

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:000000009347502

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.

Precaution for Technicians Using Medical Electric

INFOID:000000009347503

OPERATION PROHIBITION

WARNING:

- Parts with strong magnet is used in this vehicle.
- Technicians using a medical electric device such as pacemaker must never perform operation on the vehicle, as magnetic field can affect the device function by approaching to such parts.

NORMAL CHARGE PRECAUTION

WARNING:

- If a technician uses a medical electric device such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator, the possible effects on the devices must be checked with the device manufacturer before starting the charge operation.
- As radiated electromagnetic wave generated by PDM (Power Delivery Module) at normal charge operation may affect medical electric devices, a technician using a medical electric device such as implantable cardiac pacemaker or an implantable cardioverter defibrillator must not approach motor room [PDM (Power Delivery Module)] at the hood-opened condition during normal charge operation.

PRECAUTION AT TELEMATICS SYSTEM OPERATION

WARNING:

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of TCU might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), when using the service, etc.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of TCU might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before TCU use.

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PRECAUTIONS

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PRECAUTION AT INTELLIGENT KEY SYSTEM OPERATION

WARNING:

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of Intelligent Key might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), at door operation, at each request switch operation, or at engine starting.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of Intelligent Key might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before Intelligent Key use.

Point to Be Checked Before Starting Maintenance Work

INFOID:000000009347908

The high voltage system may starts automatically. It is required to check that the timer air conditioner and timer charge (during EVSE connection) are not set before starting maintenance work.

NOTE:

If the timer air conditioner or timer charge (during EVSE connection) is set, the high voltage system starts automatically even when the power switch is in OFF state.

COMPONENT PARTS

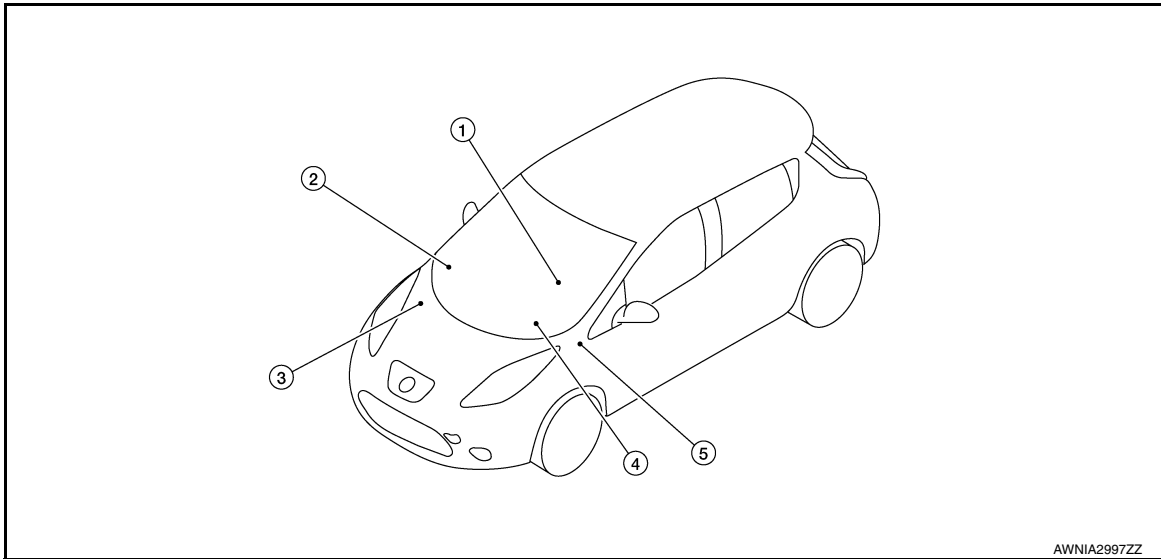
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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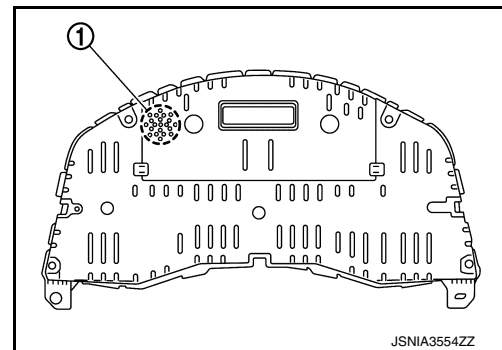
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No.	Component	Function
1.	Seat belt buckle switch (driver side)	Transmits the seat belt buckle switch signal (driver side) to the combination meter.
2.	BCM	Based on the signals received from various units and switches, transmits the buzzer output signal to the combination meter via CAN communication. Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
3.	ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to the combination meter via CAN communication. Refer to BRC-10, "Component Parts Location" for detailed installation location.
4.	Combination meter	<ul style="list-style-type: none"> Receives a buzzer output signal from the BCM with CAN communication line and sounds the buzzer. Judges whether the parking brake is released using the vehicle speed signal and the parking brake switch signal, and sounds the buzzer if necessary.
5.	Parking brake switch	Transmits the parking brake switch signal to the combination meter.

Combination Meter

INFOID:000000008746344

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



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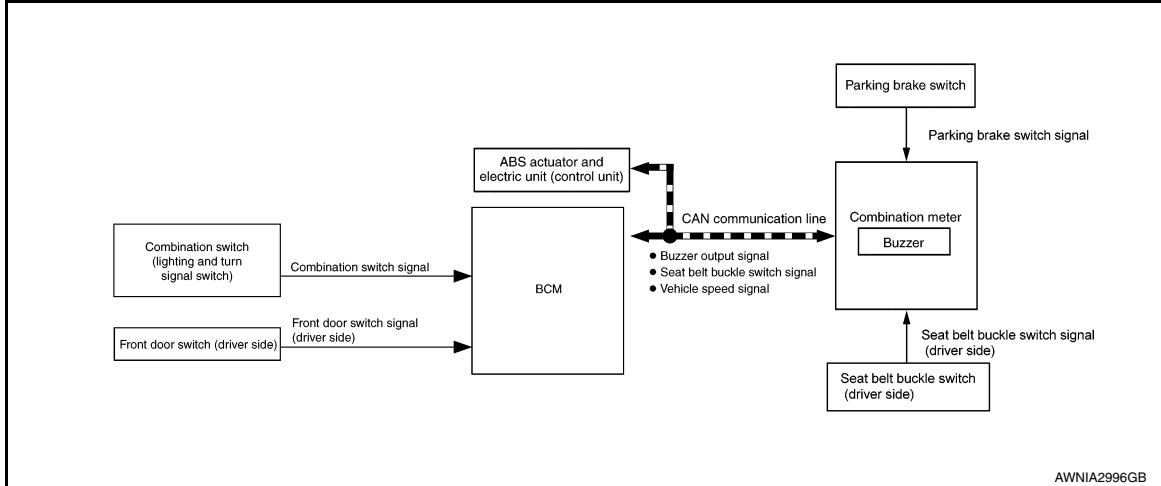
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WARNING CHIME SYSTEM

WARNING CHIME SYSTEM : System Description

INFOID:000000008746345

SYSTEM DIAGRAM



COMBINATION METER INPUT/OUTPUT SIGNAL (CAN COMMUNICATION SIGNAL)

Input signal

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

Output signal

Signal name	Reception unit
Seat belt buckle switch signal (driver side)	BCM

BCM INPUT/OUTPUT SIGNAL (CAN COMMUNICATION SIGNAL)

Input signal

Signal name	Transmit unit
Seat belt buckle switch signal (driver side)	Combination meter

Output signal

Signal name	Reception unit
Buzzer output signal	Combination meter

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

SYSTEM

< SYSTEM DESCRIPTION >

Warning functions	Outline	Warning judgment unit	Refer to
Light reminder warning chime	The warning chime sounds when the power switch is in LOCK, OFF or ACC position with the combination switch (lighting switch) in the 1st or 2nd position and the driver side door open.	BCM	WCS-8. "LIGHT REMINDER WARNING CHIME : System Description"
Seat belt warning chime	The warning chime sounds when the driver seat belt is unfastened with the power switch in ON or READY position.	BCM	WCS-10. "SEAT BELT WARNING CHIME : System Description"
Parking brake release warning chime	The warning chime sounds when the parking brake is applied and the vehicle speed 4.3 MPH (7 km/h) or more.	Combination meter	WCS-11. "PARKING BRAKE RELEASE WARNING CHIME : Parking Brake Release Warning Chime"

WARNING CHIME SYSTEM : Fail-Safe

INFOID:000000009347519

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

Function		Specifications	
Power meter		The display turns OFF by suspending communication.	
Li-ion battery temperature gauge			
Li-ion battery capacity level gauge			
Li-ion battery available charge gauge			
Driving range display		The display turns "--" by suspending communication.	
Illumination control		When suspending communication, changes to nighttime mode.	
Information display	Trip computer	Current electricity consumption	Reset to zero by suspending communication.
		Average electricity consumption	The last result calculated during normal condition is indicated.
		Li-ion battery available charge	
		Average vehicle speed	
	Travel distance	An indicated value is maintained at communications blackout.	
	Odo/trip meter	An indicated value is maintained at communications blackout.	
	Shift indicator	The display turns OFF by suspending communication.	
	Li-ion low battery charge warning display	The display turns ON by suspending communication.	
	Electric shift warning display		
Other than the above	The display turns OFF by suspending communication.		
Buzzer		The buzzer turns OFF by suspending communication.	

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SYSTEM

< SYSTEM DESCRIPTION >

	Function	Specifications
Warning lamp/ indicator lamp	ABS warning lamp	The lamp turns ON by suspending communication.
	ESP (VDC) warning lamp	
	Brake warning lamp	
	Front fog lamp indicator lamp	
	Brake system warning lamp	
	EPS warning lamp	
	Low battery charge warning lamp	
	Electric shift warning lamp	The lamp turns OFF by suspending communication.
	High beam indicator lamp	
	ESP (VDC) OFF indicator lamp	
	Rear fog lamp indicator lamp	
	Position lamp indicator lamp	
	READY to drive indicator lamp	
	12V battery charge warning lamp	
	Power limitation indicator lamp	
	EV system warning lamp	

- The upper meter performs the fail-safe control when a breakdown of CAN communications between the combination meter and each unit occurs.

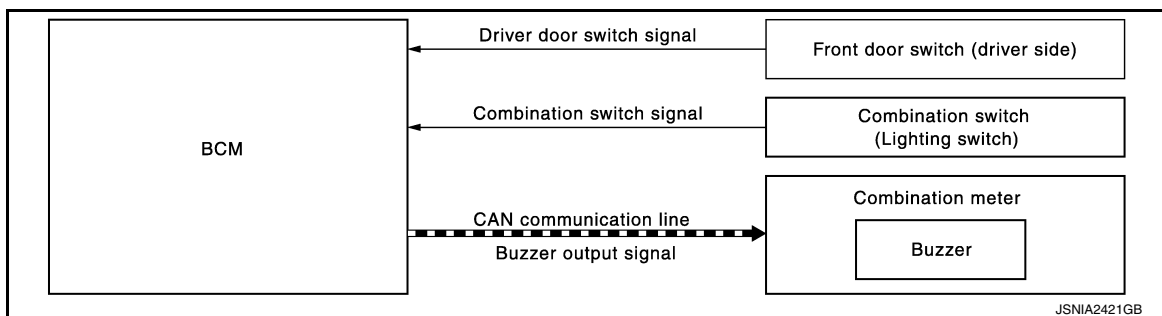
Function	Specifications
Speedometer	The display turns OFF by suspending communication.
Eco indicator	
Outside air temperature display	The last result calculated during normal condition is indicated.
Clock	<ul style="list-style-type: none"> • When reception time of an abnormal signal is 30 seconds or less, the last value received. • When reception time of an abnormal signal is more than 30 seconds, internal clock time is indicated.
Illumination control	When suspending communication, changes to nighttime mode.
Turn signal indicator lamp	The lamp turns OFF by suspending communication.

