

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:000000011386492

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

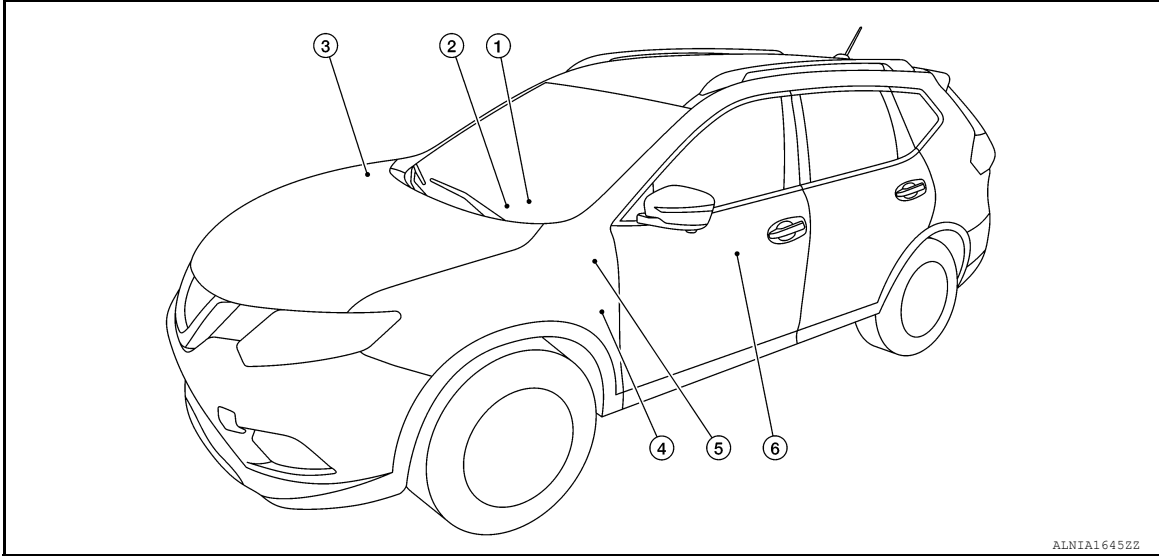
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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No.	Component	Function
1.	Key switch	Transmits the key switch signal to the BCM. Refer to SEC-121, "Component Parts Location" (without Intelligent Key system) for detailed installation location.
2.	Combination meter	<ul style="list-style-type: none"> • Receives a buzzer output signal from the BCM with CAN communication line and sounds the buzzer. • 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"> - Seat belt reminder warning chime - Parking brake release warning chime - Key warning chime
3.	ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to the combination meter via CAN communication. Refer to BRC-7, "Component Parts Location" 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 BCS-7, "BODY CONTROL SYSTEM : Component Parts Location" (with Intelligent Key system) or BCS-79, "BODY CONTROL SYSTEM : Component Parts Location" (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

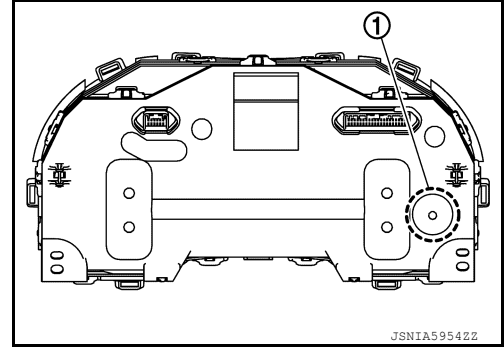
< SYSTEM DESCRIPTION >

Combination Meter

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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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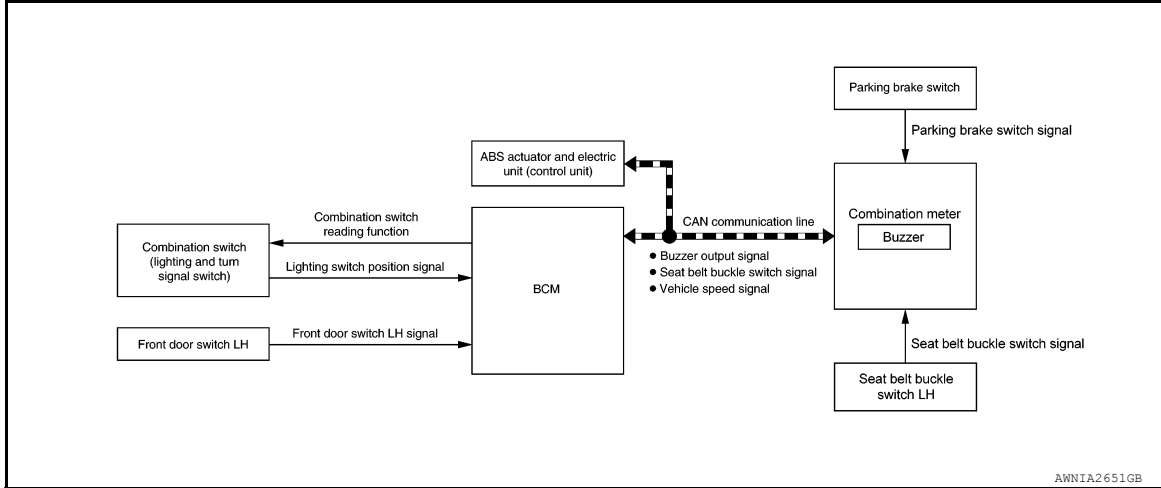
SYSTEM

