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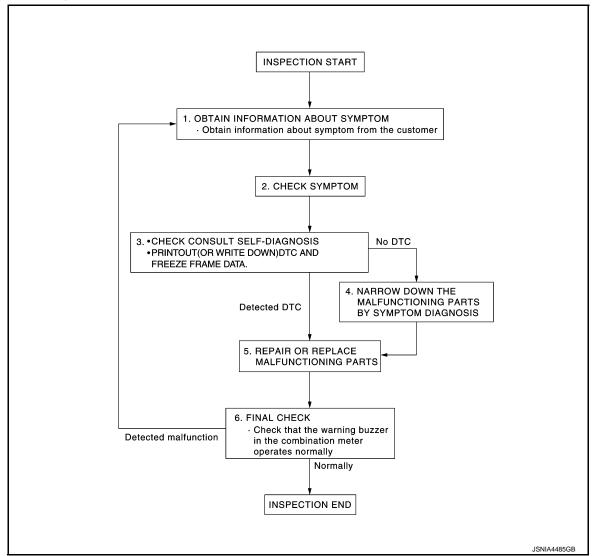
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# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORKFLOW

Work Flow | INFOID:0000000007626173 | B

#### **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 <u>WCS-34, "DTC Index"</u>.

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#### **DIAGNOSIS AND REPAIR WORKFLOW**

#### < BASIC INSPECTION >

- 2. When DTC is detected, follow the instructions below:
- Record DTC and Freeze Frame Data.

#### Are self-diagnosis results normal?

YES >> GO TO 4. NO >> GO TO 5.

# 4. NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

# 5. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

NOTE:

If DTC is displayed, erase DTC after repairing or replacing malfunctioning parts.

>> GO TO 6.

### 6. FINAL CHECK

Check that the warning buzzer in the combination meter operates normally.

#### Does it operate normally?

YES >> INSPECTION END

NO >> GO TO 1.

# SYSTEM DESCRIPTION

# WARNING CHIME SYSTEM WARNING CHIME SYSTEM

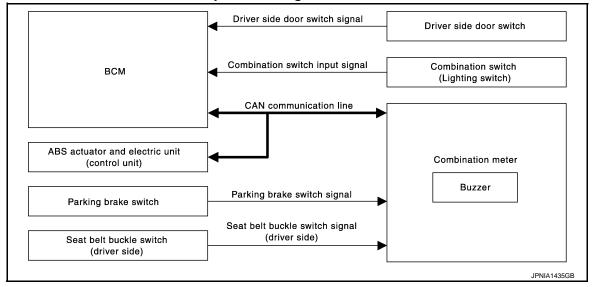
# WARNING CHIME SYSTEM: System Diagram

INFOID:0000000007626174

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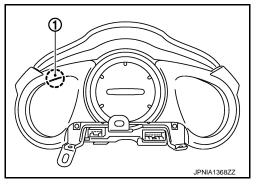


### WARNING CHIME SYSTEM: System Description

INFOID:0000000007626175

#### **COMBINATION METER**

- The buzzer (1) for the warning chime system is integrated in the combination meter.
- The combination meter sounds the alarm buzzer installed in the combination meter when receiving the buzzer output signal transmitted from each unit.
- Judges whether the parking brake is released from the vehicle speed signal received from the ABS actuator and electric unit (control unit) with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.



#### BCM

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.

### **BCM Warning Function List**

Warning functions	Signal name
Light reminder warning chime	<ul><li> Ignition switch signal</li><li> Combination switch input signal</li><li> Driver side door switch signal</li></ul>
Seat belt warning chime	<ul><li>Ignition switch signal</li><li>Seat belt buckle switch signal (driver side)</li></ul>

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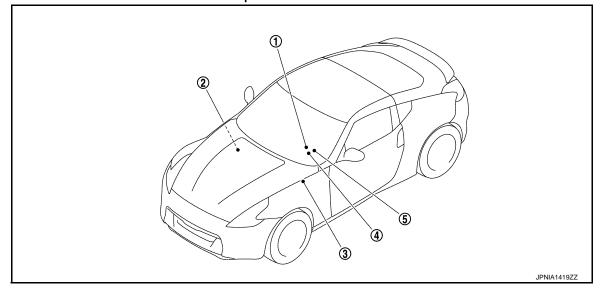
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# WARNING CHIME SYSTEM: Component Parts Location

INFOID:0000000007626176



- 1. Parking brake switch
- BCM
  2. Refer to BCS-9, "Component Parts Location".
- 4. Combination meter
- 5. Seat belt buckle switch (driver side)
- ABS actuator and electric unit (control unit)
- Refer to BRC-11, "Component Parts Location".

# WARNING CHIME SYSTEM: Component Description

INFOID:0000000007626177

Unit	Description		
Combination meter	<ul> <li>Receives a buzzer output signal from the BCM with CAN communication line and sounds the buzzer.</li> <li>Judges whether the parking brake is released from the vehicle speed signal received from the ABS actuator and electric unit (control unit) with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.</li> <li>Receives the seat belt buckle switch signal (driver side) from the seat belt buckle switch (driver side) and transmits it to BCM with CAN communication line.</li> </ul>		
BCM	Transmits signals provided by various units to the combination meter with CAN communication line.		
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter with CAN communication line.		
Seat belt buckle switch (driver side)	Transmits a seat belt buckle switch signal (driver side) to the combination meter.		
Combination switch (Lighting switch)	Transmits the combination switch input signal to BCM.		
Driver side door switch	Transmits the driver side door switch signal to BCM.		
Parking brake switch	Refer to MWI-53, "Description".		

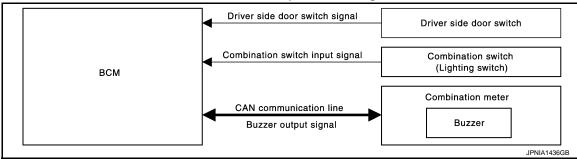
### LIGHT REMINDER WARNING CHIME

#### WARNING CHIME SYSTEM

#### < SYSTEM DESCRIPTION >

# LIGHT REMINDER WARNING CHIME: System Diagram

INFOID:0000000007626178



# LIGHT REMINDER WARNING CHIME: System Description

INFOID:0000000007626179

### **DESCRIPTION**

With ignition switch in the OFF or ACC position, when the driver door is open and the lighting switch is the 1st or 2nd position, the light warning chime will sound.

- BCM detects ignition switch in the OFF or ACC position, driver side door switch ON, and lighting switch in 1st or 2nd position. Then the BCM transmits the buzzer output signal (light reminder warning chime) to combination meter with CAN communication line.
- When combination meter receives buzzer output signal (light reminder warning chime), it sounds the buzzer.

#### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Ignition switch is in the OFF or ACC
- · Lighting switch is in the 1st or 2nd position
- Driver side door switch is ON

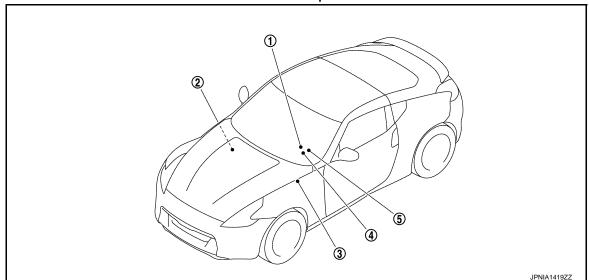
#### WARNING CANCEL CONDITIONS

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

- Lighting switch OFF
- Ignition switch ON
- Driver side door switch is OFF

# LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:0000000007793300



Parking brake switch

Combination meter

- **BCM**
- Refer to BCS-9, "Component Parts Location".
- 5. Seat belt buckle switch (driver side)
- ABS actuator and electric unit (control unit)
- Refer to BRC-11, "Component Parts Location".

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# LIGHT REMINDER WARNING CHIME: Component Description

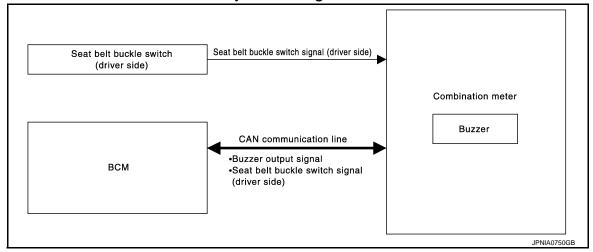
INFOID:0000000007626181

Unit	Description		
Combination meter	Receives a buzzer output signal from the BCM and sounds the buzzer.		
BCM	Judges the light reminder warning conditions from the signals provided by various switches and transmits a buzzer output signal to the combination meter via CAN communication line if necessary.		
Combination switch (Lighting switch)	Transmits the combination switch input signal to BCM.		
Driver side door switch	Transmits the driver side door switch signal to BCM.		

#### SEAT BELT WARNING CHIME

# SEAT BELT WARNING CHIME: System Diagram

INFOID:0000000007626182



# SEAT BELT WARNING CHIME: System Description

INFOID:0000000007626183

#### **DESCRIPTION**

With ignition switch turned ON and driver seat belt unfastened, seat belt warning chime will sound for approximately 6 seconds.

- The combination meter receives the seat belt buckle switch signal (driver side) from seat belt buckle switch (driver side) and transmits it to the BCM via CAN communication.
- The BCM receives seat belt buckle switch signal from combination meter via CAN communication.
- The BCM detects seat belt reminder warning based on the received signal and transmits the buzzer output signal to combination meter via CAN communication.
- The combination meter receives the buzzer output signal from BCM via CAN communication and sounds the warning buzzer.

#### WARNING OPERATION CONDITIONS

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

- Ignition switch ON
- Seat belt buckle switch (driver side) is ON (driver seat belt not fastened)

### WARNING CANCEL CONDITIONS

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

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

# SEAT BELT WARNING CHIME : Component Parts Location

INFOID:0000000007793301 Α D

- Parking brake switch
- **BCM** 2. Refer to BCS-9, "Component Parts Location".

**(4**)

Combination meter 5. Seat belt buckle switch (driver side)

ABS actuator and electric unit (control unit)

Refer to BRC-11, "Component Parts Location".

### SEAT BELT WARNING CHIME: Component Description

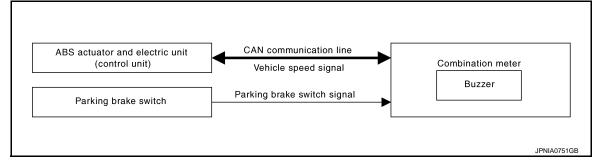
INFOID:0000000007626185

Unit	Description		
Combination meter	<ul> <li>Receives the seat belt buckle switch signal (driver side) from the seat belt buckle switch (driver side) and transmits it to BCM via CAN communication line.</li> <li>Receives a buzzer output signal from the BCM and sounds the buzzer.</li> </ul>		
BCM  Judges the seat belt warning condition according to the seat belt buckle switch received from the combination meter via CAN communication and transmits a but to the combination meter via CAN communication line if necessary.			
Seat belt buckle switch (driver side)  Transmits the seat belt buckle switch signal (driver side) to the combination meter.			

