

SECTION **WCS**

WARNING CHIME SYSTEM

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

CONTENTS

<p>PRECAUTION 3</p> <p>PRECAUTIONS 3</p> <p style="padding-left: 20px;">Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"3</p> <p>SYSTEM DESCRIPTION 4</p> <p>COMPONENT PARTS 4</p> <p style="padding-left: 20px;">Component Parts Location4</p> <p style="padding-left: 20px;">Component Description4</p> <p style="padding-left: 20px;">Combination Meter5</p> <p>SYSTEM 6</p> <p>WARNING CHIME SYSTEM6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : System Diagram6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : System Description6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : Fail-Safe7</p> <p>LIGHT REMINDER WARNING CHIME8</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : System Diagram8</p> <p style="padding-left: 20px;">LIGHT REMINDER WARNING CHIME : System Description8</p> <p>SEAT BELT REMINDER WARNING CHIME9</p> <p style="padding-left: 20px;">SEAT BELT REMINDER WARNING CHIME : System Diagram 10</p> <p style="padding-left: 20px;">SEAT BELT REMINDER WARNING CHIME : System Description 10</p> <p>PARKING BRAKE RELEASE WARNING CHIME..... 11</p> <p style="padding-left: 20px;">PARKING BRAKE RELEASE WARNING CHIME : System Diagram 11</p> <p style="padding-left: 20px;">PARKING BRAKE RELEASE WARNING CHIME : System Description 11</p> <p>KEY WARNING CHIME 12</p> <p style="padding-left: 20px;">KEY WARNING CHIME : System Diagram 13</p> <p style="padding-left: 20px;">KEY WARNING CHIME : System Description 13</p>	<p>DIAGNOSIS SYSTEM (COMBINATION METER)15</p> <p style="padding-left: 20px;">CONSULT-III Function15</p> <p>DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)20</p> <p>COMMON ITEM20</p> <p style="padding-left: 20px;">COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)20</p> <p>BUZZER21</p> <p style="padding-left: 20px;">BUZZER : CONSULT-III Function (BCM - BUZZER)21</p> <p>DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)23</p> <p>COMMON ITEM23</p> <p style="padding-left: 20px;">COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)23</p> <p>BUZZER23</p> <p style="padding-left: 20px;">BUZZER : CONSULT-III Function (BCM - BUZZER)24</p> <p>ECU DIAGNOSIS INFORMATION25</p> <p>COMBINATION METER25</p> <p style="padding-left: 20px;">Reference Value25</p> <p style="padding-left: 20px;">Fail-Safe32</p> <p style="padding-left: 20px;">DTC Index33</p> <p>BCM (BODY CONTROL MODULE)35</p> <p style="padding-left: 20px;">List of ECU Reference35</p> <p>WIRING DIAGRAM36</p> <p>WARNING CHIME SYSTEM36</p> <p style="padding-left: 20px;">Wiring Diagram36</p> <p>BASIC INSPECTION37</p>
--	--

WCS

DIAGNOSIS AND REPAIR WORKFLOW	37	THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND	42
Work Flow	37	Description	42
DTC/CIRCUIT DIAGNOSIS	39	Diagnosis Procedure	42
POWER SUPPLY AND GROUND CIRCUIT	39	THE LIGHT REMINDER WARNING DOES NOT SOUND	43
COMBINATION METER	39	Description	43
COMBINATION METER : Diagnosis Procedure ...	39	Diagnosis Procedure	43
METER BUZZER CIRCUIT	40	THE SEAT BELT REMINDER WARNING CONTINUES SOUNDING, OR DOES NOT SOUND	44
Component Function Check	40	Description	44
Diagnosis Procedure	40	Diagnosis Procedure	44
PARKING BRAKE SWITCH SIGNAL CIRCUIT	41	THE KEY WARNING DOES NOT SOUND (WITHOUT INTELLIGENT KEY)	46
Diagnosis Procedure	41	Description	46
Component Inspection	41	Diagnosis Procedure	46
SYMPTOM DIAGNOSIS	42		

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000006751927

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

The vehicle may be equipped with a passenger air bag deactivation switch. Because no rear seat exists where a rear-facing child restraint can be placed, the switch is designed to turn off the passenger air bag so that a rear-facing child restraint can be used in the front passenger seat. The switch is located in the center of the instrument panel, near the ashtray. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate for certain types of collision. When the switch is turned to the OFF position, the passenger air bag is disabled and will not inflate. A passenger air bag OFF indicator on the instrument panel lights up when the passenger air bag is switched OFF. The driver air bag always remains enabled and is not affected by the passenger air bag deactivation switch.

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 "SRS AIR BAG".
- 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.
- The vehicle may be equipped with a passenger air bag deactivation switch which can be operated by the customer. When the passenger air bag is switched OFF, the passenger air bag is disabled and will not inflate. When the passenger air bag is switched ON, the passenger air bag is enabled and could inflate for certain types of collision. After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag 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 3 minutes before performing any service.

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

COMPONENT PARTS

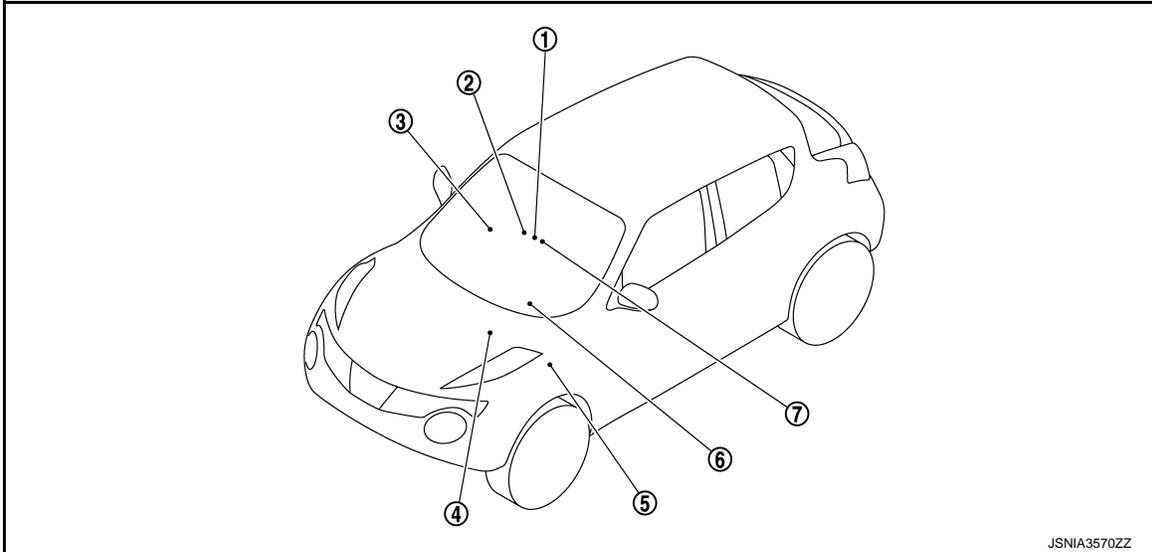
< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:000000006501840



- | | | |
|--|--|---|
| 1. Parking brake switch | 2. Seat belt buckle switch (passenger side) | 3. Occupant detection unit (Under the passenger seat cushion pad) |
| 4. ABS actuator and electric unit (control unit)
Refer to BRC-97, "Component Parts Location" (with ESP).
Refer to BRC-9, "Component Parts Location" (without ESP). | 5. BCM
Refer to BCS-6, "BODY CONTROL SYSTEM : Component Parts Location" (with intelligent key system).
Refer to BCS-96, "BODY CONTROL SYSTEM : Component Parts Location" (without intelligent key system). | 6. Combination meter |
| 7. Seat belt buckle switch (driver side) | | |

Component Description

INFOID:000000006501841

Unit	Description
Combination meter	<ul style="list-style-type: none"> Receives a buzzer output signal from the BCM with CAN communication line and sounds the buzzer. 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
BCM	Based on the signals received from various units and switches, transmits the buzzer output signal to the combination meter via CAN communication.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter via CAN communication.
Seat belt buckle switch (driver side)	Transmits a seat belt buckle switch signal (driver side) to the combination meter.
Seat belt buckle switch (passenger side)	Transmits a seat belt buckle switch signal (passenger side) to the combination meter.
Occupant detection unit	Transmits a occupant detection signal to the seat belt buckle switch (passenger side).
Combination switch (Lighting switch)	Transmits the combination switch signal to BCM.

COMPONENT PARTS

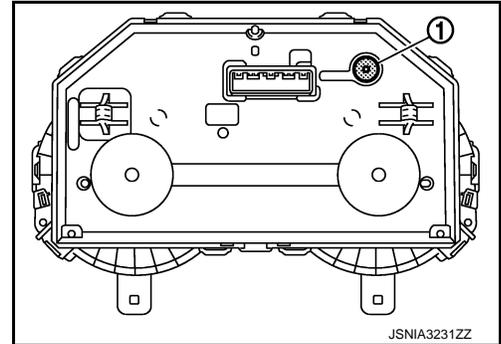
< SYSTEM DESCRIPTION >

Unit	Description
Front door switch (driver side)	Transmits the driver side door switch signal to BCM.
Key switch	Transmits the key switch signal to BCM.
Parking brake switch	Transmits the parking brake switch signal to the combination meter.