WARNING CHIME SYSTEM

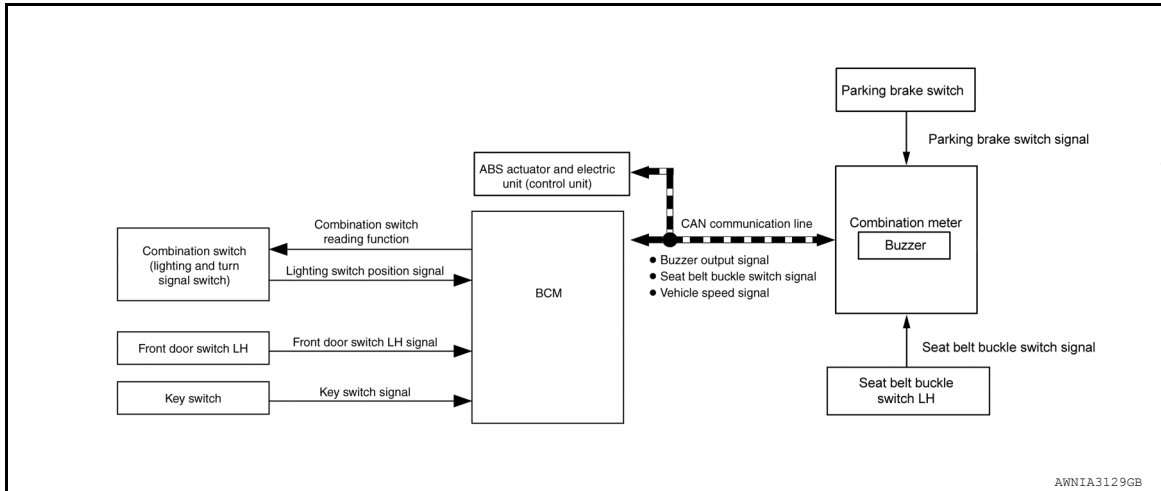
WARNING CHIME SYSTEM : System Description

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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	WCS-7, "LIGHT REMINDER WARNING CHIME : Light Reminder Warning"
Parking brake release warning chime	WCS-8, "PARKING BRAKE RELEASE WARNING CHIME : Parking Brake Release Warning Chime"
Seat belt warning	WCS-9, "SEAT BELT REMINDER WARNING CHIME : Seat belt Warning"
Key warning chime (without Intelligent Key system)	WCS-10, "KEY WARNING CHIME : Key Warning Chime"

WARNING CHIME SYSTEM : Fail-safe

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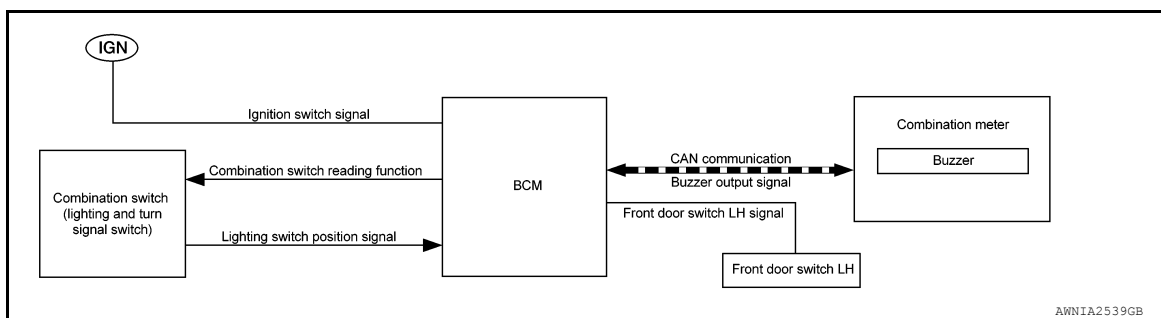
The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning.

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 are 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.

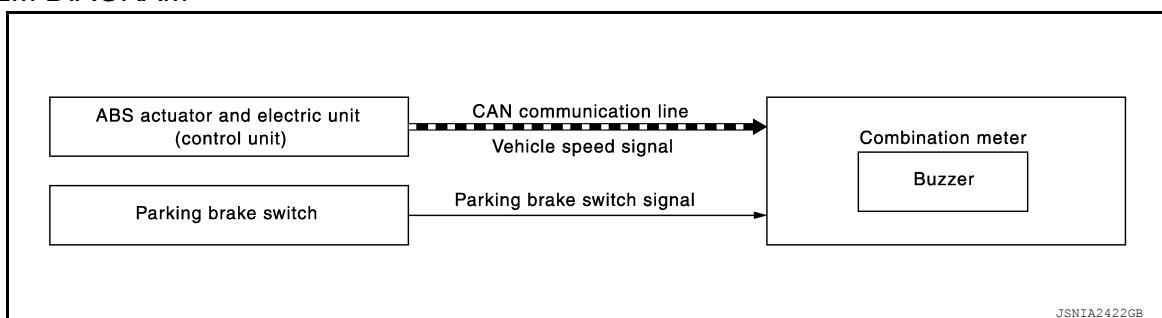
Signal name	Signal source
Buzzer output signal	BCM  → Combination meter

PARKING BRAKE RELEASE WARNING CHIME

PARKING BRAKE RELEASE WARNING CHIME : Parking Brake Release Warning Chime

INFOID:0000000011276457

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.