# PARKING BRAKE RELEASE WARNING CHIME

# PARKING BRAKE RELEASE WARNING CHIME: System Diagram

INFOID:0000000007626186



# PARKING BRAKE RELEASE WARNING CHIME: System Description

INFOID:0000000007626187

#### DESCRIPTION

Parking brake release warning chime judges the remaining parking brake according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from parking brake switch to sound the warning buzzer.

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#### **WARNING CHIME SYSTEM**

#### < SYSTEM DESCRIPTION >

#### WARNING OPERATION CONDITIONS

- If all of the following conditions are fulfilled.

   Vehicle speed is 7 km/h (4.3 MPH) or more
- Parking brake switch ON

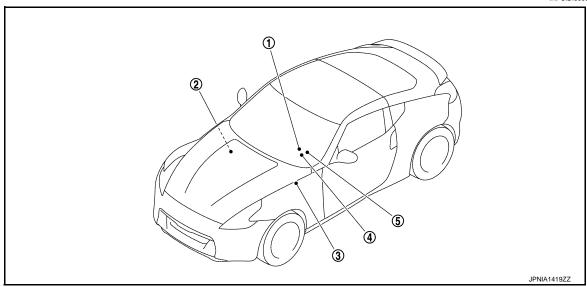
#### WARNING CANCEL CONDITIONS

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

- Vehicle speed is approximately 3 km/h (1.9 MPH) or less
- · Parking brake switch OFF

# PARKING BRAKE RELEASE WARNING CHIME: Component Parts Location

INFOID:0000000007793302



Parking brake switch

Combination meter

- **BCM** Refer to BCS-9, "Component Parts Location".
- 5. Seat belt buckle switch (driver side)

ABS actuator and electric unit (control unit)

Refer to BRC-11, "Component Parts Location".

# PARKING BRAKE RELEASE WARNING CHIME: Component Description INFOID-000000007626189

Unit	Description	
Combination meter	Judges the remaining parking brake according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from parking brake switch and sounds the warning buzzer.	
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to the combination meter via CAN communication.	
Parking brake switch	Transmits the parking brake switch signal to the combination meter.	

# < SYSTEM DESCRIPTION >

# **DIAGNOSIS SYSTEM (METER)**

# CONSULT Function (METER/M&A)

INFOID:0000000007793303

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#### **CONSULT APPLICATION ITEMS**

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

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

#### **SELF DIAG RESULT**

Refer to MWI-67, "DTC Index".

#### DATA MONITOR

Display Item List

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [km/h]	×	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]	Х	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]	Х	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]	Х	Fuel level indicated on combination meter.
W TEMP METER [°C]	×	Value of engine coolant temperature signal is received from ECM via CAN communication.  NOTE: 215 is displayed when the malfunction signal is input.
ABS W/L [On/Off]		Status of ABS warning lamp detected from ABS warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp detected from VDC OFF indicator lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
SLIP IND [On/Off]		Status of VDC warning lamp detected from VDC warning lamp signal received from ABS actuator and electric unit (control unit) via CAN communication.
BRAKE W/L [On/Off]		Status of brake warning lamp detected from brake warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.  NOTE:  Displays "Off" if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.
DOOR W/L [On/Off]		Status of door warning detected from door switch signal received from BCM via CAN communication.
TRUNK/GLAS-H [Off]		This item is displayed, but cannot be monitored.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp detected from high beam request signal is received from BCM via CAN communication.

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#### < 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.
RR FOG IND [On/Off]		Status of rear fog lamp indicator lamp detected from rear fog lamp status signal is received from BCM via CAN communication.
LIGHT IND [On/Off]		Status of light indicator lamp detected from position light request signal is received from BCM via CAN communication.
OIL W/L [On/Off]		Status of oil pressure warning lamp detected from oil pressure switch signal is re ceived from BCM via CAN communication.
MIL [On/Off]		Status of malfunction indicator lamp detected from malfunctioning indicator lamp signal is received from ECM via CAN communication.
CRUISE IND [On/Off]		Status of CRUISE indicator lamp detected from CRUISE indicator lamp signal is received from ECM via CAN communication.
SET IND [Off]		This item is displayed, but cannot be monitored.
ATC/T-AMT W/L [On/Off]		A/T CHECK indicator lamp status judged by the transmission check warning lamp signal received from TCM via CAN communication.
FUEL W/L [On/Off]		Low-fuel warning lamp status detected by the identified fuel level.
WASHER W/L [On/Off]		Status of washer warning lamp judged from washer level switch input to combina tion meter.
AIR PRES W/L [On/Off]		Status of low tire pressure warning lamp detected from tire pressure signal is received from BCM via CAN communication.
KEY G/Y W/L [On/Off]		Status of key warning lamp (yellow) detected from key warning signal is received from BCM via CAN communication.
MT SYNC REV IND [On/Off]		Status of S-MODE indicator judged from S-MODE indicator signal received from ECM with CAN communication line.
FUEL CAP W/L [On/Off]		Status of fuel filler cap warning judged from fuel filler cap warning display signal received from ECM with CAN communication line.
LCD [C&P N, C&P I, B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY, OUTKY, LK WN]		Displays status of Intelligent Key system warning detected from meter display signal is received from BCM via CAN communication.
SHIFT IND [P, R, N, D, L, M1, M2, M3, M4, M5, M6, M7]		<ul> <li>Status of shift position indicator detected from shift position signal and manual mode indicator signal is received from TCM via CAN communication. (A/T mod els)</li> <li>Status of shift position indicator detected from shift position signal is received from ECM via CAN communication. (with SynchroRev Match mode models)</li> </ul>
AT S MODE SW [Off]		This item is displayed, but cannot be monitored.
M RANGE SW [On/Off]		Status of manual mode switch.
NM RANGE SW [On/Off]		Status of non-manual mode switch.
AT SFT UP SW [On/Off]		Status of position select switch (up).
AT SFT DWN SW [On/Off]		Status of position select switch (down).
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.
SYNC MODE [On/Off]		This item is displayed, but cannot be monitored.

#### < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
PKB SW [On/Off]		Status of parking brake switch.
BUCKLE SW [On/Off]		Status of seat belt buckle switch (driver side).
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.
A/C AMP CONN [On/Off]		Status of A/C auto amp. connection recognition signal.
ENTER SW [On/Off]		Status of (ENTER) switch.
SELECT SW [On/Off]		Status of (SELECT) switch.
MT SYNC REV SW [On/Off]		Status of S-MODE switch.
DISTANCE [km]		Value of possible driving distance calculated by combination meter.
OUTSIDE TEMP [°C or °F]		Ambient air temperature value converted from ambient sensor signal received from ambient sensor.  NOTE:  This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.)
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit via CAN communication.
BUZZER [On/Off]	×	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.

#### NOTE:

Some items are not available according to vehicle specification.

#### 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 VDC OFF indicator lamp.
SLIP IND	Lighting history of VDC warning lamp.
BRAKE W/L	Lighting history of brake warning lamp.
DOOR W/L	Lighting history of door warning.
OIL W/L	Lighting history of oil pressure warning lamp.
C-ENG W/L	Lighting history of malfunction indicator lamp.
CRUISE IND	Lighting history of CRUISE indicator lamp.

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# < SYSTEM DESCRIPTION >

Display item	Description
ATC/T-AMT W/L	Lighting history of A/T CHECK indicator lamp.
FUEL W/L	Lighting history of low fuel level warning.
WASHER W/L	Lighting history of low washer fluid warning
AIR PRES W/L	Lighting history of low tire pressure warning lamp.
KEY G/Y W/L	Lighting history of key warning lamp (yellow).

#### 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:0000000007793326

x: Applicable item

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#### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description	
Work Support	Changes the setting for each system function.	
Self Diagnostic Result	Displays the diagnosis results judged by BCM.	
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.	
Data Monitor	The BCM input/output signals are displayed.	
Active Test	The signals used to activate each device are forcibly supplied from BCM.	
Ecu Identification	The BCM part number is displayed.	
Configuration	<ul><li>Read and save the vehicle specification.</li><li>Write the vehicle specification when replacing BCM.</li></ul>	

#### 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.

Diagnosis mode System Sub system selection item Work Support **Data Monitor** Active Test Door lock DOOR LOCK X × × REAR DEFOGGER Rear window defogger X × Warning chime **BUZZER** X × Interior room lamp timer INT LAMP × X X Exterior lamp **HEAD LAMP** × × × **WIPER** Wiper and washer × × **FLASHER** Turn signal and hazard warning lamps × AIR CONDITONER\* · Intelligent Key system INTELLIGENT KEY × X × · Engine start system Combination switch COMB SW × Body control system **BCM** X **IMMU NVIS - NATS** × × **BATTERY SAVER** Interior room lamp battery saver × × X Back door/Trunk lid open TRUNK × X THEFT ALM Vehicle security system X × X RAP system **RETAINED PWR** X Signal buffer system SIGNAL BUFFER × ×

# TPMS

#### FREEZE FRAME DATA (FFD)

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

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TPMS (AIR PRESSURE MONITOR)

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<sup>\*:</sup> This item is displayed, but is not used.

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description		
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected		
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected		
	SLEEP>LOCK		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" (Except emergency stop operation)	
	CRANK>RUN	Power supply position status of the moment a particular DTC is detected	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"	
V 1 : 1 O 15:	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*	
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"	
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode	
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode	
	LOCK		Power supply position is "LOCK"*	
	OFF		Power supply position is "OFF" (Ignition switch OFF)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	0 - 39	<ul> <li>The number of times that ignition switch is turned ON after DTC is detected</li> <li>The number is 0 when a malfunction is detected now.</li> <li>The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON.</li> <li>The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul>		

#### NOTE

- \*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.
- · Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

#### BUZZER

BUZZER: CONSULT Function (BCM - BUZZER)

INFOID:0000000007626192

**CONSULT APPLICATION ITEMS** 

# **DIAGNOSIS SYSTEM (BCM)**

# < SYSTEM DESCRIPTION >

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

# **DATA MONITOR**

Display item [Unit]	Description	
PUSH SW [On/Off]	Status of push-button ignition switch judged by BCM.	
UNLK SEN-DR [On/Off]	Status of unlock sensor judged by BCM.	
VEH SPEED 1 [km/h]	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line.	
KEY SW-SLOT [On/Off]	Status of key slot judged by BCM.	
TAIL LAMP SW [On/Off]	Status of each switch judged by BCM using the combination switch readout function.	
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM.	
DOOR SW-DR [On/Off]	Status of driver side door switch judged by BCM.	