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME : System Description

INFOID:000000008746348

SYSTEM DIAGRAM



WARNING CHIME OPERATION CONDITIONS

If all of the following conditions are fulfilled.

SYSTEM

< SYSTEM DESCRIPTION >

Operation conditions	
Power switch	LOCK, OFF or ACC position
Combination switch (Lighting switch)	1st or 2nd position
Driver side door	Open [front door switch (driver side) ON]

WARNING CHIME CANCEL CONDITIONS

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


Operation conditions	
Power switch	ON or READY position
Combination switch (Lighting switch)	OFF or AUTO position
Driver side door	Close [front door switch (driver side) OFF]

SIGNAL PATH

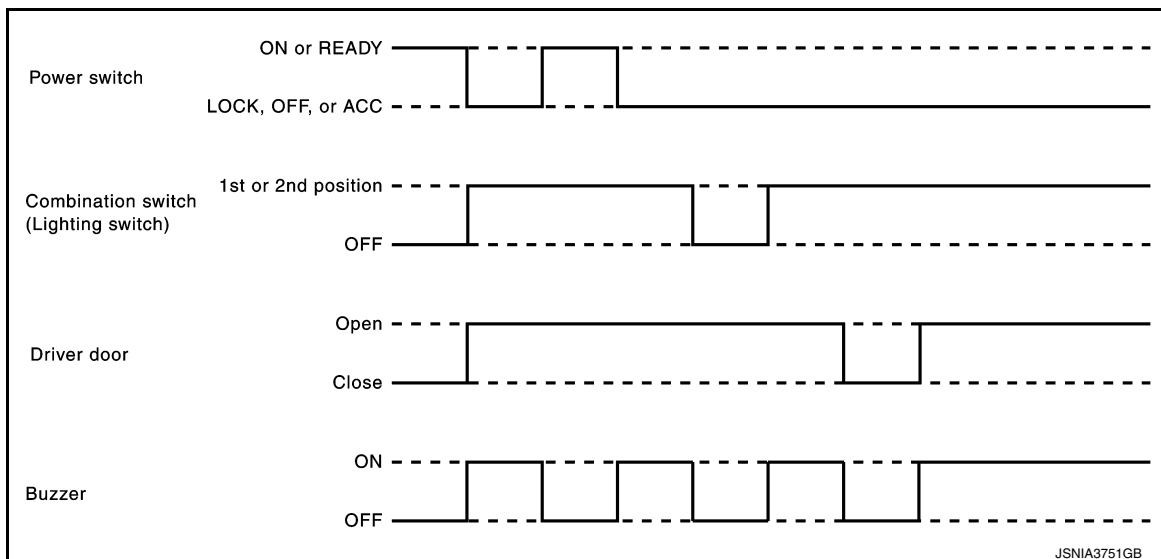
1. BCM requires warning chime output to combination meter when it judges light reminder warning chime is necessary from signals below.

Signal name	Signal path
Power switch ON signal	—
Combination switch signal	Combination switch (Lighting switch) → BCM
Driver door switch signal	Front door switch (driver side) → BCM

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

Signal name	Signal path
Buzzer output signal	BCM  → Combination meter

TIMING CHART



SEAT BELT WARNING CHIME

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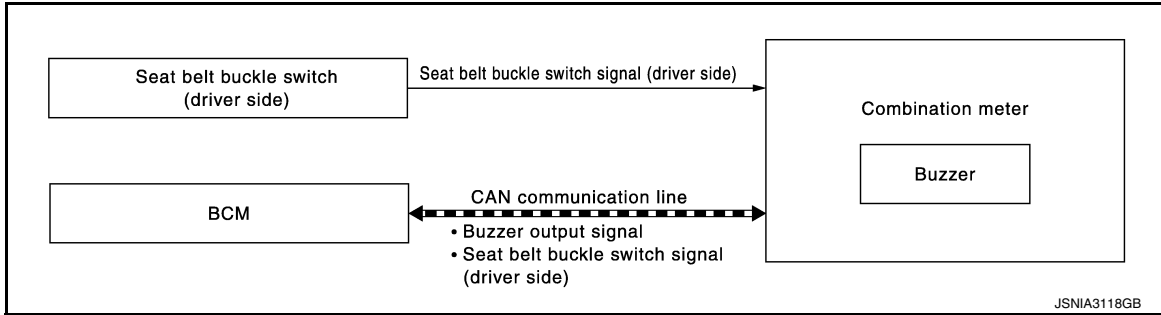
SYSTEM

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SEAT BELT WARNING CHIME : System Description

INFOID:000000008746350

SYSTEM DIAGRAM



WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

Operation conditions	
Power switch	ON or READY position
Driver seat belt	Unfastened [seat belt buckle switch (driver side) ON]

WARNING CANCEL CONDITIONS

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

Operation conditions	
Power switch	LOCK, OFF, or ACC position
Driver seat belt	Fastened [seat belt buckle switch (driver side) OFF]
6 seconds after the start of warning sound	

SIGNAL PATH

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

Signal name	Signal path
Power switch ON signal	—
Seat belt buckle switch signal (driver side)	Seat belt buckle switch (driver side) → Combination meter → CAN → BCM

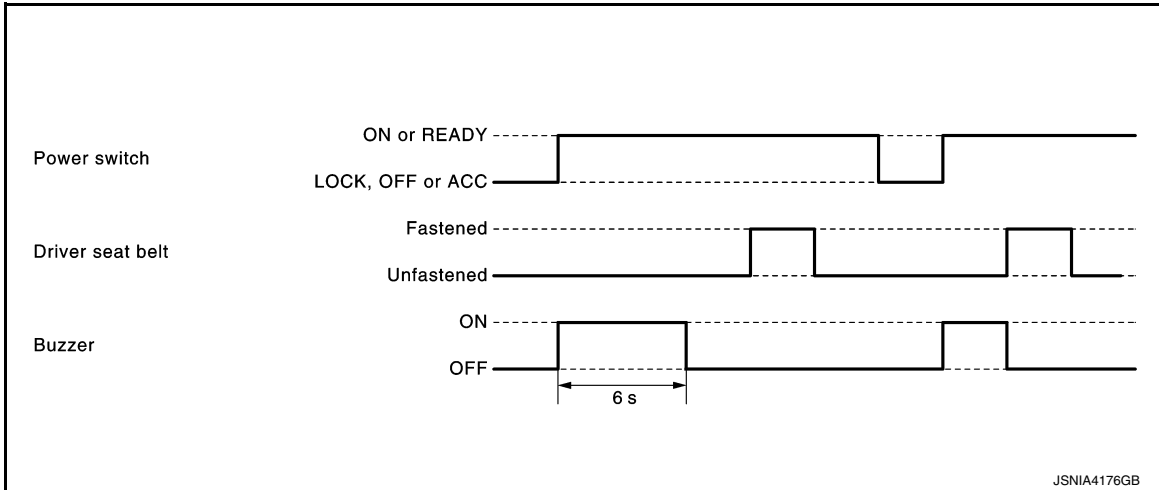
2. Combination meter sounds integrated buzzer, following the warning chime output requirement (below signal) from BCM.

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

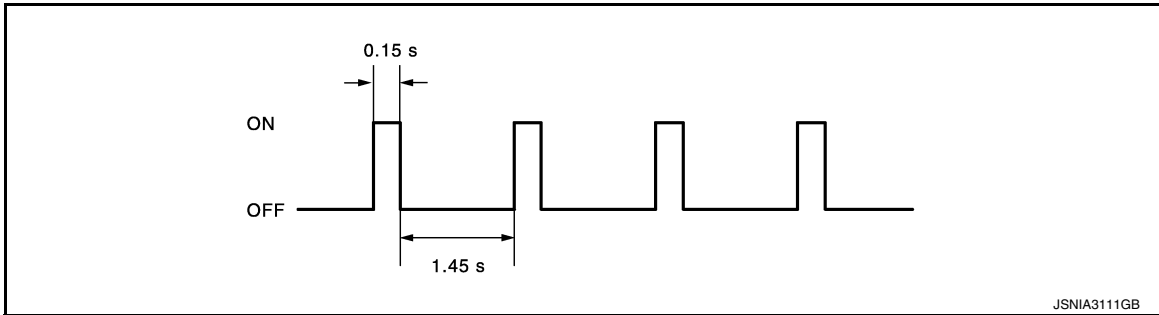
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TIMING CHART



SOUND SPECIFICATION

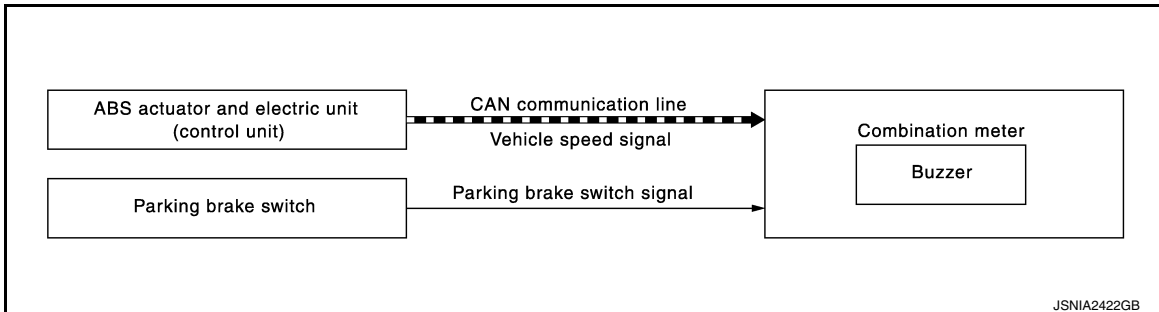


PARKING BRAKE RELEASE WARNING CHIME

PARKING BRAKE RELEASE WARNING CHIME : Parking Brake Release Warning Chime

INFOID:000000009347516

SYSTEM DIAGRAM



WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

WARNING CANCEL CONDITIONS

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

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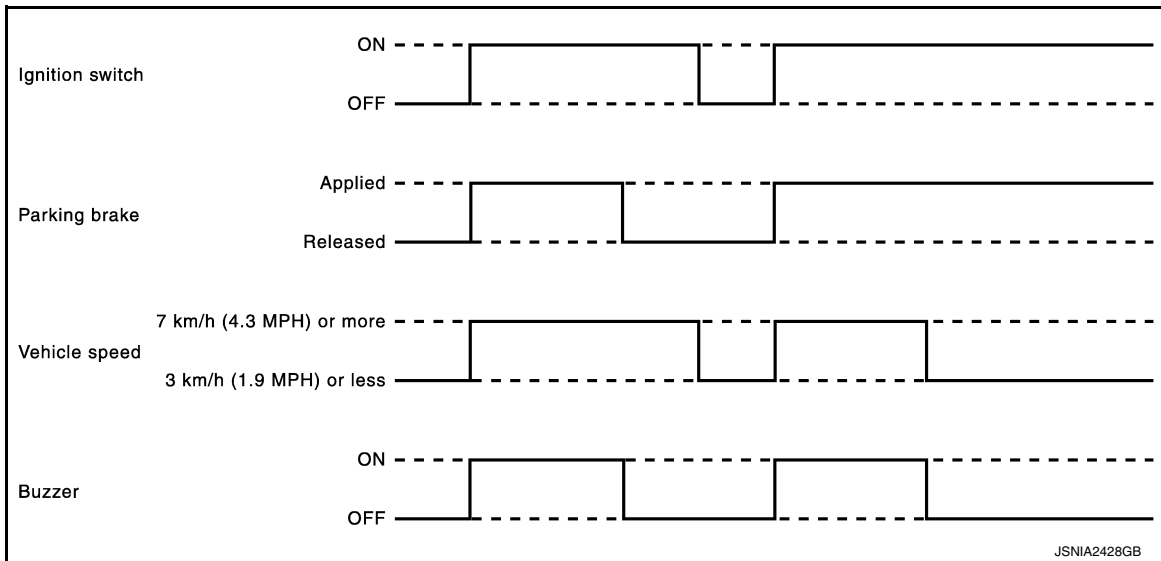
Operation conditions	
Power switch	OFF
Parking brake	Release condition (parking brake switch OFF)
Vehicle speed	Approximately 3 km/h (1.9 MPH) or less