Combination Meter

INFOID:000000006501842

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



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

WCS

SYSTEM

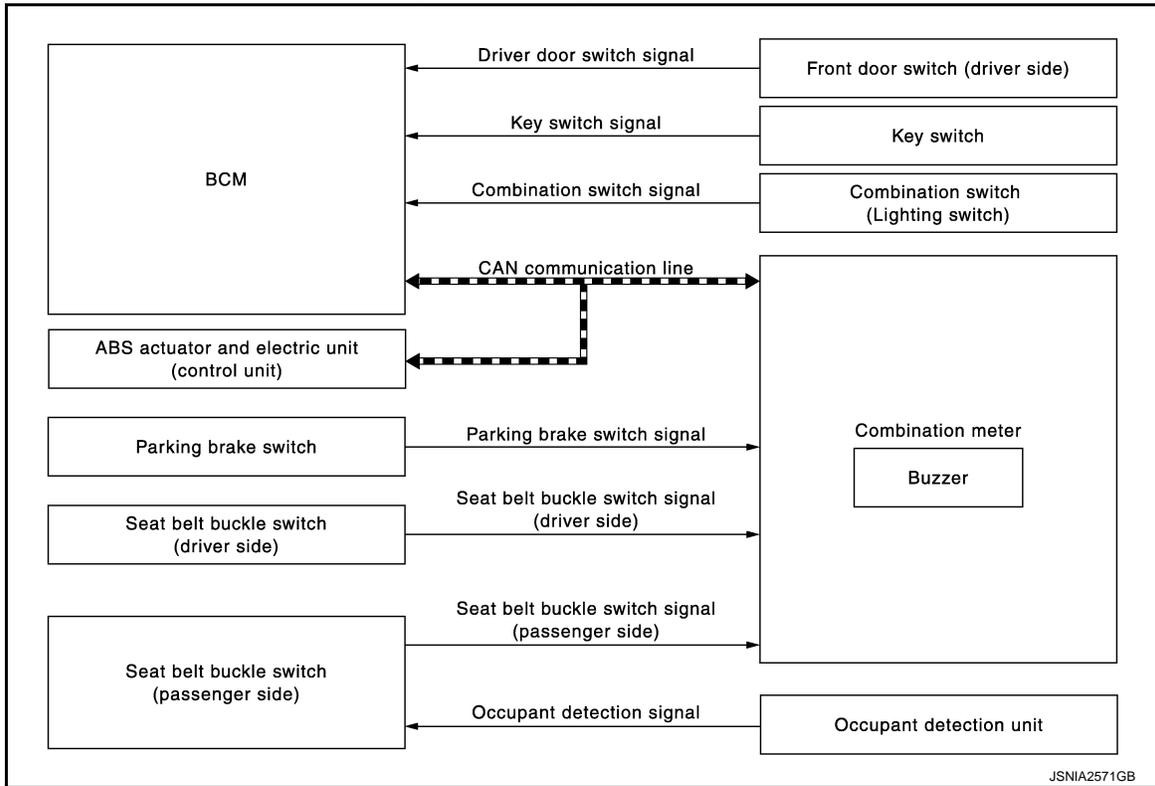
< SYSTEM DESCRIPTION >

SYSTEM

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM : System Diagram

INFOID:000000006501843



WARNING CHIME SYSTEM : System Description

INFOID:000000006501844

COMBINATION METER

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

BCM

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

WARNING CHIME FUNCTION LIST

Warning functions	Out line	Warning judgment unit	Refer to
Light reminder warning chime	The warning chime sounds when the ignition switch is in OFF or ACC position with the combination switch (lighting switch) in the 1st or 2nd position and the driver side door open.	BCM	WCS-8. "LIGHT REMINDER WARNING CHIME : System Description"
Seat belt reminder warning chime	The warning chime sounds when the ignition switch is in ON position while driving at 15 km/h (9.3 MPH) or more with the driver or passenger.	Combination meter	WCS-10. "SEAT BELT REMINDER WARNING CHIME : System Description"

SYSTEM

< SYSTEM DESCRIPTION >

Warning functions	Out line	Warning judgment unit	Refer to
Parking brake release warning chime	The warning chime sounds when the ignition switch is in ON position with the parking brake in operation and the vehicle speed 7 km/h (4.3 MPH) or more.	Combination meter	WCS-11, "PARKING BRAKE RELEASE WARNING CHIME : System Description"
Key warning chime (Without intelligent key)	The warning chime sounds when the ignition switch is in OFF or ACC position with the key inserted and the driver side door open.	BCM	WCS-13, "KEY WARNING CHIME : System Description"

WARNING CHIME SYSTEM : Fail-Safe

INFOID:000000006502109

FAIL-SAFE

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

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Engine coolant temperature gauge		
Illumination control		When suspending communication, changes to nighttime mode.
Shift position indicator	Shift position	When suspending communication, not indicate.
	S mode indicator lamp	
Information display	Instantaneous fuel consumption	<ul style="list-style-type: none"> When reception time of an abnormal signal is 2 seconds or less, the last received datum is used for calculation to indicate the result. When reception time of an abnormal signal is more than two seconds, the last result calculated during normal condition is indicated.
	Average fuel consumption	
	Possible driving distance	
	Torque distribution 4WD	
Buzzer		The buzzer turns OFF by suspending communication.

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

WCS

SYSTEM

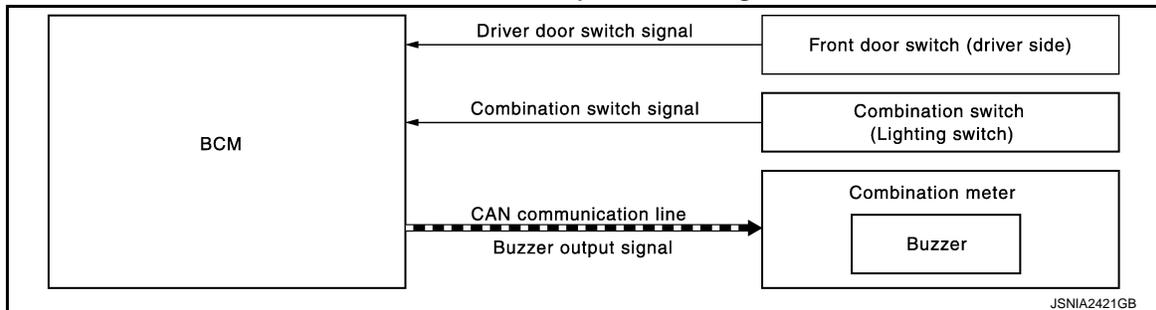
< SYSTEM DESCRIPTION >

Function		Specifications
Warning lamp/indicator lamp	ABS warning lamp	The lamp turns ON by suspending communication.
	Malfunction indicator (Yellow)	
	SLIP indicator lamp	
	EPS warning lamp	
	4WD warning lamp	
	Brake warning lamp	
	VDC warning lamp	The lamp turns OFF by suspending communication.
	High beam indicator lamp	
	Turn signal indicator lamp	
	Door warning lamp	
	Light indicator lamp	
	Engine start operation indicator lamp	
	Shift P warning lamp	
	Front fog lamp indicator lamp	
	Rear fog lamp indicator lamp	
	Oil pressure warning lamp	
	Malfunction indicator (Red)	
	CRUISE indicator lamp	
	SET indicator lamp	
	Speed limiter indicator lamp	
	4WD indicator lamp	
	4WD LOCK indicator lamp	
	Key warning lamp	
	DPF (Diesel Particulate Filter) warning lamp	
	Glow indicator lamp	
	CVT indicator lamp	
Filter warning lamp		

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME : System Diagram

INFOID:000000006501846



LIGHT REMINDER WARNING CHIME : System Description

INFOID:000000006501847

WARNING CHIME OPERATION CONDITIONS

If all of the following conditions are fulfilled.

SYSTEM

< SYSTEM DESCRIPTION >

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

SIGNAL PATH

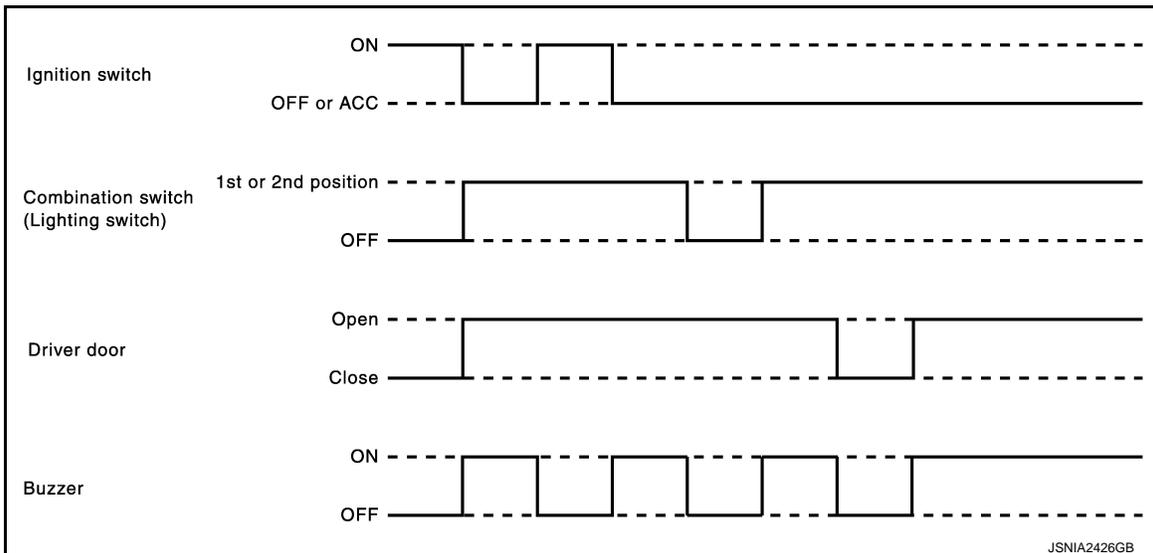
1. BCM requires warning chime output to combination meter when it judges light reminder warning chime is necessary from signals below.

Signal name	Signal path
Ignition switch 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 REMINDER WARNING CHIME

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

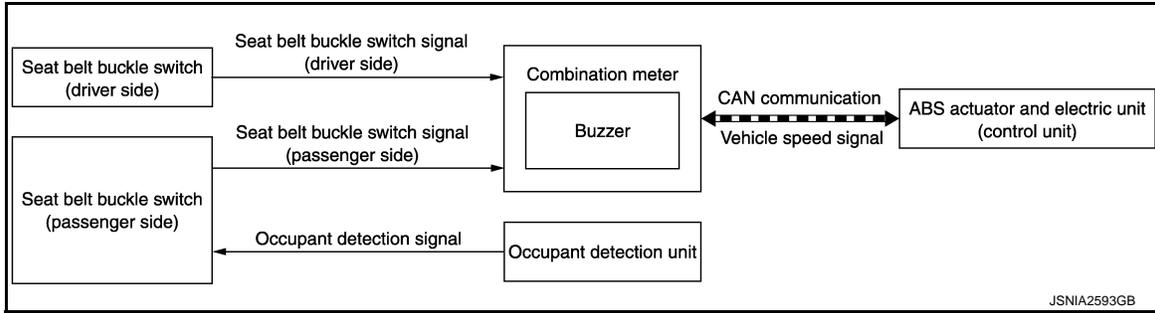
WCS

SYSTEM

< SYSTEM DESCRIPTION >

SEAT BELT REMINDER WARNING CHIME : System Diagram

INFOID:000000006501848



SEAT BELT REMINDER WARNING CHIME : System Description

INFOID:000000006501849

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

Operation conditions	
Ignition switch	ON
Driver/passenger seat belt	Unfastened [seat belt buckle switch (driver/passenger side) ON]
Vehicle speed	15 km/h (9.3 MPH) or more