# **ACTIVE TEST**

Display item [Unit]	Description
IGN KEY WARN ALM	The key warning chime operation can be checked by operating the relevant function (On/Off).
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).
ID REGIST WARNING	The ID regist warning chime operation can be checked by operating the relevant function (On/Off).
LIGHT WARN ALM	The light warning chime operation can be checked by operating the relevant function (On/Off).
RUN FLAT/T WARN BUZZER	The run-flat tire warning chime operation can be checked by operating the relevant function (On/Off).
KEY REMINDER WARN	The key reminder warning chime operation can be checked by operating the relevant function (On/Off).

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#### POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

# **COMBINATION METER: Diagnosis Procedure**

INFOID:0000000007793304

### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	11
Ignition switch ACC or ON	19
Ignition switch ON or START	4

#### Is the inspection result normal?

YES >> GO TO 2.

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

# 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

	Terminals			
(	(+)		Ignition switch po- sition	Voltage (Approx.)
Combina	Combination meter			
Connector	Terminal			
	1	Ground	OFF	
M53	15		ACC	Battery voltage
	2		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			Continuity
Connector	Terminal Ground		Continuity
M53	17	Giodila	Existed
	23		LXISIEU

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

BCM (BODY CONTROL MODULE)

# BCM (BODY CONTROL MODULE): Diagnosis Procedure

INFOID:0000000007793323

# 1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

#### **POWER SUPPLY AND GROUND CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

Signal name	Fuse and fusible link No.	
Pottony nower cumply	К	
Battery power supply	10	

#### Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

# 2.CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connectors.
- 3. Check voltage between BCM harness connector and ground.

(	Voltage		
В	СМ		(Approx.)
Connector	Terminal	Ground	
M118	1	Glound	Battery voltage
M119	11		Dattery Voltage

#### Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector Terminal		Ground	Continuity
M119	13		Existed

#### Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

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#### **METER BUZZER CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

### METER BUZZER CIRCUIT

Description INFOID:0000000007626195

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

# Component Function Check

INFOID:0000000007626196

# 1. CHECK OPERATION OF METER BUZZER

- Select "BUZZER" of "BCM" on CONSULT.
- 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.

>> Replace BCM. Refer to BCS-92, "Removal and Installation". NO

# Diagnosis Procedure

INFOID:0000000007626197

# 1. CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to MWI-45, "COMBINATION METER: Diagnosis Procedure".

#### Is the inspection result normal?

YES >> INSPECTION END

NO

>> Repair power supply circuit of combination meter. Refer to MWI-45, "COMBINATION METER: Diagnosis Procedure".

#### SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

### SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description

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

# Component Function Check

# 1. CHECK COMBINATION METER INPUT SIGNAL

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

**BUCKLE SW** 

: Off When seat belt is fastened When seat belt is unfastened : On

>> INSPECTION END

# Diagnosis Procedure

# 1. CHECK COMBINATION METER INPUT SIGNAL

Turn ignition switch ON.

Check voltage between combination meter harness connector and ground. 2.

	Terminals			
(+)		(-)	Condition	Voltage (Approx.)
Combination meter			Condition	
Connector	Terminal	Ground		
M54	M54 35		When seat belt is fastened	12 V
10134 33			When seat belt is unfastened	0 V

#### Is the inspection result normal?

YES >> Replace combination meter

NO >> GO TO 2.

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

Turn ignition switch OFF.

Disconnect combination meter connector and seat belt buckle switch (driver side) connector.

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

	Terminals				
Combination meter Seat belt buckle switch (driver side)			Continuity		
Connector	Terminal	Connector Terminal			
M54	35	B13 <sup>*1</sup> B515 <sup>*2</sup>	1	Exist	

\*1: Without climate controlled seat

\*2: With climate controlled seat

Check harness continuity between combination meter harness connector and ground.

Combina	tion meter		Continuity
Connector	Terminal	Ground	
M54	35		Not existed

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INFOID:0000000007626198

INFOID:0000000007626199

INFOID:0000000007626200

#### SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# ${f 3.}$ CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) GROUND CIRCUIT

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

Seat belt buckle s	Continuity		
Connector	Terminal	Ground	
B13 <sup>*1</sup> B515 <sup>*2</sup>	2	Ground	Exist

<sup>\*1 :</sup> Without climate controlled seat

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

### Component Inspection

INFOID:0000000007626201

# 1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

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

Terminals Seat belt buckle switch (driver side)			
		Condition	Continuity
1	2	When seat belt is fastened	Not existed
	2	When seat belt is unfastened	Exist

#### Is the inspection result normal?

NO

YES >> INSPECTION END

>> Replace seat belt buckle (driver side). Refer to <u>SB-11, "SEAT BELT BUCKLE: Removal and Installation".</u>

<sup>\*2:</sup> With climate controlled seat

# WARNING CHIME SYSTEM

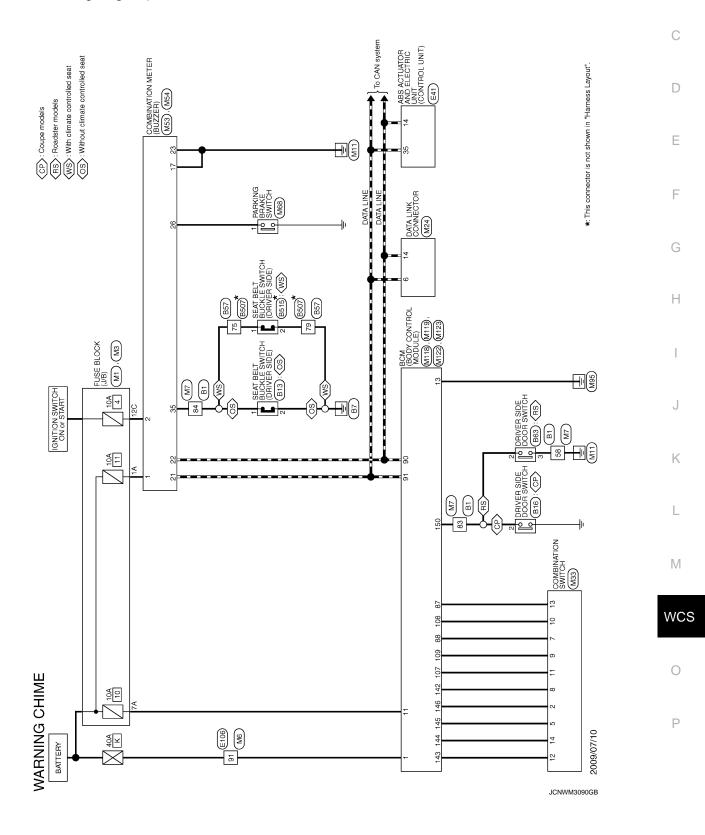
# Wiring Diagram - WARNING CHIME -

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

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INFOID:0000000007626202



### < ECU DIAGNOSIS INFORMATION >

# **ECU DIAGNOSIS INFORMATION**

# **COMBINATION METER**

Reference Value

#### VALUES ON THE DIAGNOSIS TOOL

Monitor Item		Condition	Value/Status
SPEED METER [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received
ODO OUTPUT [km/h or mph]	Ignition switch ON	_	Equivalent to odometer reading in combination meter
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading NOTE: 8191.875 is displayed when the mal- function signal is received
FUEL METER [L]	Ignition switch ON	_	Values according to fuel level
W TEMP METER [°C]	Ignition switch ON	_	Values according to engine coolant temperature  NOTE:  215 is displayed when the malfunction signal is input
A D.C. \M/I	Ignition switch	ABS warning lamp ON	On
ABS W/L	ON	ABS warning lamp OFF	Off
VDC/TCC IND	Ignition switch	VDC OFF indicator lamp ON	On
VDC/TCS IND	ON	VDC OFF indicator lamp OFF	Off
SLIP IND	Ignition switch	SLIP Indicator lamp ON	On
SLIP IND	ON	SLIP indicator lamp OFF	Off
DDAKE W/I	Ignition switch	Brake warning lamp ON	On
BRAKE W/L	ON	Brake warning lamp OFF	Off
DOOR W/L	Ignition switch	Door warning lamp ON	On
DOOK W/L	ON	Door warning lamp OFF	Off
TRUNK/GLAS-H	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
LII DEAM IND	Ignition switch	High-beam indicator lamp ON	On
HI-BEAM IND	ON	High-beam indicator lamp OFF	Off
TUDNIND	Ignition switch	Turn signal indicator lamp ON	On
TURN IND	ON	Turn signal indicator lamp OFF	Off
DD EOC IND	Ignition switch	Rear fog lamp indicator lamp ON	On
RR FOG IND	ON	Rear fog lamp indicator lamp	Off
LIGHT IND	Ignition switch	Tail lamp indicator lamp ON	On
LIGHT IND	ON	Tail lamp indicator lamp OFF	Off

# < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
OIL W/L Ignition switch ON		Oil pressure warning lamp ON	On
		Oil pressure warning lamp OFF	Off
NAII	Ignition switch	Malfunction indicator lamp ON	On
MIL	ON	Malfunction indicator lamp OFF	Off
ODLUCE IND	Ignition switch	Cruise indicator lamp ON	On
CRUISE IND	ON	Cruise indicator lamp OFF	Off
ATO/T ANAT \A//I	Ignition switch	A/T CHECK indicator lamp ON	On
ATC/T-AMT W/L	ON	A/T CHECK indicator lamp OFF	Off
4WD W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
4WD LOCK IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
	Ignition switch	Low-fuel warning displayed	On
FUEL VV/I	ON	Low-fuel warning not displayed	Off
WASHER W/L Ignit	Ignition switch	Washer warning displayed	On
	ON	Washer warning not displayed	Off
AID DDEC W//	Ignition switch	Low tire pressure lamp ON	On
AIR PRES W/L ON		Low tire pressure lamp OFF	Off
KEY G/Y W/L	Ignition switch	KEY warning lamp (yellow) ON	On
KET G/T W/L	ON	KEY warning lamp (yellow) OFF	Off
KEY R W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
KEY KNOB W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
AFS OFF IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
MT SYNC DEV IND	Ignition switch	S-MODE indicator ON	On
MT SYNC REV IND	ON	S-MODE indicator OFF	Off
	Ignition switch	Fuel filler cap warning displayed	On
FUEL CAP W/L	ŎN	Fuel filler cap warning not displayed	Off