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
Power switch signal	—
Parking brake switch signal	Parking brake switch \longrightarrow Combination meter
Vehicle speed signal	ABS actuator and electric unit (control unit) $\xrightarrow{\text{CAN}}$ Combination meter

TIMING CHART



DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (COMBINATION METER)

On Board Diagnosis Function

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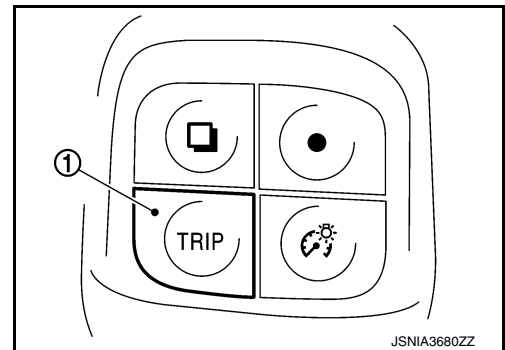
ON BOARD DIAGNOSIS ITEM

The combination meter and upper meter allows the following diagnosis items with the on-board diagnosis function.

Diagnosis item	
LCD (liquid crystal display) check	<ul style="list-style-type: none">• Speedometer• Power meter• Li-ion battery temperature gauge• Li-ion battery capacity level gauge• Li-ion battery available charge gauge• Eco indicator• Driving range display• Outside air temperature display• Clock display• Information display

METHOD OF STARTING

1. Power switch OFF.
2. Turn the power switch ON while holding down the trip reset switch (1).



3. If the diagnosis function is activated with trip A displayed, the mileage on trip A is reset to 0000.0. (The same way for trip B.)
4. Make sure that the trip meter displays 0000.0.
5. Press the trip reset switch at least 3 times (within 7 seconds after power ON).
6. The upper meter (A) and combination meter (B) is turned to self-diagnosis mode.
 - The following items are OFF.
 - Speedometer
 - Power meter
 - Li-ion battery temperature gauge
 - Li-ion battery capacity level gauge
 - Li-ion battery available charge gauge
 - Eco indicator
 - Driving range display
 - Outside air temperature display
 - Clock display
 - Information display

NOTE:

- Check the following items when the self-diagnosis mode of the combination meter does not start. Replace combination meter if the following items are normal
 - Combination meter power supply and ground circuit.
 - Meter control switch signal circuit (trip A/B reset switch signal circuit) and meter control switch.
- Check the following items when the self-diagnosis mode of the upper meter does not start. Replace upper meter if the following items are normal
 - Upper meter power supply and ground circuit.

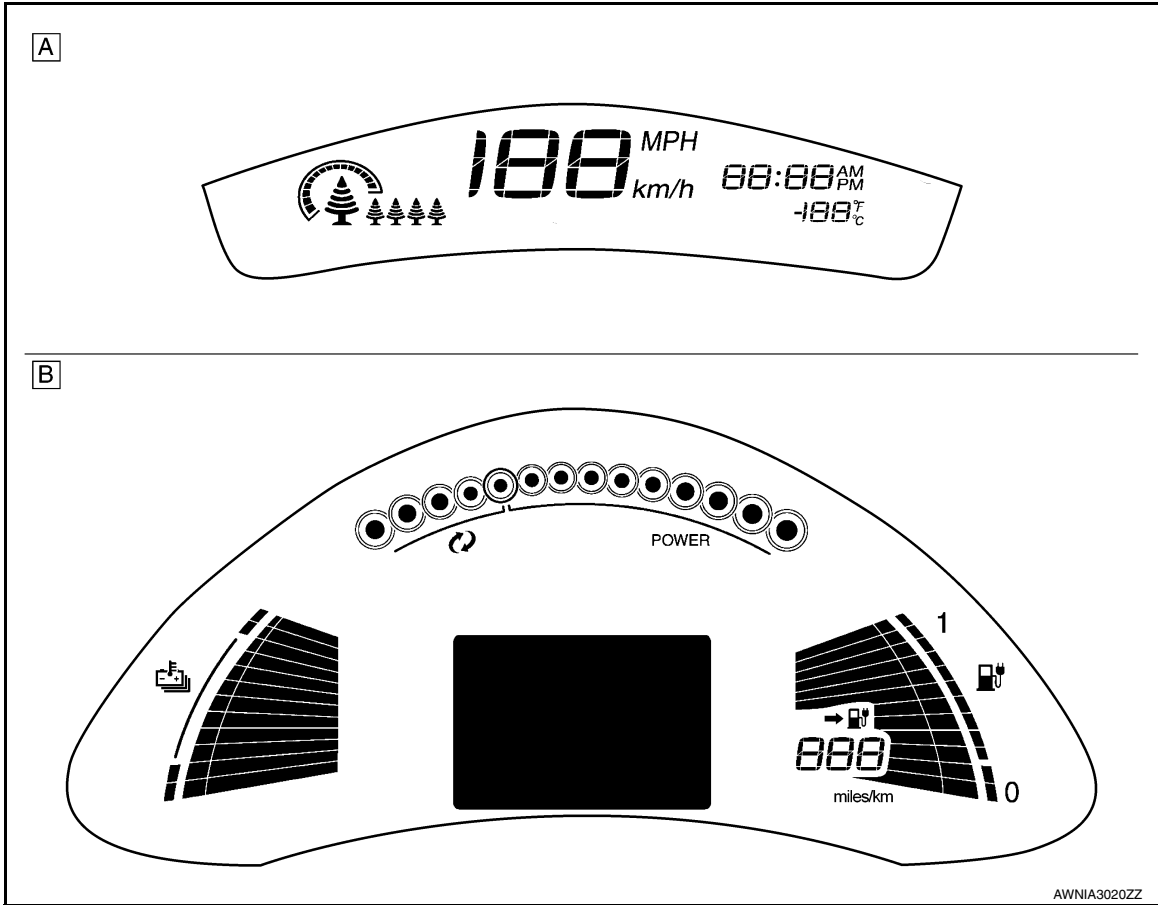
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DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

- Communication line (METER → UPPER)



7. The segments and information display turn ON while the trip reset switch is depressed.

NOTE:

- If there is a segment that does not turn ON, replace the combination meter or upper meter.
- If the information display does not turn ON, replace the combination meter.

CONSULT Function

INFOID:000000009347505

CONSULT APPLICATION ITEMS

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

System	Diagnosis mode	Description
METER/M&A	Self Diagnostic Results	The combination meter checks the conditions and displays memorized errors.
	Data Monitor	Displays the combination meter input/output data in real time.
	Work Support	Allows quick and precise adjustment of component parts and systems.
	Warning History	Lighting history of the warning lamp and indicator lamp can be checked.

SELF DIAG RESULT

Refer to [WCS-32. "DTC Index"](#).

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Display Item List

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [mph or km/h]	X	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication. NOTE: 655.35 is displayed when the malfunction signal is received.
SPEED OUTPUT [mph or km/h]	X	Vehicle speed signal value transmitted to other units via CAN communication. NOTE: 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [mph or km/h]		Odometer signal value transmitted to other units via CAN communication.
ABS W/L [On/Off]		Status of ABS warning lamp detected from ABS warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
VDC/TCS IND [On/Off]		Status of ESP (VDC) OFF indicator lamp detected from ESP (VDC) OFF indicator lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
SLIP IND [On/Off]		Status of ESP (VDC) warning lamp detected from ESP (VDC) warning lamp signal received from ABS actuator and electric unit (control unit) via CAN communication.
BRAKE W/L [On/Off]		Status of brake warning lamp detected from brake warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication. NOTE: Displays "Off" if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.
DOOR W/L [On/Off]		Status of door open warning detected from door switch signal received from BCM via CAN communication.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp detected from high beam request signal is received from BCM via CAN communication.
TURN IND [On/Off]		Status of turn indicator lamp detected from turn indicator signal is received from BCM via CAN communication.
FR FOG IND [On/Off]		Status of front fog light indicator lamp detected from front fog light request signal is received from BCM via CAN communication.
LIGHT IND [On/Off]		Status of position lamp indicator lamp detected from position light request signal is received from BCM via CAN communication.
CRUISE IND [On/Off]		Status of CRUISE indicator detected from ASCD status signal is received from VCM via CAN communication.
SET IND [On/Off]		Status of SET indicator detected from ASCD status signal is received from VCM via CAN communication.
KEY G/Y W/L [On/Off]		Status of Intelligent Key system malfunction detected from meter display signal is received from BCM via CAN communication.
EPS W/L [On/Off]		Status of EPS warning lamp detected from EPS warning lamp signal is received from EPS control unit via CAN communication.
SLOW IND [On/Off]		Status of power limitation indicator detected from power limitation indication lamp request signal is received from VCM via CAN communication.
READY IND [On/Off]		Status of READY to drive indicator lamp detected from READY to drive indicator lamp request signal is received from VCM via CAN communication.
CHAGE W/L [On/Off]		Status of 12V battery charge warning lamp detected from 12-volt battery charge warning lamp request signal is received from VCM via CAN communication.
LCD [B&PN, B&P I, ID NG, ROTAT, IN-SRT, BATT, NO KY, OUTKY, LK WN, KY>PSW]		Status of Intelligent Key system warning judged from meter display signal received from BCM with CAN communication line.
SHIFT IND [P, R, N, D, B]		Status of shift indicator display judged based on the shift position signal received from VCM via CAN communication.