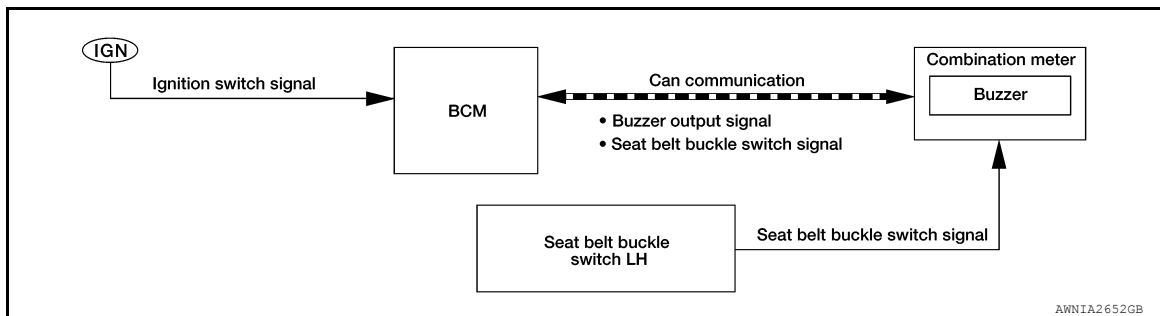
Signal name	Signal source
Ignition switch signal	—
Parking brake switch signal	Parking brake switch → Combination meter
Vehicle speed signal	ABS actuator and electric unit (control unit) $\xrightarrow{\text{CAN}}$ Combination meter

SEAT BELT REMINDER WARNING CHIME

SEAT BELT REMINDER WARNING CHIME : Seat belt Warning

INFOID:000000011276458

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 are 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 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 → CAN → BCM

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

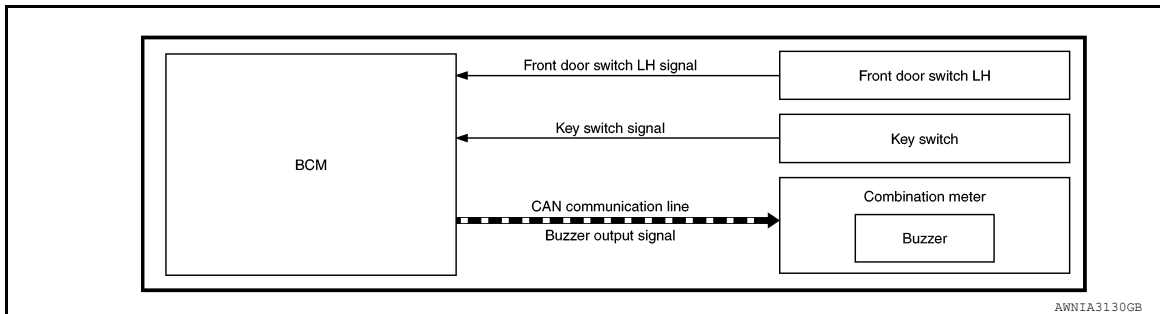
Signal name	Signal source
Buzzer output signal	BCM → CAN → Combination meter

KEY WARNING CHIME

KEY WARNING CHIME : Key Warning Chime

INFOID:000000011276459

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 are 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

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

Signal name	Signal source
Buzzer output signal	BCM ^{CAN} → Combination meter

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DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (COMBINATION METER)

Description

INFOID:000000011403293

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).

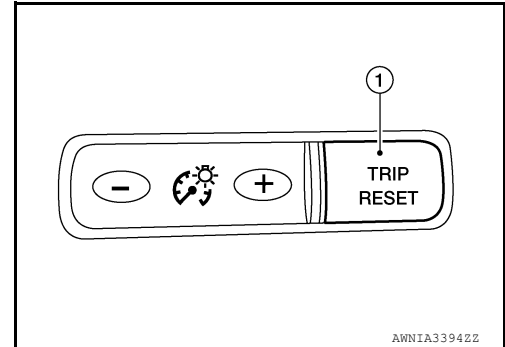
STARTING COMBINATION METER SELF-DIAGNOSIS MODE

NOTE:

- Check combination meter power supply and ground circuits if self-diagnosis mode does not start. Refer to [MWI-60, "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-84, "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"> • Speedometer • Tachometer • Engine coolant temperature gauge • Fuel gauge <p>NOTE: If any one of the pointers does not sweep, replace combination meter.</p>
8	Color check ^{*1}	Performs the color check of the information display.

DIAGNOSIS SYSTEM (COMBINATION METER)

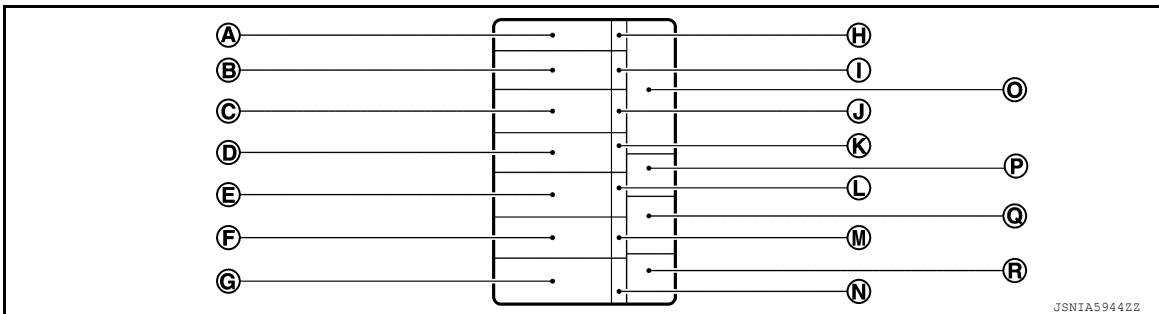
< SYSTEM DESCRIPTION >

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

NOTE:

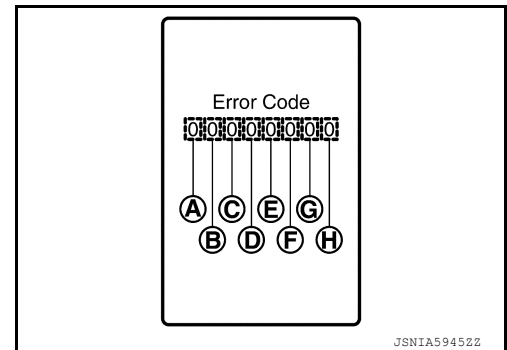
When the trip reset switch is pressed during the indication of Test order "10," test item returns to Test order "2."

