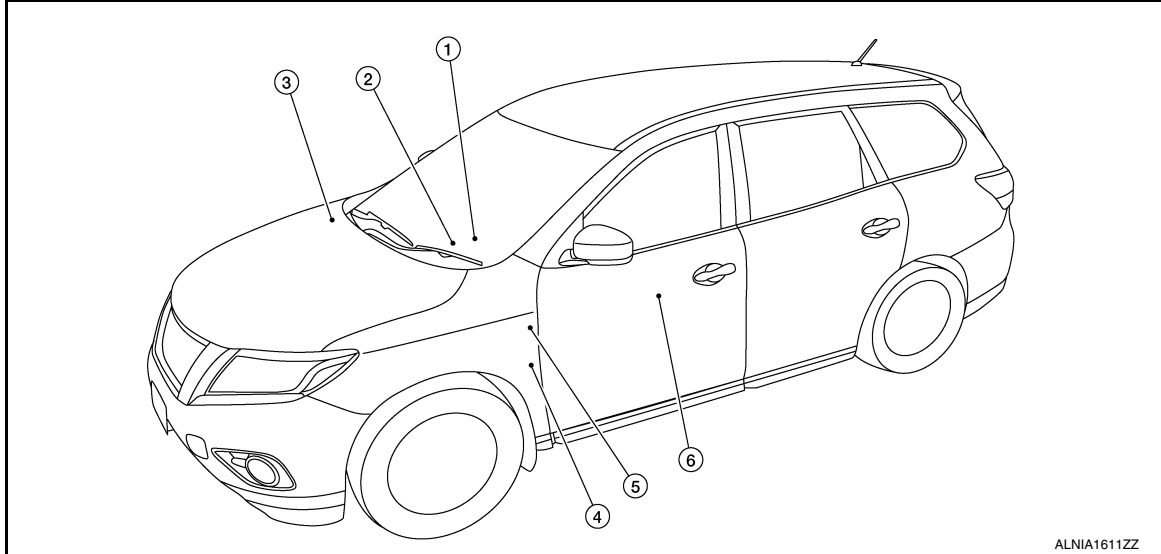
< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

INFOID:000000010338523



ALNIA1611ZZ

No.	Component	Function
1.	Key switch	Transmits the key switch signal to the BCM. Refer to <a href="#">SEC-115, "Component Parts Location"</a> (without Intelligent Key system) for detailed installation location.
2.	Combination meter	<ul style="list-style-type: none"> <li>Receives a buzzer output signal from the BCM with CAN communication line and sounds the buzzer.</li> <li>Controls the following with the vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication and the signals from switches: <ul style="list-style-type: none"> <li>Seat belt reminder warning chime</li> <li>Parking brake release warning chime</li> <li>Key warning chime</li> </ul> </li> </ul>
3.	ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to the combination meter via CAN communication. Refer to <a href="#">BRC-8, "Component Parts Location"</a> for detailed installation location.
4.	Parking brake switch	Transmits the parking brake switch signal to the combination meter.
5.	BCM	Based on the signals received from various units and switches, transmits the buzzer output signal to the combination meter via CAN communication. Refer to <a href="#">BCS-7, "BODY CONTROL SYSTEM : Component Parts Location"</a> (with Intelligent Key system) or <a href="#">BCS-79, "BODY CONTROL SYSTEM : Component Parts Location"</a> (without Intelligent Key system) for detailed installation location.
6.	Seat belt buckle switch LH	Transmits a seat belt buckle switch signal LH to the combination meter.

# COMPONENT PARTS

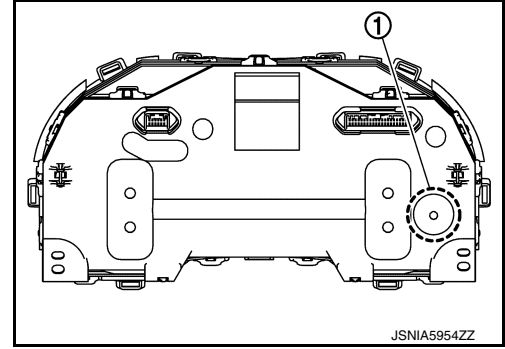
< SYSTEM DESCRIPTION >

## Combination Meter

INFOID:000000010338524

The combination meter has a built-in buzzer (1) and sounds the following warnings, according to signals from each switch and unit:

- Light reminder warning
- Parking brake release warning chime
- Seat belt warning
- Key warning chime



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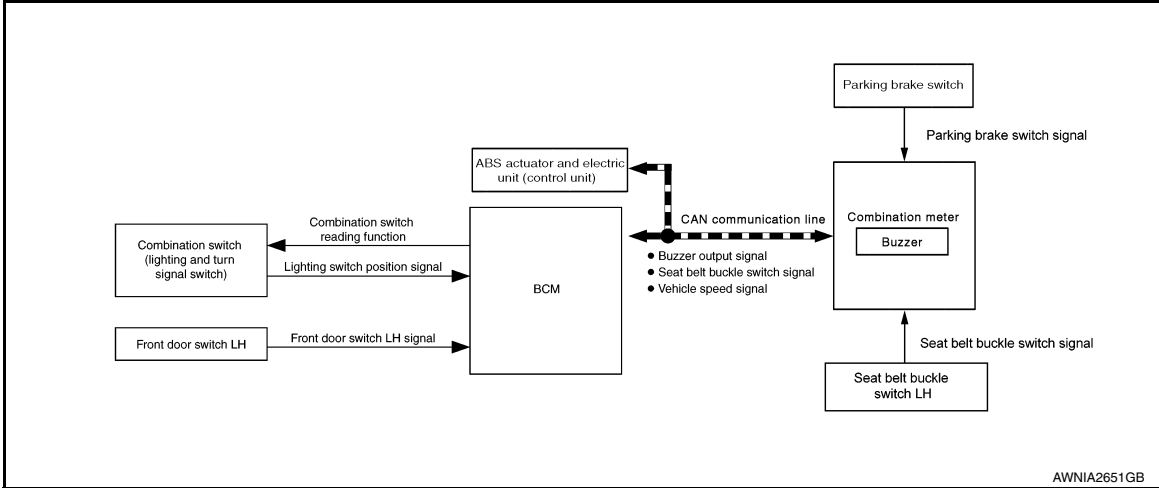
## SYSTEM

### WARNING CHIME SYSTEM

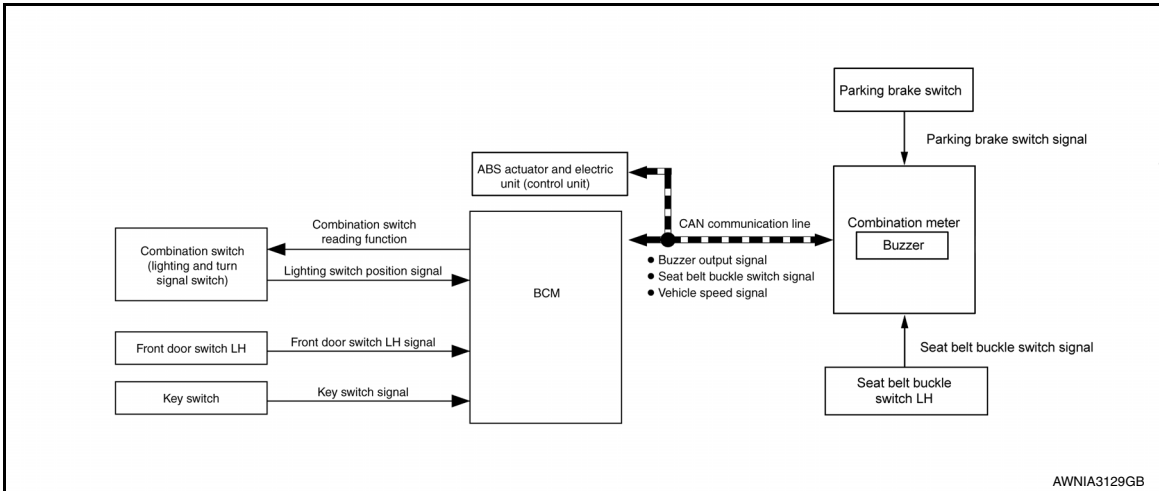
### WARNING CHIME SYSTEM : System Description

INFOID:000000010338525

#### SYSTEM DIAGRAM (WITH INTELLIGENT KEY SYSTEM)



#### SYSTEM DIAGRAM (WITHOUT INTELLIGENT KEY SYSTEM)



#### COMBINATION METER INPUT/OUTPUT SIGNAL (CAN COMMUNICATION SIGNAL)

Input signal

Signal name	Transmit unit
Vehicle speed signal	ABS actuator and electric unit (control unit)
Buzzer output signal	BCM

Output signal

Signal name	Reception unit
Vehicle speed signal	BCM

#### BCM INPUT/OUTPUT SIGNAL (CAN COMMUNICATION SIGNAL)

Input signal

# SYSTEM

## < SYSTEM DESCRIPTION >

Signal name	Transmit unit
Vehicle speed signal	Combination meter

### Output signal

Signal name	Reception unit
Buzzer output signal	Combination meter

## DESCRIPTION

### 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	Refer to
Light reminder warning	<a href="#">WCS-7, "LIGHT REMINDER WARNING CHIME : Light Reminder Warning"</a>
Parking brake release warning chime	<a href="#">WCS-8, "PARKING BRAKE RELEASE WARNING CHIME : Parking Brake Release Warning Chime"</a>
Seat belt warning	<a href="#">WCS-9, "SEAT BELT REMINDER WARNING CHIME : Seat belt Warning"</a>
Key warning chime (without Intelligent Key system)	<a href="#">WCS-10, "KEY WARNING CHIME : Key Warning Chime"</a>

## WARNING CHIME SYSTEM : Fail-safe

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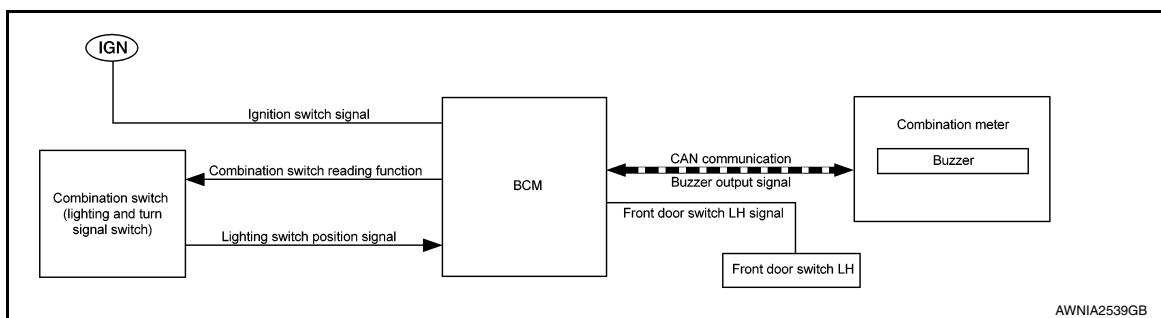
The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning.