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DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
BUCKLE SW [On/Off]		Status of seat belt buckle switch (driver side).
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.
MODE A SW [On/Off]		Status of enter switch.
MODE B SW [On/Off]		Status of select switch.
PASS BUCKLE SW [On/Off]		Status of seat belt buckle switch (passenger side).
LED LMP R OPEN [On/Off]		Status of front combination lamp RH judged based on LED headlamp (RH) warning signal input from front combination lamp RH.
LED LMP L OPEN [On/Off]		Status of front combination lamp LH judged based on LED headlamp (LH) warning signal input from front combination lamp LH.
CHG CONCT DET [On/Off]		Charge connector connection status judged based plug in signal input from on board charger.
BUZZER [On/Off]	X	Buzzer status (in the combination meter) is detected from the buzzer output signal received from each unit via CAN communication and the warning output condition of the combination meter.
TPMS PRESS L [On/Off]		Status of check low tire pressure warning detected from TPMS warning lamp signal received from BCM via CAN communication.
ALL PWER MTER [kW]		Status of current power meter display, judged based on current motor power signal received from VCM via CAN communication.
ASCD SPD BLINK [On/Off]		Blinking status of ASCD or speed limiter set vehicle speed judged by the ASCD status signal received from VCM via CAN communication.
ASCD STATUS [Off, ASCD, CRUISE, SL ON, SL SET]		Status of ASCD and speed limiter status display judged by the ASCD status signal received from VCM via CAN communication.
ASCD REQ SPD [km/h/Off]		ASCD or speed limiter set vehicle speed value judged by the ASCD status signal received from VCM via CAN communication.
BAT REMAIN [kWh]		Value of Li-ion battery available charge signal received from VCM via CAN communication.
BAT REMAIN LEV [LEV 1-12]		ON segment value of Li-ion battery available charge gauge received from VCM via CAN communication.
BAT CHG CAP LEV [LEV 1-12]		ON segment value of Li-ion battery capacity level gauge received from VCM via CAN communication.
BAT TEMP [°C]		Value of Li-ion battery temperature signal received from VCM via CAN communication.
POWER MAX [kW]		Value of maximum motor output power signal received from VCM via CAN communication.
REGENE MAX [kW]		Value of maximum regenerable power signal received from VCM via CAN communication.
ECO IND1 [0-15]		ON segment value of instant ECO indicator received from VCM via CAN communication.
ECO IND2 [OFF, seg11-seg15+seg24]		ON segment value of ECO tree received from VCM via CAN communication.
SFT W/L [On/Off]		Status of electric shift warning lamp judged based on electric shift warning lamp signal received from VCM via CAN communication.
REGENE W/L [On/Off]		Status of brake system warning lamp judged based on brake system warning lamp signal received from electrically-driven intelligent brake unit via CAN communication.
EV SYSTEM W/L [On/Off]		Status of EV system warning lamp judged based on EV system warning lamp request signal received from VCM via CAN communication.

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
SFT P W DSP [On/Off]		This item is displayed, but cannot be monitored.
SFT DSP [Off, PKB, SFT MALF, SFT POSI]		Status of electric shift warning display judged based on electric shift warning message signal received from VCM via CAN communication.
PUSH SW W DSP [On/Off]		Status of remove charge connector warning display judged based on plug in warning display signal received from VCM via CAN communication.
IMM CHG DSP [On/Off]		This item is displayed, but cannot be monitored.
POW LIMIT DSP [Off, BAT TMP, MOT TMP, BAT LEVL]		Status of power limitation warning display judged based on power limitation cause signal received from VCM via CAN communication.
100V CHG TIME [min]		Value of remaining time to charge completion (100 V) signal received from VCM via CAN communication.
200V CHG TIME [min]		Value of remaining time to charge completion (200 V) signal received from VCM via CAN communication.
CHARGE STATE [100V, 200V, QICK CHG, OFF]		Charge status judged based on charge status signal received from VCM via CAN communication.
DCDC W DSP [OFF, STOP, CRUISE]		Status of DC/DC converter warning display judged based on vehicle stop and parking brake operation request display signal received from VCM via CAN communication.
SFT SIG [On/Off]		Status of electric shift warning signal input from VCM.
DTE DIF [km]		Value of driving range difference signal received from VCM via CAN communication.
DTE INPUT [km]		Value of driving range signal received from VCM via CAN communication.
DTE 2ND W [On, BLINK, Off]		Status of driving range display (“—”) blinking, judged based on driving range flashing request signal received from VCM via CAN communication.
BAT LOW W/L [On/Off]		Status of low battery charge warning lamp judged based on low battery charge warning lamp request signal received from VCM via CAN communication.
ELE COMPR OFF [kW/h]		Value of A/C OFF average electricity consumption for driving range signal received from VCM via CAN communication.
ELE COMPR ON [kW/h]		Value of A/C ON average electricity consumption for driving range signal received from VCM via CAN communication.
DTE BLINK [On/Off]		Status of driving range display blinking, judged based on driving range flashing request signal received from VCM via CAN communication/

NOTE:

Some items are not available according to vehicle specification.

WORK SUPPORT

Work support item	Description
Clock Calibration and Outside Air Temperature Parameters Update	NOTE: This item is displayed, but cannot be monitored.

WARNING HISTORY

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

NOTE:

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

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

Display Item

Display item	Description
ABS W/L	Lighting history of ABS warning lamp.
VDC/TCS IND	Lighting history of ESP (VDC) OFF indicator lamp.
SLIP IND	Lighting history of ESP (VDC) warning lamp.
BRAKE W/L	Lighting history of brake warning lamp.
DOOR W/L	Lighting history of door open warning.
CRUISE IND	Lighting history of CRUISE indicator.
SET IND	Lighting history of SET indicator.
EPS W/L	Lighting history of EPS warning lamp.
CHAGE W/L	Lighting history of 12V battery charge warning lamp.
REGENE BRAKE W/L	Lighting history of brake system warning lamp.
SLOW IND	Lighting history of power limitation indicator.
EV SYSTEM W/L	Lighting history of EV system warning lamp.
LED LAMP W/L	Lighting history of headlamp warning lamp.

NOTE:

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000009347510

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	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			
Air conditioner	AIR CONDITIONER			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			
Trunk 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

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

BUZZER : CONSULT Function (BCM - BUZZER)

INFOID:000000009347511

DATA MONITOR

Monitor Item [Unit]	Description
PUSH -SW [On/Off]	Indicates condition of power switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
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
ID REGIST WARNING	This test is able to check TPMS transmitter ID regist warning chime operation [On/Off].
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].

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:000000009347506

VALUES ON THE DIAGNOSIS TOOL

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to consult display items.

Monitor item	Condition		Value/Status
SPEED METER [mph or km/h]	Power switch ON	While driving	Input value of vehicle speed signal (CAN communication signal) NOTE: 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [mph or km/h]	Power switch ON	While driving	Output value of vehicle speed signal (CAN communication signal) NOTE: 655.35 is displayed when the malfunction signal is received
ODO OUTPUT [mph or km/h]	Power switch ON	—	Output value of odometer signal (CAN communication signal)
ABS W/L	Power switch ON	ABS warning lamp ON	On
		ABS warning lamp OFF	Off
VDC/TCS IND	Power switch ON	ESP (VDC) OFF indicator lamp ON	On
		ESP (VDC) OFF indicator lamp OFF	Off
SLIP IND	Power switch ON	ESP (VDC) warning lamp ON	On
		ESP (VDC) warning lamp OFF	Off
BRAKE W/L	Power switch ON	Brake warning lamp ON	On
		Brake warning lamp OFF	Off
DOOR W/L	Power switch ON	Door open warning ON	On
		Door open warning OFF	Off
HI-BEAM IND	Power switch ON	High-beam indicator lamp ON	On
		High-beam indicator lamp OFF	Off
TURN IND	Power switch ON	Turn indicator lamp ON	On
		Turn indicator lamp OFF	Off
FR FOG IND	Power switch ON	Front fog lamp indicator lamp ON	On
		Front fog lamp indicator lamp OFF	Off
LIGHT IND	Power switch ON	Position lamp indicator lamp ON	On
		Position lamp indicator lamp OFF	Off
CRUISE IND	Power switch ON	CRUISE indicator ON	On
		CRUISE indicator OFF	Off
SET IND	Power switch ON	SET indicator ON	On
		SET indicator OFF	Off
KEY G/Y W/L	Power switch ON	During Intelligent Key warning malfunction indication	On
		Other than the above	Off
EPS W/L	Power switch ON	EPS warning lamp ON	On
		EPS warning lamp OFF	Off

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COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor item	Condition		Value/Status
SLOW IND	Power switch ON	Power limitation indicator lamp ON	On
		Power limitation indicator lamp OFF	Off
READY IND	Power switch ON	READY to drive indicator lamp ON	On
		READY to drive indicator lamp OFF	Off
CHAGE W/L	Power switch ON	12V battery charge warning lamp ON	On
		12V battery charge warning lamp OFF	Off
LCD	Power switch ON	During engine start information indication	B&P I
	Power switch ACC	During engine start information indication	B&P N
	Power switch LOCK	During key ID warning indication	ID NG
	Power switch LOCK	During steering lock information indication	ROTAT
	Power switch LOCK	During P position warning indication	SFT P
	Power switch LOCK	During Intelligent Key insert information indication	INSRT
	Power switch LOCK	During Intelligent Key low battery warning indication	BATT
	Power switch ON	During take away warning indication	NO KY
	Power switch LOCK	During key warning indication	OUTKY
	Power switch ON	During ACC warning indication	LK WN
SHIFT IND	Power switch ON	During the indication of "P" by shift position indicator	P
		During the indication of "R" by shift position indicator	R
		During the indication of "N" by shift position indicator	N
		During the indication of "D" by shift position indicator	D
		During the indication of "B" by shift position indicator	B
		Other than above	Off
BUCKLE SW	Power switch ON	Driver seat belt not fastened	On
		Driver seat belt fastened	Off
BRAKE OIL SW	Power switch ON	Brake fluid level switch ON	On
		Brake fluid level switch OFF	Off
PASS BUCKLE SW	Power switch ON	Passenger seat belt not fastened	On
		Passenger seat belt fastened	Off
MODE A SW	Power switch ON	When enter switch is pressed	On
		Other than above	Off
MODE B SW	Power switch ON	When select switch is pressed	On
		Other than above	Off

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor item	Condition		Value/Status	
LED LMP R OPEN	Power switch ON	Front combination lamp RH malfunction	On	A
		Front combination lamp RH normal	Off	
LED LMP L OPEN	Power switch ON	Front combination lamp LH malfunction	On	B
		Front combination lamp LH normal	Off	
CHG CONCT DET	Power switch ON	Charge connector connected	On	C
		Charge connector not connected	Off	
BUZZER	Power switch ON	Buzzer ON	On	D
		Buzzer OFF	Off	
TPMS PRESS L	Power switch ON	During check tire pressure warning indication	On	E
		Other than above	Off	
ALL PWER MTER [kW]	Power switch ON	While driving	Input value of current power signal	
ASCD STATUS	Power switch ON	ASCD and speed limiter system OFF	Off	F
		ASCD system ON	ON	
		ASCD set vehicle speed	CRUISE	G
		Speed limiter system ON	SL ON	
		Speed limiter set vehicle speed	SL SET	
ASCD SPD BLNK	Power switch ON	Set vehicle speed indicator blinking	On	H
		Set vehicle speed indicator not blinking	Off	
ASCD REQ SPD [mph, km/h or Off]	Power switch ON	While driving	Same value as ASCD or speed limiter set vehicle speed.	I
BAT REMAIN [kWh]	Power switch ON	—	Input value of Li-ion battery available charge signal	
BAT REMAIN LEV	Power switch ON	1 segment of Li-ion battery available charge gauge illuminates	LV.1	J
		2 segments of Li-ion battery available charge gauge illuminate	LV.2	K
		3 segments of Li-ion battery available charge gauge illuminate	LV.3	
		4 segments of Li-ion battery available charge gauge illuminate	LV.4	L
		5 segments of Li-ion battery available charge gauge illuminate	LV.5	M
		6 segments of Li-ion battery available charge gauge illuminate	LV.6	
		7 segments of Li-ion battery available charge gauge illuminate	LV.7	WCS
		8 segments of Li-ion battery available charge gauge illuminate	LV.8	
		9 segments of Li-ion battery available charge gauge illuminate	LV.9	O
		10 segments of Li-ion battery available charge gauge illuminate	LV.10	P
		11 segments of Li-ion battery available charge gauge illuminate	LV.11	
		12 segments of Li-ion battery available charge gauge illuminate	LV.12	

