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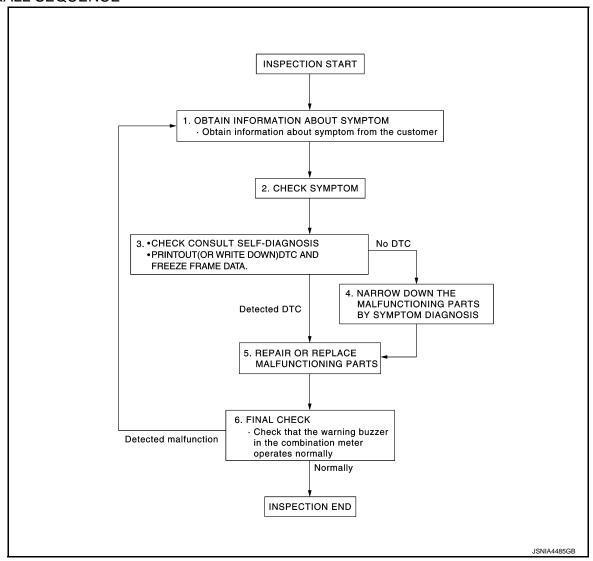
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

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 that any other malfunctions are present.

>> GO TO 3.

3.check consult self-diagnosis results

Connect CONSULT and perform self-diagnosis. Refer to <u>MWI-85, "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 repair or replace 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

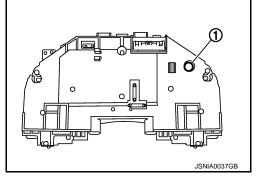
INFOID:0000000008161116 Parking brake switch Parking brak Combination switch (Lighting switch) Communication line (METER ← AMP. CAN communication line Unified meter and A/C amp. Combination mete Buzzer Front driver side Front driver side door switch signa Seat belt buckle switch (driver side) signa Seat belt buckle switch (driver side) JSNIA0619GB

WARNING CHIME SYSTEM: System Description

INFOID:0000000008161117

COMBINATION METER

- The buzzer (1) for warning chime system is installed in the combination meter.
- The buzzer sounds when the combination meter receives buzzer output signal from each unit through unified meter and A/C amp.



UNIFIED METER AND A/C AMP.

The unified meter and A/C amp. transmits the buzzer output signal received from BCM with CAN communication line to the combination meter.

BCM

BCM receives signals from various units and transmits a buzzer output signal to the unified meter and A/C amp. with CAN communication line if it judges that the warning buzzer should be activated.

BCM warning function list

Warning functions	Signal name
Light reminder warning chime	Lighting switch position signal Driver side door switch signal
Seat belt warning chime	Ignition switch signal Seat belt buckle switch (driver side) signal

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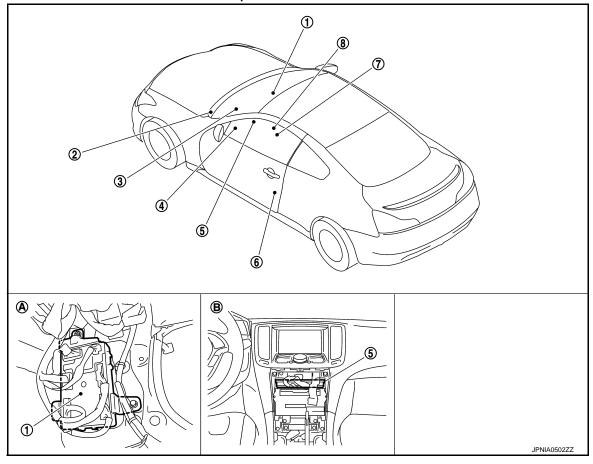
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WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000008161118



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch (driver side)
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T models)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T models)
- B. Behind cluster lid C (back)
- Combination meter
- 6. Front driver side door switch

WARNING CHIME SYSTEM : Component Description

INFOID:0000000008161119

Unit	Description			
Combination meter	 Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary. 			
Unified meter and A/C amp.	 Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM with CAN communication line. Receives a buzzer output signal from BCM with CAN communication line and transmits it to the combination meter by means of communication line. 			
BCM	Transmits signals provided by various units to the unified meter and A/C amp. with CAN communication line.			
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to BCM with CAN communication line.			
Seat belt buckle switch (driver side)	Transmits a seat belt buckle switch (driver side) signal to the unified meter and A/C amp.			
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.			