Function	Specifications
Buzzer	The buzzer turns OFF by suspending communication.

## LIGHT REMINDER WARNING CHIME

### LIGHT REMINDER WARNING CHIME : Light Reminder Warning

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## WARNING CHIME OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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# SYSTEM

## < SYSTEM DESCRIPTION >

Operation conditions	
Ignition switch	OFF
Combination switch (Lighting switch)	1st or 2nd position
Driver side door	Open [front door switch LH ON]

### WARNING CHIME CANCEL CONDITIONS

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


Operation conditions	
Ignition switch	ON
Combination switch (Lighting switch)	OFF or AUTO position
Driver side door	Close [front door switch LH OFF]

### SIGNAL PATH

1. BCM requires warning chime output to combination meter when it judges light reminder warning chime is necessary from signals below.

Signal name	Signal source
Ignition switch signal	—
Combination switch signal	Combination switch (Lighting switch) → BCM
Driver door switch signal	Front door switch LH → BCM

2. Combination meter sounds integrated buzzer, following the warning chime output requirement (below signal) from BCM.

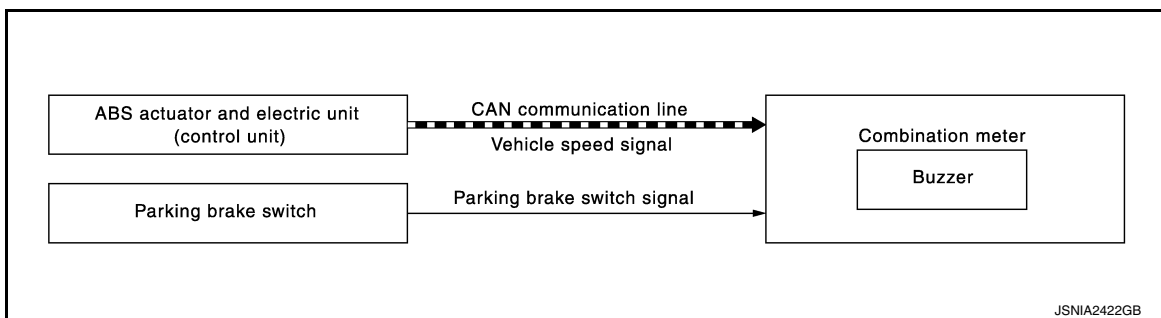
Signal name	Signal source
Buzzer output signal	BCM  → Combination meter

## PARKING BRAKE RELEASE WARNING CHIME

### PARKING BRAKE RELEASE WARNING CHIME : Parking Brake Release Warning Chime

INFOID:000000010338528

### SYSTEM DIAGRAM



### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

Operation conditions	
Ignition switch	ON



# SYSTEM

## < SYSTEM DESCRIPTION >

Operation conditions	
Parking brake	During the operation (parking brake switch ON)
Vehicle speed	Approximately 4.3 MPH (7 km/h) or more

### WARNING CANCEL CONDITIONS

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

Operation conditions	
Ignition switch	OFF
Parking brake	Release condition (parking brake switch OFF)
Vehicle speed	Approximately 1.9 MPH (3 km/h) or less

### SIGNAL PATH

Combination meter sounds integrated buzzer when it judges that parking brake release warning chime is necessary from signals below.

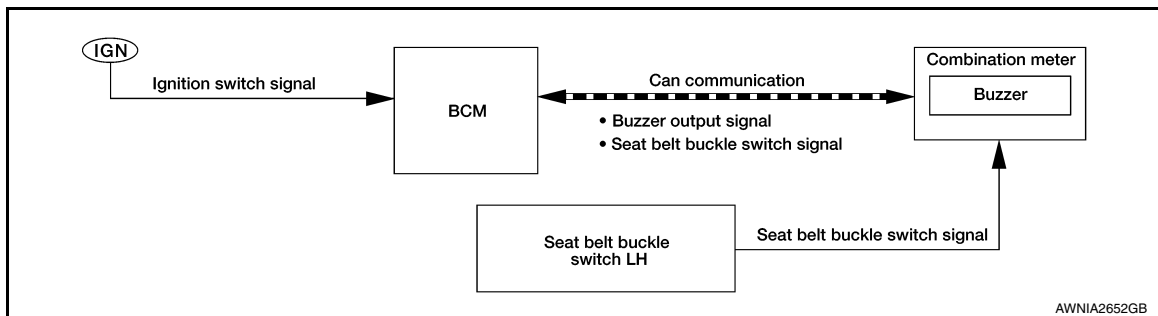
Signal name	Signal source
Ignition switch signal	—
Parking brake switch signal	Parking brake switch → Combination meter
Vehicle speed signal	ABS actuator and electric unit (control unit) <sup>CAN</sup> → Combination meter

## SEAT BELT REMINDER WARNING CHIME

### SEAT BELT REMINDER WARNING CHIME : Seat belt Warning

INFOID:000000010338529

### SYSTEM DIAGRAM



### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

Operation conditions	
Ignition switch	ON
Driver seat belt	Unfastened [seat belt buckle switch LH ON]

### WARNING CANCEL CONDITIONS

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

Operation conditions	
Ignition switch	OFF
Driver seat belt	Fastened (seat belt buckle switch LH OFF)
6 seconds after the start of warning sound	

### SIGNAL PATH

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# SYSTEM

## < SYSTEM DESCRIPTION >

1. BCM requires warning chime output to combination meter when it judges seat belt warning chime is necessary from signals below.

Signal name	Signal source
Ignition switch signal	—
Seat belt buckle switch signal (LH)	Seat belt buckle switch (LH) → Combination meter  → BCM

2. Combination meter sounds integrated buzzer, following the warning chime output requirement (below signal) from BCM.

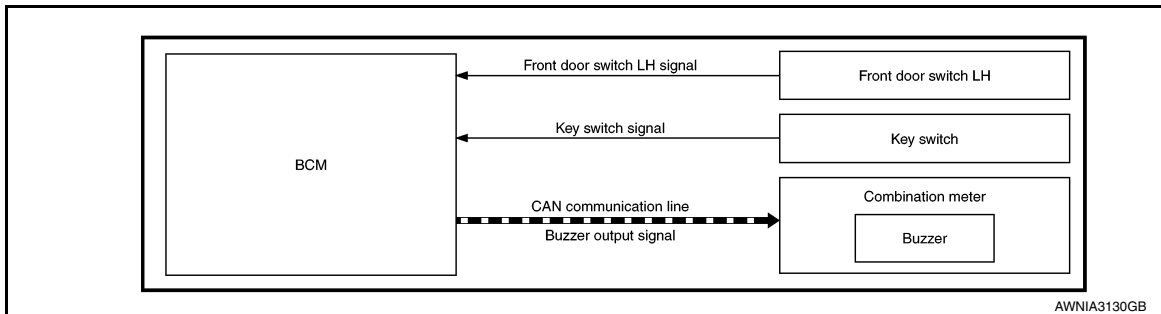
Signal name	Signal source
Buzzer output signal	BCM  → Combination meter

## KEY WARNING CHIME

### KEY WARNING CHIME : Key Warning Chime

INFOID:000000010338530

### SYSTEM DIAGRAM



### WARNING CHIME OPERATION CONDITIONS

If all of the following conditions are fulfilled.

Operation conditions	
Ignition switch	OFF
Key switch	ON (key is in key cylinder)
Driver side door	Open [front door switch LH ON]

### WARNING CHIME CANCEL CONDITIONS

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

Operation conditions	
Ignition switch	ON
Key switch	ON (key is removed from key cylinder)
Driver side door	Close [front door switch LH OFF]



### SIGNAL PATH

1. BCM detects key inserted into the ignition switch, and sends key warning signal to combination meter with CAN communication line.


Signal name	Signal source
Ignition switch signal	—

# SYSTEM

## < SYSTEM DESCRIPTION >

Signal name	Signal source
Key switch signal	Key switch  BCM
Driver door switch signal	Front door switch LH  BCM

2. Combination meter sounds integrated buzzer, when it receives a buzzer output signal from BCM.

Signal name	Signal source
Buzzer output signal	BCM  Combination meter

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# DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (COMBINATION METER)

### Description

INFOID:000000010339915

#### COMBINATION METER SELF-DIAGNOSIS MODE

The following meter functions can be checked during Combination Meter Self-Diagnosis Mode:

- Pointer sweep of speedometer, tachometer and gauges.
- Illumination of all LCD segments and color patterns for meter displays.
- Illumination of all lamps/LEDs that are controlled by the combination meter (regardless of switch status).

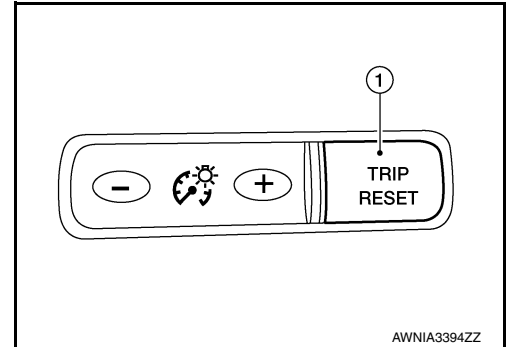
#### STARTING COMBINATION METER SELF-DIAGNOSIS MODE

##### NOTE:

- Check combination meter power supply and ground circuits if self-diagnosis mode does not start. Refer to [MWI-59, "COMBINATION METER : Diagnosis Procedure"](#). Replace combination meter if power supply and ground circuits are found to be normal and self-diagnosis mode does not start. Refer to [MWI-82, "Removal and Installation"](#).
- Combination meter self-diagnosis mode will function with the ignition switch in ON. Combination meter self-diagnosis mode will exit upon turning the ignition switch to OFF.