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Monitor Item		Condition	Value/Status
	Ignition switch	Engine start information display (A/T models)	B&P I
	ŎN	Engine start information display (M/T models)	C&P I
	Ignition switch	Engine start information display (A/T models)	B&P N
	LOCK or ACC	Engine start information display (M/T models)	C&P N
	Ignition switch LOCK	Key ID warning display	ID NG
LCD	Ignition switch LOCK	Steering lock information display	ROTAT
LOD	Ignition switch LOCK	P position warning display	SFT P
	Ignition switch LOCK	Intelligent Key insert information display	INSRT
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT
	Ignition switch ON	Take away warning display	NO KY
	Ignition switch LOCK	Key warning display	OUTKY
	Ignition switch ON	ACC warning display	LK WN
		Shift position indicator P display	Р
		Shift position indicator R display	R
		Shift position indicator N display	N
		Shift position indicator D display	D
		Shift position indicator L display	L
OLUET IND	Ignition switch	Shift position indicator M1 display	M1
SHIFT IND	ŎN	Shift position indicator M2 display	M2
		Shift position indicator M3 display	M3
		Shift position indicator M4 display	M4
		Shift position indicator M5 display	M5
		Shift position indicator M6 display	M6
		Shift position indicator M7 display	M7
AT S MODE SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
M DANCE CW	Ignition switch	Selector lever manual mode position	On
M RANGE SW	ON	Other than the above	Off
NIM DANIOE CIA!	Ignition switch	Selector lever manual mode position	Off
NM RANGE SW	ŎN	Other than the above	On
AT OFT UP OVA	Ignition switch	Selector lever + position	On
AT SFT UP SW	ON	Other than the above	Off
AT OFT BUILDING	Ignition switch	Selector lever – position	On
AT SFT DWN SW	ON	Other than the above	Off
	Ignition switch	Paddle shifter switch up operation	On
ST SFT UP SW	ON	Other than above	Off

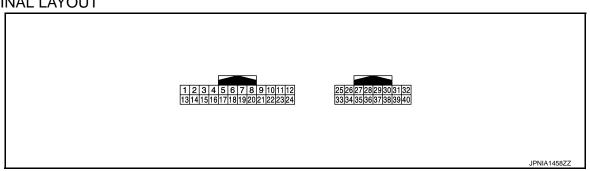
### < ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status
OT OUT DIAME OW	Ignition switch	Paddle shifter switch down operation	On
ST SFT DWN SW	ŎN	Other than above	Off
DICD CW/	Ignition switch	Parking brake switch ON	On
PKB SW	ON	Parking brake switch OFF	Off
DUCKLE CW	Ignition switch	Seat belt not fastened	On
BUCKLE SW	ON	Seat belt fastened	Off
DDAKE OIL CW	Ignition switch	Brake fluid level switch ON	On
BRAKE OIL SW	ON	Brake fluid level switch OFF	Off
	lamition ovvitals	Other than the following	On
A/C AMP CONN	Ignition switch ON	Receives A/C auto amp. connection recognition signal	Off
AMB POWER	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
ENTED CW	Ignition switch	When 🖵 is pressed	On
ENTER SW	ON	Other than the above	Off
SELECT SW	Ignition switch	When is pressed	On
SELECT SW	ON	Other than the above	Off
MT SYNG DEVISION Ignition switch		S-MODE switch ON	On
MT SYNC REV SW	ŎN	S-MODE switch OFF	Off
DISTANCE [km]	Ignition switch ON	_	Possible driving distance calculated by combination meter
OUTSIDE TEMP [°C or °F]	Ignition switch ON	_	Equivalent to ambient temperature NOTE: This may not match the indicated value on the information display.
ELIEL LOW SIG	Ignition switch	Low fuel warning displayed	On
FUEL LOW SIG	ŎN	Low fuel warning not displayed	Off
	Ignition switch C	N	On
CRANKING SIG	At engine cranki	ng	Off
ST CNT SIG	Ignition switch C	N	On
OI ONI SIG	At engine cranki	ng	Off
BUZZER	Ignition switch	Buzzer ON	On
DULLER	ON	Buzzer OFF	Off

#### NOTE:

Some items are not available according to vehicle specification.

# TERMINAL LAYOUT



PHYSICAL VALUES

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Termin (Wire		Description		Condition		Value
+	-	Signal name	Input/ Output			(Approx.)
1 (V)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
2 (O)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage
3 (L)	Ground	Vehicle speed signal (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).
4 (Y)*1 (V)*2	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).
					Lighting switch 1ST     When meter illumination is maximum	(V) 15 10 5 0 -2.5 ms
5 (B)	Ground	Illumination control signal	Output	Ignition switch ON	<ul><li>Lighting switch 1ST</li><li>When meter illumination is step 12</li></ul>	(V) 15 10 5 0 2.5 ms JPNIA1362GB
					Lighting switch 1ST     When meter illumination is minimum	10 V
6 (R)	Ground	Roof status signal	Input	Ignition switch ON	Roof warning lamp ON  Roof warning lamp OFF	0 V 12 V

Terminal No. (Wire color)		Description		Condition		Value	
+	_	Signal name	Input/ Output	Contanton		(Approx.)	
9 (BR)	Ground	Communication signal (METER⇒TRIPLE METER)	Output	Ignition switch ON	<u>-</u> -	(v) 6 4 2 0 2.5 ms JPNIA1425GB	B C
10 (L)	Ground	Communication signal (TRIPLE METER⇒METER)	Input	Ignition switch ON	_	(v) 6 4 2 0 2.5 ms	E
12	Craund	C MODE quitab signal	lanut	Ignition	S-MODE switch operation	12 V	G
(G)	Ground	S-MODE switch signal	Input	switch ON	Other than the above	0 V	
15 (L)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage	Н
16 (R)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON Air bag warning lamp	4 V	I
17 (B)	Ground	Ground	_	Ignition switch ON	OFF —	0 V	J
18 (V)	Ground	Ambient sensor signal	Input	Ignition switch ON	Changes depending to ambient temperature.	(V)  3  2  1  0  -10  0  10  0  10  0  0  0  0  0  0  0  0	K L M
19 (G)	Ground	A/C auto amp. connection recognition signal	Input	Ignition switch ON	_	5 V	
20 (GR)	Ground	Ambient sensor ground	Input	Ignition switch ON	_	0 V	WC
21 (L)	_	CAN-H	_	_	_	_	0
22 (P)	_	CAN-L	_	_	_		Р
23 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
24 (Y)	Ground	Fuel level sensor ground	_	Ignition switch ON	_	0 V	

Terminal No. (Wire color)		Description		Condition		Value	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
25				Ignition	Charge warning lamp ON	2 V	
(W)	Ground	Alternator signal	Input	switch ON	Charge warning lamp OFF	12 V	
26	Ground	Parking brake switch signal	Input	Engine	Parking brake is applied	0 V	
(O)	0.00	r aming trains smith signal		idling	Parking brake is released	12 V	
27		Brake fluid level switch sig-		Ignition	Brake fluid level is normal	12 V	
(LG)	(-round)		Input	switch ON	Brake fluid level is less than LOW level	0 V	
28	0	On assert a single	la a t	Ignition	Security warning lamp ON	0 V	
(Y)	Ground	Security signal	Input	switch ON	Security warning lamp OFF	12 V	
29				Ignition	Washer level switch ON	0 V	
(GR)	Ground	Washer level switch signal	Input	switch ON	Washer level switch OFF	5 V	
32	0	Paddle shifter down signal	lant	Ignition	Paddle shifter down operation	0 V	
(G)	Ground		Input	switch ON	Other than the above	5 V	
33				Ignition	Paddle shifter up operation	0 V	
(O)	Ground	Paddle shifter up signal	Input	switch ON	Other than the above	5 V	
34 (BR)	Ground	Fuel level sensor signal	Input	Ignition switch ON	_	(V) 4 3 2 1 0 E 1/4 1/2 3/4 F JPNIA0740ZZ	
35	Ground	Seat belt buckle switch sig-	Input	Ignition switch	When driver seat belt is fastened.	12 V	
(L)		nal (driver side)	,	ON	When driver seat belt is unfastened.	0 V	
36 (P) <sup>*1</sup>	Ground	Passenger seat belt warn-	Input	Ignition switch	<ul><li>When getting in the passenger seat.</li><li>When passenger seat belt is fastened.</li></ul>	12 V	
(F) (L) <sup>*2</sup>	Ground	ing signal	Input	ON	<ul><li>When getting in the passenger seat.</li><li>When passenger seat belt is unfastened.</li></ul>	0 V	
37				Ignition	Manual mode	12 V	
(G)	Ground	Non-manual mode signal	Input	switch ON	Other than the above	0 V	
38 (V)	Ground	Manual mode shift down	Input	Ignition switch	Selector lever down operation	0 V	
(v)		signal		ON	Other then the above	12 V	
39	Ground	Manual mode shift up sig- nal	Input	Ignition switch ON	Selector lever up operation	0 V	
(L)					Other then the above	12 V	
40	Crawad	Manual mode size al	lon: ·4	Ignition	Manual mode	0 V	
(W)	Ground	Manual mode signal	Input	switch ON	Other than the above	12 V	

#### < ECU DIAGNOSIS INFORMATION >

\*1 : Except for Mexico

\*2 : For Mexico

# Wiring Diagram - METER -

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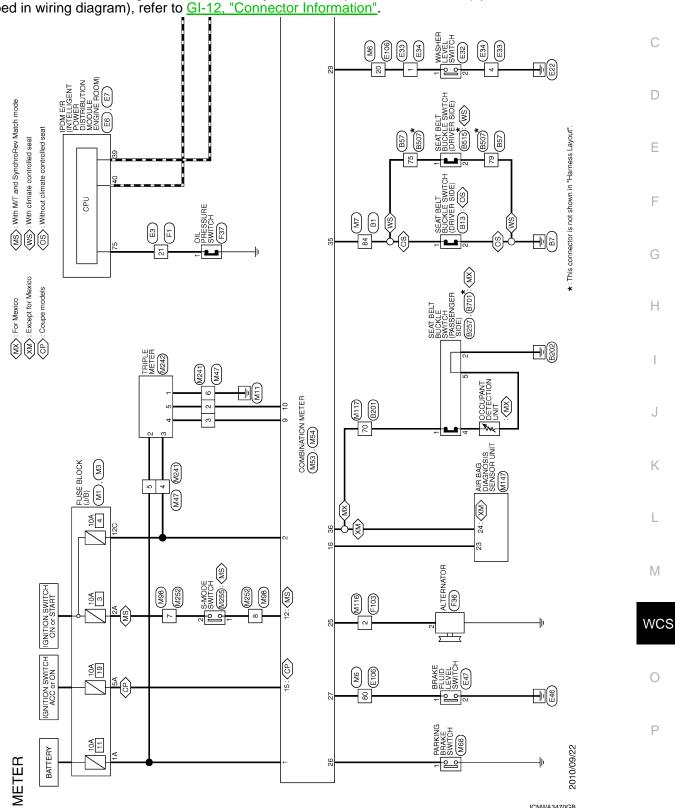
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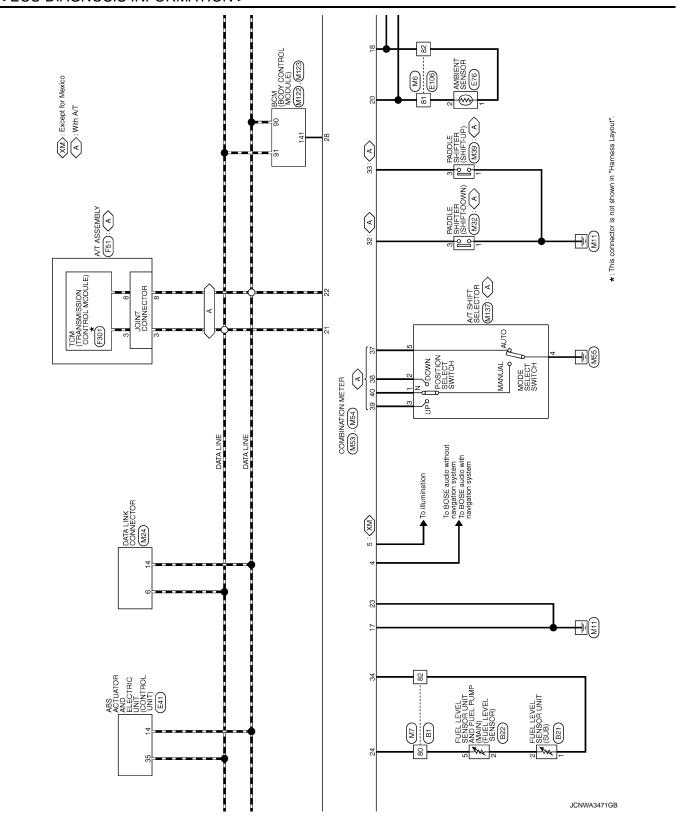
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For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".