*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 BRC-53. "DTC Index" .
	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 EC-96, "DTC Index" .
Ⓒ	Fuel gauge	0	Normal	—
		1	Fuel gauge circuit is short.	Refer to MWI-63, "Component Function Check" .
		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 MWI-31, "DTC Index" .
Ⓔ	Meter control switch	0	Normal	—
		1	When judging that the illumination control switch signal circuit is shorted for 5 minutes or more.	Refer to MWI-69, "Diagnosis Procedure" .
		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:000000011403294

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-31, "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.
ECO MODE IND [On/Off]		Displays [ON/OFF] condition of ECO mode indicator lamp.
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.
ECO MODE SW [On/Off]		Displays [ON/OFF] condition of ECO mode switch.
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.

WORK SUPPORT

Work support item	Description
Outside air temperature diagnosis	A possible malfunction can be narrowed down by following the displayed instructions.
Fuel meter diagnosis (Analog pointer)	
Warning/Indicator lamp diagnosis	

WARNING HISTORY

Special menu

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

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.

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WCS

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:000000011403295

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"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
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		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
Air conditioner	AIR CONDITIONER				×			

BUZZER

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

BUZZER : CONSULT Function (BCM - BUZZER)

INFOID:000000011403296

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].

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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:0000000011403297

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"> • The vehicle specification can be read and saved. • The vehicle specification can be written when replacing BCM.
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:0000000011403298

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.	A
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.	B

ACTIVE TEST

Test Item	Description	
SEAT BELT WARN TEST	This test is able to check seat belt warning chime operation [On/Off].	C
LIGHT WARN ALM	This test is able to check light warning chime operation [On/Off].	D
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].	E

WCS

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:0000000011386493

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* ¹
		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
4WD W/L	Ignition switch ON	AWD warning displayed.	On
		Other than the above.	Off

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
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
ECO MODE IND	Ignition switch ON	ECO mode indicator ON.	On
		ECO 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
ECO MODE SW	Ignition switch ON	ECO mode switch ON.	On
		ECO mode switch OFF.	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

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COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

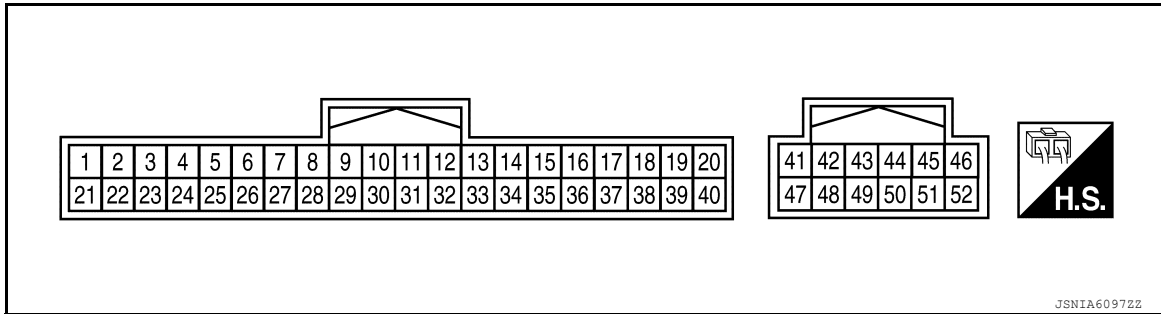
Monitor Item	Condition	Value/Status	
STRG SW INPUT	Ignition switch ON	BACK switch is pressed.	SW1
		MENU UP switch is pressed.	SW2
		MENU DOWN switch is pressed.	SW3
		Voice recognition switch is pressed.	SW4
		MENU OK switch is pressed.	SW5
		VOL DOWN switch is pressed.	SW6
		VOL UP switch is pressed.	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	Ignition switch ON	Blind spot warning lamp ON.	On
		Blind spot warning lamp OFF.	Off
BSW W/L	Ignition switch ON	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/ Out- put			
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
9 (GR)	Ground	ECO mode switch	—	—	—	—
10 (P)	Ground	O/D OFF switch	—	—	—	—

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

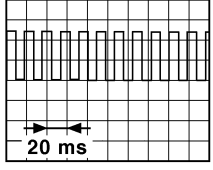
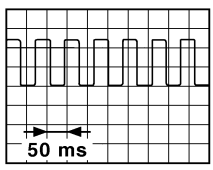
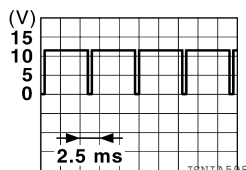
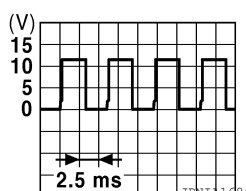
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Out- put			
15 (L)	Ground	Ambient sensor signal	Input	Ignition switch ON	—	<p style="text-align: right; font-size: small;">JSNIA0014GB</p>
17 (BG)	Ground	Meter control switch ground	—	—	—	0 V
18 (SB)	Ground	Trip/reset 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 (BR)	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

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COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
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>NOTE: The maximum voltage varies depending on the specification (destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>
39 (W)	Ground	Vehicle speed signal (2-pulse)	Output	Ignition switch ON Speedometer operated [When vehicle speed is approx. 25 MPH (40 km/h)].	<p>NOTE: The maximum voltage varies depending on the specification (destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0015GB</p>
41 (L)	Ground	CAN high	—	—	—
42 (P)	Ground	CAN low	—	—	—
43 (W)	Ground	Illumination control signal	Output	Ignition switch ON	<ul style="list-style-type: none"> Lighting switch 1st position When meter illumination is minimum.  <p style="text-align: right; font-size: small;">JSNIA00183GB</p>
					<ul style="list-style-type: none"> Lighting switch 1st position When meter illumination is step 11.  <p style="text-align: right; font-size: small;">JSNIA00186GB</p>
					<ul style="list-style-type: none"> Lighting switch 1st position When meter illumination is maximum. <p style="text-align: center;">0 V</p>
44 (LA/B)	Ground	Fuel level sensor ground	—	Ignition switch ON	0 V
45 (LA/G)	Ground	Battery power supply	—	—	Battery voltage