WARNING CANCEL CONDITIONS

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

Operation conditions	
Ignition switch	OFF
Seat belt (driver and passenger side)	Fastened (driver and passenger side seat belt buckle switch OFF)
90 seconds after the start of warning sound	

SIGNAL PATH

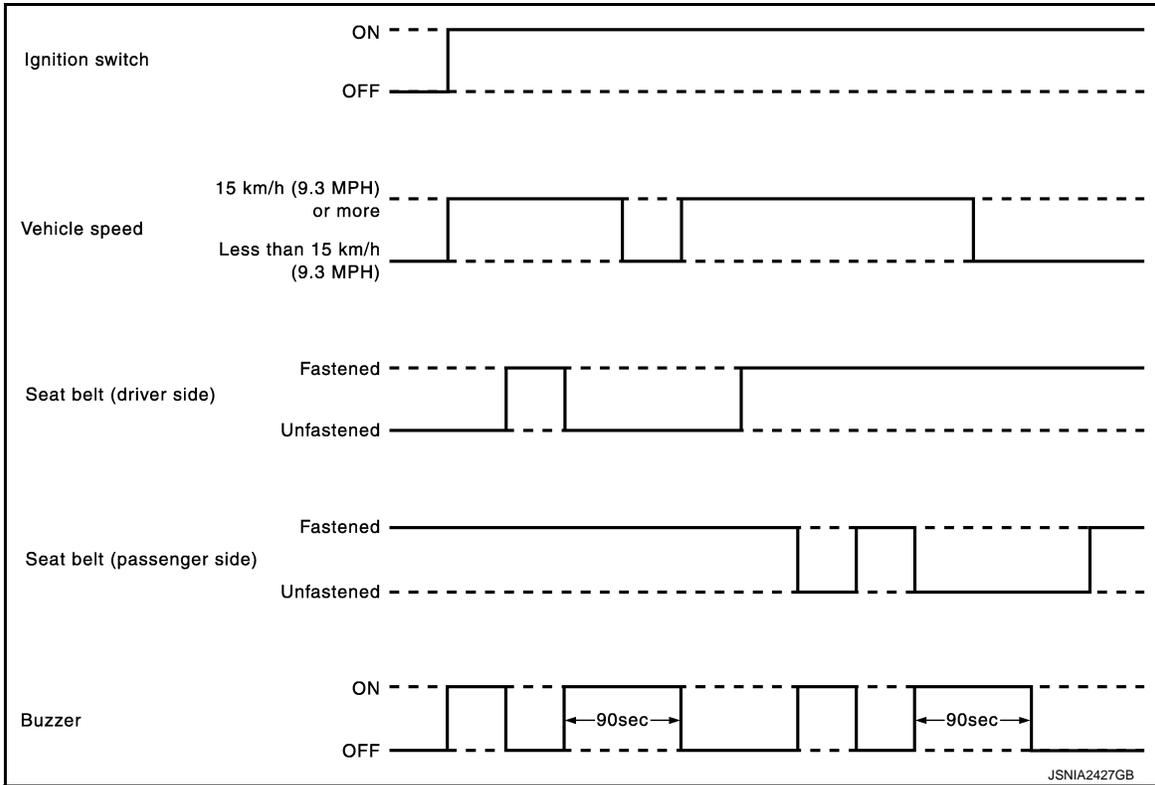
Combination meter sounds integrated buzzer when it judges that seat belt warning chime is necessary from signals below.

Signal name	Signal path
Ignition switch signal	—
Seat belt buckle switch signal (driver side)	Seat belt buckle switch (driver side) → Combination meter
Seat belt buckle switch signal (passenger side)	Occupant detection unit → seat belt buckle switch ((passenger side)) → Combination meter
Vehicle speed signal	ABS ^{CAN} → Combination meter

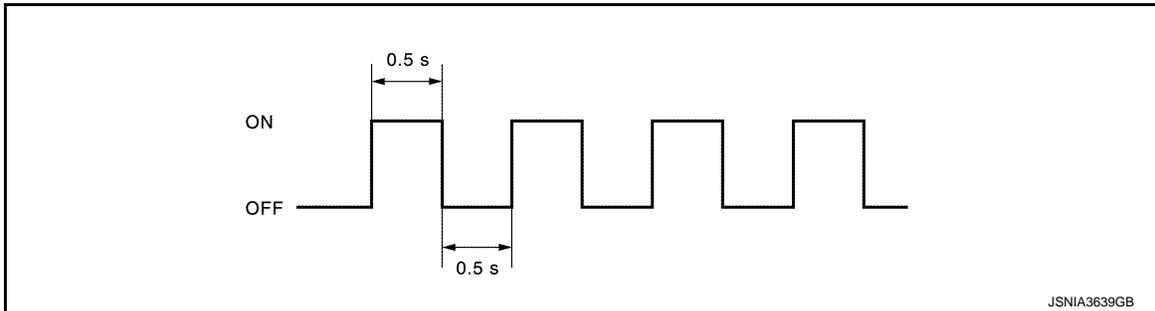
SYSTEM

< SYSTEM DESCRIPTION >

TIMING CHART



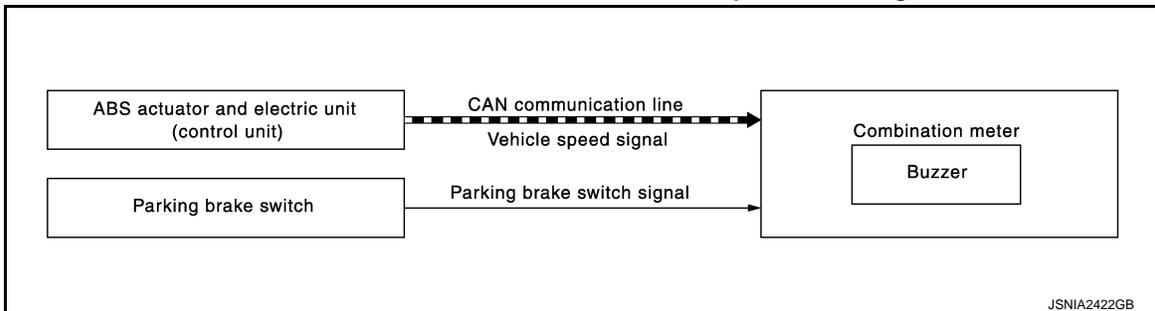
SOUND SPECIFICATION



PARKING BRAKE RELEASE WARNING CHIME

PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:000000006501850



PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:000000006501851

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

WCS

SYSTEM

< SYSTEM DESCRIPTION >

Operation conditions	
Ignition 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.

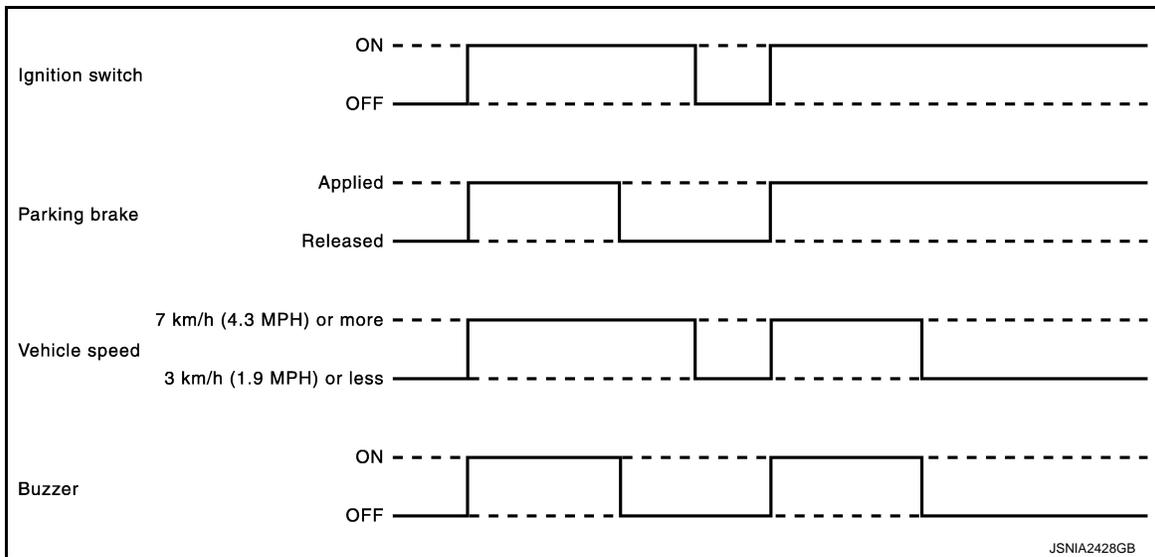
Operation conditions	
Ignition switch	OFF
Parking brake	Release condition (parking brake switch OFF)
Vehicle speed	Approximately 3 km/h (1.9 MPH) or less

SIGNAL PATH

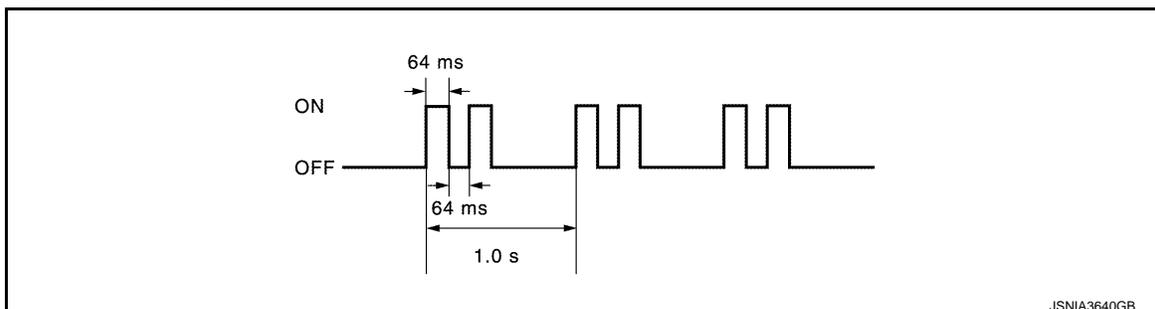
Combination meter sounds integrated buzzer when it judges that parking brake release warning chime is necessary from signals below.