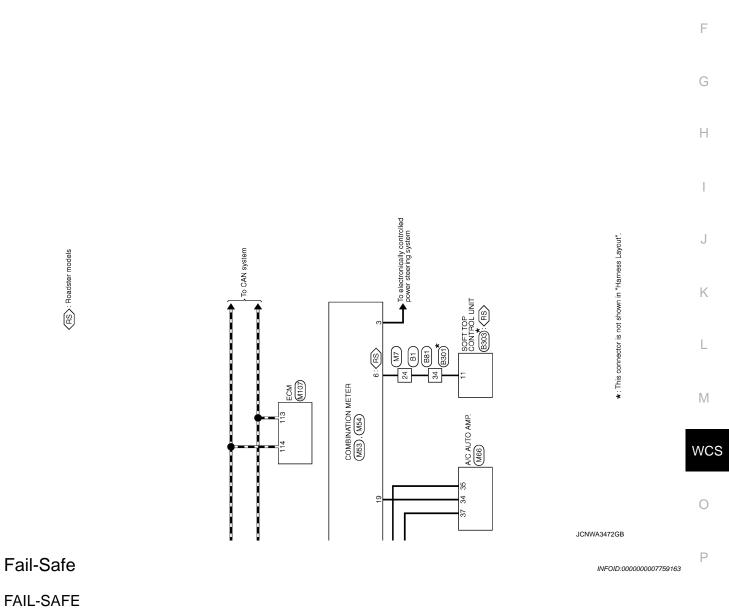
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### FAIL-SAFE

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

# < ECU DIAGNOSIS INFORMATION >

	Function	Specifications	
Speedometer		Reset to zero by suspending communication.	
Tachometer			
Engine coolant temperatu	ıre gauge	The segment turns OFF by suspending communication.	
Fuel gauge		Indicates fuel level.	
Illumination control		When suspending communication, changes to nighttime mode.	
Shift position indicator			
S-MODE indicator		The segment turns OFF by suspending communication.	
Manual mode indicator			
	Door open warning		
	Parking brake release warning	The display turns OFF by suspending communication.	
	Fuel filler cap warning		
Information display	Instantaneous fuel warning	When reception time of an abnormal signal is 2 seconds or	
	Average fuel consumption	<ul> <li>less, the last received datum is used for calculation to indicate the result.</li> </ul>	
	Average vehicle speed	When reception time of an abnormal signal is more than tv	
	Travel distance	seconds, the last result calculated during normal condition is indicated.	
Buzzer		The buzzer turns OFF by suspending communication.	
	ABS warning lamp		
	VDC warning lamp	The lamp turns ON by evappending communication	
	Brake warning lamp	The lamp turns ON by suspending communication.	
	Malfunction indicator lamp		
	Low tire pressure warning lamp	The lamp turns ON after flashing for 1 minute.	
	High beam indicator lamp		
Warning lamp/indicator lamp	Turn signal indicator lamp		
	Light indicator lamp		
	Rear fog lamp indicator lamp		
	Oil pressure warning lamp	The lamp turns OFF by suspending communication.	
	CRUISE indicator lamp		
	Key warning lamp		
	VDC OFF indicator lamp		

DTC Index

Display contents of CONSULT	Diagnostic item is detected when		
CAN COMM CIRCUIT [U1000]	When combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-38, "Diagnosis Procedure"	
CONTROL UNIT (CAN) [U1010]	When detecting error during the initial diagnosis of the CAN controller of combination meter.	MWI-39, "Diagnosis Procedure"	
COMM ERROR 1 [B2201]	If a communication error is present in the communication line between combination meter and triple meter for 2 seconds or more.	MWI-40, "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-42, "Diagnosis Procedure"	

#### < ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Diagnostic item is detected when	Refer to
ENGINE SPEED [B2267]	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-43, "Diagnosis Procedure"
WATER TEMP [B2268]	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-44, "Diagnosis Procedure"

#### NOTE:

The details of TIME display are as follows.

- CRNT: The malfunctions that are detected now.
- PAST: The malfunctions was detected in the past. IGN counter is displayed on FFD (Freeze Frame data).
- 1 39: The number is indicated when it is normal at present and a malfunction was detected in the past. It increases like 0 → 1 → 2 ··· 38 → 39 after returning to the normal condition whenever IGN OFF → ON. It is fixed to 39 until the self-diagnosis results are erased if it is over 39. It returns to 0 when a malfunction is detected again in the process.

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# **BCM (BODY CONTROL MODULE)**

# < ECU DIAGNOSIS INFORMATION >

# **BCM (BODY CONTROL MODULE)**

Reference Value

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
TIX WII LIXTII	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
TR WIFER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
FR WIFER IN	Front wiper switch INT	On
ED WIDED STOD	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dia position
TURN SIGNAL R	Other than turn signal switch RH	Off
TORN SIGNAL K	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
TORN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAWIP SW	Lighting switch 1ST or 2ND	On
LII DEAM CW	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
HEAD LAIVIP SVV I	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
HEAD LAIVIP 3VV 2	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
FR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DD FOC SW	Rear fog lamp switch OFF	Off
RR FOG SW	Rear fog lamp switch ON	On
DOOR SW-DR	Driver door closed	Off
DOOK SW-DK	Driver door opened	On
DOOD SW AS	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off

Monitor Item	Condition	Value/Status	_ ,
DOOR SW-BK	Back door closed (Coupe models)     Trunk lid closed (Roadster models)	Off	_ /
BOOK GW-BIX	Back door opened (Coupe models)     Trunk lid opened (Roadster models)	On	E
CDL LOCK SW	Other than door lock and unlock switch LOCK	Off	
ODE EGON GW	Door lock and unlock switch LOCK	On	(
CDL UNLOCK SW	Other than door lock and unlock switch UNLOCK	Off	
ODE ONEOOK OW	Door lock and unlock switch UNLOCK	On	_
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off	
KET OTE EK OW	Driver door key cylinder LOCK position	On	_
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off	_ _ [
KET OTE ON-OW	Driver door key cylinder UNLOCK position	On	
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off	- F
HAZARD SW	Hazard switch is OFF	Off	
IINANIO OW	Hazard switch is ON	On	-
REAR DEF SW	Rear window defogger switch OFF	Off	(
NOTE: For models with NAVI this item s not monitored.	Rear window defogger switch ON	On	_
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off	- l
TD CANCEL CW	Trunk lid opener cancel switch OFF	Off	_
TR CANCEL SW	Trunk lid opener cancel switch ON	On	_
TR/BD OPEN SW	Back door opener switch OFF (Coupe models)     Trunk lid opener switch OFF (Roadster models)	Off	_
IR/BD OPEN SW	While the back door opener switch is turned ON (Coupe models)     While the trunk lid opener switch is turned ON (Roadster models)	On	_
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off	ŀ
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off	
TARE LOOK	LOCK button of the Intelligent Key is pressed	On	l
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off	_
MAL-ONLOOK	UNLOCK button of the Intelligent Key is pressed	On	II.
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off	- N
NOTE: For Coupe models this item is not monitored.	TRUNK OPEN of the Intelligent Key is pressed	On	W
	PANIC button of the Intelligent Key is not pressed	Off	
RKE-PANIC	PANIC button of the Intelligent Key is pressed	On	_
	UNLOCK button of the Intelligent Key is not pressed	Off	- (
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On	_
2/5 1/055 2::2	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off	-
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On	=
ODTIONI OFNICOS	Bright outside of the vehicle	Close to 5 V	_
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V	_

Monitor Item	Condition	Value/Status
REQ SW -DR	Driver door request switch is not pressed	Off
NEQ 5W -DIN	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
NEQ OW -AO	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed (Coupe models)     Trunk lid door request switch is not pressed (Roadster models)	Off
NEW OW BB/TK	Back door request switch is pressed (Coupe models)     Trunk lid door request switch is pressed (Roadster models)	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
FUSH 3W	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	The clutch pedal is not depressed	Off
<b>NOTE:</b> For A/T models this item is not monitored.	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
	The brake pedal is not depressed	Off
BRAKE SW 2	The brake pedal is depressed	On
DETE/CANCL SW NOTE:	Selector lever in P position (A/T models)     The clutch pedal is depressed (M/T models without SynchroRev Match mode)	Off
For M/T models with Synchro- Rev Match mode this item is not monitored.	Selector lever in any position other than P (A/T models)     The clutch pedal is not depressed (M/T models without SynchroRev Match mode)	On
SFT PN/N SW NOTE: For roadster M/T models and	<ul> <li>Selector lever in any position other than P and N (A/T models)</li> <li>Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode)</li> </ul>	Off
coupe M/T models without SynchroRev Match mode this item is not monitored.	<ul> <li>Selector lever in P or N position (A/T models)</li> <li>Control lever in neutral position (Coupe M/T models with SynchroRev Match mode)</li> </ul>	On
S/L -LOCK	NOTE: The item is indicated but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
OIATIV OTIA -DIV	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
I GOLLOVA -IL DIAI	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
ION INCLUEND	Ignition switch in ON position	On