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor item	Condition		Value/Status
BAT CHG CAP LEV	Power switch ON	1 segment of Li-ion battery capacity level gauge illuminates	LV.1
		2 segments of Li-ion battery capacity level gauge illuminate	LV.2
		3 segments of Li-ion battery capacity level gauge illuminate	LV.3
		4 segments of Li-ion battery capacity level gauge illuminate	LV.4
		5 segments of Li-ion battery capacity level gauge illuminate	LV.5
		6 segments of Li-ion battery capacity level gauge illuminate	LV.6
		7 segments of Li-ion battery capacity level gauge illuminate	LV.7
		8 segments of Li-ion battery capacity level gauge illuminate	LV.8
		9 segments of Li-ion battery capacity level gauge illuminate	LV.9
		10 segments of Li-ion battery capacity level gauge illuminate	LV.10
		11 segments of Li-ion battery capacity level gauge illuminate	LV.11
		12 segments of Li-ion battery capacity level gauge illuminate	LV.12
BAT TEMP [°F or °C]	Power switch ON	—	Input value of Li-ion battery temperature signal
POWER MAX [kW]	Power switch ON	While driving	Input value of maximum motor output power signal
REGENE MAX [kW]	Power switch ON	While driving	Input value of maximum regenerable power signal

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor item	Condition		Value/Status	
ECO IND1	Power switch ON	1 segment of Instant ECO indicator illuminates	1	A
		2 segments of Instant ECO indicator illuminate	2	B
		3 segments of Instant ECO indicator illuminate	3	
		4 segments of Instant ECO indicator illuminate	4	C
		5 segments of Instant ECO indicator illuminate	5	D
		6 segments of Instant ECO indicator illuminate	6	
		7 segments of Instant ECO indicator illuminate	7	E
		8 segments of Instant ECO indicator illuminate	8	F
		9 segments of Instant ECO indicator illuminate	9	
		10 segments of Instant ECO indicator illuminate	10	G
		11 segments of Instant ECO indicator illuminate	11	H
		12 segments of Instant ECO indicator illuminate	12	
		13 segments of Instant ECO indicator illuminate	13	I
		14 segments of Instant ECO indicator illuminate	14	J
		15 segments of Instant ECO indicator illuminate	15	
	Other than the above	0	K	
ECO IND2	Power switch ON	—	Displays number of ON segments of ECO tree*	
SFT W/L	Power switch ON	Electric shift warning lamp ON	On	L
		Electric shift warning lamp OFF	Off	
REGENE W/L	Power switch ON	Brake system warning lamp ON	On	M
		Brake system warning lamp OFF	Off	
EV SYSTEM W/L	Power switch ON	EV system warning lamp ON	On	WCS
		EV system warning lamp OFF	Off	
SFT P W DSP	Power switch ON	NOTE: This item is displayed, but cannot be monitored	Off	O
SFT DSP Power switch ON		During electric shift warning ("T/M system malfunction visit dealer") indication	SIFT MALF	
		During electric shift warning ("check position of shift lever") indication	SFT POSI	P
		Other than the above	Off	
PUSH SW W DSP	Power switch ON	During remove charge connector warning indication	On	
		Other than the above	Off	

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

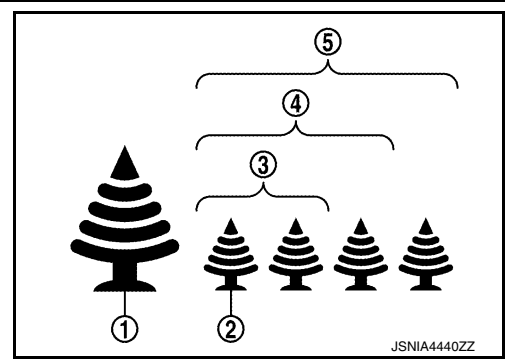
Monitor item	Condition		Value/Status
IMM CHG DSP	Power switch ON	NOTE: This item is displayed, but cannot be monitored	Off
POW LIMIT DSP	Power switch ON	During power limitation warning (when Li-ion battery temperature is low) indication	BAT TMP
		During power limitation warning (when motor temperature is over heat) indication	MOT TMP
		During power limitation warning (when Li-ion battery remaining energy is low) indication	BAT LEV L
		During power limitation warning (other) indication	OTHER
		Other than the above	Off
100V CHG TIME	Power switch ON	—	Displays 100 V charging time.
200V CHG TIME	Power switch ON	—	Displays 200 V charging time.
CHARGE STATE	Power switch ON	100 V charging	100 V
		200 V charging	200 V
		In Quick Charging	QICK CHG
		Other than the above	Off
DCDC W DSP	Power switch ON	During DC/DC converter warning (“stop vehicle”) indication	STOP
		During DC/DC converter warning (“apply parking brake”) indication	CRUISE
		Other than the above	Off
SFT SIG	Power switch ON	Electric shift warning lamp ON	On
		Electric shift warning lamp OFF	Off
DTE DIF [mi or km]	Power switch ON	—	Input value of driving range difference signal
DTE INPUT [mi or km]	Power switch ON	—	Input value of driving range signal
DTE 2ND W	Power switch ON	Driving range display “—” display	On
		Driving range display “—” blinking	BLINK
		Other than the above	Off
BAT LOW W/L	Power switch ON	Low battery charge warning lamp ON	On
		Low battery charge warning lamp OFF	Off
ELE COMPR OFF [mi or km]	Power switch ON	—	Input value of A/C OFF average electricity consumption for driving range signal
ELE COMPR ON [mi or km]	Power switch ON	—	Input value of A/C ON average electricity consumption for driving range signal
DTE BLINK	Power switch ON	Driving range display blinking	On
		Other than the above	Off

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

*: "ECO IND2" displays the items in the Status column of the following table.

Displays number of ON segments of ECO tree	Status
1 segment of ECO tree ① illuminates	SEG11
2 segments of ECO tree ① illuminate	SEG12
3 segments of ECO tree ① illuminate	SEG13
4 segments of ECO tree ① illuminate	SEG14
5 segments of ECO tree ① illuminate	SEG15
ECO tree ② illuminates	SEG21
<ul style="list-style-type: none"> • ECO tree ② illuminates • 1 segments of ECO tree ① illuminate 	SEG11+SEG21
<ul style="list-style-type: none"> • ECO tree ② illuminates • 2 segments of ECO tree ① illuminate 	SEG12+SEG21
<ul style="list-style-type: none"> • ECO tree ② illuminates • 3 segments of ECO tree ① illuminate 	SEG13+SEG21
<ul style="list-style-type: none"> • ECO tree ② illuminates • 4 segments of ECO tree ① illuminate 	SEG14+SEG21
<ul style="list-style-type: none"> • ECO tree ② illuminates • 5 segments of ECO tree ① illuminate 	SEG15+SEG21
ECO tree ③ illuminates	SEG22
<ul style="list-style-type: none"> • ECO tree ③ illuminates • 1 segment of ECO tree ① illuminate 	SEG11+SEG22
<ul style="list-style-type: none"> • ECO tree ③ illuminates • 2 segments of ECO tree ① illuminate 	SEG12+SEG22
<ul style="list-style-type: none"> • ECO tree ③ illuminates • 3 segments of ECO tree ① illuminate 	SEG13+SEG22
<ul style="list-style-type: none"> • ECO tree ③ illuminates • 4 segments of ECO tree ① illuminate 	SEG14+SEG22
<ul style="list-style-type: none"> • ECO tree ③ illuminates • 5 segments of ECO tree ① illuminate 	SEG15+SEG22
ECO tree ④ illuminates	SEG23
<ul style="list-style-type: none"> • ECO tree ④ illuminates • 1 segment of ECO tree ① illuminate 	SEG11+SEG23
<ul style="list-style-type: none"> • ECO tree ④ illuminates • 2 segments of ECO tree ① illuminate 	SEG12+SEG23
<ul style="list-style-type: none"> • ECO tree ④ illuminates • 3 segments of ECO tree ① illuminate 	SEG13+SEG23
<ul style="list-style-type: none"> • ECO tree ④ illuminates • 4 segments of ECO tree ① illuminate 	SEG14+SEG23
<ul style="list-style-type: none"> • ECO tree ④ illuminates • 5 segments of ECO tree ① illuminate 	SEG15+SEG23
ECO tree ⑤ illuminates	SEG24
<ul style="list-style-type: none"> • ECO tree ⑤ illuminates • 1 segment of ECO tree ① illuminate 	SEG11+SEG24



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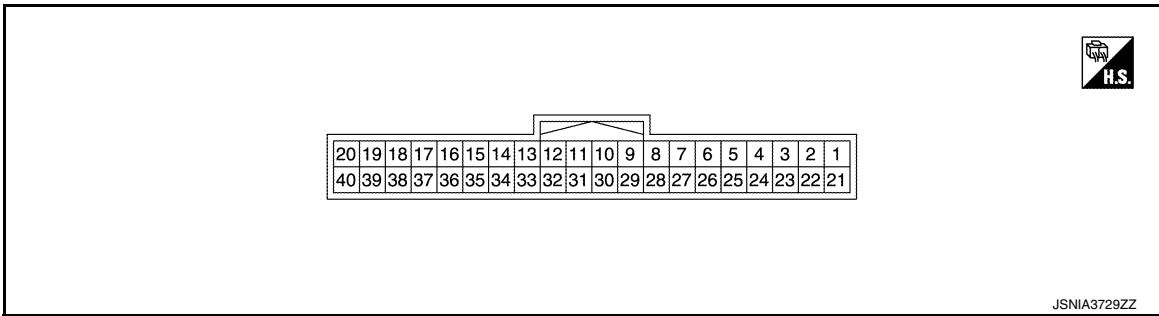
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COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Displays number of ON segments of ECO tree	Status
<ul style="list-style-type: none"> • ECO tree ⑤ illuminates • 2 segments of ECO tree ① illuminate 	SEG12+SEG24
<ul style="list-style-type: none"> • ECO tree ⑤ illuminates • 3 segments of ECO tree ① illuminate 	SEG13+SEG24
<ul style="list-style-type: none"> • ECO tree ⑤ illuminates • 4 segments of ECO tree ① illuminate 	SEG14+SEG24
<ul style="list-style-type: none"> • ECO tree ⑤ illuminates • 5 segments of ECO tree ① illuminate 	SEG15+SEG24
Other than the above	Off

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (LG)	Ground	Battery power supply	Input	Power switch OFF	—	Battery voltage
2 (Y)	Ground	Battery power supply (for upper meter)	Output	Power switch OFF	—	Battery voltage
3 (GR)	Ground	Power switch ON signal	Input	Power switch ON	—	Battery voltage
4 (BG)	Ground	Power switch ON signal (for upper meter)	Output	Power switch ON	—	Battery voltage
5 (B)	Ground	Ground	—	Power switch ON	—	0 V
6 (B)	Ground	Ground	—	Power switch ON	—	0 V
8 (Y)	Ground	Washer level switch signal	Input	Power switch ON	Washer level switch ON	0 V
					Washer level switch OFF	5 V
9 (BR)	Ground	Plug in signal	Input	Power switch ON	Charge connector connected	0 V
					Charge connector not connected	Battery voltage
12 (V)	Ground	Sw ground	—	—	—	—

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
13 (G)	Ground	Select switch signal	Input	Power switch ON	When ● switch (select switch) is pressed	0 V
					Other than the above	5 V
14 (Y)	Ground	Enter switch signal	Input	Power switch ON	When □ switch (enter switch) is pressed	0 V
					Other than the above	5 V
15 (BR)	Ground	Trip reset switch signal	Input	Power switch ON	When trip reset switch is pressed	0 V
					Other than the above	5 V
16 (P)	Ground	Illumination control switch signal	Input	Power switch ON	When ☼ switch (illumination control switch) is pressed	0 V
					Other than the above	5 V
17 (G)	Ground	Illumination control signal (for upper meter)	Output	Power switch ON	<ul style="list-style-type: none"> Lighting switch 1ST position When meter illumination is maximum 	
					<ul style="list-style-type: none"> Lighting switch 1ST position When meter illumination is step 6 	
					<ul style="list-style-type: none"> Lighting switch 1ST position When meter illumination is minimum 	0 V
18 (P)	—	CAN-L	—	—	—	—
19 (L)	—	CAN-H	—	—	—	—
20 (LG)	Ground	Seat belt buckle switch signal (passenger side)	Input	Power switch ON	<ul style="list-style-type: none"> When getting in the passenger seat When passenger seat belt is fastened 	Battery voltage
					<ul style="list-style-type: none"> When getting in the passenger seat When passenger seat belt is unfastened 	0 V
22 (GR)	Ground	Ground (for upper meter)	—	Power switch ON	—	0 V
24 (BG)	Ground	Parking brake switch signal	Input	Power switch ON	Parking brake applied	0 V
					Parking brake released	Battery voltage