Signal name	Signal path
Ignition switch signal	—
Parking brake switch signal	Parking brake switch → Combination meter
Vehicle speed signal	ABS actuator and electric unit (control unit) ^{CAN} → Combination meter

TIMING CHART



SOUND SPECIFICATION



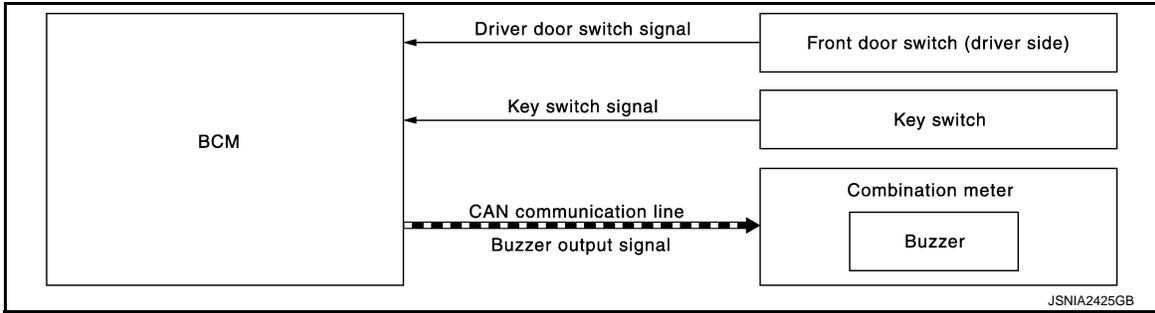
KEY WARNING CHIME

SYSTEM

< SYSTEM DESCRIPTION >

KEY WARNING CHIME : System Diagram

INFOID:000000006501853



KEY WARNING CHIME : System Description

INFOID:000000006501853

DESCRIPTION

The warning chime sounds when the ignition switch is in OFF or ACC position with the key inserted and the driver side door open.

WARNING OPERATION CONDITIONS

The BCM transmits the buzzer output signal to combination meter with CAN communication line when all of the following operation conditions are met. When combination meter receives buzzer output signal, it sounds the buzzer.

Operation conditions	
Ignition switch	OFF or ACC position
Key switch	ON (state that inserted key in key cylinder)
Driver side door	Open [front door switch (driver side) ON]

WARNING CANCEL CONDITIONS

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

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

SIGNAL PATH

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

Signal name	Signal path
Ignition switch signal	—
Key switch signal	Key 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.

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

WCS

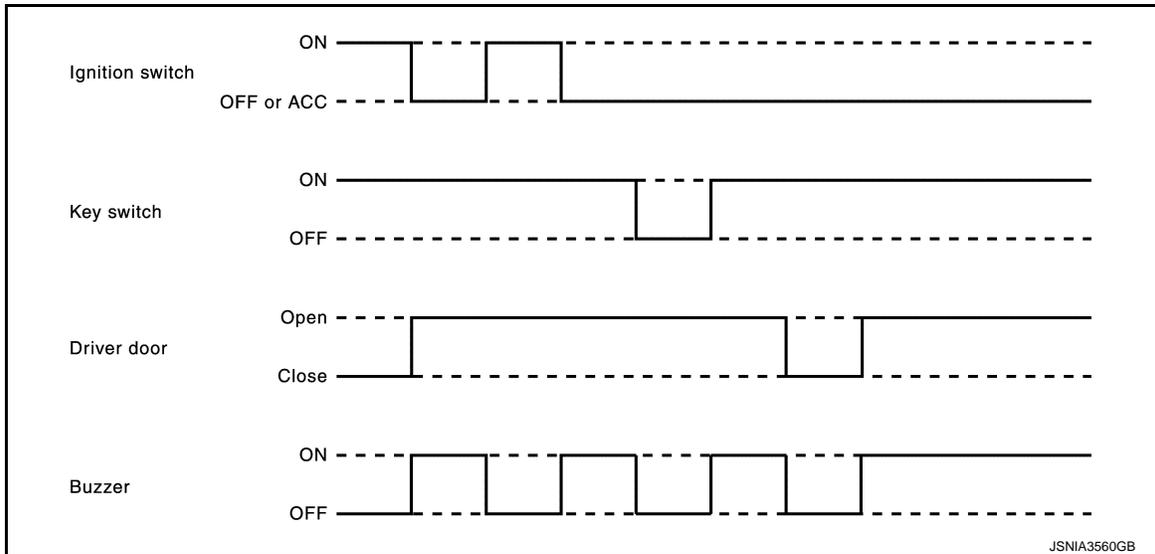
O
P

SYSTEM

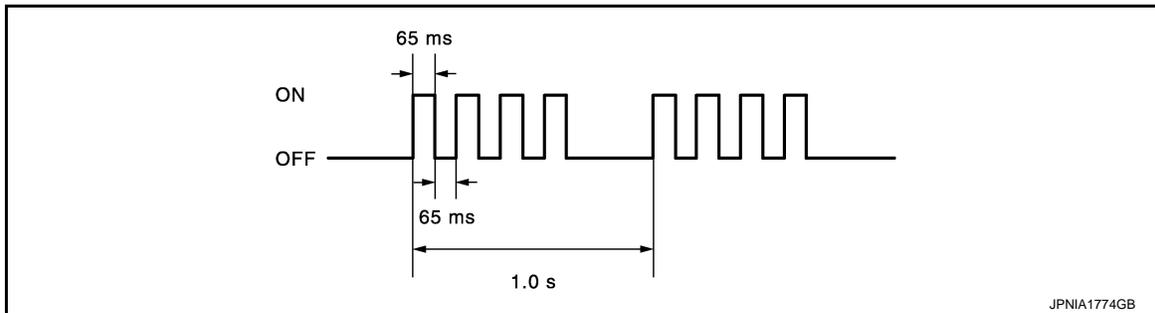
< SYSTEM DESCRIPTION >

Signal name	Signal path
Buzzer output signal	BCM  Combination meter

TIMING CHART



SOUND SPECIFICATION



DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (COMBINATION METER)

CONSULT-III Function

INFOID:000000006502204

CONSULT-III APPLICATION ITEMS

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

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

SELF DIAG RESULT

Refer to [MWI-36, "DTC Index"](#).

DATA MONITOR

Display Item List

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [km/h]	X	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication. NOTE: 655.35 is displayed when the malfunction signal is received.
SPEED OUTPUT [km/h]	X	Vehicle speed signal value transmitted to other units via CAN communication. NOTE: 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [km/h or mph]		Odometer signal value transmitted to other units via CAN communication.
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM via CAN communication. NOTE: 8191.875 is displayed when the malfunction signal is received.
FUEL METER [L]	X	Fuel level indicated on combination meter.
W TEMP METER [°C]	X	Value of engine coolant temperature signal is received from ECM via CAN communication. NOTE: 215 is displayed when the malfunction signal is input.
FUEL CAP W/L [Off]		This item is displayed, but cannot be monitored.
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 OFF indicator lamp detected from ESP OFF indicator lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
SLIP IND [On/Off]		Status of ESP warning lamp detected from ESP 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 lamp detected from door switch signal received from BCM via CAN communication.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp detected from high beam request signal is received from BCM via CAN communication.

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
TURN IND [On/Off]		Status of turn indicator lamp detected from turn indicator signal is received from BCM via CAN communication.
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.
RR FOG IND [On/Off]		Status of rear fog light indicator lamp detected from rear fog light request signal is received from BCM via CAN communication.
LIGHT IND [On/Off]		Status of light indicator lamp detected from position light request signal is received from BCM via CAN communication.
OIL W/L [On/Off]		<ul style="list-style-type: none"> • Status of oil pressure warning lamp detected from oil pressure switch signal is received from BCM via CAN communication. (K9K engine models) • Status of oil pressure warning lamp detected from oil pressure switch signal is received from ECM via CAN communication. (except for K9K engine models)
MIL [On/Off]		Status of malfunction indicator (yellow) detected from malfunctioning indicator lamp signal is received from ECM via CAN communication.
GLOW IND [On/Off]		Status of glow indicator lamp detected from glow indicator lamp signal is received from ECM via CAN communication.
C-ENG2 W/L [On/Off]		Status of malfunction indicator (red) detected from malfunctioning indicator lamp signal is received from ECM via CAN communication.
CRUISE IND [On/Off]		Status of CRUISE indicator lamp detected from ASCD status signal is received from ECM via CAN communication.
SET IND [On/Off]		Status of SET indicator lamp detected from ASCD status signal is received from ECM via CAN communication.
O/D OFF IND [On/Off]		Status of S mode indicator lamp detected from S mode indicator lamp signal is received from TCM via CAN communication.
CVT IND [On/Off]		Status of CVT indicator lamp detected from CVT status signal is received from TCM via CAN communication.
4WD W/L [On/Off]		Status of 4WD warning lamp judged from 4WD warning lamp signal received from 4WD control module with CAN communication line.
4WD LOCK IND [On/Off]		Status of 4WD lock indicator lamp judged from 4WD mode lamp signal received from 4WD control module with CAN communication line.
FUEL W/L [On/Off]		Low fuel warning status detected by the identified fuel level.
KEY G/Y W/L [On/Off]		Status of KEY warning lamp (G/Y) detected from KEY warning lamp signal is received from BCM via CAN communication.
KEY KNOB W/L [On/Off]		Status of shift P warning lamp detected from shift P warning lamp 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.
DPF W/L [On/Off]		Status of Diesel Particulate Filter warning lamp detected from Diesel Particulate Filter warning lamp signal is received from ECM via CAN communication.
FILTER W/L [On/Off]		Status of Filter warning lamp detected from Filter warning lamp signal is received from ECM via CAN communication.
LCD [B&P N, B&P I, SFT P, BATT, NO KY, LK WN] ^{*1} [C&P N, C&P I, SFT P, BATT, NO KY, LK WN] ^{*2}		Status of engine start operation indicator lamp, shift P warning lamp and KEY warning lamp, detected from engine start operation indicator lamp signal, shift P warning lamp signal and KEY warning lamp signal are received from BCM via CAN communication.
SHIFT IND [P, R, N, D, L] ^{*3} [P, R, N, D, M1, M2, M3, M4, M5, M6] ^{*4}		Status of shift position indicator judged from shift position signal received from TCM with CAN communication line.
O/D OFF SW [On/Off]		Status of over drive control switch.