#### How to Initiate Self-Diagnosis Mode

1. Turn ignition switch OFF.
2. While pressing the trip reset switch (1), turn ignition switch ON.
3. Keep the trip reset switch for 1 seconds or more.
4. Press the trip reset switch at least 3 times. (Within 7 seconds after the ignition switch is turned ON.)
5. "Work instruction code" is indicated in the top portion of information display and self-diagnosis is started.
6. The mode switches in the order shown below each time the trip reset switch is pressed.



##### NOTE:

If the trip reset switch is not operated for 20 seconds or more, the self-diagnosis mode is automatically cancelled.

Test order	Test item	Description
1	Work instruction code	This item is displayed, but not used.
2	Part number	
3	Software code	
4	EEPROM code	
5	Hardware code	
6	P.C.B code	
7	Circuit check	<p>The pointer of the following items moves from 0 to MAX twice.</p> <ul style="list-style-type: none"> <li>• Speedometer</li> <li>• Tachometer</li> <li>• Engine coolant temperature gauge</li> <li>• Fuel gauge</li> </ul> <p><b>NOTE:</b> If any one of the pointers does not sweep, replace combination meter.</p>
8	Color check <sup>*1</sup>	Performs the color check of the information display.

# DIAGNOSIS SYSTEM (COMBINATION METER)

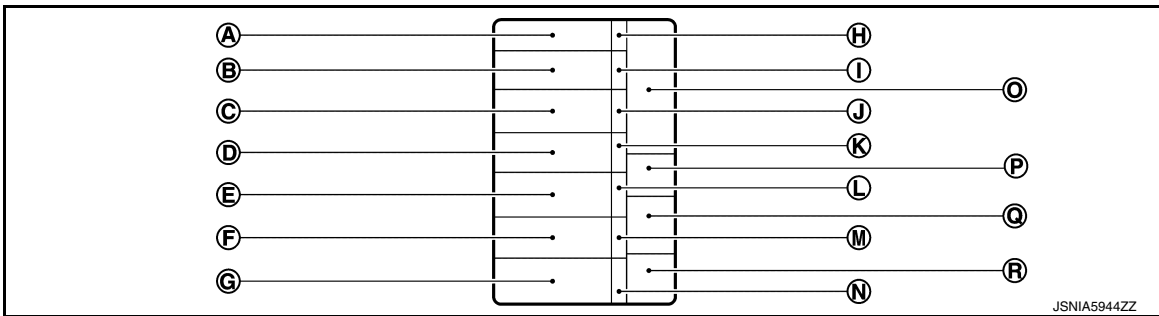
## < SYSTEM DESCRIPTION >

Test order	Test item	Description
9	error code*2	Displays the error code of the following items: <ul style="list-style-type: none"> <li>• Speedometer</li> <li>• Tachometer</li> <li>• Engine coolant temperature gauge</li> <li>• Fuel gauge</li> <li>• Meter control switch</li> </ul>
10	Warning/indicator lamp check	All warning/indicator lamp illuminate. <b>NOTE:</b> <ul style="list-style-type: none"> <li>• When either one of them does not turn ON, replace combination meter.</li> <li>• SRS air bag warning lamp and security indicator lamp are not illuminate.</li> </ul>

**NOTE:**

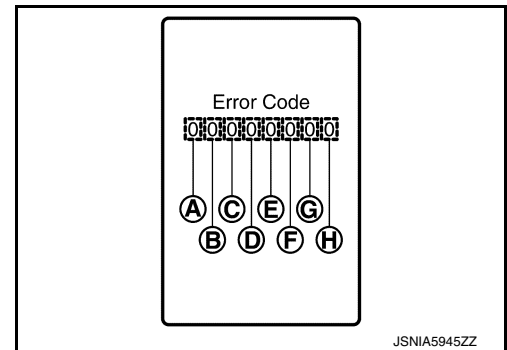
When the trip reset switch is pressed during the indication of Test order "10," test item returns to Test order "2."

\*1: Color Check



- |                |                |            |
|----------------|----------------|------------|
| (A) Blue       | (B) Red        | (C) Pink   |
| (D) Green      | (E) Light blue | (F) Yellow |
| (G) White      | (H) White      | (I) Black  |
| (J) Light blue | (K) Black      | (L) Pink   |
| (M) Black      | (N) Blue       | (O) Black  |
| (P) Dark blue  | (Q) White      | (R) Blue   |

\*2: Error Code



Item	Code	Description	Action to take/Reference
(A) Speedometer	0	Normal	—
	1	A vehicle speed signal cannot be received from ABS actuator and electric unit (control unit).	Perform "Self Diagnostic Result" of "ABS." Refer to <a href="#">BRC-55. "DTC Index"</a> .
	2	A vehicle speed signal received from the ABS actuator and electric unit (control unit) is abnormal.	

# DIAGNOSIS SYSTEM (COMBINATION METER)

## < SYSTEM DESCRIPTION >

Item		Code	Description	Action to take/Reference
Ⓑ	Tachometer	0	Normal	—
		1	An engine speed signal cannot be received from ECM.	Perform "Self Diagnostic Result" of "ECM." Refer to <a href="#">EC-93, "DTC Index"</a> .
Ⓒ	Fuel gauge	0	Normal	—
		1	Fuel gauge circuit is short.	Refer to <a href="#">MWI-62, "Component Function Check"</a> .
		2	Fuel gauge circuit is open.	
Ⓓ	Engine coolant temperature gauge	0	Normal	—
		1	An engine coolant temperature signal cannot be received from ECM.	Perform "Self Diagnostic Result" of "ECM." Refer to <a href="#">MWI-30, "DTC Index"</a> .
Ⓔ	Meter control switch	0	Normal	—
		1	When judging that the illumination control switch signal circuit is shorted for 5 minutes or more.	Refer to <a href="#">MWI-67, "Diagnosis Procedure"</a> .
		2	When judging that the trip reset switch signal circuit is shorted for 5 minutes or more.	
		3	When judging that the both switch signal circuit is shorted for 5 minutes or more.	
Ⓕ	—	0	Displays "0" constantly.	—
Ⓖ	—	0	Displays "0" constantly.	—
Ⓗ	—	0	Displays "0" constantly.	—

### How to Reset Error Code

Error codes stored in combination meter can be reset by following the instructions below:

1. Turn ignition switch OFF.
2. While pressing the trip reset switch, turn ignition switch ON.
3. Keep the trip reset switch for 1 seconds or more.
4. Press the trip reset switch at least 3 times. (Within 7 seconds after the ignition switch is turned ON.)
5. Turn ignition switch OFF.
6. Perform self-diagnosis and check that the error codes are reset.

## CONSULT Function (METER/M&A)

INFOID:0000000010339916

### APPLICATION ITEMS

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

METER/M&A Diagnosis mode	Description
SELF DIAGNOSTIC RESULT	Displays combination meter self-diagnosis results.
DATA MONITOR	Displays combination meter input/output data in real time.
WARNING HISTORY	Lighting history of the warning lamp and indicator lamp can be checked.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.

### SELF DIAG RESULT

Refer to [MWI-30, "DTC Index"](#).

### DATA MONITOR

Display Item List

# DIAGNOSIS SYSTEM (COMBINATION METER)

## < SYSTEM DESCRIPTION >

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description	A
SPEED METER	X	Displays the value of vehicle speed signal.	B
SPEED OUTPUT [mph or km/h]	X	Vehicle speed signal value transmitted to other units via CAN communication.	C
ODO OUTPUT [mph or km/h]		Odometer signal value transmitted to other units via CAN communication.	D
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM via CAN communication.	E
FUEL METER [L]	X	Fuel level indicated on combination meter.	F
W TEMP METER [°F] or [°C]	X	Displays the value of engine coolant temperature signal, which is input from ECM.	G
ABS W/L [On/Off]		Displays [On/Off] condition of ABS warning indicator.	H
VDC/TCS IND [On/Off]		Displays [On/Off] condition of VDC OFF indicator lamp.	I
SLIP IND [On/Off]		Displays [On/Off] condition of SLIP indicator lamp.	J
BRAKE W/L [On/Off]		Displays [On/Off] condition of brake warning indicator.	K
DOOR W/L [On/Off]		Displays [On/Off] condition of door or liftgate warning message in the information display.	L
HI-BEAM IND [On/Off]		Displays [On/Off] condition of high beam indicator.	M
TURN IND [On/Off]		Displays [On/Off] condition of turn indicator.	WCS
LIGHT IND [On/Off]		Displays [On/Off] condition of light indicator.	O
FR FOG IND [On/Off]		Displays [On/Off] condition of front fog lamp indicator.	P
OIL W/L [On/Off]		Displays [On/Off] condition of low oil pressure warning message in the information display.	
O/D OFF IND [On/Off]		Displays [On/Off] condition of O/D OFF indicator.	
DDS W/L [On/Off]		Displays [On/Off] condition of hill descent control warning indicator.	
MIL [On/Off]		Displays [On/Off] condition of malfunction indicator.	
SPORT IND [On/Off]		Displays [On/Off] condition of SPORT indicator.	
CHAGE W/L [On/Off]		Displays [On/Off] condition of charge warning indicator.	
4WD LOCK IND [On/Off]		Displays [On/Off] condition of AWD LOCK indicator lamp.	
4WD W/L [On/Off]		Displays [On/Off] condition of AWD warning message in the information display.	
FUEL W/L [On/Off]		Displays [On/Off] condition of low-fuel warning message.	
WASHER W/L [On/Off]		Displays [On/Off] condition of low washer fluid warning message.	

# DIAGNOSIS SYSTEM (COMBINATION METER)

## < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
AIR PRES W/L [On/Off]		Displays [On/Off] condition of tire pressure warning lamp.
KEY G/Y W/L [On/Off]		Displays [On/Off] condition of key green warning lamp.
EPS W/L [On/Off]		Displays [On/Off] condition of EPS warning indicator.
LCD		Displays the value of Intelligent Key system message indication.
SHIFT IND [P, R, N, D, L]		Displays shift selector position.
FUEL CAP W/L [On/Off]		Displays [On/Off] condition of loose fuel cap warning message.
O/D OFF SW [On/Off]		Displays [On/Off] condition of O/D Off switch.
PKB SW [On/Off]		Displays [On/Off] condition of parking brake switch.
BUCKLE SW [On/Off]		Displays [On/Off] condition of seat belt buckle switch LH.
PASS BUCKLE SW [On/Off]		Displays [On/Off] condition of seat belt buckle switch RH.
BRAKE OIL SW [On/Off]		Displays [On/Off] condition of brake fluid level switch.
DISTANCE [Mi] or [km]		Displays distance to empty.
OUTSIDE TEMP [°F or °C]		Displays the ambient air temperature which is input from the ambient sensor.
FUEL LOW SIG [On/Off]		Displays [On/Off] condition of low-fuel warning signal.
STRG SW INPUT [SW 1-SW 10, NOT INPUT]		Displays [SW 1-SW 10, NOT INPUT] condition of steering switches.
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.
BSW IND [On/Off]		Displays [On/Off] condition of blind spot warning indicator.
BSW W/L [On/Off]		Displays [On/Off] condition of blind spot warning message in the information display.