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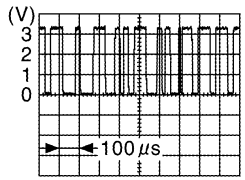
COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
25 (SB)	Ground	Brake fluid level switch signal	Input	Power switch ON	Brake fluid level is normal	Battery voltage
					The brake fluid level is lower than the low level	0 V
26 (B)	Ground	Illumination control signal	Output	Power switch ON	<ul style="list-style-type: none"> Lighting switch 1ST position When meter illumination is maximum 	Battery voltage
					<ul style="list-style-type: none"> Lighting switch 1ST position When meter illumination is step 6 	<p style="text-align: right; font-size: small;">JPNIA1686GB</p>
					<ul style="list-style-type: none"> Lighting switch 1ST position When meter illumination is minimum 	<p style="text-align: right; font-size: small;">JPNIA1687GB</p>
27 (R)	Ground	Air bag signal	Input	Power switch ON	Air bag warning lamp ON	Battery voltage
					Air bag warning lamp OFF	0 V
28 (R)	Ground	Security signal	Input	Power switch ON	Security indicator lamp ON	0 V
					Security indicator lamp OFF	Battery voltage
30 (P)	Ground	Vehicle speed signal (8-pulse)	Output	Power switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	<p>NOTE: The maximum voltage varies depending on the specification (destination unit).</p> <p style="text-align: right; font-size: small;">JSNIA0012GB</p>
32 (W)	Ground	Communication signal (METER → UPPER)	Output	Power switch ON	—	<p>NOTE: Reference waveform</p> <p style="text-align: right; font-size: small;">JSNIA3767GB</p>

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
33 (G)	Ground	Clock signal	Output	Power switch ON	NOTE: Reference waveform  <small>JSNIA3768GB</small>	
34 (L)	Ground	Plug in indicator lamp signal	Input	Power switch ON	Plug in indicator lamp ON	0 V
				Power switch OFF	Plug in indicator lamp OFF	Battery voltage
38 (V)	Ground	LED headlamp (RH) warning signal	Input	Power switch ON	Front combination lamp RH malfunction	Battery voltage
				Power switch OFF	Front combination lamp RH normal	0 V
39 (LG)	Ground	LED headlamp (LH) warning signal	Input	Power switch ON	Front combination lamp LH malfunction	Battery voltage
				Power switch OFF	Front combination lamp LH normal	0 V
40 (W)	Ground	Seat belt buckle switch signal (driver side)	Input	Power switch ON	When driver seat belt is fastened	Battery voltage
				Power switch OFF	When driver seat belt is unfastened	0 V

Fail-Safe

INFOID:000000009347507

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

Function		Specifications	
Power meter		The display turns OFF by suspending communication.	
Li-ion battery temperature gauge			
Li-ion battery capacity level gauge			
Li-ion battery available charge gauge			
Driving range display		The display turns "--" by suspending communication.	
Illumination control		When suspending communication, changes to nighttime mode.	
Information display	Trip computer	Current electricity consumption	Reset to zero by suspending communication.
		Average electricity consumption	The last result calculated during normal condition is indicated.
		Li-ion battery available charge	
		Average vehicle speed	
		Travel distance	An indicated value is maintained at communications blackout.
	Odo/trip meter	An indicated value is maintained at communications blackout.	
	Shift indicator	The display turns OFF by suspending communication.	
	Li-ion low battery charge warning display	The display turns ON by suspending communication.	
	Electric shift warning display		
Other than the above	The display turns OFF by suspending communication.		
Buzzer		The buzzer turns OFF by suspending communication.	

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Function		Specifications
Warning lamp/ indicator lamp	ABS warning lamp	The lamp turns ON by suspending communication.
	ESP (VDC) warning lamp	
	Brake warning lamp	
	Front fog lamp indicator lamp	
	Brake system warning lamp	
	EPS warning lamp	
	Low battery charge warning lamp	
	Electric shift warning lamp	The lamp turns OFF by suspending communication.
	High beam indicator lamp	
	ESP (VDC) OFF indicator lamp	
	Rear fog lamp indicator lamp	
	Position lamp indicator lamp	
	READY to drive indicator lamp	
	12V battery charge warning lamp	
	Power limitation indicator lamp	
	EV system warning lamp	

- The upper meter performs the fail-safe control when a breakdown of CAN communications between the combination meter and each unit occurs.

Function	Specifications
Speedometer	The display turns OFF by suspending communication.
Eco indicator	
Outside air temperature display	The last result calculated during normal condition is indicated.
Clock	<ul style="list-style-type: none"> • When reception time of an abnormal signal is 30 seconds or less, the last value received. • When reception time of an abnormal signal is more than 30 seconds, internal clock time is indicated.
Illumination control	When suspending communication, changes to nighttime mode.
Turn signal indicator lamp	The lamp turns OFF by suspending communication.

DTC Index

INFOID:000000009347508

Display contents of CONSULT	Diagnostic item is detected when...	Refer to
CAN COMM CIRCUIT [U1000]	When combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-89
CONTROL UNIT (CAN) [U1010]	When detecting error during the initial diagnosis of the CAN controller of combination meter.	MWI-90
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from the ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-91

BCM

< ECU DIAGNOSIS INFORMATION >

BCM

List of ECU Reference

INFOID:000000008746357

ECU	Reference
BCM	BCS-28. "Reference Value"
	BCS-46. "Fail-safe"
	BCS-47. "DTC Inspection Priority Chart"
	BCS-48. "DTC Index"

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WCS

WARNING CHIME SYSTEM

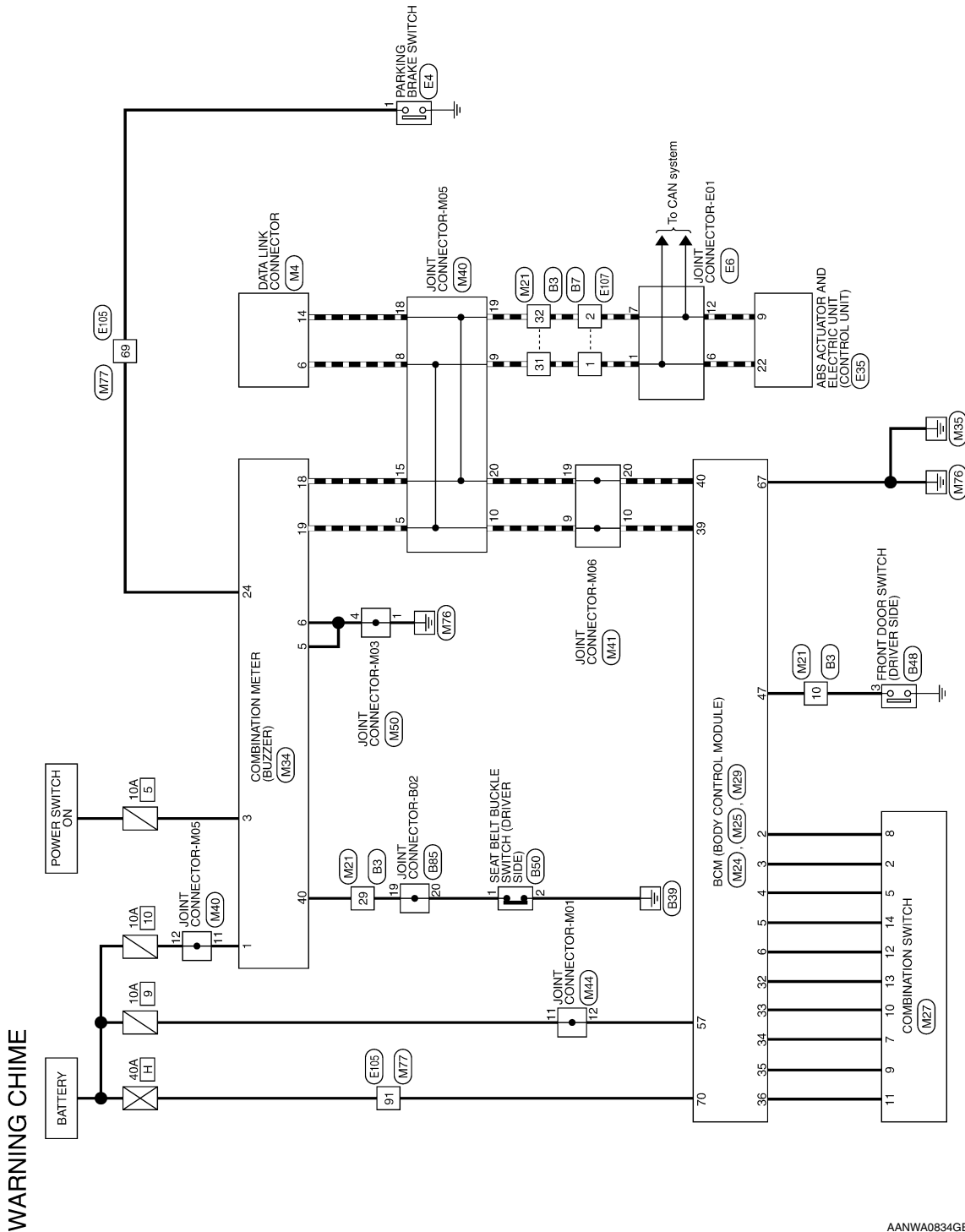
< WIRING DIAGRAM >

WIRING DIAGRAM

WARNING CHIME SYSTEM

Wiring Diagram

INFOID:000000008746358



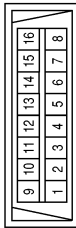
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WARNING CHIME SYSTEM

< WIRING DIAGRAM >

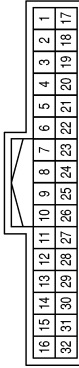
WARNING CHIME - CONNECTORS

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	LG	-
4	B	-
5	B	-
6	L	-
7	GR	-
8	G	-
9	-	-
10	-	-
11	SB	-
12	G	-
13	L	-
14	P	-
15	-	-
16	Y	-

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	B	-
8	SHIELD	-
9	R	-
10	SB	-
11	P	-
12	V	-
13	GR	-
14	P	-
15	L	-
16	G	-
17	-	-
18	-	-
19	-	-

Terminal No.	Color of Wire	Signal Name
20	-	-
21	-	-
22	-	-
23	-	-
24	W	-
25	B	-
26	W	-
27	Y	-
28	-	-
29	W	-
30	L	-
31	L	-
32	P	-

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WARNING CHIME SYSTEM

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
36	P	COMBINATION SW OUTPUT 1
37	V	SHIFT P POSITION, PARKING POSITION SW
38	SB	INTELLIGENT TUNER
39	L	CAN-H
40	P	CAN-L