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
46 (LA/ BR)	Ground	Ignition signal	—	Ignition switch ON or START	—	Battery voltage
47 (SB)	Ground	M CAN high	—	—	—	—
48 (LG)	Ground	M CAN low	—	—	—	—
51 (LA/ L)	Ground	Fuel level sensor signal	—	Ignition switch ON	Fuel gauge indication position.	Battery voltage
52 (B)	Ground	Ground	—	—	—	0 V

Fail-safe

INFOID:0000000011386494

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		Turns OFF by suspending communication.
Information display	Current fuel consumption	The last result calculated during normal condition is indicated.
	Average fuel consumption	
	Average vehicle speed	
	Range (Distance to empty)	
	Driving distance	
	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.	

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

	Function	Specifications
Warning lamp/indicator lamp	ABS warning lamp	Turns ON by suspending communication.
	Brake warning lamp	
	EPS warning lamp	
	VDC warning lamp	
	AWD warning lamp	
	Malfunction indicator lamp	
	Airbag warning lamp	
	Charge warning lamp	
	VDC OFF indicator lamp	
	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	
	ECO mode indicator lamp	
	Front fog lamp indicator lamp	
	Hill descent control indicator lamp	After blinking for 1 minute, the lamp remains ON.
Low tire pressure warning lamp		

DTC Index

INFOID:000000011386495

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.	MWI-55
CONTROL UNIT (CAN) [U1010]	Detecting error during the initial diagnosis of CAN controller of combination meter.	MWI-56
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-57
ENGINE SPEED [B2267]	ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-58
WATER TEMP [B2268]	ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-59

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000011276469

ECU	Reference
BCM (with Intelligent Key system)	BCS-28. "Reference Value"
	BCS-46. "Fail Safe"
	BCS-46. "DTC Inspection Priority Chart"
	BCS-47. "DTC Index"
BCM (without Intelligent Key system)	BCS-96. "Reference Value"
	BCS-107. "Fail Safe"
	BCS-107. "DTC Inspection Priority Chart"
BCS-108. "DTC Index"	