## SPECIAL FUNCTION

### Special menu

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

### W/L ON HISTORY

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

### NOTE:

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



# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010339918

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul style="list-style-type: none"> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

### SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		x	x	x	x		
Rear window defogger	REAR DEFOGGER			x	x	x		
Warning chime	BUZZER			x	x			
Interior room lamp timer	INT LAMP			x	x	x		
Exterior lamp	HEADLAMP			x	x	x		
Wiper and washer	WIPER			x	x	x		
Turn signal and hazard warning lamps	FLASHER			x	x			
Intelligent Key system	INTELLIGENT KEY		x	x	x	x		
Combination switch	COMB SW			x				
BCM	BCM	x	x			x	x	x
Immobilizer	IMMU		x	x	x			
Interior room lamp battery saver	BATTERY SAVER			x	x			
Back door open	TRUNK			x				
Vehicle security system	THEFT ALM			x	x	x		
RAP system	RETAINED PWR			x				
Signal buffer system	SIGNAL BUFFER			x				
TPMS	AIR PRESSURE MONITOR		x	x	x	x		

### BUZZER

# DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## BUZZER : CONSULT Function (BCM - BUZZER)

INFOID:000000010339919

### DATA MONITOR

Monitor Item [Unit]	Description
PUSH -SW [On/Off]	Indicates condition of push-button ignition switch.
VEH SPEED 1 [km/h]	Indicates vehicle speed signal received from ABS on CAN communication line.
TAIL LAMP SW [On/Off]	Indicates condition of combination switch.
FR FOG SW [On/Off]	Indicates condition of front fog lamp switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.

### ACTIVE TEST

Test Item	Description
SEAT BELT WARN TEST	This test is able to check seat belt warning chime operation [On/Off].
LIGHT WARN ALM	This test is able to check light warning chime operation [On/Off].
REVERSE WARNING	This test is able to check reverse warning chime operation [On/Off].
ID REGIST WARNING	This test is able to check TPMS sensor ID regist warning chime operation [On/Off].

# DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000010339923

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul style="list-style-type: none"> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

### SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK			x	x	x		
Rear window defogger	REAR DEFOGGER			x	x	x		
Warning chime	BUZZER			x	x			
Interior room lamp timer	INT LAMP			x	x	x		
Remote keyless entry system	MULTI REMOTE ENT					x		
Exterior lamp	HEADLAMP			x	x			
Wiper and washer	WIPER			x	x	x		
Turn signal and hazard warning lamps	FLASHER			x	x			
Combination switch	COMB SW			x				
BCM	BCM	x	x			x	x	x
Immobilizer	IMMU		x		x			
Interior room lamp battery saver	BATTERY SAVER			x	x			
Back door open	TRUNK			x				
Vehicle security system	THEFT ALM			x	x	x		
RAP system	RETAINED PWR			x				
TPMS	AIR PRESSURE MONITOR		x	x	x	x		

### BUZZER

BUZZER : CONSULT Function (BCM - BUZZER)

INFOID:0000000010339924

### DATA MONITOR

# DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

## < SYSTEM DESCRIPTION >

Monitor Item [Unit]	Description
TAIL LAMP SW [On/Off]	Indicates condition of combination switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.

## ACTIVE TEST

Test Item	Description
SEAT BELT WARN TEST	This test is able to check seat belt warning chime operation [On/Off].
LIGHT WARN ALM	This test is able to check light warning chime operation [On/Off].
REVERSE WARNING	This test is able to check reverse warning chime operation [On/Off].
ID REGIST WARNING	This test is able to check TPMS sensor ID regist warning chime operation [On/Off].

# COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

## ECU DIAGNOSIS INFORMATION

### COMBINATION METER

Reference Value

INFOID:0000000010339926

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
SPEED METER [mph or km/h]	Ignition switch ON	While driving	Input value of vehicle speed signal (CAN communication signal)
SPEED OUTPUT [mph or km/h]	Ignition switch ON	While driving	Output value of vehicle speed signal (CAN communication signal)
ODO OUTPUT [mph or km/h]	Ignition switch ON	—	Output value of odometer signal (CAN communication signal)
TACHO METER [rpm]	Ignition switch ON	Engine running	Input value of engine speed signal (CAN communication signal)
FUEL METER [L]	Ignition switch ON	—	Input value of fuel level sensor signal
W TEMP METER [°F] or [°C]	Ignition switch ON	—	Input value of engine coolant temperature signal (CAN communication signal)
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 <sup>*1</sup>
		Brake warning lamp OFF	Off
DOOR W/L	Ignition switch ON	Door or lift gate open warning displayed	On
		Other than the above	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
FR FOG IND	Ignition switch ON	Front fog lamp indicator lamp ON	On
		Front fog lamp indicator lamp OFF	Off
LIGHT IND	Ignition switch ON	Position lamp indicator lamp ON	On
		Position lamp indicator lamp OFF	Off
OIL W/L	Ignition switch ON	Engine oil pressure warning displayed	On
		Other than the above	Off
O/D OFF IND	Ignition switch ON	O/D OFF indicator lamp ON	On
		Other than the above	Off
DDS W/L	Ignition switch ON	Hill descent warning indicator ON	On
		Other than the above	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
4WD W/L	Ignition switch ON	AWD warning displayed	On
		Other than the above	Off
4WD LOCK IND	Ignition switch ON	AWD LOCK indicator lamp ON	On
		Other than the above	Off
FUEL W/L	Ignition switch ON	Low fuel warning displayed	On
		Low fuel warning lamp OFF	Off
WASHER W/L	Ignition switch ON	Low washer fluid warning displayed	On
		Other than the above	Off
AIR PRES W/L	Ignition switch ON	Low tire pressure warning lamp ON	On
		Low tire pressure warning lamp OFF	Off
KEY G/Y W/L	Ignition switch ON	Intelligent Key system warning indication	On
		Other than the above	Off
EPS W/L	Ignition switch ON	Power steering warning lamp ON	On
		Power steering warning lamp OFF	Off
SPORT IND	Ignition switch ON	Sport mode indicator ON	On
		Sport mode indicator OFF	Off
CHAGE W/L	Ignition switch ON	Charge warning lamp ON	On
		Charge warning lamp OFF	Off
SHIFT IND	Ignition switch ON	Shift position indicator displayed	[P, R, N, D, L]
FUEL CAP W/L	Ignition switch ON	Fuel filler cap warning displayed	On
		Other than the above	Off
O/D OFF SW	Ignition switch ON	O/D off switch ON	On
		O/D off switch OFF	Off
PKB SW	Ignition switch ON	Parking brake switch ON	On
		Parking brake switch OFF	Off
BUCKLE SW	Ignition switch ON	Driver seat belt not fastened	On
		Driver seat belt fastened	Off
PASS BUCKLE SW	Ignition switch ON	Passenger seat belt not fastened	On
		Passenger seat belt fastened	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON	On
		Brake fluid level switch OFF	Off
DISTANCE [mi] or [km]	Ignition switch ON	—	Distance to empty
OUTSIDE TEMP [°F] or [°C]	Ignition switch ON	—	Displays the ambient air temperature which is input from the ambient sensor
FUEL LOW SIG	—	Low fuel level warning	On
		Except during low fuel level warning	Off
BUZZER	Ignition switch ON	Buzzer ON	On
		Buzzer OFF	Off
LCD	Ignition switch ON	Engine start information	B&P

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

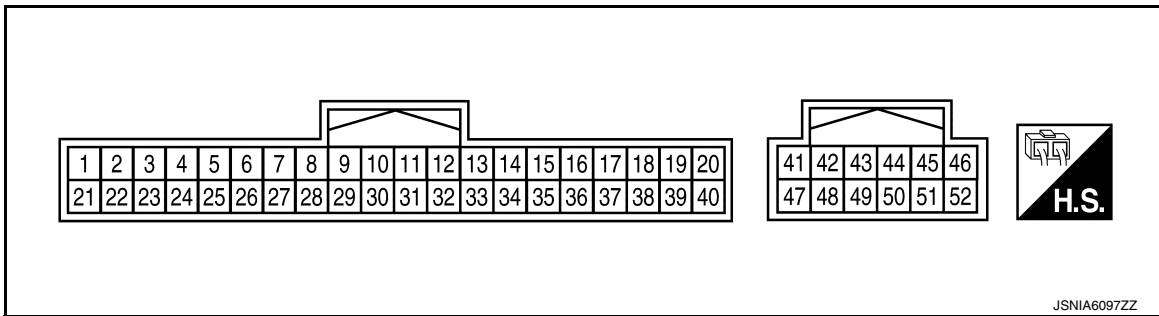
Monitor Item	Condition	Value/Status
STRG SW INPUT	BACK switch is pressed	SW1
	MENU UP switch is pressed	SW2
	MENU DOWN switch is pressed	SW3
	Voice recognition switch is pressed	SW4
	MENU OK switch is pressed	SW5
	VOL DOWN switch is pressed	SW6
	VOL UP switch is pressed	SW7
	TEL switch is pressed	SW8
	Display back switch is pressed	SW9
	Display next switch is pressed	SW10
	Other than above	NO INPUT
BSW IND	Blind spot warning lamp ON	On
	Blind spot warning lamp OFF	Off
BSW W/L	Blind spot warning displayed	On
	Other than above	Off

\*: DDS (hill descent control)

### NOTE:

Some items are not available according to vehicle specification.