Terminal No.	Color of Wire	Signal Name
15	W	REAR DEFOGGER SW
16	R	MR OUTPUT
17	Y	AUTO LIGHT SENSOR POWER SUPPLY OUTPUT
18	L	KEYLESS TUNER, AUTO LIGHT SENSOR GND
19	-	-
20	-	-
21	P	IMMOBILIZER ONE WAY COMMUNICATION (CLOCK)
22	-	-
23	R	SECURITY INDICATOR OUTPUT
24	SB	DONGLE LINK
25	LG	IMMOBILIZER TWO WAY COMMUNICATION
26	-	-
27	-	-
28	-	-
29	G	HAZARD SW
30	V	TRUNK/BACK DOOR OPENER SW
31	W	DOOR LOCK STATUS SW (DR)
32	GR	COMBINATION SW OUTPUT 5
33	Y	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	BG	COMBINATION SW OUTPUT 2

Connector No.	M24
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



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	-	-
2	L	COMBINATION SW INPUT 5
3	GR	COMBINATION SW INPUT 4
4	BR	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	V	COMBINATION SW INPUT 1
7	GR	KEY CYLINDER UNLOCK SW
8	R	KEY CYLINDER LOCK SW
9	BR	BRAKE SW 1
10	-	-
11	-	-
12	Y	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW
14	G	AUTO LIGHT SENSOR INPUT

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WARNING CHIME SYSTEM

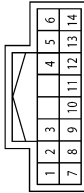
< WIRING DIAGRAM >

Connector No.	M29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
41	-	-
42	-	-
43	Y	DOOR SW (BACK)
44	LG	REAR WIPER AUTO STOP SW
45	BR	DOOR SW (AS)
46	R	DOOR SW (RR)
47	SB	DOOR SW (DR)
48	W	DOOR SW (RL)
49	L	LUGGAGE LAMP OUTPUT
50	-	-
51	P	REQUEST SW (TRUNK/BACK DOOR)
52	-	-
53	GR	TRUNK/BACK DOOR OPEN OUTPUT
54	P	REAR WIPER MOTOR OUTPUT
55	G	DOOR UNLOCK OUTPUT (RR, RL)

Connector No.	M27
Connector Name	COMBINATION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	LG	-
2	GR	-
3	R	-
4	SB	-
5	BR	-
6	B	-
7	W	-
8	L	-
9	BG	-
10	Y	-
11	P	-
12	V	-
13	GR	-
14	G	-
15	-	-
16	-	-

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
56	P	BATTERY SAVER OUTPUT
57	P	BATTERY (FUSE)
58	-	-
59	LG	DOOR UNLOCK OUTPUT (AS)
60	V	FLASHER OUTPUT (LEFT)
61	R	FLASHER OUTPUT (RIGHT)
62	-	-
63	BR	ROOM LAMP OUTPUT
64	-	-
65	V	DOOR LOCK OUTPUT
66	G	DOOR UNLOCK COMMON (DR)
67	B	GND
68	L	POWER WINDOW POWER SUPPLY (RAP)
69	R	POWER WINDOW POWER SUPPLY (BATTERY)
70	Y	BATTERY (F/L)

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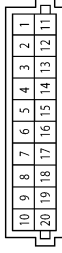
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WARNING CHIME SYSTEM

< WIRING DIAGRAM >

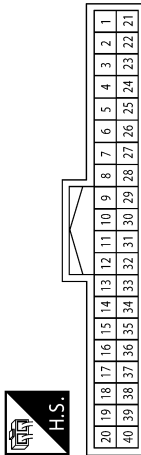
Connector No.	M40
Connector Name	JOINT CONNECTOR-M05
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-
3	BR	-
4	GR	-
5	L	-
6	L	-
7	L	-
8	L	-
9	L	-
10	L	-
11	LG	-
12	LG	-
13	L	-
14	R	-
15	P	-
16	P	-
17	P	-
18	P	-
19	P	-
20	P	-

Terminal No.	Color of Wire	Signal Name
21	-	-
22	GR	-
23	-	-
24	BG	-
25	SB	-
26	B	-
27	R	-
28	R	-
29	-	-
30	GR	-
31	-	-
32	W	-
33	G	-
34	L	-
35	-	-
36	-	-
37	-	-
38	V	-
39	LG	-
40	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Color	WHITE



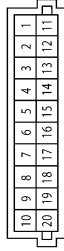
Terminal No.	Color of Wire	Signal Name
1	LG	-
2	Y	-
3	GR	-
4	BG	-
5	B	-
6	B	-
7	-	-
8	Y	-
9	BR	-
10	-	-
11	-	-
12	V	-
13	G	-
14	Y	-
15	BR	-
16	P	-
17	G	-
18	P	-
19	L	-
20	LG	-

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WARNING CHIME SYSTEM

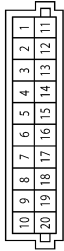
< WIRING DIAGRAM >

Connector No.	M50
Connector Name	JOINT CONNECTOR-M03
Connector Color	PINK



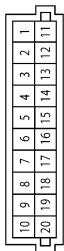
Terminal No.	Color of Wire	Signal Name
1	B	-
2	B	-
3	B	-
4	B	-
5	B	-
6	B	-
7	B	-
8	B	-
9	B	-
10	B	-
11	G	-
12	G	-
13	G	-
14	G	-
15	G	-
16	L	-
17	L	-
18	L	-
19	L	-
20	L	-

Connector No.	M44
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	P	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	B	-
9	B	-
10	B	-
11	P	-
12	P	-
13	W	-
14	W	-
15	LG	-
16	R	-
17	R	-
18	W	-
19	W	-
20	W	-

Connector No.	M41
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	SB	-
2	SB	-
3	SB	-
4	SB	-
5	L	-
6	L	-
7	L	-
8	L	-
9	L	-
10	L	-
11	LG	-
12	LG	-
13	LG	-
14	LG	-
15	P	-
16	P	-
17	P	-
18	P	-
19	P	-
20	P	-

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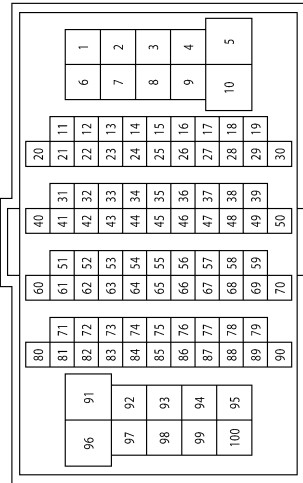
WARNING CHIME SYSTEM

< WIRING DIAGRAM >

Terminal No.	Color of Wire	Signal Name
60	Y	-
61	GR	-
62	W	-
63	BR	-
64	SHIELD	-
65	W	-
66	LG	-
67	R	-
68	G	-
69	BG	-
70	GR	-
71	R	-
72	R	-
73	B	-
74	W	-
76	L	-
80	W	-
81	LG	-
83	GR	-
84	L	-
85	Y	-
86	SB	-
88	R	-
89	G	-
90	SHIELD	-
91	Y	-
92	BR	-
93	W	-
94	P	-
95	L	-
96	P	-
97	G	-
98	V	-
99	LG	-
100	R	-

Terminal No.	Color of Wire	Signal Name
22	B	-
23	BG	-
24	B	-
25	W	-
26	G	-
27	B	-
28	B	-
29	R	-
31	R	-
32	W	-
33	GR	-
34	BR	-
35	BR	-
36	W	-
37	L	-
38	LG	-
39	SB	-
40	V	-
41	P	-
42	SB	-
43	G	-
44	LG	-
45	Y	-
46	R	-
47	W	-
48	L	-
49	G	-
50	L	-
51	SB	-
52	L	-
54	B	-
55	R	-
56	V	-
57	Y	-
58	L	-

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	R	-
2	L	-
3	V	-
4	LG	-
6	P	-
7	GR	-
9	G	-
10	L	-
11	L	-
12	Y	-
13	V	-
14	R	-
15	G	-
16	W	-
17	R	-
18	G	-
19	W	-
20	GR	-
21	P	-

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WARNING CHIME SYSTEM

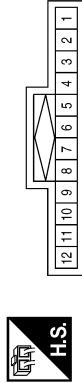
< WIRING DIAGRAM >

Connector No.	E4
Connector Name	PARKING BRAKE SWITCH
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	B	-

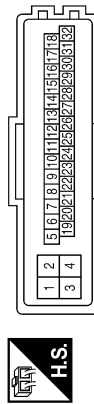
Connector No.	E6
Connector Name	JOINT CONNECTOR-E01
Connector Color	BLUE



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

Terminal No.	Color of Wire	Signal Name
5	-	-
6	L	-
7	P	-
8	P	-
9	P	-
10	P	-
11	-	-
12	P	-

Connector No.	E35
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	G	MOTOR BATTERY
2	R	VALVE BATTERY
3	B	GROUND
4	B	GROUND
5	P	ESP OFF SW SIGNAL
6	O	BRAKE SW SIGNAL
7	L/Y	PRESS SENSOR SIGNAL
8	SB	STOP LAMP SW SIGNAL

Terminal No.	Color of Wire	Signal Name
9	P	CAN-L
10	W/L	PRESS SENSOR POWER SUPPLY
11	BR	RR RH WHEEL SENSOR POWER SUPPLY
12	W	FR RH WHEEL SENSOR SIGNAL
13	G	G SENSOR POWER SUPPLY
14	B	G SENSOR SIGNAL (+)
15	LG	RR RH WHEEL SENSOR SIGNAL
16	V	POWER SWITCH ON
17	-	-
18	-	-
19	-	-
20	L	CAN2-H

Terminal No.	Color of Wire	Signal Name
21	B	FR RH WHEEL SENSOR POWER SUPPLY
22	L	CAN-H
23	R	FR LH WHEEL SENSOR POWER SUPPLY
24	-	-
25	W	CAN2-L
26	B	FR LH WHEEL SENSOR POWER SUPPLY
27	Y	FR LH WHEEL SENSOR SIGNAL
28	R	G SENSOR GND
29	Y	G SENSOR SIGNAL (-)
30	G	RR LH WHEEL SENSOR SIGNAL
31	-	-
32	L/O	PRESS SENSOR GND

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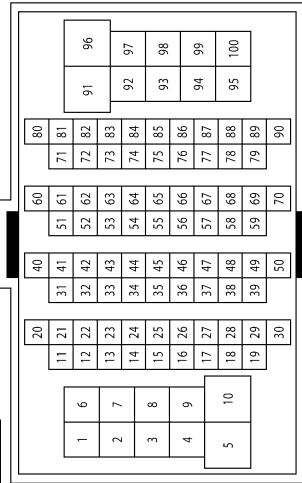
WARNING CHIME SYSTEM

< WIRING DIAGRAM >

57	Y	-
58	L	-
60	LG	-
61	GR	-
62	W	-
63	SB	-
64	SHIELD	-
65	W	-
66	G	-
67	V	-
68	R	-
69	B	-
70	BR	-
71	LG	-
72	R	-
73	B	-
74	O	-
76	L	-
77	Y	-
80	P	-
81	SB	-
83	GR	-
84	L	-
85	O	-
86	BR	-
88	B	-
89	W	-
90	SHIELD	-
91	Y	-
92	BR	-
93	O	-
94	R	-
95	V	-
96	P	-
97	G	-
98	W	-
99	O	-
100	SB	-

19	W/L	-
20	BR	-
21	R	-
22	B	-
23	LG	-
24	B	-
25	W	-
26	W	-
27	B	-
28	O/L	-
29	W	-
31	R	-
32	W	-
33	G	-
34	BR	-
35	V	-
36	O	-
37	L	-
38	SB	-
39	P	-
40	V	-
41	O	-
42	Y	-
43	BR	-
44	W	-
45	G	-
46	P	-
47	LG	-
47	R	-
48	B	-
49	L	-
50	G	-
51	W	-
52	O	-
54	B	-
55	R	-
56	Y	-