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WARNING CHIME SYSTEM

< WIRING DIAGRAM >

WIRING DIAGRAM

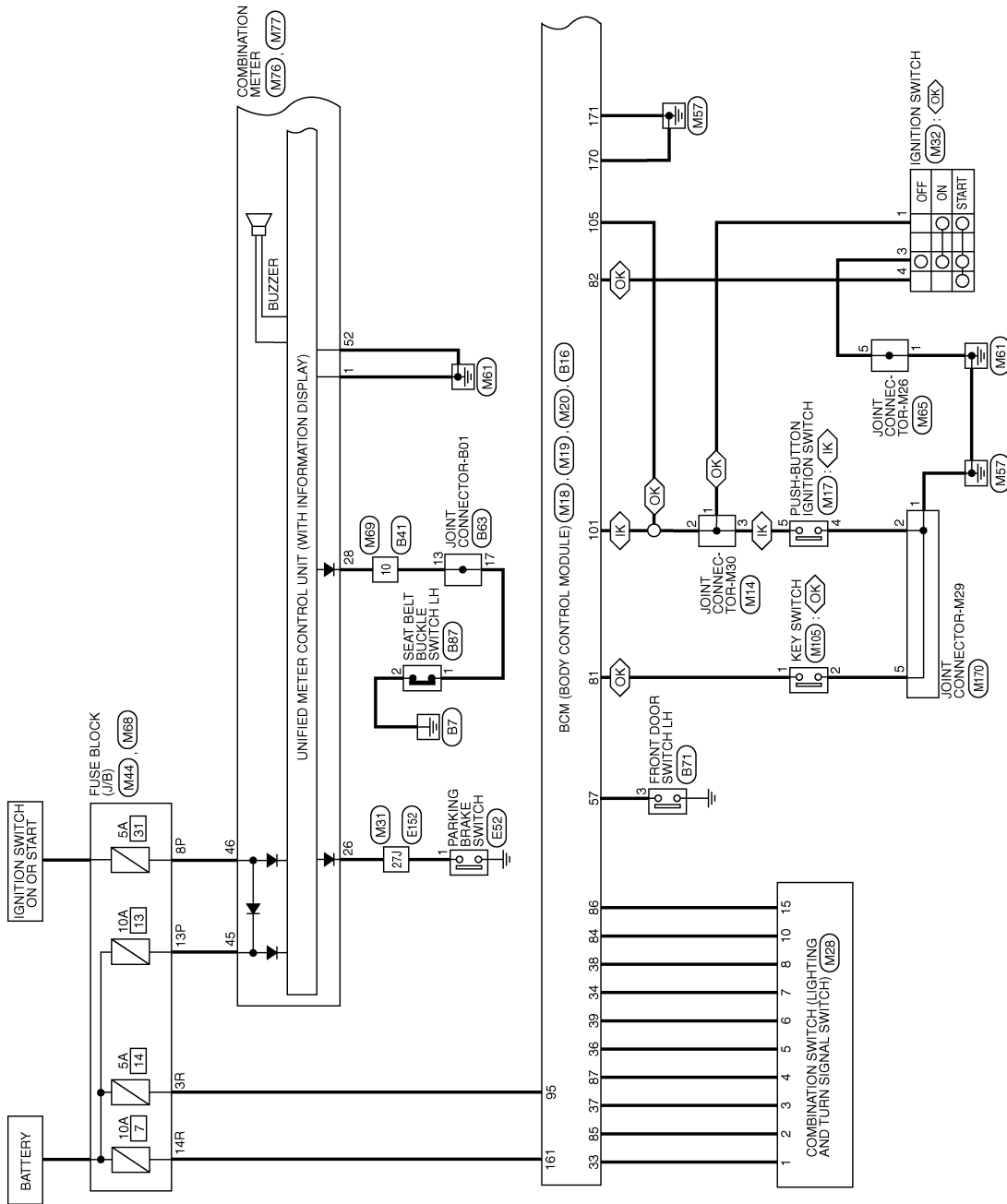
WARNING CHIME SYSTEM

Wiring Diagram

INFOID:0000000011276470

: WITH INTELLIGENT KEY SYSTEM
 : WITHOUT INTELLIGENT KEY SYSTEM

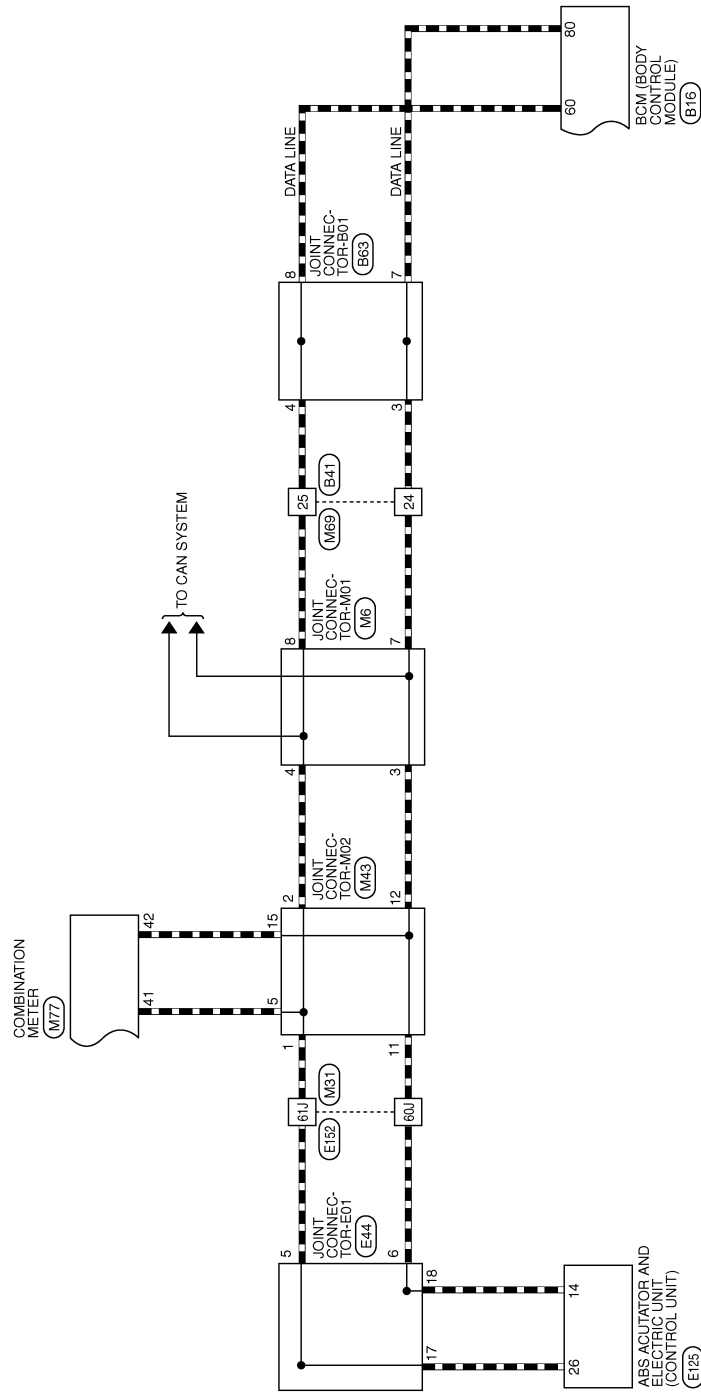
WARNING CHIME SYSTEM



AANWA1193GB

WARNING CHIME SYSTEM

< WIRING DIAGRAM >



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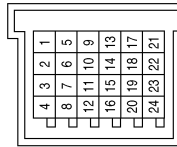
AANWA1194GB

WARNING CHIME SYSTEM

< WIRING DIAGRAM >

WARNING CHIME SYSTEM CONNECTORS

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



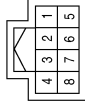
Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-

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



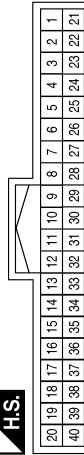
Terminal No.	Color of Wire	Signal Name
1	Y	-
2	Y	-
3	Y	-

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



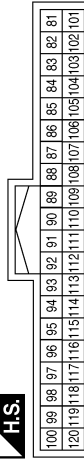
Terminal No.	Color of Wire	Signal Name
4	B	-
5	Y	-

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
89	Y	I START WO ESCL SW
95	V	I SHORTING PIN
105	Y	I IGN SW (WITHOUT I-KEY)

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



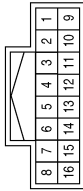
Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
170	B	I GND1
175	R	I PWR DOORLOCK2