### TERMINAL LAYOUT

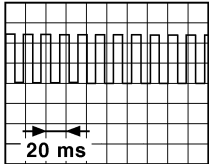


### PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (B)	Ground	Ground	—	—	—	0 V
7 (BG)	Ground	Security signal	Input	Ignition switch OFF	Security indicator ON	0 V
					Security indicator OFF	Battery voltage
10 (P)	Ground	O/D off switch	—	—	—	—
15 (L)	Ground	Ambient sensor signal	Input	Ignition switch ON	—	<p style="text-align: right;">JSNIA0014GB</p>

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

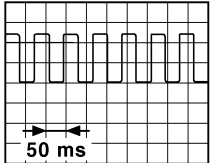
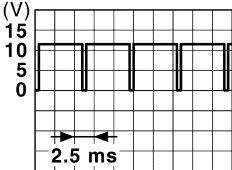
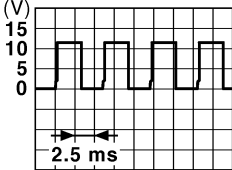
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
17 (BG)	Ground	Meter control switch ground	—	—	—	0 V
18 (SB)	Ground	Trip/reset signal	Input	Ignition switch OFF or ON	Trip/Reset switch is pressed	0 V
					Other than the above	5.0 V
20 (Y)	Ground	Ambient sensor ground	—	—	—	0 V
21 (L)	Ground	Steering switch ground	—	—	—	0 V
22 (Y)	Ground	Steering switch output 1	—	—	—	—
23 (GR)	Ground	Steering switch output 2	—	—	—	—
24 (V)	Ground	Washer fluid level switch signal	Input	Ignition switch ON	Washer fluid level switch ON	0 V
					Washer fluid level switch OFF	Battery voltage
25 (V)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level low	0 V
					Brake fluid level normal	Battery voltage
26 (G)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake applied	0 V
					Parking brake released	Battery voltage
28 (Y)	Ground	Seat belt buckle switch signal LH	Input	Ignition switch ON	When driver seat belt is fastened.	Battery voltage
					When driver seat belt is unfastened.	0 V
29 (R)	Ground	Sport mode switch signal	—	—	—	—
36 (GR)	Ground	Illumination control switch signal (+)	Input	Ignition switch OFF or ON	When illumination control switch (+) is pressed	0 V
					Other than the above	5.0 V
37 (V)	Ground	Illumination control switch signal (-)	Input	Ignition switch OFF or ON	When illumination control switch (-) is pressed	0 V
					Other than the above	5.0 V
38 (G)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 25 MPH (40 km/h)]	<p><b>NOTE:</b> The maximum voltage varies depending on the specification (destination unit).</p> 

JSNIA0012GB



# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
39 (W)	Ground	Vehicle speed signal (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 25 MPH (40 km/h)]	<b>NOTE:</b> The maximum voltage varies de- pending on the specification (destination unit).   <small>JSNIA0015GB</small>
41 (L)	Ground	CAN-H	—	—	—	—
42 (P)	Ground	CAN-L	—	—	—	—
43 (W)	Ground	Illumination control sig- nal	Output	Ignition switch ON	<ul style="list-style-type: none"> <li>Lighting switch 1st position</li> <li>When meter illumination is minimum</li> </ul>	 <small>JSNIA5983GB</small>
					<ul style="list-style-type: none"> <li>Lighting switch 1st position</li> <li>When meter illumination is step 11</li> </ul>	 <small>JPNIA1686GB</small>
					<ul style="list-style-type: none"> <li>Lighting switch 1st position</li> <li>When meter illumination is maximum</li> </ul>	0 V
44 (LA/B)	Ground	Fuel level sensor ground	—	Ignition switch ON	—	0 V
45 (LA/G)	Ground	Battery power supply	—	—	—	Battery voltage
46 (LA/ BR)	Ground	Ignition signal	—	Ignition switch ON or START	—	Battery voltage
47 (SB)	Ground	M CAN-H	—	—	—	—
48 (LG)	Ground	M CAN-L	—	—	—	—
51 (LA/L)	Ground	Fuel level sensor signal	—	Ignition switch ON	Fuel gauge indication position	—
52 (B)	Ground	Ground	—	—	—	0 V

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# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

### Fail-safe

INFOID:000000010339927

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

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Engine coolant temperature gauge		
Meter illumination control		When suspending communication, changes to nighttime mode.
Buzzer		Turned off by suspending communication.
Information display	Current fuel consumption	<ul style="list-style-type: none"> <li>• When reception time of an abnormal signal is 2 seconds or less, the last received datum is used for calculation to indicate the result.</li> <li>• When reception time of an abnormal signal is more than 2 seconds, the last result calculated during normal condition is indicated.</li> </ul>
	Average fuel consumption	
	Average vehicle speed	
	Range (Distance to empty)	
	Driving distance	An indicated value is maintained at communications blackout.
	Door open warning	The display turns OFF by suspending communication.
	Lift gate open warning	
	Low tire pressure warning	
	Parking brake release warning	
	Fuel filler cap warning	
	Oil pressure warning	
	CVT warning	
	BSW/LDW warning	
	Odo/trip meter	An indicated value is maintained at communications blackout.
Shift position indicator	The indicator turns OFF by suspending communication.	
Warning lamp/indicator lamp	ABS warning lamp	Turned on by suspending communication.
	Brake warning lamp	
	EPS warning lamp	
	VDC warning lamp	
	AWD warning lamp	
	Malfunction indicator lamp	
	VDC OFF indicator lamp	Turned off by suspending communication.
	SPORT mode indicator lamp	
	AWD LOCK indicator lamp	
	High beam indicator lamp	
	Turn signal indicator lamp	
	Position lamp indicator lamp	
	OD OFF indicator lamp	
	BSW indicator lamp	
LDW indicator lamp		
Low tire pressure warning lamp	After blinking for 1 minute, the lamp remains ON.	

# COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

## DTC Index

INFOID:0000000110339928

Display contents of CONSULT	Diagnostic item is detected when...	Refer to
CAN COMM CIRCUIT [U1000]	Combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	<a href="#">MWI-54</a>
CONTROL UNIT (CAN) [U1010]	Detecting error during the initial diagnosis of CAN controller of combination meter.	<a href="#">MWI-55</a>
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	<a href="#">MWI-56</a>
ENGINE SPEED [B2267]	ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	<a href="#">MWI-57</a>
WATER TEMP [B2268]	ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	<a href="#">MWI-58</a>

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# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## BCM (BODY CONTROL MODULE)

### List of ECU Reference

INFOID:000000010338540

ECU	Reference
BCM (with Intelligent Key system)	<a href="#">BCS-28. "Reference Value"</a>
	<a href="#">BCS-47. "Fail Safe"</a>
	<a href="#">BCS-47. "DTC Inspection Priority Chart"</a>
	<a href="#">BCS-48. "DTC Index"</a>
BCM (without Intelligent Key system)	<a href="#">BCS-96. "Reference Value"</a>
	<a href="#">BCS-107. "Fail Safe"</a>
	<a href="#">BCS-107. "DTC Inspection Priority Chart"</a>
	<a href="#">BCS-108. "DTC Index"</a>