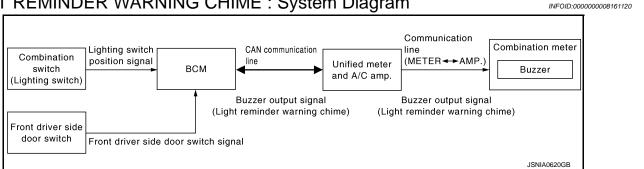
WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

Unit	Description
Front driver side door switch	Transmits the front driver side door switch signal to BCM.
Parking brake switch	Refer to MWI-61, "Description".

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME: System Diagram



LIGHT REMINDER WARNING CHIME: System Description

INFOID:0000000008161121

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DESCRIPTION

With ignition switch in OFF or ACC position, front driver side door open, and lighting switch in 1ST or 2ND position, the light warning chime will sound.

- BCM detects ignition switch in OFF or ACC position, driver side door switch ON, and lighting switch in 1st or 2nd position. And then transmits buzzer output signal (light reminder warning chime) to unified meter and A/ C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (light reminder warning chime) to combination meter with 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.

- · Lighting switch is at 1st or 2nd position
- Ignition switch is at OFF or ACC
- Front 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
- Front driver side door switch is OFF

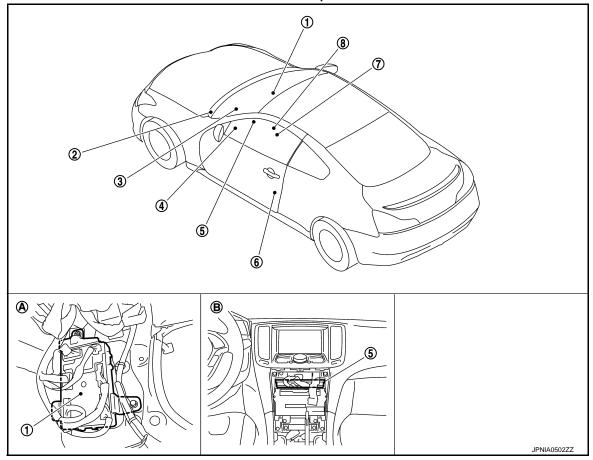
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WCS-7 Revision: 2012 July 2013 G Coupe

LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:0000000008748611



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch (driver side)
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T models)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T models)
- B. Behind cluster lid C (back)
- Combination meter
- 6. Front driver side door switch

LIGHT REMINDER WARNING CHIME : Component Description

INFOID:0000000008161123

Unit	Description		
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.		
Unified meter and A/C amp.	Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line.		
BCM	Judges the light warning chime conditions from the signals provided by various switches and transmits a buzzer output signal to the unified meter and A/C amp. via CAN communication line if necessary.		
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.		
Front driver side door switch	Transmits the front driver side door switch signal to BCM.		

SEAT BELT WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

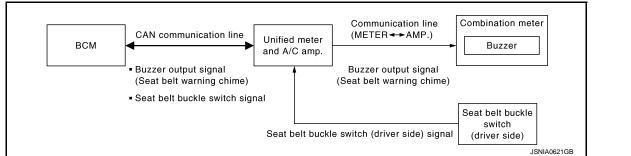
SEAT BELT WARNING CHIME: System Diagram

INFOID:0000000008161124

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SEAT BELT WARNING CHIME: System Description

INFOID:0000000008161125

DESCRIPTION

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

- BCM receives seat belt buckle switch signal from unified meter and A/C amp. with CAN communication line.
- BCM detects ignition switch turned ON and seat belt buckle switch (driver side) ON. And then transmits buzzer output signal (seat belt warning chime) to unified meter and A/C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (seat belt warning chime) to combination meter with communication line.
- When combination meter receives buzzer output signal (seat belt warning chime), it sounds the buzzer.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Ignition switch OFF→ON
- Seat buckle switch (driver side) is ON (driver seat belt unfastened)

WARNING CANCEL CONDITIONS

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

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

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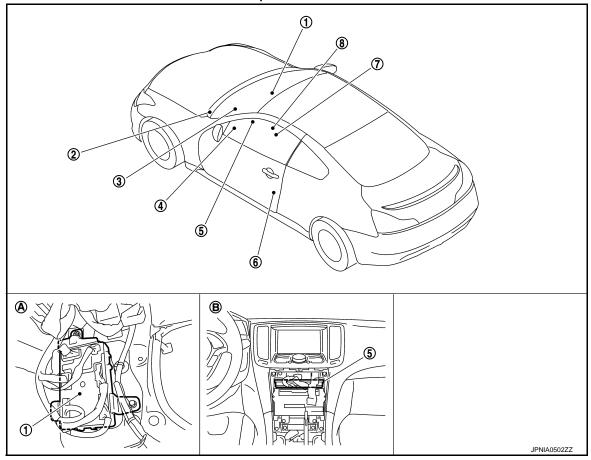
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SEAT BELT WARNING CHIME: Component Parts Location