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description	
M RANGE SW [On/Off]		Status of manual mode switch.	A
NM RANGE SW [On/Off]		Status of non-manual mode switch.	B
AT SFT UP SW [On/Off]		Status of manual mode shift up switch.	C
AT SFT DWN SW [On/Off]		Status of manual mode shift down switch.	
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the engine coolant temperature and the acceleration degree.	D
PKB SW [On/Off]		Status of parking brake switch.	E
BUCKLE SW [On/Off]		Status of seat belt buckle switch (driver side).	
BRAKE SW [On/Off]		Status of stop lamp switch.	F
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.	G
A/C AMP CONN [On/Off]		<ul style="list-style-type: none"> Status of A/C auto amp. connection recognition signal. Status of PTC heater control unit connection recognition signal. 	
PASS BUCKLE SW [On/Off]		Status of seat belt buckle switch (passenger side).	H
DISTANCE [km]		Value of distance to empty calculated by combination meter.	I
OUTSIDE TEMP [°C or °F]		Ambient temperature value converted from ambient sensor signal received from ambient sensor. NOTE: This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.)	J
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit via CAN communication.	K
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.	L
ASCD SPD BLNK [On/Off]		Blinking status of ASCD or speed limiter set vehicle speed that is judged by the ASCD status signal received from ECM via CAN communication.	M
ASCD STATUS [Off, ASCD, CRUISE, SL ON, SL SET]		Display status of ASCD and speed limiter status display judged by the ASCD status signal received from ECM via CAN communication.	
ASCD REQ SPD [km/h/Off]		ASCD or speed limiter set vehicle speed value that is judged by the ASCD status signal received from ECM via CAN communication.	WCS
E/O CHG TMNG [km]		A value of ECM-judged remaining distance to the oil change time.	O
E/O CHG TMNG RST [On/Off]		Resetting of a remaining distance to the engine oil change time.	P

- *1: CVT models
- *2: M/T models
- *3: Without manual mode CVT
- *4: With manual mode CVT

NOTE:

Some items are not available according to vehicle specification.

SPECIAL FUNCTION

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

Special menu

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

W/L ON HISTORY

- Stores histories when warning/indicator lamp is turned on.
- “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: Stores NO (0) turning on history of warning/indicator lamp.

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.

Display Item

Display item	Description
ABS W/L	Lighting history of ABS warning lamp.
VDC/TCS IND	Lighting history of ESP OFF indicator lamp.
SLIP IND	Lighting history of ESP warning lamp.
BRAKE W/L	Lighting history of brake warning lamp.
DOOR W/L	Lighting history of door open warning.
TRUNK/GLAS-H	This item is displayed, but cannot be monitored.
OIL W/L	Lighting history of oil pressure warning lamp.
C-ENG W/L	Lighting history of malfunction indicator lamp (orange).
C-ENG2 W/L	Lighting history of malfunction indicator lamp (red).
CRUISE IND	Lighting history of CRUISE indicator lamp.
SET IND	Lighting history of SET indicator lamp.
CRUISE W/L	This item is displayed, but cannot be monitored.
BA W/L	This item is displayed, but cannot be monitored.
O/D OFF IND	Lighting history of S mode indicator lamp.
ATC/T-AMT W/L	This item is displayed, but cannot be monitored.
ATF TEMP W/L	This item is displayed, but cannot be monitored.
CVT IND	Lighting history of CVT indicator.
SPORT IND	This item is displayed, but cannot be monitored.
4WD W/L	Lighting history of 4WD warning lamp.
FUEL W/L	Lighting history of low fuel level warning.
WASHER W/L	This item is displayed, but cannot be monitored.
AIR PRES W/L	This item is displayed, but cannot be monitored.
KEY G/Y W/L	Lighting history of KEY warning lamp (G/Y).
KEY R W/L	This item is displayed, but cannot be monitored.
KEY KNOB W/L	Lighting history of Shift P warning lamp.
EPS W/L	Lighting history of EPS warning lamp.
e-4WD	This item is displayed, but cannot be monitored.
AFS OFF IND	This item is displayed, but cannot be monitored.
4WAS/RAS W/L	This item is displayed, but cannot be monitored.
HDC W/L	This item is displayed, but cannot be monitored.

DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

Display item	Description	
SYS FAIL W/L	This item is displayed, but cannot be monitored.	A
SFT POSI W/L	This item is displayed, but cannot be monitored.	
HV BAT W/L	This item is displayed, but cannot be monitored.	B
HEV BRAKE W/L	This item is displayed, but cannot be monitored.	
SFT OPER W/L	This item is displayed, but cannot be monitored.	
LANE W/L	This item is displayed, but cannot be monitored.	C
CHAGE W/L	This item is displayed, but cannot be monitored.	
OIL LEV LOW	This item is displayed, but cannot be monitored.	D
DPF W/L	Lighting history of DPF warning lamp.	
TRAILER IND	This item is displayed, but cannot be monitored.	
RUN FLAT W/L	This item is displayed, but cannot be monitored.	E
E-SUS W/L	This item is displayed, but cannot be monitored.	
LAUNCH CNT W/L	This item is displayed, but cannot be monitored.	F
BSW W/L	This item is displayed, but cannot be monitored.	
FILTER W/L	Lighting history of FILTER warning lamp.	
BRAKE PAD W/L	This item is displayed, but cannot be monitored.	G

H

I

J

K

L

M

WCS

O

P

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

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

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:000000006751933

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

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

NOTE:

- *1: This item is displayed, but not used.
- *2: For models with automatic A/C, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

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

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"
	OFF>ACC		While turning power supply position from "OFF" to "ACC"
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)
CRANKING	Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 	

BUZZER

BUZZER : CONSULT-III Function (BCM - BUZZER)

INFOID:000000006501856

CONSULT-III APPLICATION ITEMS

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

DATA MONITOR

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Display item [Unit]	Description
PUSH SW [On/Off]	Status of push-button ignition switch judged by BCM.
UNLK SEN-DR [On/Off]	Status of unlock sensor judged by BCM.
VEH SPEED 1 [km/h]	Value of vehicle speed signal received from combination meter with CAN communication line.
TAIL LAMP SW [On/Off]	Status of lighting switch judged by BCM using the combination switch readout function.
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM using the combination switch readout function.
DOOR SW-DR [On/Off]	Status of driver side door switch judged by BCM.
CDL LOCK SW [On/Off]	Status of door lock unlock switch judged by BCM.

ACTIVE TEST

Display item [Unit]	Description
KEY REMINDER WARN	The key warning chime operation can be checked by operating the relevant function (On/Off).
LIGHT WARN ALM	The light warning chime operation can be checked by operating the relevant function (On/Off).

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

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

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:000000006751934

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	x	x	x
Rear window defogger	REAR DEFOGGER		x	x
Warning chime	BUZZER		x	x
Interior room lamp control	INT LAMP	x	x	x
Remote keyless entry system	MULTI REMOTE ENT	x	x	x
Exterior lamp	HEAD LAMP	x	x	x
Wiper and washer	WIPER	x	x	x
Turn signal and hazard warning lamps	FLASHER		x	x
<ul style="list-style-type: none"> Automatic A/C Manual A/C Manual heater 	AIR CONDITONER		x	x*2
Combination switch	COMB SW		x	
Body control system	BCM	x		
NATS	IMMU	x		x
Interior room lamp battery saver	BATTERY SAVER	x	x	x
Back door open	TRUNK		x	
Vehicle security system	THEFT ALM	x	x	x
—	RETAINED PWR*1		x	x
Signal buffer system	SIGNAL BUFFER		x	x
—	PANIC ALARM*1			x

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

*2: For models with automatic A/C, this mode is not used.

BUZZER

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

BUZZER : CONSULT-III Function (BCM - BUZZER)

INFOID:00000006501858

CONSULT-III APPLICATION ITEMS

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

DATA MONITOR

Display item [Unit]	Description
IGN ON SW [On/Off]	Status of ignition switch judged by BCM.
KEY ON SW [On/Off]	Status of key switch judged by BCM.
DOOR SW-DR [km/h]	Status of driver side door switch judged by BCM.
REVERSE SW CAN [On/Off]	This item is displayed, but cannot be monitored.
TAIL LAMP SW [On/Off]	Status of lighting switch judged by BCM using the combination switch readout function.
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM using the combination switch readout function.
BUCKLE SW [On/Off]	Status of seatbelt buckle switch (driver side) received from combination meter with CAN communication line.
VEHICLE SPEED [km/h]	Value of vehicle speed signal received from combination meter with CAN communication line.

ACTIVE TEST

Display item [Unit]	Description
IGN KEY WARN ALM	The key warning chime operation can be checked by operating the relevant function (On/Off).
LIGHT WARN ALM	The light warning chime operation can be checked by operating the relevant function (On/Off).

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:000000006502214

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
SPEED METER [km/h]	Ignition 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 [km/h]	Ignition 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 [km/h or mph]	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) NOTE: 8191.875 is displayed when the mal- function signal is received
FUEL METER [L]	Ignition switch ON	—	Input value of fuel level sensor signal
W TEMP METER [°C]	Ignition switch ON	—	Input value of engine coolant tempera- ture signal (CAN communication sig- nal) NOTE: 215 is displayed when the malfunction signal is input
FUEL CAP W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be moni- tored.	Off
ABS W/L	Ignition switch ON	ABS warning lamp ON	On
		ABS warning lamp OFF	Off
VDC/TCS IND	Ignition switch ON	ESP OFF indicator lamp ON	On
		ESP OFF indicator lamp OFF	Off
SLIP IND	Ignition switch ON	ESP warning lamp ON	On
		ESP warning lamp OFF	Off
BRAKE W/L	Ignition switch ON	Brake warning lamp ON	On
		Brake warning lamp OFF	Off
DOOR W/L	Ignition switch ON	Door open warning lamp ON	On
		Door open warning lamp OFF	Off
HI-BEAM IND	Ignition switch ON	High-beam indicator lamp ON	On
		High-beam indicator lamp OFF	Off
TURN IND	Ignition switch ON	Turn signal indicator lamp ON	On
		Turn signal indicator lamp OFF	Off
FR FOG IND	Ignition switch ON	Front fog lamp indicator lamp ON	On
		Front fog lamp indicator lamp OFF	Off

A

B

C

D

E

F

G

H

I

J

K

L

M

WCS

O

P

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
RR FOG IND	Ignition switch ON	Rear fog lamp indicator lamp ON	On
		Rear fog lamp indicator lamp OFF	Off
LIGHT IND	Ignition switch ON	Tail lamp indicator lamp ON	On
		Tail lamp indicator lamp OFF	Off
OIL W/L	Ignition switch ON	Oil pressure warning lamp ON	On
		Oil pressure warning lamp OFF	Off
MIL	Ignition switch ON	Malfunction indicator (yellow) ON	On
		Malfunction indicator (yellow) OFF	Off
GLOW IND	Ignition switch ON	Glow indicator lamp ON	On
		Glow indicator lamp OFF	Off
C-ENG2 W/L	Ignition switch ON	Engine warning (red) ON	On
		Engine warning (red) OFF	Off
CRUISE IND	Ignition switch ON	CRUISE indicator lamp ON	On
		CRUISE indicator lamp OFF	Off
SET IND	Ignition switch ON	SET indicator ON	On
		SET indicator OFF	Off
O/D OFF IND	Ignition switch ON	S mode indicator lamp ON	On
		S mode indicator lamp OFF	Off
CVT IND	Ignition switch ON	CVT indicator ON	On
		CVT indicator OFF	Off
4WD W/L	Ignition switch ON	4WD warning lamp ON	On
		4WD warning lamp OFF	Off
4WD LOCK IND	Ignition switch ON	4WD LOCK indicator lamp ON	On
		4WD LOCK indicator lamp OFF	Off
KEY G/Y W/L	Ignition switch ON	During Intelligent Key system malfunction indication	On
		Other than the above	Off
KEY KNOB W/L	Ignition switch ON	SHIFT P warning lamp ON	On
		SHIFT P warning lamp OFF	Off
EPS W/L	Ignition switch ON	EPS warning lamp ON	On
		EPS warning lamp OFF	Off
DPF W/L	Ignition switch ON	DPF warning lamp ON	On
		DPF warning lamp OFF	Off
FUEL W/L	Ignition switch ON	During low fuel warning indication	On
		Other than the above	Off
FILTER W/L	Ignition switch ON	Filter warning lamp ON	On
		Filter warning lamp OFF	Off