# WARNING CHIME SYSTEM

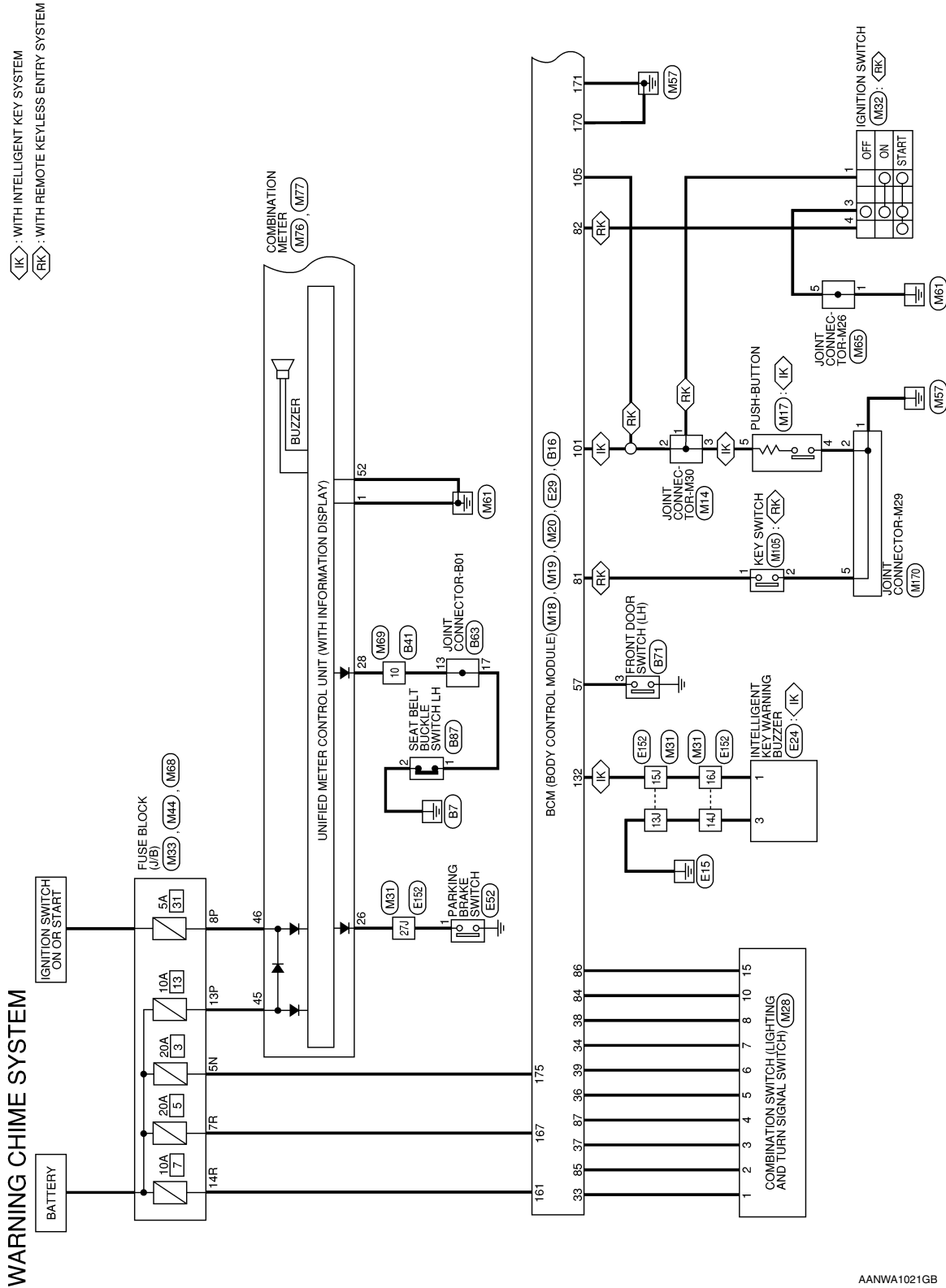
< WIRING DIAGRAM >

## WIRING DIAGRAM

### WARNING CHIME SYSTEM

#### Wiring Diagram

INFOID:0000000010338541



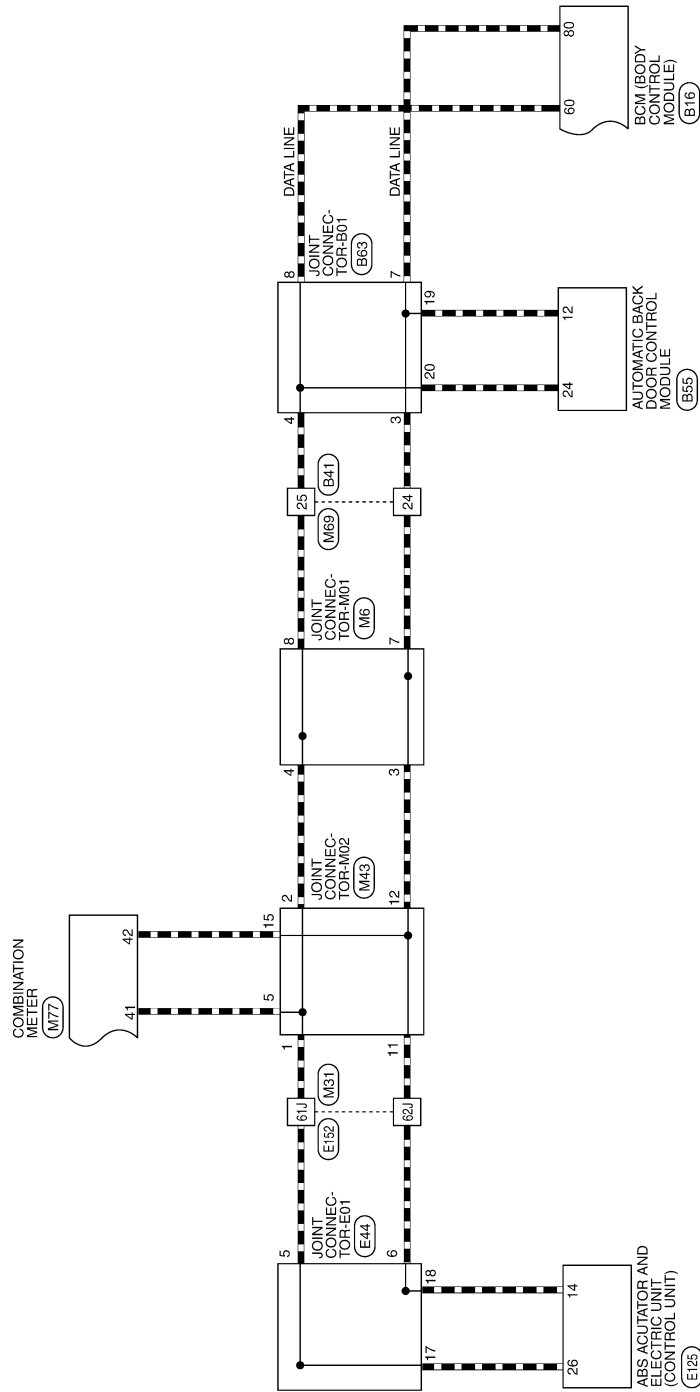
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# WARNING CHIME SYSTEM

< WIRING DIAGRAM >



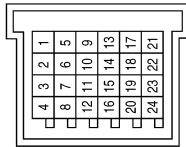
AANWA1022GB

# WARNING CHIME SYSTEM

< WIRING DIAGRAM >

## WARNING CHIME SYSTEM CONNECTORS

Connector No.	M6
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



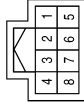
Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

Connector No.	M14
Connector Name	JOINT CONNECTOR-M30
Connector Color	WHITE



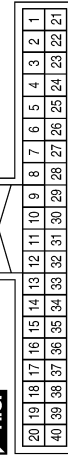
Terminal No.	Color of Wire	Signal Name
1	Y	-
2	Y	-
3	Y	-

Connector No.	M17
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	B	-
5	Y	-

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
33	LG	I CSW 5
34	Y	O CSW 5
36	G	I CSW 3
37	GR	I CSW 4
38	V	I CSW 1
39	W	I CSW 2

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
81	L	I KEY SW
82	LA/R	I STARTER SW (WITHOUT I-KEY)
84	BR	O CSW 2
85	SB	O CSW 1
86	P	O CSW 3
87	BG	O CSW 4
101	Y	I START SW
105	Y	I IGN SW (WITHOUT I-KEY)

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
167	LAV	I PWR DOORLOCK1
170	B	I GND1
171	B	I GND2
175	R	I PWR DOORLOCK2

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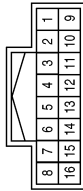
A B C D E F G H I J K L M N O P

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# WARNING CHIME SYSTEM

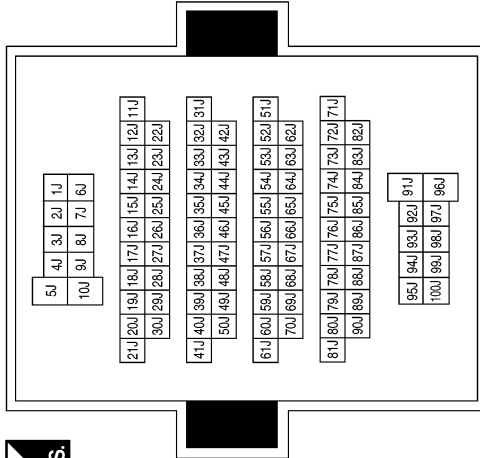
< WIRING DIAGRAM >

Connector No.	M28
Connector Name	COMBINATION SWITCH
Connector Color	WHITE



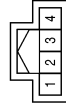
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	SB	-
3	GR	-
4	BG	-
5	G	-
6	W	-
7	Y	-
8	V	-
10	BR	-
15	P	-

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE



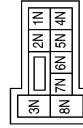
Terminal No.	Color of Wire	Signal Name
13J	B	-
14J	B	-
15J	G	-
16J	G	-
27J	G	-
61J	L	-
62J	P	-

Connector No.	M32
Connector Name	IGNITION SWITCH
Connector Color	WHITE



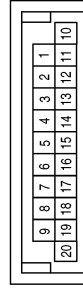
Terminal No.	Color of Wire	Signal Name
1	Y	-
3	B	-
4	LA/R	-

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5N	R	-

Connector No.	M43
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-
5	L	-
11	P	-
12	P	-
15	P	-



# WARNING CHIME SYSTEM

< WIRING DIAGRAM >

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
7R	LA/V	-
14R	W	-

Connector No.	M65
Connector Name	JOINT CONNECTOR-M26
Connector Color	WHITE



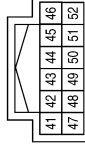
Terminal No.	Color of Wire	Signal Name
1	B	-
5	B	-

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



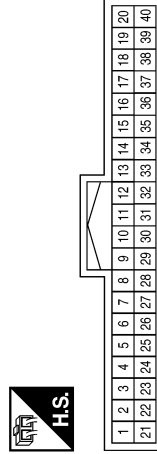
Terminal No.	Color of Wire	Signal Name
8P	LA/BR	-
13P	LA/G	-

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



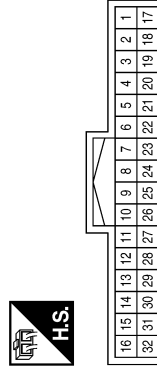
Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LA/G	BAT
46	LA/BR	IGN
52	B	GND2

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	GND1
26	G	PBK SW
28	Y	DR BELT SW

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
10	Y	-
24	P	-
25	L	-

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# WARNING CHIME SYSTEM

< WIRING DIAGRAM >

Connector No.	M105
Connector Name	KEY SWITCH
Connector Color	WHITE



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

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Color	WHITE



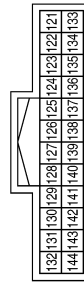
Terminal No.	Color of Wire	Signal Name
1	B	-
2	B	-
5	B	-

Connector No.	E24
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN



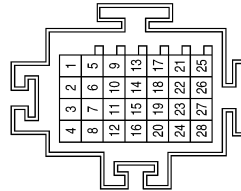
Terminal No.	Color of Wire	Signal Name
1	G	-
3	B	-

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
132	Y	O BUZZER

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	L	-
6	P	-
17	L	-
18	P	-

Connector No.	E52
Connector Name	PARKING BRAKE SWITCH
Connector Color	BLACK

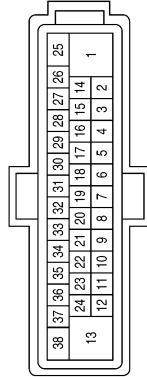


Terminal No.	Color of Wire	Signal Name
1	G	-

# WARNING CHIME SYSTEM

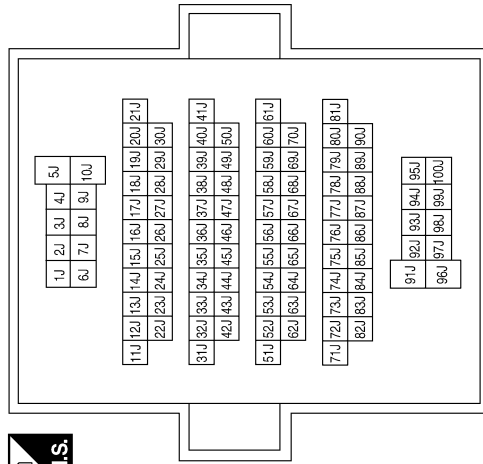
< WIRING DIAGRAM >

Connector No.	E125
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
14	P	CAN-L
26	L	CAN-H

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



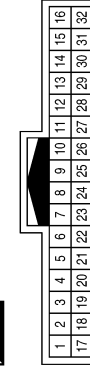
Terminal No.	Color of Wire	Signal Name
13J	B	-
14J	B	-
15J	Y	-
16J	G	-
27J	G	-
61J	L	-
62J	P	-