Monitor Item	Condition	Value/Status
DETE CIAL IDDM	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
SFT PN -IPDM	<ul> <li>Selector lever in any position other than P and N (A/T models)</li> <li>The clutch pedal is not depressed (M/T models)</li> </ul>	Off
OFT FIN-IPDIVI	<ul> <li>Selector lever in P or N position (A/T models)</li> <li>The clutch pedal is depressed (M/T models)</li> </ul>	On
SFT P -MET	Selector lever in any position other than P	Off
FIP-WEI	Selector lever in P position	On
ET N. MET	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On
	Engine stopped	Stop
	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated but not monitored.	Off
/EH SPEED 1	While driving	Equivalent to speedom- eter reading
VEH SPEED 2	While driving	Equivalent to speedom- eter reading
	Driver door is locked	LOCK
OOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
OOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
D OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
DIAT ENG 0	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
	The Intelligent Key is not inserted into key slot	Off
(EY SW -SLOT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
CONEDMID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done

Monitor Item	Condition	Value/Status
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
CONTINUIDS	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
CONTINUID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
OCIVI IKWI IBT	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
11 4	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
IP3	The ID of third Intelligent Key is registered to BCM	Done
TD 0	The ID of second Intelligent Key is not registered to BCM	Yet
TP 2	The ID of second Intelligent Key is registered to BCM	Done
TD 4	The ID of first Intelligent Key is not registered to BCM	Yet
TP 1	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID NEGOT LET	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGGI FRI	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
ID REGOT KKT	ID of rear RH tire transmitter is not registered	Yet
ID DECCT DI 4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
WADNING LAND	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

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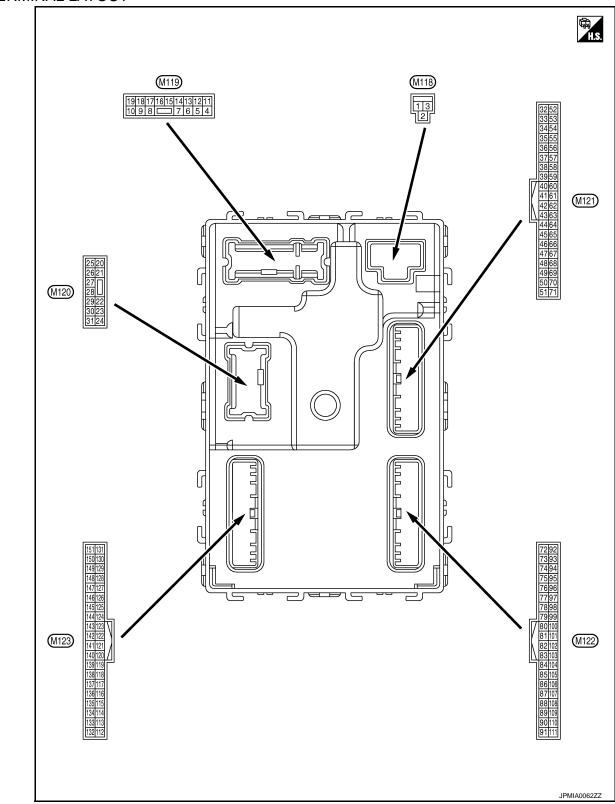
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#### TERMINAL LAYOUT



PHYSICAL VALUES

Revision: 2011 August **WCS-41** 2012 370Z

	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch (	OFF	Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch (	OFF	12 V
3 (Y)	Ground	P/W power supply (IGN)	Output	Ignition switch (	ON	12 V
					mp battery saver is activated. or room lamp power supply)	0 V
4 (R)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V
(G)	Ground	LOCK	Output	door	Other than UNLOCK (Actuator is not activated)	0 V
8	Ground	All doors, fuel lid	Outnut	All doors, fuel	LOCK (Actuator is activated)	12 V
(V)	Ground	LOCK	Output	lid	Other than LOCK (Actuator is not activated)	0 V
9	Crownd	Driver door, fuel lid	Outnut	Driver door,	UNLOCK (Actuator is activated)	12 V
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V
11 (BR)	Ground	Battery power supply	Input	Ignition switch (	DFF	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch (	ON	0 V
					OFF	0 V
		Push-button ignition				NOTE: When the illumination brightening/dimming level is in the neutral position.
14 (R)	Ground	switch illumination ground	Output	Tail lamp	ON	(V) 10 0 2 ms
15					OFF (LOCK indicator is	Battery voltage
(Y)	Ground	ACC indicator lamp	Output	Ignition switch	not illuminated) ACC	0 V
					ACC	υv

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front and side)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 PKID0926E
					Turn signal switch OFF	6.5 V 0 V
18 (O)	Ground	Turn signal LH (Front and side)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0
19	Crownd	Interior room lamp	Outrut	Interior room	OFF	6.5 V 12 V
(P)	Ground	control	Output	lamp	ON	0 V
					Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
23		Back door/Trunk lid		Back door/	OPEN (Back door/Trunk lid open- er actuator is activated)	12 V
(L)* <sup>1</sup> (Y)* <sup>2</sup>	Ground	open	Output	Trunk lid	Other than OPEN (Back door/Trunk lid opener actuator is not activated)	0 V
24* <sup>8</sup>	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
(O)	Cround	Toda log lamp	Carput	. tour roy ramp	ON	12 V
			<u>-</u>		Turn signal switch OFF	0 V
25 (LG)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s
				Luggage room/	ON	6.5 V 0 V
30 (R)	Ground	Luggage room/Trunk room lamp	Output	Trunk room		
(K)		τοσπιαπιρ	•	lamp	OFF	12 V

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
34		Luggage room/Trunk		Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1   S   S   S   S   S   S   S   S   S
(G)	Ground	room antenna (–)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
35	Ground	Luggage room/Trunk	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 1 s JMKIA0062GB
(R)		room antenna (+)	J Support	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s  JMKIA0063GB
38	Ground	Rear bumper anten-	Output	When the back door/trunk lid door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(B)	Cround	na (–)	Сири	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

	nal No. color)	Description	I		0 199	Value		
+	-	Signal name	Input/ Output		Condition	(Approx.)		
39	Ground	Rear bumper anten-	Output	When the back door/trunk lid door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB		
(W)	Cround	na (+)	Culput	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB		
47		Ignition relay (IPDM			OFF or ACC	12 V		
(V)	Ground	E/R) control	Output	Ignition switch	ON	0 V		
				Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V		
52	Ground	Starter relay control	Output	Output	Output	els)	When selector lever is not in P or N position	0 V
(SB)	Ground	When the   Ignition switch   depresse	When the clutch pedal is depressed	Battery voltage				
				ON (M/T mod- els)	When the clutch pedal is not depressed	0 V		
60	0	Push-button ignition	lament	Push-button ig-	Pressed	0 V		
(BR)	Ground	switch (Push switch)	Input	nition switch (push switch)	Not pressed	Battery voltage		
					ON (Pressed)	0 V		
61 (W)	Ground	Back door/Trunk Lid door request switch	Input	Back door/ Trunk lid door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB		
64		Intelligent Key warn-		Intelligent Key	Sounding	1.0 V 0 V		
(G)	Ground	ing buzzer	Output	warning buzzer	Not sounding	12 V		
66 (R)	Ground	Back door/Trunk room lamp switch	Input	Back door/ Trunk room lamp switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB		
						11.8 V		
					ON (Door open)	0 V		

	nal No.	Description				Value								
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)								
67 (GR)	Ground	Back door/Trunk lid opener switch	Input	Back door/ Trunk lid open- er switch	Not pressed	0 V  (V) 15 10 5 0  JPMIA0011GB 11.8 V								
72	Ground	Room antenna 2 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB								
(L)		(Center console)	OFF									Ol I	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
73	Ground	Room antenna 2 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB								
(P)	Giouna	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB								

	nal No.	Description				Value	/-
+	color)	Signal name	Input/ Output		Condition	(Approx.)	<i>[-</i>
74	Capital	Passenger door an-	Outout	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	(C
(SB)	Ground	tenna (-)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
75		Passenger door an-		When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	  -
(BR)	Ground	tenna (+)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	ŀ
76		Driver door antenna	0	When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	W
(V)	Ground	( <del>-</del> )	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 1	F

	nal No.	Description				Value
+ (VVire	color)	Signal name	Input/ Output		Condition	(Approx.)
77		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(LG)	Ground	(+)	Output	switch is operated with ignition switch OFF  When Intelligent Key is not in the antenna detection area	15 10 5 0	
78* <sup>2</sup>	Ground	Room antenna 1 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(L)	Godile	(Instrument panel)	Guipur	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
79* <sup>2</sup>	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(R)	Giodila	(Instrument panel)	Сири	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

	nal No. color)	Description			0 11/1	Value							
+	-	Signal name	Input/ Output		Condition	(Approx.)							
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.							
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.							
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V 12 V							
83	Remote keyless entry		Input/	During waiting		(V) 15 10 5 0 1 ms							
(GR)		Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms  JMKIA0065GB								
			All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V									
87 (BR)	Ground	Combination switch INPUT 5	Input	Input	Input	Input	Input	Input	Input	Input	Combination switch	Rear fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 6  Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB							

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	value (Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
88	Ground	Combination switch	Input	Combination	Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
(V)		INPUT 3		switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 2 ms JPMIA0037GB 1.3 V
					Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V
90 (P)	Ground	CAN-L	Input/ Output		<del></del>	_
91 (L)	Ground	CAN-H	Input/ Output		_	
			2		OFF	0 V
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	Blinking	(V) 15 10 5 0 1 s 1 s JPMIA0015GB
					ON OFF (LOCK indicator is	12 V
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	not illuminated)	Battery voltage
. ,					ON	0 V

#### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(O)	Ground	Acc relay control	Output	ignition switch	ACC or ON	12 V
96* <sup>3</sup> (Y)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
		Selector lever P posi-		O-la eta a la con	P position	0 V
		tion switch (A/T models)		Selector lever	Any position other than P	12 V
99* <sup>6</sup> (R)	Ground	Clutch pedal position switch (M/T models	Input	Clutch pedal	OFF (Clutch pedal is depressed)	0 V
		without SynchroRev Match mode)		position switch	ON (Clutch pedal is not depressed)	Battery voltage
					ON (Pressed)	0 V
100 (GR)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (Y)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
102	Ground	Blower fan motor re-	Outout	lanition switch	OFF or ACC	0 V
(O)	Ground	lay control	Output	Ignition switch	ON	12 V
103 (LG)	Ground	Remote keyless entry receiver (front) power supply	Output	Ignition switch C	DFF	12 V

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	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
108		Combination switch		Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
(R)	Ground	INPUT 4	Input	switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V
					Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6	(V) 15 10 5 0 2 ms
						JPMIA0039GB 1.3 V

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	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 2 ms JPMIA0036GB 1.3 V
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					ON	0 V
110 (P)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V

## < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)	
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V	
(O)	Cround		,	mpat	ON	When dark outside of the vehicle	Close to 0 V
114* <sup>4</sup>	Ground	Clutch interlock	Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V	
(R)	Ground	switch	при	switch	ON (Clutch pedal is depressed)	Battery voltage	
115* <sup>9</sup> (O)	_	_	_		_	_	
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage	
118	Ground	Stop lamp switch 2	Input	Stop lamp	OFF (Brake pedal is not depressed)	0 V	
(P)	Ground	Otop lamp Switch 2	Прис	switch	ON (Brake pedal is depressed)	Battery voltage	
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB	
					UNLOCK status (Unlock switch sensor ON)	0 V	
121	Crowns	Koy alot ovital	lon::4	When the Intellig	gent Key is inserted into key	12 V	
(R)	Ground	Key slot switch	Input	When the Intelliq	gent Key is not inserted into	0 V	
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V	
( ۷ ۷ )					ON	Battery voltage	
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0	
						JPMIA0011GB 11.8 V	
	1		1	İ	ON (Door open)	0 V	

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	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)
129* <sup>2</sup> (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V
130* <sup>7</sup> (L)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB
					Rear window defogger switch ON	0 V
132 (Y)* <sup>1</sup> (V)* <sup>2</sup>	Ground	Power window switch and soft top control unit communication  Input/ Output  Output		N	(V) 15 10 5 0 10 ms JPMIA0013GB 10.2 V	
				Ignition switch C	OFF or ACC	12 V
					ON (Tail lamps OFF)	9.5 V
133 (G)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.  (V) 15 10 5 UPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch C	ON	0 V 0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(V)	34	power supply		g	ACC or ON	5.0 V

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
				Ignition switch OFF (Remote key-	During waiting	(V) 15 10 5 1 ms 1 ms JMKIA0064GB
139 (L)	Ground	Tire pressure receiver communication	Input/ Output	less entry re- ceiver communica- tion)	When operating either button on the Intelligent Key	(V) 15 10 5 0 1 ms  JMKIA0065GB
				Ignition switch	Standby state	(V) 6 4 2 0 ** 0.2s
				(Tire pressure receiver com- munication)	When receiving the signal from the transmitter	(V) 6 4 2 0 • • 0.2s
		Selector lever P/N		Selector lever	P or N position	12 V
_		position (A/T models)		Selector lever	Except P and N positions	0 V
140* <sup>5</sup> (G)	Ground	Park/neutral position switch (Coupe M/T	Input	Ignition switch	Control lever in neutral position	Battery voltage
		models with Synchro- Rev Match mode)		ON	Control lever in any position other than neutral	0 V
					ON	0 V
141 (Y)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking	(V) 15 10 5 0 1 s
						11.3 V
					OFF	12 V

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND	0 V
					Turn signal switch RH  All switches OFF (Wiper intermittent dial 4)	2 ms JPMIA0031GB 10.7 V
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Front wiper switch HI (Wiper intermittent dial 4)  Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 2  Wiper intermittent dial 3  Wiper intermittent dial 6  Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0032GB
					All switches OFF (Wiper intermittent dial 4) Front washer switch ON	0 V
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	(Wiper intermittent dial 4)  Any of the conditions below with all switches OFF  Wiper intermittent dial 1  Wiper intermittent dial 5  Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0033GB
					All switches OFF	0 V
					Front wiper switch INT	(1/1)
4.45		O and in ation assistate		Combination	Front wiper switch LO  Lighting switch AUTO	(V) 15
145 (L)	Ground	Combination switch OUTPUT 3	Output	switch (Wiper intermit- tent dial 4)	Rear fog lamp switch ON	10 5 0 2 ms JPMIA0034GB
					All switches OFF	10.7 V
					Lighting switch 2ND	0 V
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	Lighting switch PASS  Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0035GB
						10.7 V

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (Door open)	0 V
151	Ground	Rear window defog-	Output	Rear window	Active	0 V
(G)			Output	defogger	Not activated	Battery voltage

<sup>\*1:</sup> Coupe models

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<sup>\*2:</sup> Roadster models

<sup>\*3:</sup> A/T models

<sup>\*4:</sup> M/T models

<sup>\*5:</sup> With A/T or coupe models with M/T and SynchroRev Match mode

<sup>\*6:</sup> With A/T or with M/T without SynchroRev Match mode

<sup>\*7:</sup> Without NAVI

<sup>\*8:</sup> With rear fog lamp

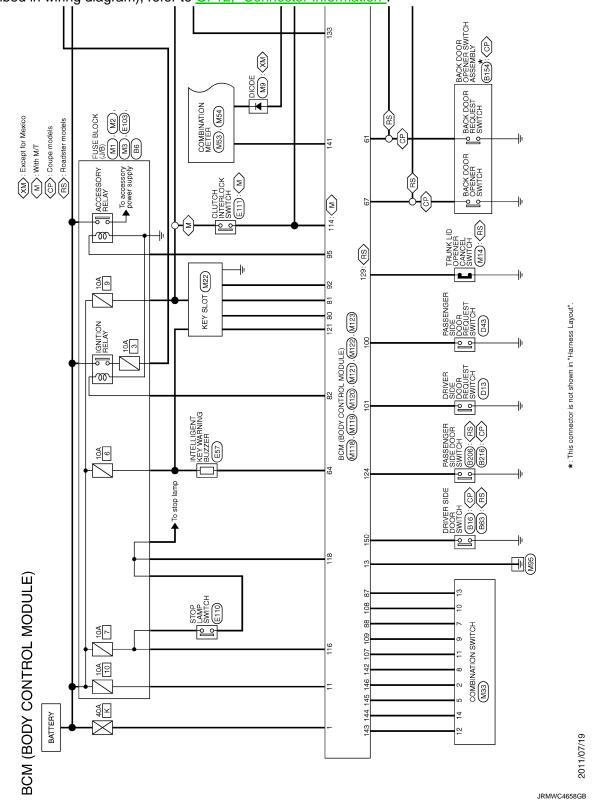
<sup>\*9:</sup> BCM does not use this terminal for control.

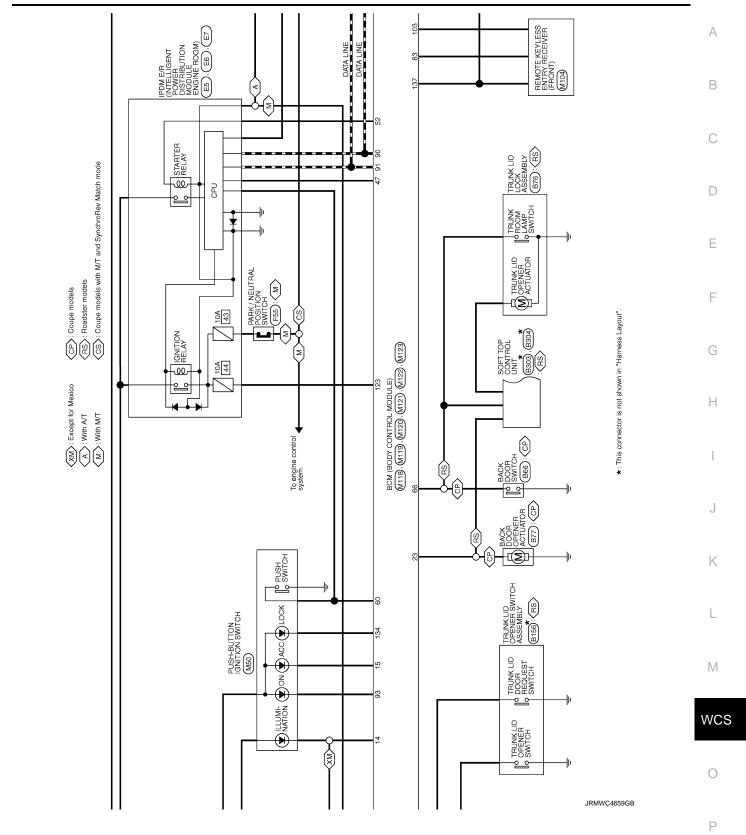
#### < ECU DIAGNOSIS INFORMATION >

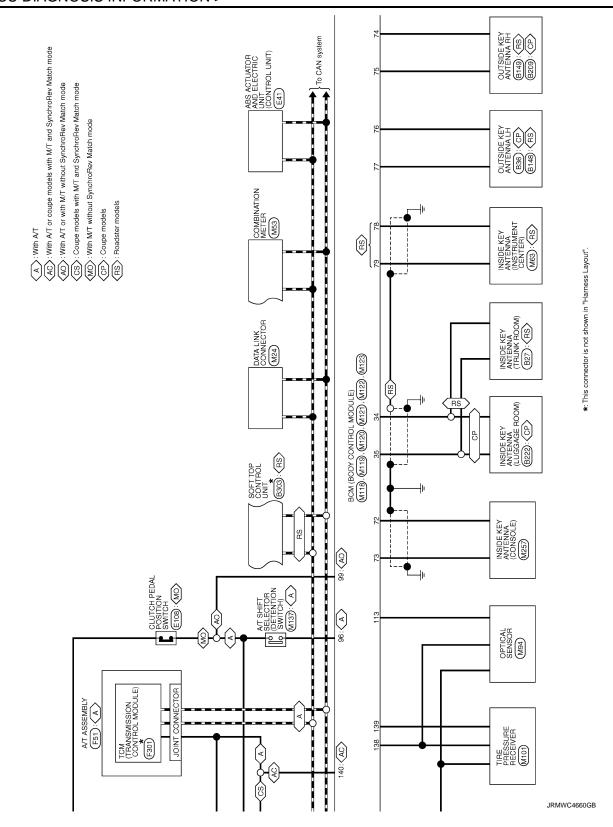
#### Wiring Diagram - BCM -

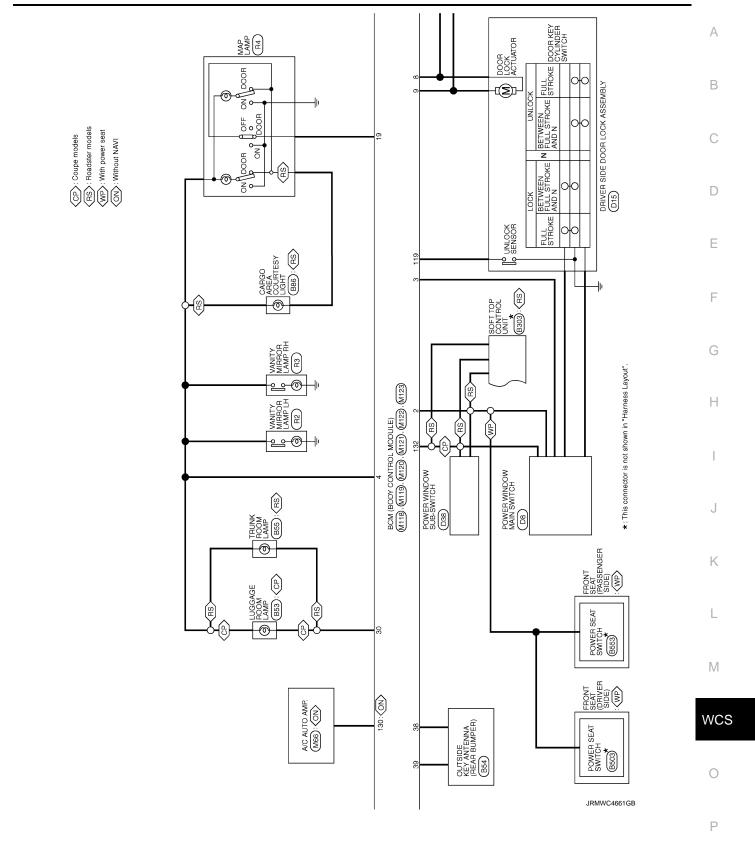
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For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".