AANIA3206GB

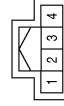
WARNING CHIME SYSTEM

< WIRING DIAGRAM >

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE



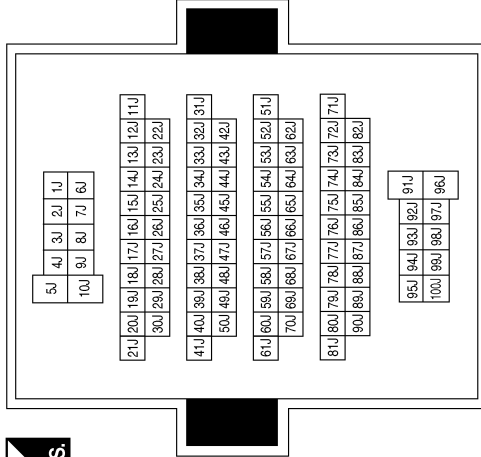
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	SB	-
3	GR	-
4	BG	-
5	G	-
6	W	-
7	Y	-
8	V	-
10	BR	-
15	P	-



Connector No.	M32
Connector Name	IGNITION SWITCH
Connector Color	WHITE

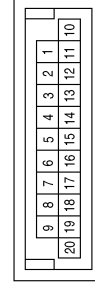
Terminal No.	Color of Wire	Signal Name
1	Y	-
3	B	-
4	LA/R	-

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



Terminal No.	Color of Wire	Signal Name
27J	G	-
60J	P	-
61J	L	-

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	-

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	-

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WARNING CHIME SYSTEM

< WIRING DIAGRAM >

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



16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17

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

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



7R	6R	5R	4R	3R	2R	1R		
16R	15R	14R	13R	12R	11R	10R	9R	8R

Terminal No.	Color of Wire	Signal Name
3R	V	-
14R	W	-

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



8	7	6	5	4	3	2	1
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Terminal No.	Color of Wire	Signal Name
1	B	-
5	B	-

Connector No.	M105
Connector Name	KEY SWITCH
Connector Color	WHITE



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

Connector No.	M77
Connector Name	COMBINATION METER
Connector Color	WHITE



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

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	G1

Connector No.	M76
Connector Name	COMBINATION METER
Connector Color	WHITE



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

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

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WARNING CHIME SYSTEM

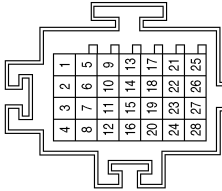
< WIRING DIAGRAM >

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.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



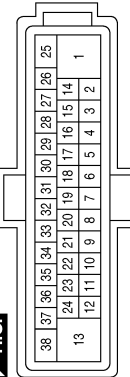
Terminal No.	Color of Wire	Signal Name
5	L	-
6	P	-
17	L	-
18	P	-

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



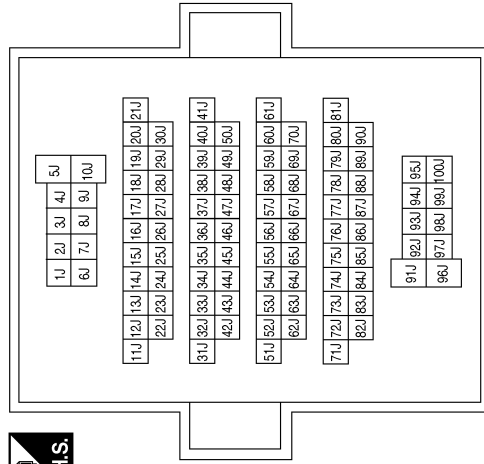
Terminal No.	Color of Wire	Signal Name
1	G	-

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



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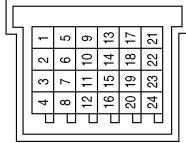
A B C D E F G H I J K L M O P

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WARNING CHIME SYSTEM

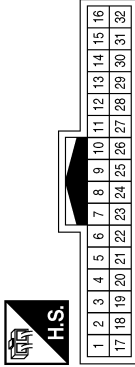
< WIRING DIAGRAM >

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



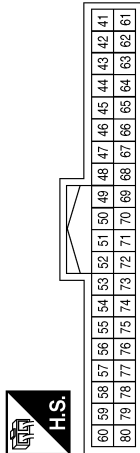
Terminal No.	Color of Wire	Signal Name
3	P	-
4	L	-
7	P	-
8	L	-
13	LAY	-
17	LAY	-

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



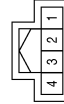
Terminal No.	Color of Wire	Signal Name
10	LAY	-
24	P	-
25	L	-

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



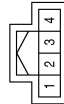
Terminal No.	Color of Wire	Signal Name
57	SB	I DR DOOR2 SW
60	L	CAN-H
80	P	CAN-L