Connector No.	E 105
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	R	-
2	L	-
3	BW	-(WITHOUT FRONT FOG LAMPS)
3	R	-(WITH LED HEADLAMPS)
4	LG	-(WITH LED HEADLAMPS)
4	B/W	-(WITHOUT FRONT FOG LAMPS)
6	B/R	-
7	W	-
9	G	-
10	R	-
11	L	-
12	Y	-
13	W	-
14	R	-
15	G	-
16	G	-
17	R	-
18	O	-

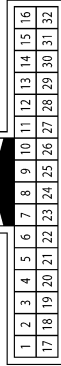
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WARNING CHIME SYSTEM

< WIRING DIAGRAM >

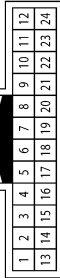
Terminal No.	Color of Wire	Signal Name
24	R	-
25	W	-
26	LG	-
27	Y	-
28	-	-
29	R	-
30	GR	-
31	L	-
32	P	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	B	-
8	SHIELD	-
9	B	-
10	SB	-
11	P	-
12	BR	-
13	GR	-
14	P	-
15	L	-
16	G	-
17	-	-
18	-	-
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-

Connector No.	E107
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	P	-
3	SB	-
4	-	-
5	-	-
6	GR	-
7	-	-
8	P	-
9	BR	-
10	W	-
11	R	-
12	B	-
13	G	-
14	B	-
15	LG	-
16	BR	-
17	G	-
18	B	-
19	Y	-
20	R	-
21	O	-
22	W	-
23	SHIELD	-
24	-	-

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WARNING CHIME SYSTEM

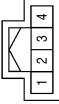
< WIRING DIAGRAM >

Connector No.	B50
Connector Name	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
Connector Color	WHITE



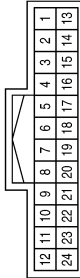
Terminal No.	Color of Wire	Signal Name
1	R	-
2	B	-

Connector No.	B48
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	SB	-
4	-	-

Connector No.	B7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	-
2	P	-
3	Y	-
4	-	-
5	-	-
6	SB	-
7	-	-
8	P	-
9	V	-
10	Y	-
11	L	-
12	G	-
13	G	-
14	B	-
15	LG	-
16	BR	-
17	G	-
18	B	-
19	Y	-
20	R	-
21	Y	-
22	W	-
23	SHIELD	-
24	-	-

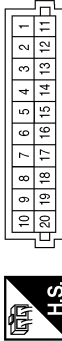
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WARNING CHIME SYSTEM

< WIRING DIAGRAM >

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Connector No.	B85
Connector Name	JOINT CONNECTOR-B02
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	B	-
2	-	-
3	B	-
4	B	-
5	-	-
6	-	-
7	L	-
8	W	-
9	V	-
10	V	-
11	SHIELD	-
12	SHIELD	-
13	B	-
14	B	-
15	G	-
16	G	-
17	G	-
18	LG	-
19	R	-
20	R	-

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

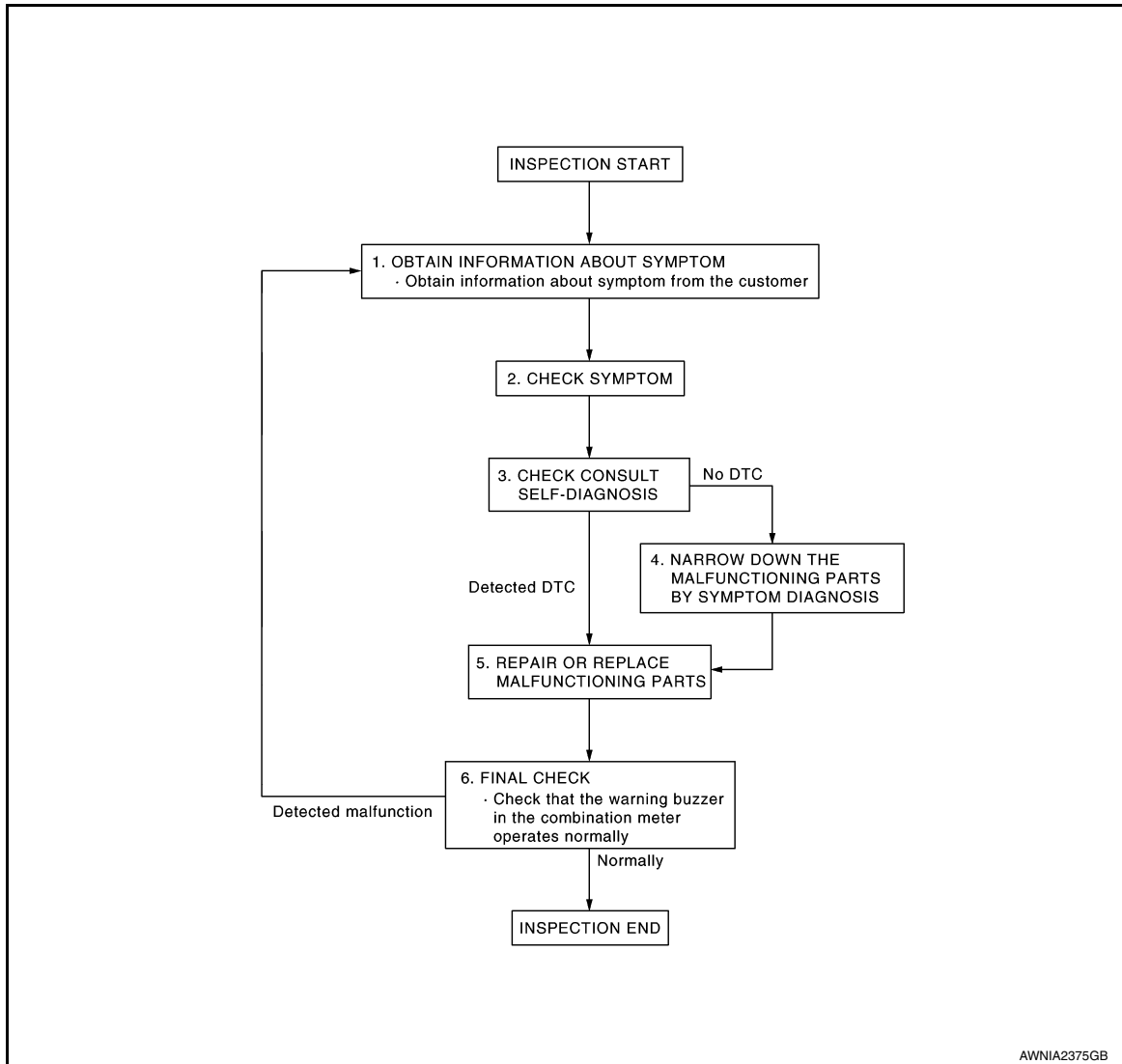
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000009347512

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

Connect CONSULT and perform Self Diagnosis. Refer to [MWI-65. "DTC Index"](#).

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

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.

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WCS

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER : Diagnosis Procedure

INFOID:000000009347509

1. CHECK FUSES

Check that the following fuses are not blown.

Power source	Fuse No.
Battery	11
Power switch ON	5

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit.

2. CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

Terminals		Power switch position	Voltage (Approx.)
(+)	(-)		
Combination meter		OFF	Battery voltage
Connector	Terminal		
M34	1		
	3		
		ON	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK GROUND CIRCUIT

1. Power switch OFF.

2. Disconnect combination meter connector.

3. Check continuity between combination meter harness connector and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M34	5		Yes
	6		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connector.

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Component Function Check

INFOID:000000008746361

1.CHECK OPERATION OF METER BUZZER

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

Does meter buzzer beep?

- YES >> Inspection End.
NO >> GO TO 2.

2.CHECK COMBINATION METER INPUT SIGNAL

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

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

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-107, "Removal and Installation"](#).
NO >> Replace BCM. Refer to [BCS-86, "Removal and Installation"](#).

Diagnosis Procedure

INFOID:000000008746362

1.CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to [MWI-92, "COMBINATION METER : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> Inspection End.
NO >> Repair harness or connector.

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WCS

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)

Component Function Check

INFOID:000000008746363

1.CHECK COMBINATION METER INPUT SIGNAL

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

Monitor Item	Condition	Status
BUCKLE SW	When seat belt LH (driver seat) is fastened	OFF
	When seat belt LH (driver seat) is unfastened	ON

Is the inspection result normal?

YES >> Inspection End.

NO >> Proceed to diagnosis procedure. Refer to [WCS-50, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000008746364

1.CHECK COMBINATION METER INPUT SIGNAL

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

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
Combination meter			
Connector	Terminal		
M34	40	When driver seat belt is fastened	Battery voltage
		When driver seat belt is unfastened	0 V

Is the inspection result normal?

YES >> Replace combination meter. Refer to [MWI-107, "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

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

Combination meter		Seat belt buckle switch (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M34	40	B50	1	Yes

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

Combination meter		Ground	Continuity
Connector	Terminal		
M34	40		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

Seat belt buckle switch (driver side)		Ground	Continuity
Connector	Terminal		
B50	2		Yes

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Repair harness or connector.

Component Inspection

INFOID:000000008746365

1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

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

Terminal		Condition	Continuity
1	2	When driver seat belt is fastened	No
		When driver seat belt is unfastened	Yes

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Replace seat belt buckle (driver side). Refer to [SB-13, "SEAT BELT BUCKLE : Removal and Installation"](#).

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WCS

THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description

INFOID:000000008746366

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

Diagnosis Procedure

INFOID:000000008746367

1. CHECK COMBINATION SWITCH (LIGHTING SWITCH) OPERATION

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

Do they operate normally?

YES >> GO TO 2.

NO >> Refer to [EXL-90. "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table"](#).

2. CHECK DRIVER DOOR SWITCH SIGNAL CIRCUIT

Check the driver door switch signal circuit. Refer to [DLK-117. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK DRIVER DOOR SWITCH

Check the driver door switch. Refer to [DLK-118. "Component Inspection"](#).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-86. "Removal and Installation"](#).

NO >> Replace driver door switch. Refer to [DLK-217. "Removal and Installation"](#).

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

Description

INFOID:000000008746368

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

Diagnosis Procedure

INFOID:000000008746369

1.CHECK SEAT BELT WARNING LAMP

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

Driver seat belt fastened : OFF
Driver seat belt unfastened : ON

Is the inspection result normal?

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

2.CHECK BCM OUTPUT SIGNAL

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

Is the inspection result normal?

- YES >> Inspection End.
NO >> GO TO 3.

3.CHECK COMBINATION METER INPUT SIGNAL

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

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

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-107, "Removal and Installation"](#).
NO >> Replace BCM. Refer to [BCS-86, "Removal and Installation"](#).

4.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) CIRCUIT

Check the seat belt buckle switch (driver side) circuit. Refer to [WCS-50, "Diagnosis Procedure"](#).

Is the inspection result normal?

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

5.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Check the seat belt buckle switch (driver side). Refer to [WCS-51, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-107, "Removal and Installation"](#).
NO >> Replace driver seat belt buckle. Refer to [SB-13, "SEAT BELT BUCKLE : Removal and Installation"](#).

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WCS

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:000000009347517

- 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:000000009347518

1.CHECK PARKING BRAKE WARNING LAMP

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 combination meter. Refer to [MWI-107. "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Check the parking brake switch signal circuit. Refer to [MWI-99. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

3.CHECK PARKING BRAKE SWITCH

Check the parking brake switch. Refer to [MWI-99. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-107. "Removal and Installation"](#).
NO >> Replace parking brake switch. Refer to [PB-8. "Exploded View"](#).