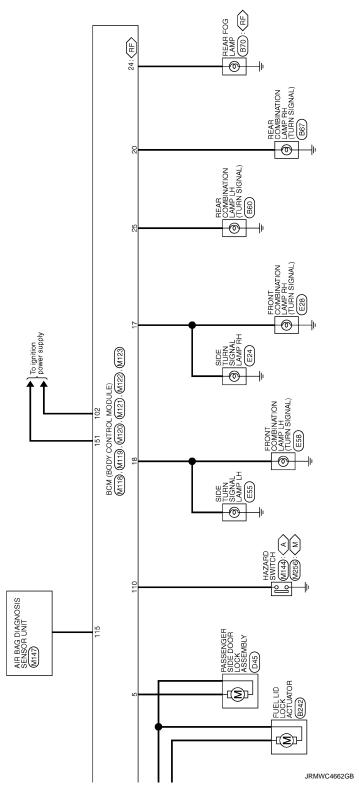












Fail-safe

## FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

#### < ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent  • Starter control relay signal  • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent  • Starter motor relay control signal  • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following conditions are fulfilled</li> <li>IGN relay (IPDM E/R) control signal: OFF (Battery voltage)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled  • Power position changes to ACC  • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	When any of the following BCM recognition conditions are fulfilled  Status 1  Clutch switch signal (CAN from ECM): ON  Clutch interlock switch signal: OFF (0 V)  Status 2  Clutch switch signal (CAN from ECM): OFF  Clutch interlock switch signal: ON (Battery voltage)

## DTC Inspection Priority Chart

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING

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#### < ECU DIAGNOSIS INFORMATION >

Priority	DTC
4	<ul> <li>B2553: IGNITION RELAY</li> <li>B2555: STOP LAMP</li> <li>B2556: PUSH-BTN IGN SW</li> <li>B2557: VEHICLE SPEED</li> <li>B2560: STARTER CONT RELAY</li> <li>B2601: SHIFT POSITION</li> <li>B2602: SHIFT POSITION</li> <li>B2603: SHIFT POSI STATUS</li> <li>B2604: PNP SW</li> <li>B2605: PNP SW</li> <li>B2608: STARTER RELAY</li> <li>B2608: STARTER RELAY</li> <li>B2608: GNITION RELAY</li> <li>B2607: ENG STATE SIG LOST</li> <li>B2614: BCM</li> <li>B2615: BCM</li> <li>B2616: BCM</li> <li>B2617: BCM</li> <li>B2618: BCM</li> <li>B2618: BCM</li> <li>B2618: BCM</li> <li>B2618: CLUTCH SW</li> <li>B2618: CLUTCH SW</li> <li>B2618: CLUTCH SW</li> <li>B2618: KEY REGISTRATION</li> <li>C1729: VHCL SPEED SIG ERR</li> <li>U0415: VEHICLE SPEED SIG</li> </ul>
5	<ul> <li>C1704: LOW PRESSURE FL</li> <li>C1705: LOW PRESSURE FR</li> <li>C1706: LOW PRESSURE RR</li> <li>C1707: LOW PRESSURE RL</li> <li>C1708: [NO DATA] FL</li> <li>C1709: [NO DATA] FR</li> <li>C1710: [NO DATA] RR</li> <li>C1711: [NO DATA] RL</li> <li>C1716: [PRESSDATA ERR] FL</li> <li>C1717: [PRESSDATA ERR] FR</li> <li>C1718: [PRESSDATA ERR] RR</li> <li>C1719: [PRESSDATA ERR] RR</li> <li>C1719: [PRESSDATA ERR] RL</li> <li>C1734: CONTROL UNIT</li> </ul>
6	B2621: INSIDE ANTENNA     B2622: INSIDE ANTENNA     B2623: INSIDE ANTENNA

DTC Index

#### NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <a href="BCS-19">BCS-19</a>, "COM-MON ITEM: CONSULT Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-46
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-47
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-48

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference	A
B2190: NATS ANTENNA AMP	×	_	_	_	<u>SEC-42</u>	- D
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-45	<b>:</b>
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-46	С
B2193: CHAIN OF BCM-ECM	×	_	_	_	<u>SEC-48</u>	-
B2195: ANTI SCANNING	×	_	_	_	<u>SEC-49</u>	
B2553: IGNITION RELAY	_	×	_	_	PCS-48	D
B2555: STOP LAMP	_	×	_	_	<u>SEC-50</u>	-
B2556: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-52</u>	Е
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-54</u>	-
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-55</u>	-
B2562: LOW VOLTAGE	_	×	_	_	BCS-49	F
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-56</u>	-
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-59</u>	G
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-62</u>	
B2604: PNP SW	×	×	×	_	<u>SEC-65</u>	-
B2605: PNP SW	×	×	×	_	<u>SEC-67</u>	Н
B2608: STARTER RELAY	×	×	×	_	<u>SEC-69</u>	-
B260A: IGNITION RELAY	×	×	×	_	PCS-50	
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-71</u>	
B2614: BCM	_	×	×	_	PCS-52	-
B2615: BCM	_	×	×	_	PCS-55	J
B2616: BCM	_	×	×	_	PCS-58	-
B2617: BCM	×	×	×	_	<u>SEC-75</u>	
B2618: BCM	×	×	×	_	PCS-61	K
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-62	=
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-78</u>	L
B2621: INSIDE ANTENNA	_	×	_	_	DLK-228	-
B2622: INSIDE ANTENNA	_	×	_	-	• <u>DLK-59</u> (Coupe) • <u>DLK-230</u> (Road- ster)	M
B2623: INSIDE ANTENNA	_	×	_	_	• <u>DLK-61</u> (Coupe) • <u>DLK-232</u> (Road- ster)	W
B26E8: CLUTCH SW	×	×	×	_	SEC-72	0
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-74	
C1704: LOW PRESSURE FL	_	_	_	×		Р
C1705: LOW PRESSURE FR	_	_	_	×	WT OO	1
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-20</u>	
C1707: LOW PRESSURE RL	_	_	_	×		

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warn- ing lamp ON	Reference	
C1708: [NO DATA] FL	_	_	_	×		
C1709: [NO DATA] FR	_	_	_	×	WT 22	
C1710: [NO DATA] RR	_	_	_	×	<u>WT-22</u>	
C1711: [NO DATA] RL	_	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	_	×		
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT 25	
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>WT-25</u>	
C1719: [PRESSDATA ERR] RL	_	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-27</u>	
C1734: CONTROL UNIT	_	_	_	×	<u>WT-29</u>	

## 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:000000007626212

- 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**

## 1. CHECK PARKING BRAKE WARNING LAMP

- 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.

NO >> GO TO 2.

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

Perform check for the parking brake switch signal circuit. Refer to MWI-53. "Diagnosis Procedure".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

## 3. CHECK PARKING BRAKE SWITCH

Perform a unit check for the parking brake switch. Refer to MWI-53, "Component Inspection".

#### Is the inspection result normal?

YES >> Replace combination meter.

NO >> Replace parking brake switch. Refer to PB-6, "Exploded View".

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#### THE LIGHT REMINDER WARNING DOES NOT SOUND

#### < SYMPTOM DIAGNOSIS >

#### THE LIGHT REMINDER WARNING DOES NOT SOUND

Description INFOID:000000007626214

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

#### **Diagnosis Procedure**

INFOID:0000000007626215

## 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

>> Refer to <u>EXL-78</u>, "<u>WITHOUT DAYTIME RUNNING LIGHT SYSTEM</u>: Symptom <u>Table</u>" (without daytime running light system) or <u>EXL-79</u>, "<u>WITH DAYTIME RUNNING LIGHT SYSTEM</u>: <u>Symptom Table</u>" (with 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 <u>DLK-63, "Diagnosis Procedure"</u> (coupe) or <u>DLK-234, "Diagnosis Procedure"</u> (roadster).

#### 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 <u>DLK-64, "Component Inspection"</u> (coupe) or <u>DLK-235, "Component Inspection"</u> (roadster).

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-92, "Removal and Installation".

NO >> Replace driver side door switch. Refer to <u>DLK-171</u>, "Removal and Installation" (coupe) or <u>DLK-346</u>, "Removal and Installation" (roadster).

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

#### < SYMPTOM DIAGNOSIS > THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND Description INFOID:0000000007626216 В Seat belt reminder warning does not sound. Seat belt reminder warning sounds continuously. Diagnosis Procedure INFOID:0000000007626217 1. CHECK SEAT BELT WARNING LAMP D Turn ignition switch ON. Check the operation of the seat belt warning lamp in the combination meter. Е Seat belt fastened : OFF Seat belt not fastened : ON Is the inspection result normal? F YES >> GO TO 2. NO >> GO TO 4. 2.CHECK BCM OUTPUT SIGNAL Check if the light reminder warning chime is activated by performing BCM active test. Refer to WCS-16, "BUZZER: CONSULT Function (BCM - BUZZER)". Is the inspection result normal? Н YES >> INSPECTION END NO >> GO TO 3. 3.CHECK COMBINATION METER INPUT SIGNAL Check if buzzer switches to proper condition (On/Off) on data monitor of combination meter. Refer to MWI-34, "CONSULT Function (METER/M&A)". : On Buzzer active condition Buzzer non-active condition : Off Is the inspection result normal? YES >> Replace combination meter. NO >> Replace BCM. Refer to BCS-92, "Removal and Installation". f 4.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) CIRCUIT WCS-21. Perform the check for the seat belt buckle switch (driver side) circuit. Refer M

"Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.

NO

NO >> Repair harness or connector.

5.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Perform a unit check for the seat belt buckle switch (driver side). Refer to WCS-22, "Component Inspection". Is the inspection result normal?

YES >> Replace combination meter.

>> Replace seat belt buckle (driver side). Refer to SB-11, "SEAT BELT BUCKLE: Removal and Installation".

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**WCS** 

## **PRECAUTION**

# PRECAUTIONS EXCEPT FOR MEXICO

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

#### **WARNING:**

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

#### WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
  ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
  a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
  serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

**EXCEPT FOR MEXICO: Precaution for Battery Service** 

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

FOR MEXICO

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

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.

#### **WARNING:**

Always observe the following items for preventing accidental activation.

 To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.

#### **PRECAUTIONS**

#### < PRECAUTION >

- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

#### **WARNING:**

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
  ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
  a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
  serious injury.
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