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status	
LCD	Ignition switch LOCK or ACC	Engine start operation indicator lamp ON (CVT models)	B&P N	A
	Ignition switch ON	Engine start operation indicator lamp ON (CVT models)	B&P I	B
	Ignition switch LOCK or ACC	Engine start operation indicator lamp ON (M/T models)	C&P N	C
	Ignition switch ON	Engine start operation indicator lamp ON (M/T models)	C&P I	
	Ignition switch LOCK	During P position warning lamp indication	SFT P	D
	Ignition switch LOCK	During Intelligent Key low battery warning indication	BATT	E
	Ignition switch ON	During take away warning indication	NO KY	
	Ignition switch ON	During ACC warning indication	LK WN	
SHIFT IND	Ignition switch ON	Shift position indicator P display	P	G
		Shift position indicator R display	R	
		Shift position indicator N display	N	
		Shift position indicator D display	D	
		Shift position indicator L display (without manual mode CVT)	L	H
		Shift position indicator M1 display (with manual mode CVT)	M1	I
		Shift position indicator M2 display (with manual mode CVT)	M2	
		Shift position indicator M3 display (with manual mode CVT)	M3	J
		Shift position indicator M4 display (with manual mode CVT)	M4	K
		Shift position indicator M5 display (with manual mode CVT)	M5	
		Shift position indicator M6 display (with manual mode CVT)	M6	
O/D OFF SW	Ignition switch ON	S mode indicator switch ON	On	M
		S mode indicator switch OFF	Off	
M RANGE SW	Ignition switch ON	Selector lever in manual mode position	On	WCS
		Other than the above	Off	
NM RANGE SW	Ignition switch ON	Selector lever in manual mode position	Off	O
		Other than the above	On	
AT SFT UP SW	Ignition switch ON	Selector lever in + position	On	P
		Other than the above	Off	
AT SFT DWN SW	Ignition switch ON	Selector lever in – position	On	
		Other than the above	Off	
COMP F/B SIG	Ignition switch ON	A/C compressor activation condition	On	
PKB SW	Ignition switch ON	Parking brake switch ON	On	
		Parking brake switch OFF	Off	

COMBINATION METER

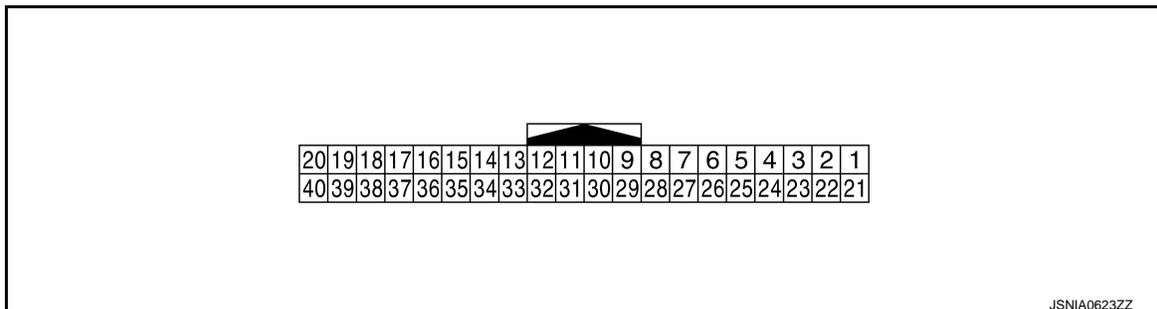
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
BUCKLE SW	Ignition switch ON	Driver seat belt not fastened	On
		Driver seat belt fastened	Off
BRAKE SW	Ignition switch ON	Brake pedal is pressed	On
		Other than the above	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON	On
		Brake fluid level switch OFF	Off
A/C AMP CONN	Ignition switch ON	Other than the following	On
		Receives A/C auto amp./PTC heater control unit connection recognition signal	Off
PASS BUCKLE SW	Ignition switch ON	Passenger seat belt not fastened	On
		<ul style="list-style-type: none"> • Passenger seat belt fastened • When getting in the passenger seat 	Off
DISTANCE [km]	Ignition switch ON	—	Distance to empty calculated by combination meter
OUTSIDE TEMP [°C or °F]	Ignition switch ON	—	Input value of ambient sensor signal (CAN communication signal) NOTE: This may not match the indicated value on the information display.
FUEL LOW SIG	Ignition switch ON	During low fuel warning indication	On
		Other than above	Off
BUZZER	Ignition switch ON	Buzzer ON	On
		Buzzer OFF	Off
ASCD SPD BLNK	Ignition switch ON	Set vehicle speed indicator blinking	On
		Set vehicle speed indicator not blinking	Off
ASCD STATUS	Ignition switch ON	ASCD and speed limiter system OFF	Off
		ASCD system ON	ASCD
		ASCD set vehicle speed	CRUISE
		Speed limiter system ON	SL ON
		Speed limiter set vehicle speed	SL SET
ASCD REQ SPD [km/h or Off]	Ignition switch ON	While driving	Same value as ASCD or speed limiter set vehicle speed
E/O CHG TMNG	Ignition switch ON	—	A value of ECM-judged remaining distance to the oil change time.
E/O CHG TMNG RST	Ignition switch ON	Resetting of a remaining distance to the engine oil change time.	On
		Other than above	Off

NOTE:

Some items are not available according to vehicle specification.

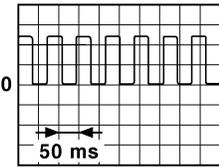
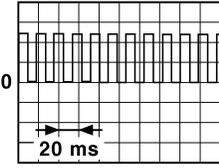
TERMINAL LAYOUT



COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (L)	—	CAN-H	—	—	—	—
2 (P)	—	CAN-L	—	—	—	—
3 (GR)	Ground	Vehicle speed signal (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	<p>NOTE: The maximum voltage varies de- pending on the specification (destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0015GB</p>
4 (Y)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	<p>NOTE: The maximum voltage varies de- pending on the specification (destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>

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

WCS

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
6 (BR)	Ground	Fuel level sensor signal	Input	Ignition switch ON	Resistance value corresponding to SEG 16/16	<ul style="list-style-type: none"> • On: 80 Ω / Off: 88 Ω (2WD) • On: 94 Ω / Off: 106 Ω (4WD)
					Resistance value corresponding to SEG 15/16	<ul style="list-style-type: none"> • On: 87 Ω / Off: 99 Ω (2WD) • On: 105 Ω / Off: 123 Ω (4WD)
					Resistance value corresponding to SEG 14/16	<ul style="list-style-type: none"> • On: 99 Ω / Off: 111 Ω (2WD) • On: 123 Ω / Off: 144 Ω (4WD)
					Resistance value corresponding to SEG 13/16	<ul style="list-style-type: none"> • On: 110 Ω / Off: 122 Ω (2WD) • On: 144 Ω / Off: 153 Ω (4WD)
					Resistance value corresponding to SEG 12/16	<ul style="list-style-type: none"> • On: 121 Ω / Off: 133 Ω (2WD) • On: 152 Ω / Off: 164 Ω (4WD)
					Resistance value corresponding to SEG 11/16	<ul style="list-style-type: none"> • On: 133 Ω / Off: 144 Ω (2WD) • On: 163 Ω / Off: 173 Ω (4WD)
					Resistance value corresponding to SEG 10/16	<ul style="list-style-type: none"> • On: 144 Ω / Off: 155 Ω (2WD) • On: 173 Ω / Off: 182 Ω (4WD)
					Resistance value corresponding to SEG 9/16	<ul style="list-style-type: none"> • On: 154 Ω / Off: 166 Ω (2WD) • On: 182 Ω / Off: 192 Ω (4WD)
					Resistance value corresponding to SEG 8/16	<ul style="list-style-type: none"> • On: 166 Ω / Off: 177 Ω (2WD) • On: 191 Ω / Off: 200 Ω (4WD)
					Resistance value corresponding to SEG 7/16	<ul style="list-style-type: none"> • On: 177 Ω / Off: 188 Ω (2WD) • On: 200 Ω / Off: 211 Ω (4WD)
					Resistance value corresponding to SEG 6/16	<ul style="list-style-type: none"> • On: 188 Ω / Off: 199 Ω (2WD) • On: 211 Ω / Off: 219 Ω (4WD)
					Resistance value corresponding to SEG 5/16	<ul style="list-style-type: none"> • On: 199 Ω / Off: 216 Ω (2WD) • On: 219 Ω / Off: 228 Ω (4WD)
					Resistance value corresponding to SEG 4/16	<ul style="list-style-type: none"> • On: 215 Ω / Off: 232 Ω (2WD) • On: 227 Ω / Off: 236 Ω (4WD)
					Resistance value corresponding to SEG 3/16	<ul style="list-style-type: none"> • On: 233 Ω / Off: 252 Ω (2WD) • On: 235 Ω / Off: 245 Ω (4WD)
					Resistance value corresponding to SEG 2/16	<ul style="list-style-type: none"> • On: 251 Ω / Off: 270 Ω (2WD) • On: 246 Ω / Off: 253 Ω (4WD)
Resistance value corresponding to SEG 1/16	<ul style="list-style-type: none"> • On: 271 Ω / Off: 287 Ω (2WD) • On: 253 Ω / Off: 258 Ω (4WD) 					
7 (R)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON	4 V
					Air bag warning lamp OFF	0 V
8 (P)	Ground	Over drive control switch signal	Input	Ignition switch ON	Over drive control switch ON	4 V
					Over drive control switch OFF	0 V
9 (W)	Ground	Seat belt buckle switch signal (driver side)	Input	Engine idling	When driver seat belt is fastened.	12 V
					When driver seat belt is unfastened.	0 V
10 (SB)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake applied.	0 V
					Parking brake released.	5 V
11 (G)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal	5 V
					Brake fluid level is less than LOW level	0 V