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



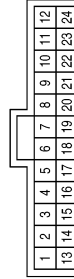
Terminal No.	Color of Wire	Signal Name
57	SB	I DR DOOR2 SW
60	L	CAN-H
80	P	CAN-L

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
10	LAY	-
24	P	-
25	L	-

Connector No.	B55
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
12	P	CAN-L
24	L	CAN-H

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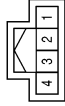
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# WARNING CHIME SYSTEM

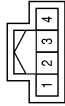
< WIRING DIAGRAM >

Connector No.	B87
Connector Name	SEAT BELT BUCKLE SWITCH LH
Connector Color	WHITE



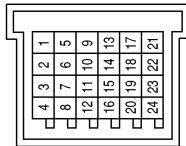
Terminal No.	Color of Wire	Signal Name
1	LAY	-
2	B	-

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	SB	-

Connector No.	B63
Connector Name	JOINT CONNECTOR-B01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-
13	LAY	-
17	LAY	-
19	P	-
20	L	-

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# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

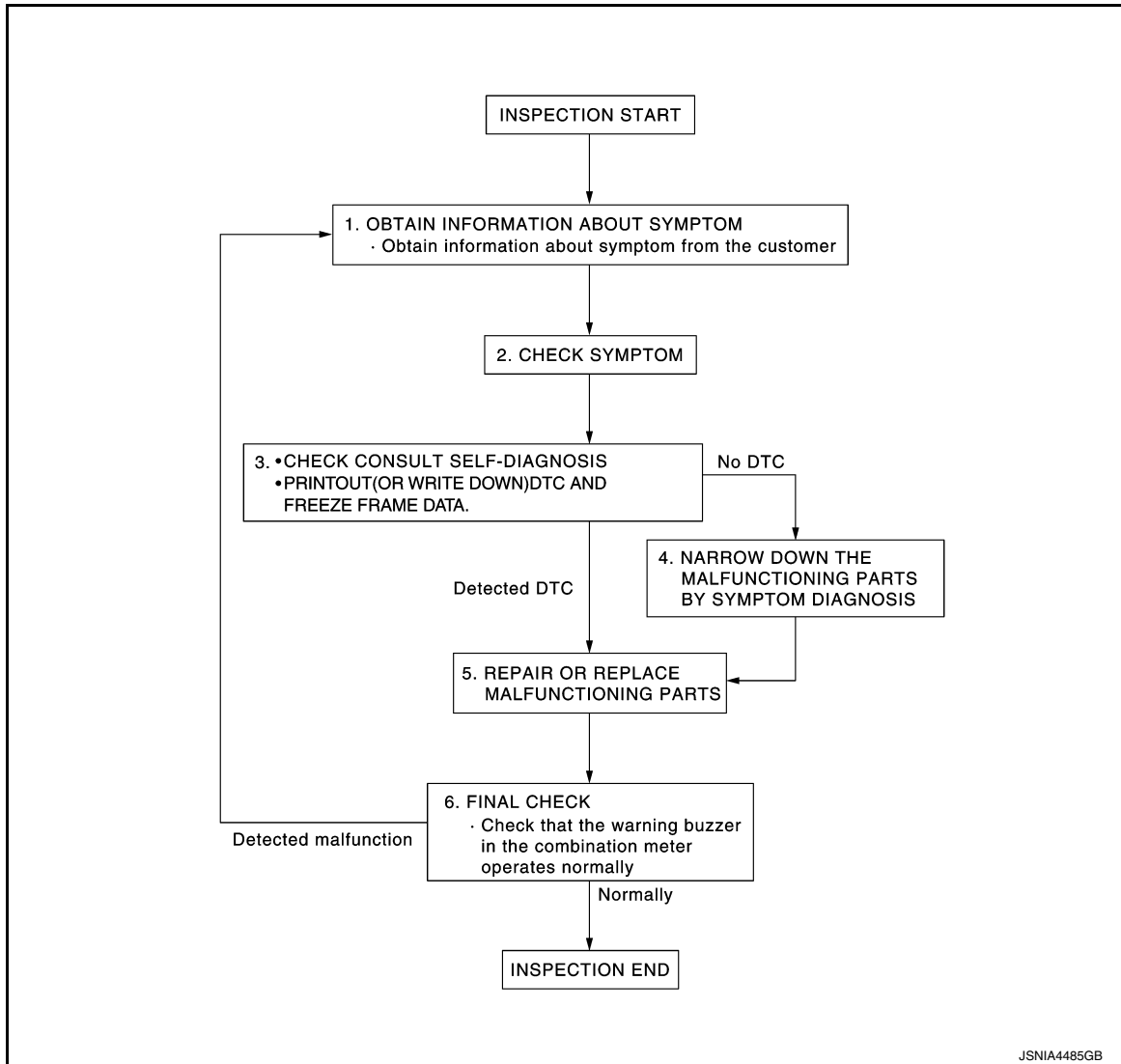
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000010338542

#### 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-27, "DTC Index"](#).

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## DIAGNOSIS AND REPAIR WORK FLOW

### < 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.

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## DTC/CIRCUIT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

#### COMBINATION METER : Diagnosis Procedure

INFOID:00000001033917

Regarding Wiring Diagram information, refer to [MWI-32. "Wiring Diagram"](#).

#### 1. CHECK FUSES

Check that the following fuses are not blown.

Unit	Power source	Fuse No.
Combination meter	Battery	13
	Ignition switch ON or START	31

##### Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

#### 2. POWER SUPPLY CIRCUIT CHECK

1. Disconnect combination meter connector.
2. Check voltage between combination meter harness connector M77 terminals 45, 46 and ground.

Terminals		Ignition switch position			
(+)		(-)	OFF	ON	START
Connector	Terminal				
M77	45	Ground	Battery voltage	Battery voltage	Battery voltage
	46		0V	Battery voltage	Battery voltage

##### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

#### 3. GROUND CIRCUIT CHECK

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

Terminals		Continuity
(+)		
Connector	Terminal	
M76	1	Ground
M77	52	

##### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connector.

### BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)

#### BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:00000001033920

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Regarding Wiring Diagram information, refer to [BCS-50, "Wiring Diagram"](#).

## 1. CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

## 2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

## 3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

**BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)**

**BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure**

INFOID:000000010339925

Regarding Wiring Diagram information, refer to [BCS-110, "Wiring Diagram"](#).

## 1. CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit.

NO >> GO TO 2.

## 2. CHECK POWER SUPPLY CIRCUIT



# POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

### 3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

WCS

# METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## METER BUZZER CIRCUIT

### Description

INFOID:000000010339861

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

### Component Function Check

INFOID:000000010339862

#### 1. CHECK OPERATION OF METER BUZZER

1. Select "BUZZER" of "BCM" on CONSULT.
2. Perform "LIGHT WARN ALM" or "SEAT BELT WARN TEST" of "ACTIVE TEST".

#### Does meter buzzer activate?

- YES >> Inspection End.  
NO >> Refer to [WCS-42. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000010339863

#### 1. CHECK COMBINATION METER INPUT SIGNAL

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

Monitor item	Condition	Status
BUZZER	Under the condition of buzzer input	On
	Except above	Off

#### Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-82. "Removal and Installation"](#).  
NO >> Replace BCM. Refer to [BCS-75. "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135. "Removal and Installation"](#) (without Intelligent Key system).

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

### Description

INFOID:000000010339857

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

### Component Function Check

INFOID:000000010339858

#### 1. CHECK COMBINATION METER INPUT SIGNAL

1. Ignition ON.
2. Monitor seat belt warning lamp while fastening and unfastening the driver seat belt buckle.

Condition	Warning lamp status
When driver seat belt buckle is unfastened	ON
When driver seat belt buckle is fastened	OFF

#### Is the inspection result normal?

- YES >> Inspection End.  
NO >> Refer to [WCS-43. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000010339859

Regarding Wiring Diagram information, refer to [WCS-29. "Wiring Diagram"](#).

#### 1. CHECK COMBINATION METER INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between combination meter harness connector M76 terminal 28 and ground.

Combination meter			Condition	Voltage (Approx.)
Connector	Terminals			
	(+)	(-)		
M76	28	Ground	When seat belt LH is fastened	Battery voltage
			When seat belt LH is unfastened	0 V

#### Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-82. "Removal and Installation"](#).  
NO >> GO TO 2.

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

1. Turn ignition switch OFF.
2. Disconnect combination meter harness connector M76 and seat belt buckle switch LH harness connector B87.
3. Check continuity between combination meter harness connector M76 terminal 28 and seat belt buckle switch LH harness connector B87 terminal 1.

Combination meter		Seat belt buckle switch LH		Continuity
Connector	Terminal	Connector	Terminal	
M76	28	B87	1	Yes

4. Check continuity between combination meter harness connector M76 terminal 28 and ground.

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# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

Combination meter		Ground	Continuity
Connector	Terminal		
M76	28		No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

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

Check continuity between seat belt buckle switch LH harness connector B87 terminal 2 and ground.

Seat belt buckle switch LH		Ground	Continuity
Connector	Terminal		
B87	2		Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connector.

## Component Inspection

INFOID:0000000010339860

### 1. CHECK SEAT BELT BUCKLE SWITCH

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

Condition	Terminal	Continuity
When seat belt buckle LH is fastened	1- 2	No
When seat belt buckle LH is unfastened		Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace the seat belt buckle switch LH. Refer to [SB-11, "FRONT SEAT BELT BUCKLE : Removal and Installation"](#).

# PARKING BRAKE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## PARKING BRAKE SWITCH SIGNAL CIRCUIT

### Component Function Check

INFOID:000000010338552

#### 1. CHECK PARKING BRAKE SWITCH OPERATION

Check that brake warning lamp in combination meter turns ON/OFF when parking brake is actuated.

Is the inspection result normal?

YES >> Inspection End.

NO >> Proceed to diagnosis procedure. Refer to [WCS-45, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000010338553

Regarding Wiring Diagram information, refer to [WCS-29, "Wiring Diagram"](#).

#### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect combination meter and parking brake switch connectors.
3. Check connectors and terminals for deformation, disconnection, looseness or damage.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace as necessary.

#### 2. CHECK PARKING BRAKE SWITCH

Check parking brake switch. Refer to [WCS-46, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace parking brake switch. Refer to [PB-7, "Exploded View"](#).