Connector No.	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	-

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

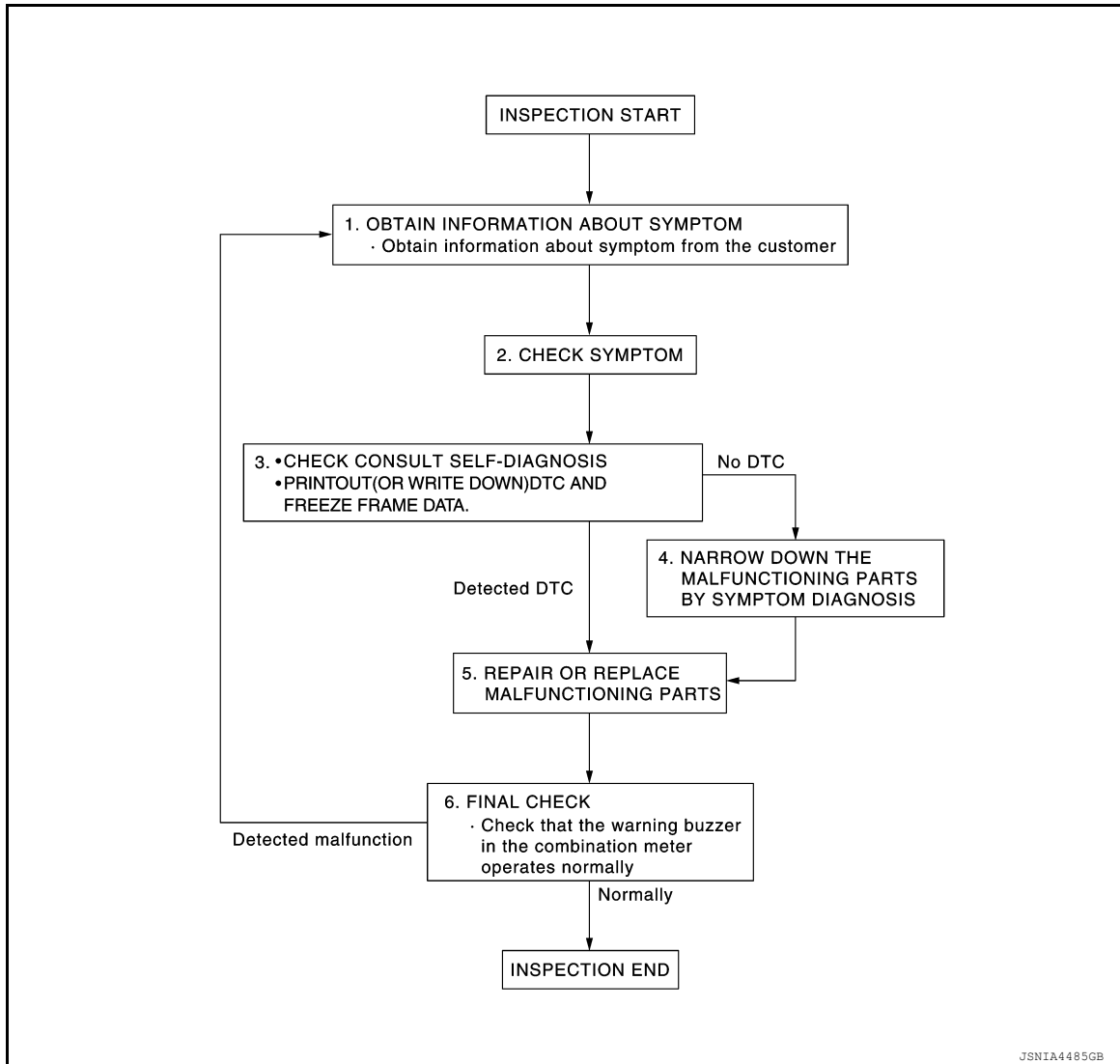
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011276471

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-28, "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:000000011386496

Regarding Wiring Diagram information, refer to [MWI-33. "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. CHECK POWER SUPPLY CIRCUIT

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

Combination meter		Ground	Ignition switch position		
Connector	Terminal		OFF	ON	START
M77	45	(-)	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. CHECK GROUND CIRCUIT

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

Combination meter		Ground	Continuity
Connector	Terminal		
M76	1	(-)	Yes
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:000000011386497

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

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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:000000011386498

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

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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.

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METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Description

INFOID:000000011276475

- 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:000000011276476

1. CHECK OPERATION OF METER BUZZER

1. Select "BUZZER" of "BCM" using CONSULT.
2. Perform "LIGHT WARN ALM" or "SEAT BELT WARN TEST" in "Active Test".

Does meter buzzer activate?

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

Diagnosis Procedure

INFOID:000000011276477

1. CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" of "METER/M&A" using CONSULT 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-84. "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:0000000011276478

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

Component Function Check

INFOID:0000000011276479

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:0000000011276480

Regarding Wiring Diagram information, refer to [WCS-30, "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	Battery voltage
		When seat belt LH is unfastened	0 V

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-84, "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:0000000011276481

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:0000000011276482

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:0000000011276483

Regarding Wiring Diagram information, refer to [WCS-30, "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. Select "METER/M&A".
4. Monitor "PKB SW" in "Data Monitor" while applying and releasing the parking brake.

Monitor item	Condition	Status
PKB SW	When parking brake is applied.	ON
	When parking brake is released.	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-84, "Removal and Installation"](#).
NO >> Repair or replace malfunctioning components.

Component Inspection

INFOID:0000000011276484

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:0000000011276485

Transmits a key switch signal to the BCM.

Component Function Check

INFOID:0000000011276486

1. CHECK BCM INPUT SIGNAL

Select "Data Monitor" of "BCM" using CONSULT 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:0000000011276487

Regarding Wiring Diagram information, refer to [WCS-30, "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	Ground	Battery voltage
		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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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	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. Refer to [SEC-195, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

Component Inspection

INFOID:0000000011276488

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. Refer to [SEC-195, "Removal and Installation"](#).

WARNING CHIME SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

WARNING CHIME SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000011276489

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

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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:000000011276490

- 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:000000011276491

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-84, "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-84, "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:0000000011276492

- 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:0000000011276493

1. CHECK WARNING CHIME OPERATION

1. Select "BUZZER" of "BCM" using CONSULT.
2. Perform "SEAT BELT WARN TEST" in "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-84, "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-84, "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:000000011276494

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

Diagnosis Procedure

INFOID:000000011276495

1.CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" of "METER/M&A" using CONSULT 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-84, "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-156, "Diagnosis Procedure"](#) (with Intelligent Key system) or [DLK-330, "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-157, "Component Inspection"](#) (with Intelligent Key system) or [DLK-331, "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-276, "Removal and Installation"](#) (with Intelligent Key system) or [DLK-396, "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:0000000011276496

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:0000000011276497

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. Refer to [SEC-195, "Removal and Installation"](#).

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