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
14 (R)	Ground	Manual mode shift up signal	Input	Ignition switch ON	Selector lever UP operation	0 V
					Other than the above	12 V
15 (L)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
16 (W)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Selector lever DOWN operation	0 V
					Other than the above	12 V
18 (R)	Ground	Security signal	Input	Ignition switch OFF	Security indicator lamp ON	0 V
					Security indicator lamp OFF	12 V
19 (GR)	Ground	Ambient sensor signal	Input	Ignition switch ON	Changes depending to ambient temperature.	<p style="text-align: center;"> <small>JSNIA0014GB</small> </p>
20 (R)	Ground	Ambient sensor ground	—	Ignition switch ON	—	0 V
21 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
22 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
23 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
24 (L)	Ground	Fuel level sensor ground	—	Ignition switch ON	—	0 V
25 (B)	Ground	ESP ground	—	Ignition switch ON	—	0 V
27 (LG)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
28 (GR)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
29 (V)	Ground	Seat belt buckle switch signal (passenger side)	Input	Engine idling	<ul style="list-style-type: none"> When getting in the passenger seat. When passenger seat belt is fastened. 	12 V
					<ul style="list-style-type: none"> When getting in the passenger seat. When passenger seat belt is unfastened. 	0 V

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

WCS

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
30 (R)	Ground	Stop lamp switch signal	Input	Ignition switch ON	Brake pedal is depressed	12 V
					Other than the above	0 V
31 (P)	Ground	A/C auto amp. /PTC heater control unit connection rec- ognition signal	Input	Ignition switch ON	—	5 V
33 (B/R)	Ground	Filter warning signal	Input	Ignition switch ON	—	—
36 (Y)	Ground	Manual mode signal	Input	Ignition switch ON	Selector manual mode po- sition	0 V
					Other than the above	12 V
37 (G)	Ground	Non-manual mode signal	Input	Ignition switch ON	Selector manual mode po- sition	12 V
					Other than the above	0 V
38 (P)	Ground	Alternator signal	Input	Ignition switch ON	Charge warning lamp ON	2 V
					Charge warning lamp OFF	12 V
39 (Y)	Ground	Oil level sensor signal	Input	Ignition switch ON	—	Refer to MWI-50, "Component Inspection" .
40 (SB)	Ground	Oil level sensor ground	—	Ignition switch ON	—	0 V

Fail-Safe

INFOID:0000000065022 15

FAIL-SAFE

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

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Engine coolant temperature gauge		
Illumination control		When suspending communication, changes to nighttime mode.
Shift position indicator	Shift position	When suspending communication, not indicate.
	S mode indicator lamp	
Information display	Instantaneous fuel consumption	<ul style="list-style-type: none"> When reception time of an abnormal signal is 2 seconds or less, the last received datum is used for calculation to indicate the result. When reception time of an abnormal signal is more than two seconds, the last result calculated during normal condition is indicated.
	Average fuel consumption	
	Possible driving distance	
	Torque distribution 4WD	
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.	A
	Malfunction indicator (Yellow)		B
	SLIP indicator lamp		C
	EPS warning lamp		D
	4WD warning lamp		E
	Brake warning lamp		F
	VDC warning lamp	The lamp turns OFF by suspending communication.	G
	High beam indicator lamp		H
	Turn signal indicator lamp		I
	Door warning lamp		J
	Light indicator lamp		K
	Engine start operation indicator lamp		L
	Shift P warning lamp		M
	Front fog lamp indicator lamp		N
	Rear fog lamp indicator lamp		O
	Oil pressure warning lamp		P
	Malfunction indicator (Red)		Q
	CRUISE indicator lamp		R
	SET indicator lamp		S
	Speed limiter indicator lamp		T
	4WD indicator lamp		U
	4WD LOCK indicator lamp		V
	Key warning lamp		W
	DPF (Diesel Particulate Filter) warning lamp		X
Glow indicator lamp	Y		
CVT indicator lamp	Z		
Filter warning lamp	AA		

DTC Index

INFOID:000000006502216

Display contents of CONSULT-III	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-44. "Diagnosis Procedure"
CONTROL UNIT (CAN) [U1010]	When detecting error during the initial diagnosis of the CAN controller of combination meter.	MWI-45. "Diagnosis Procedure"
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from the ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-46. "Diagnosis Procedure"
ENGINE SPEED [B2267]	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-47. "Diagnosis Procedure"
WATER TEMP [B2268]	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-48. "Diagnosis Procedure"

WCS

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT-III	Diagnostic item is detected when...	Refer to
OIL LEV SEN OPEN [B2321]	Signal from oil level sensor is open (resistance value of oil level sensor is larger than 20 Ω).	MWI-49. "Diagnosis Procedure"
OIL LEV SEN SHORT [B2322]	Signal from oil level sensor is shorted (resistance value of oil level sensor is smaller than 3 Ω).	MWI-49. "Diagnosis Procedure"

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:000000006501862

ECU		Reference
BCM	With intelligent key models	BCS-41, "Reference Value"
		BCS-64, "Fail-safe"
		BCS-66, "DTC Inspection Priority Chart"
		BCS-67, "DTC Index"
	Without intelligent key models	BCS-125, "Reference Value"
		BCS-140, "Fail-safe"
		BCS-140, "DTC Inspection Priority Chart"
	BCS-141, "DTC Index"	