#### 3. CHECK PARKING BRAKE SWITCH SIGNAL

Ⓜ With CONSULT.

1. Connect combination meter connector and parking brake switch connectors.
2. Turn ignition switch ON.
3. In DATA MONITOR select "PKB SW" and check parking brake switch signal.

Condition	DATA MONITOR
Actuate parking brake	On
Release parking brake	Off

Is the inspection result normal?

YES >> Refer to [WCS-37, "Work Flow"](#).

NO >> GO TO 4.

#### 4. CHECK PARKING BRAKE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter and parking brake switch connectors.
3. Check continuity between combination meter connector M76 terminal 26 and parking brake switch connector E52 terminal 1.

Combination meter		Parking brake switch		Continuity
Connector	Terminal	Connector	Terminal	
M76	26	E52	1	Yes

4. Check continuity between combination meter connector and ground.

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# PARKING BRAKE SWITCH SIGNAL CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

Combination meter		—	Continuity
Connector	Terminal		
M76	26	Ground	No

### Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-82, "Removal and Installation"](#).  
NO >> Repair or replace malfunctioning components.

## Component Inspection

INFOID:0000000010338554

### 1. CHECK PARKING BRAKE SWITCH

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

Parking brake switch terminal	—	Condition	Continuity
1	Ground	Parking brake actuated	Yes
		Parking brake released	No

### Is the inspection result normal?

- YES >> Inspection End.  
NO >> Replace parking brake switch. Refer to [PB-7, "Exploded View"](#).

# KEY SWITCH SIGNAL CIRCUIT (WITHOUT INTELLIGENT KEY)

< DTC/CIRCUIT DIAGNOSIS >

## KEY SWITCH SIGNAL CIRCUIT (WITHOUT INTELLIGENT KEY)

### Description

INFOID:000000010338555

Transmits a key switch signal to the BCM.

### Component Function Check

INFOID:000000010338556

#### 1. CHECK BCM INPUT SIGNAL

Select "Data Monitor" for "BCM" and check the "KEY ON SW" monitor value.

Monitor Item	Condition	Status
KEY ON SW	When key is removed from key cylinder	OFF
	When key is inserted into key cylinder	ON

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Refer to [WCS-47, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000010338557

Regarding Wiring Diagram information, refer to [WCS-29, "Wiring Diagram"](#).

#### 1. CHECK BCM INPUT SIGNAL

Check voltage between BCM harness connector M19 terminal 81 and ground.

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
BCM connector	Terminal		
M19	81	Key is inserted	Battery voltage
		Key is removed	0V

#### Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 2.

#### 2. CHECK KEY SWITCH CIRCUIT

1. Disconnect BCM connector M19 and key switch.
2. Check continuity between BCM harness connector M19 terminal 81 and key switch harness connector M105 terminal 1.

BCM		Key switch		Continuity
Connector	Terminal	Connector	Terminal	
M19	81	M105	1	Yes

3. Check continuity between BCM harness connector M19 terminal 81 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	81		No

#### Is the inspection result normal?

YES >> GO TO 3.

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WCS

# KEY SWITCH SIGNAL CIRCUIT (WITHOUT INTELLIGENT KEY)

## < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

### 3. CHECK KEY SWITCH POWER SUPPLY CIRCUIT

Check voltage between key switch harness connector M105 terminal 1 and ground.

Terminals			Voltage (Approx.)
(+)		(-)	
Key switch	Terminal		
M105	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

### 4. CHECK KEY SWITCH GROUND CIRCUIT

Check continuity between key switch harness connector M105 terminal 2 and ground.

Key switch		Ground	Continuity
Connector	Terminal		
M105	2		Yes

Is the inspection result normal?

YES >> Replace key switch.

NO >> Repair or replace harness or connector.

## Component Inspection

INFOID:0000000010338558

### 1. CHECK KEY SWITCH

1. Turn ignition switch OFF.
2. Disconnect key switch.
3. Check continuity between key switch terminals 1 and 2.

Terminal		Condition	Continuity
1	2	When key is removed from key cylinder	No
		When key is inserted into key cylinder	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace key switch.



# WARNING CHIME SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### WARNING CHIME SYSTEM SYMPTOMS

#### Symptom Table

INFOID:0000000010339856

**CAUTION:**

Perform the self-diagnosis with **CONSULT** before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Possible cause	Inspection item
The light reminder warning does not sound.	<ul style="list-style-type: none"><li>• Harness between BCM and front door switch LH</li><li>• Front door switch LH</li><li>• BCM</li><li>• Combination meter</li></ul>	Refer to <a href="#">WCS-52</a> .
The parking brake release warning continues sounding or does not sound.	<ul style="list-style-type: none"><li>• Harness between combination meter and parking brake switch</li><li>• Parking brake switch</li><li>• BCM</li><li>• Combination meter</li></ul>	Refer to <a href="#">WCS-50</a> .
The seat belt warning continues sounding or does not sound.	<ul style="list-style-type: none"><li>• Harness between combination meter and seat belt buckle switch LH</li><li>• Seat belt buckle switch LH</li><li>• BCM</li><li>• Combination meter</li></ul>	Refer to <a href="#">WCS-51</a> .
Warning chime does not sound at all.	<ul style="list-style-type: none"><li>• BCM</li><li>• Combination meter</li></ul>	Refer to <a href="#">WCS-42</a> .

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

< SYMPTOM DIAGNOSIS >

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

### Description

INFOID:000000010339848

- 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:000000010339849

#### 1. CHECK PARKING BRAKE WARNING LAMP

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

Condition	Warning lamp status
Parking brake applied	ON
Parking brake released	OFF

#### Is the inspection result normal?

- YES >> Replace the combination meter. Refer to [MWI-82, "Removal and Installation"](#).  
NO >> GO TO 2.

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

Check the parking brake switch signal circuit. Refer to [WCS-45, "Diagnosis Procedure"](#).

#### Is the inspection result normal?

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

#### 3. CHECK PARKING BRAKE SWITCH UNIT

Check the parking brake switch. Refer to [WCS-46, "Component Inspection"](#).

#### Is the inspection result normal?

- YES >> Replace the combination meter. Refer to [MWI-82, "Removal and Installation"](#).  
NO >> Replace the parking brake switch. Refer to [PB-7, "Exploded View"](#).

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

< SYMPTOM DIAGNOSIS >

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

### Description

INFOID:000000010339850

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

### Diagnosis Procedure

INFOID:000000010339851

#### 1. CHECK WARNING CHIME OPERATION

1. Select "BUZZER" of "BCM" on "CONSULT".
2. Perform "SEAT BELT WARN TEST" of "ACTIVE TEST".

Component	CONSULT	Condition
Buzzer	SEAT BELT WARN TEST	ON
		OFF

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace combination meter. Refer to [MWI-82, "Removal and Installation"](#).

#### 2. CHECK COMBINATION METER INPUT SIGNAL

Check the combination meter input signal. Refer to [WCS-43, "Component Function Check"](#).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-75, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135, "Removal and Installation"](#) (without Intelligent Key system).

NO >> GO TO 3.

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

Check the seat belt buckle switch LH circuit. Refer to [WCS-43, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

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

Check the seat belt buckle switch LH. Refer to [WCS-44, "Component Inspection"](#).

Is the inspection result normal?

YES >> Replace the combination meter. Refer to [MWI-82, "Removal and Installation"](#).

NO >> Replace the seat belt buckle switch LH. Refer to [SB-11, "FRONT SEAT BELT BUCKLE : Removal and Installation"](#).

WCS

# THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

## THE LIGHT REMINDER WARNING DOES NOT SOUND

### Description

INFOID:000000010339854

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

### Diagnosis Procedure

INFOID:000000010339855

#### 1.CHECK COMBINATION METER INPUT SIGNAL

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

Monitor item	Condition	Status
BUZZER	Under the condition of buzzer input	On
	Except above	Off

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-82, "Removal and Installation"](#).
- NO >> GO TO 2.

#### 2.CHECK FRONT DOOR SWITCH LH SIGNAL CIRCUIT

Check the front door switch LH signal circuit. Refer to [DLK-149, "Diagnosis Procedure"](#) (with Intelligent Key system) or [DLK-319, "Diagnosis Procedure"](#) (without Intelligent Key system).

Is the inspection result normal?

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

#### 3.CHECK FRONT DOOR SWITCH LH

Check the front door switch LH. Refer to [DLK-150, "Component Inspection"](#) (with Intelligent Key system) or [DLK-320, "Component Inspection"](#) (without Intelligent Key system).

Is the inspection result normal?

- YES >> Replace the BCM. Refer to [BCS-75, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135, "Removal and Installation"](#) (without Intelligent Key system).
- NO >> Replace the front door switch LH. Refer to [DLK-269, "Removal and Installation"](#) (with Intelligent Key system) or [DLK-385, "Removal and Installation"](#) (without Intelligent Key system).

# THE KEY WARNING DOES NOT SOUND (WITHOUT INTELLIGENT KEY)

< SYMPTOM DIAGNOSIS >

## THE KEY WARNING DOES NOT SOUND (WITHOUT INTELLIGENT KEY)

### Description

INFOID:000000010339864

The key warning chime does not sound, when all of the following conditions are fulfilled:

- Key inserted into the key cylinder (key switch signal ON).
- Ignition switch is in OFF position (ignition switch signal OFF).
- Driver side door is open (front door switch LH ON)

### Diagnosis Procedure

INFOID:000000010339865

#### 1. CHECK BCM INPUT SIGNAL

1. Connect CONSULT.
2. Select the "DATA MONITOR" of "BCM (BUZZER)" and check the "KEY ON SW" monitor value.

Monitor item	Condition	Status
KEY ON SW	Under the condition of buzzer input	On
	Except above	Off

Is the inspection result normal?

- YES >> Replace the BCM. Refer to [BCS-135, "Removal and Installation"](#).  
NO >> GO TO 2.

#### 2. CHECK KEY SWITCH SIGNAL CIRCUIT

Check the key switch signal circuit. Refer to [WCS-47, "Diagnosis Procedure"](#).

Is the inspection result normal?

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

#### 3. CHECK KEY SWITCH

Check the key switch. Refer to [WCS-48, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace the BCM. Refer to [BCS-135, "Removal and Installation"](#).  
NO >> Replace key switch.

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