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

WCS

WARNING CHIME SYSTEM

< WIRING DIAGRAM >

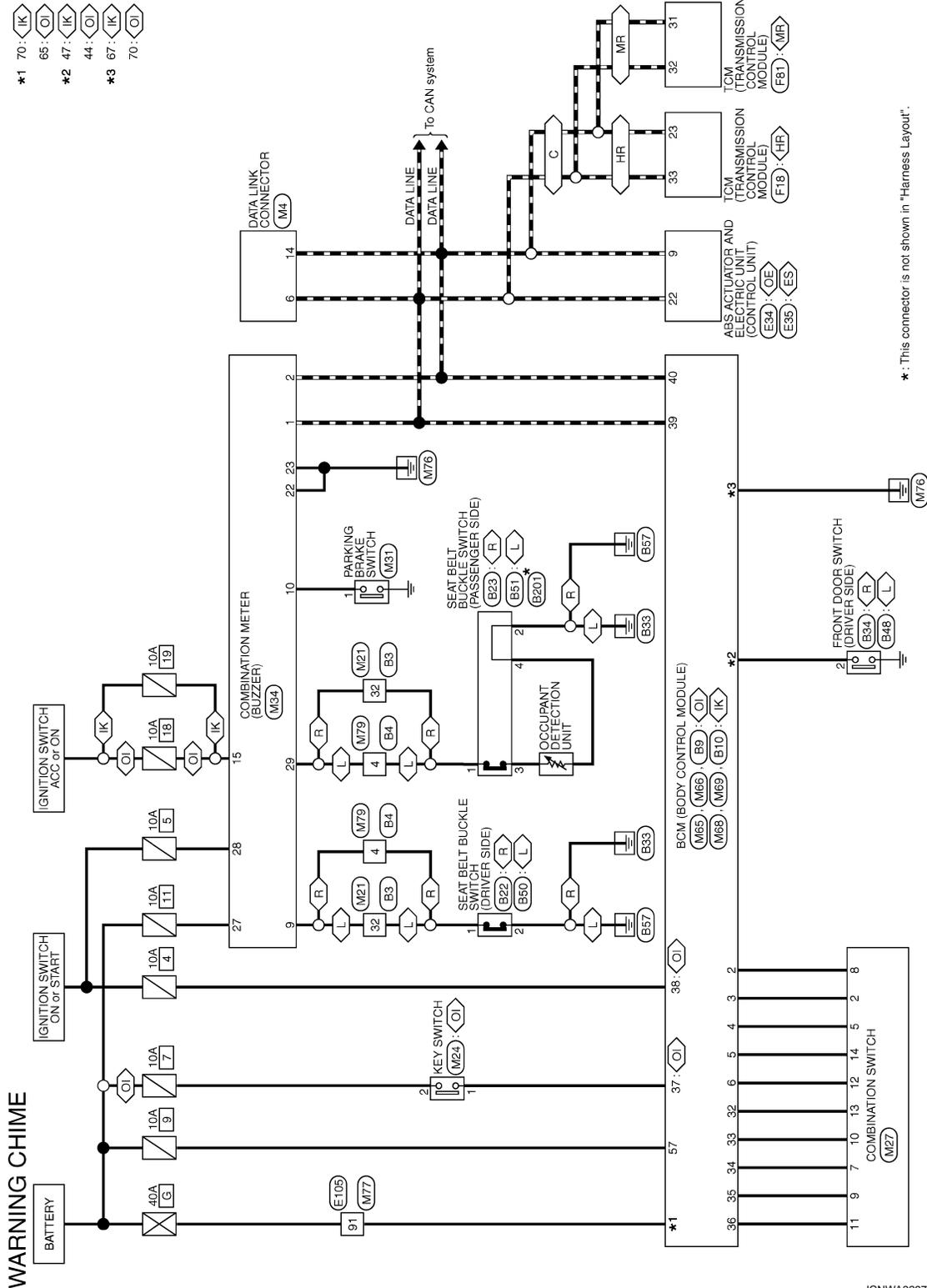
WIRING DIAGRAM

WARNING CHIME SYSTEM

Wiring Diagram

INFOID:000000006501863

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



DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

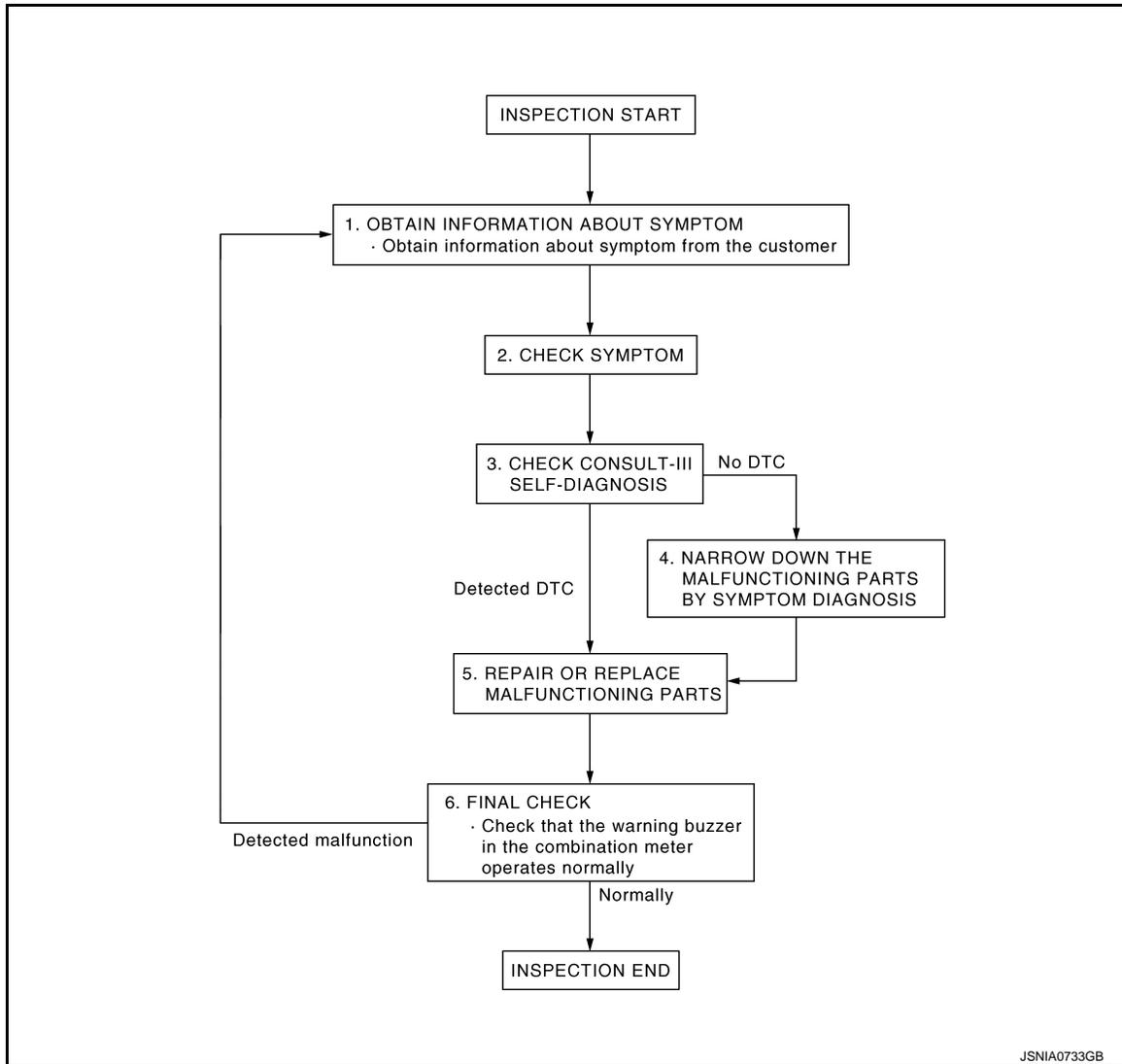
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000006501865

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-III SELF-DIAGNOSIS RESULTS

Connect CONSULT-III and perform self-diagnosis. Refer to [WCS-15. "CONSULT-III Function"](#).

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

WCS

O
P

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.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER : Diagnosis Procedure

INFOID:000000006502218

1. CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	11
Ignition switch ON or START	5
Ignition switch ACC or ON	18 (Without intelligent key)
	19 (With intelligent key)

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

Terminals		Ignition switch position	Voltage (Approx.)
(+)	(-)		
Combination meter			
Connector	Terminal	Ground	Battery voltage
M34	27		
	15		
	28		
		OFF	
		ACC	
		ON	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

3. CHECK GROUND CIRCUIT

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

Combination meter		Ground	Continuity
Connector	Terminal		Existed
M34	21		
	22		
	23		
	25 (With ESP)		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

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

WCS

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Component Function Check

INFOID:000000006501867

1. CHECK OPERATION OF METER BUZZER

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

Does meter buzzer beep?

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

2. CHECK COMBINATION METER INPUT SIGNAL

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

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

Is the inspection result normal?

- YES >> Replace combination meter.
NO >> Replace BCM. Refer to [BCS-93, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-161, "Removal and Installation"](#) (without Intelligent Key system).

Diagnosis Procedure

INFOID:000000006501868

1. CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to [WCS-39, "COMBINATION METER : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Repair power supply circuit of combination meter.

PARKING BRAKE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

PARKING BRAKE SWITCH SIGNAL CIRCUIT

Diagnosis Procedure

INFOID:000000006501869

1. CHECK COMBINATION METER INPUT SIGNAL

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

(+)		(-)	Condition	Voltage (Approx.)	
Combination meter		Ground			
Connector	Terminal				
M34	10		Ground	Ignition switch ON	When parking brake is applied
				When parking brake is released	12 V

Is the inspection result normal?

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

2. CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

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

Terminals				Continuity
Combination meter		Parking brake switch		
Connector	Terminal	Connector	Terminal	
M34	10	M31	1	Existed

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

Terminals			Continuity
Combination meter		Ground	
Connector	Terminal		
M34	10		Ground

Is the inspection result normal?

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

Component Inspection

INFOID:000000006501870

1. CHECK PARKING BRAKE SWITCH

Check parking brake switch. Refer to [BRC-208, "Component Inspection"](#) (with ESP) or [BRC-70, "Component Inspection"](#) (without ESP).

Is the inspection result normal?

- YES >> INSPECTION END.
NO >> Replace parking brake switch. Refer to [PB-4, "Exploded View"](#).

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

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

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

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

Description

INFOID:000000006501871

- 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:000000006501872

1. CHECK PARKING BRAKE WARNING LAMP

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

When parking brake is applied : ON

When parking brake is released : OFF

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-69. "Removal and Installation"](#)
NO >> GO TO 2.

2. CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform check for the parking brake switch signal circuit. Refer to [WCS-41. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

3. CHECK PARKING BRAKE SWITCH

Perform a unit check for the parking brake switch. Refer to [WCS-41. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-69. "Removal and Installation"](#)
NO >> Replace parking brake switch. Refer to [PB-4. "Exploded View"](#).

THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description

INFOID:000000006501873

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

Diagnosis Procedure

INFOID:000000006501874

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-75, "WITH DAYTIME RUNNING LIGHT SYSTEM : Symptom Table"](#) (with daytime running light system) or [EXL-74, "WITHOUT DAYTIME RUNNING LIGHT SYSTEM : Symptom Table"](#) (without daytime running light system).

2. CHECK DRIVER SIDE DOOR SWITCH SIGNAL CIRCUIT

Perform the check for the driver side door switch signal circuit. Refer to [DLK-87, "Diagnosis Procedure"](#) (Type 1), [DLK-258, "Diagnosis Procedure"](#) (Type 2), [DLK-397, "Diagnosis Procedure"](#) (Type 3), or [DLK-522, "Diagnosis Procedure"](#) (Type 4).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK DRIVER SIDE DOOR SWITCH

Perform a unit check for the driver side door switch. Refer to [DLK-88, "Component Inspection"](#) (Type 1), [DLK-259, "Component Inspection"](#) (Type 2), [DLK-398, "Component Inspection"](#) (Type 3), or [DLK-523, "Component Inspection"](#) (Type 4).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-93, "Removal and Installation"](#) (with intelligent key system) or [BCS-161, "Removal and Installation"](#) (without intelligent key system).

NO >> Replace driver side door switch. Refer to [DLK-187, "Removal and Installation"](#) (Type 1), [DLK-350, "Removal and Installation"](#) (Type 2), [DLK-485, "Removal and Installation"](#) (Type 3), or [DLK-601, "Removal and Installation"](#) (Type 4).

NOTE:

To identify vehicle type, refer to [DLK-17, "Information"](#).

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

WCS

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:000000006501875

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

Diagnosis Procedure

INFOID:000000006501876

1. CHECK SEAT BELT WARNING LAMP

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

Seat belt (driver side) fastened	: OFF
Seat belt (driver side) unfastened	: ON
Seat belt (passenger side) fastened*	: OFF
Seat belt (passenger side) unfastened*	: ON

*: When getting in the passenger seat

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-69. "Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)

Perform the check for the seat belt buckle switch (driver side) circuit. Refer to [MWI-58. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

3. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Perform the check for the seat belt buckle switch (driver side). Refer to [MWI-59. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace seat belt buckle (driver side). Refer to [SB-8. "SEAT BELT BUCKLE : Removal and Installation"](#).

4. CHECK SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (PASSENGER SIDE)

Perform the check for the seat belt buckle switch (passenger side) circuit. Refer to [MWI-60. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

5. CHECK SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Perform the check for the seat belt buckle switch (passenger side). Refer to [MWI-60. "Component Inspection \(Seat Belt Buckle Switch\)"](#).

Is the inspection result normal?

- YES >> GO TO 6.
NO >> Replace seat belt buckle (passenger side). Refer to [SB-8. "SEAT BELT BUCKLE : Removal and Installation"](#).

6. CHECK OCCUPANT DETECTION UNIT

Perform the check for the occupant detection unit. Refer to [MWI-61. "Component Inspection \(Occupant Detection Unit\)"](#).

Is the inspection result normal?

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

< SYMPTOM DIAGNOSIS >

- YES >> Replace combination meter. Refer to [MWI-69. "Removal and Installation"](#).
- NO >> Replace seat cushion trim and pad. Refer to [SE-21. "SEAT CUSHION : Disassembly and Assembly"](#) (2WD) or [SE-29. "SEAT CUSHION : Disassembly and Assembly"](#) (4WD).

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

WCS

THE KEY WARNING DOES NOT SOUND (WITHOUT INTELLIGENT KEY)

< SYMPTOM DIAGNOSIS >

THE KEY WARNING DOES NOT SOUND (WITHOUT INTELLIGENT KEY)

Description

INFOID:000000006501877

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 ACC or OFF (ignition switch signal OFF).
- Driver side door is open (driver side door switch ON)

Diagnosis Procedure

INFOID:000000006501878

1. CHECK BCM INPUT SIGNAL

1. Connect CONSULT-III.
2. Select the "Data Monitor" of "BCM (BUZZER)" and check the "KEY ON SW" monitor value. Refer to [WCS-21. "BUZZER : CONSULT-III Function \(BCM - BUZZER\)".](#)

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-161, "Removal and Installation".](#)
NO >> GO TO 2.

2. CHECK KEY SWITCH SIGNAL CIRCUIT

Check the key switch signal circuit. Refer to [DLK-401, "Diagnosis Procedure"](#) (Type 3) or [DLK-526, "Diagnosis Procedure"](#) (Type 4).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-161, "Removal and Installation".](#)
NO >> Check applicable parts, and repair or replace corresponding parts.

NOTE:

To identify vehicle type, refer to [DLK-357, "Information".](#)