INFOID:0000000008748612



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch (driver side)
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T models)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T models)
- B. Behind cluster lid C (back)
- Combination meter
- 6. Front driver side door switch

SEAT BELT WARNING CHIME : Component Description

INFOID:0000000008161127

Unit	Description		
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.		
Unified meter and A/C amp.	 Receives the seat belt buckle switch (driver side) signal from the seat belt buckle switch (driver side) and transmits it to BCM via CAN communication line. Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line. 		
BCM	Judges the seat belt warning chime condition from the seat belt buckle switch signal received for the unified meter and A/C amp. and transmits a buzzer output signal to the unified meter and A/C amp via CAN communication line if necessary.		
Seat belt buckle switch (driver side)	Refer to WCS-24, "Description".		

PARKING BRAKE RELEASE WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

PARKING BRAKE RELEASE WARNING CHIME: System Diagram

INFOID:0000000008161128

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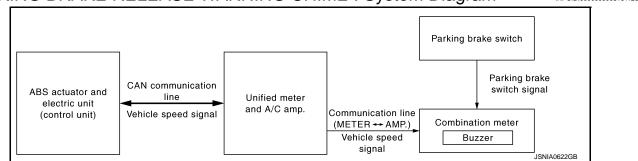
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PARKING BRAKE RELEASE WARNING CHIME: System Description

INFOID:0000000008161129

DESCRIPTION

- The unified meter and A/C amp. receives the vehicle speed signal from the ABS actuator and electric unit (control unit) via CAN communication line and transmits it to the combination meter by means of communication line
- The combination meter judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. and the parking brake switch signal from the parking brake switch, and sounds the warning buzzer if necessary.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

WARNING CANCEL CONDITIONS

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

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

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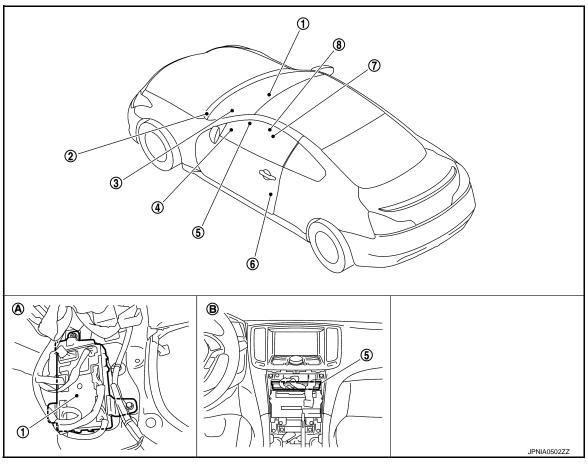
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PARKING BRAKE RELEASE WARNING CHIME: Component Parts Location

IFOID:0000000008748613



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch (driver side)
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T models)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T models)
- B. Behind cluster lid C (back)
- 3. Combination meter
- 6. Front driver side door switch

PARKING BRAKE RELEASE WARNING CHIME: Component Description INFOID:000000008161131

Unit	Description			
Combination meter	Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. via CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.			
Unified meter and A/C amp.	Receives a vehicle speed signal from ABS actuator and electric unit (control unit) via CAN munication line and transmits it to the combination meter by means of communication line			
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter via CAN communication line.			
Parking brake switch	Refer to MWI-61, "Description".			

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

CONSULT Function (METER/M&A)

INFOID:0000000008748614

X: Applicable

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CONSULT APPLICATION ITEMS

CONSULT can perform the following diagnosis modes with CAN communication with the unified meter and A/C amp.

System	Diagnosis mode	Description
METER/M&A		Unified meter and A/C amp. checks the conditions and displays memorized error.
		Displays unified meter and A/C amp. input/output data in real time.

SELF DIAG RESULT

Refer to WCS-45, "DTC Index".

DATA MONITOR

NOTE:

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

Display Item List

BRAKE W/L

[On/Off]

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [km/h]	х	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line. NOTE: 655.35 is displayed when the malfunction signal is received.
SPEED OUTPUT [km/h]	Х	Vehicle speed signal value transmitted to other units with CAN communication line. NOTE: 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [km]		Odometer signal value transmitted to other units with CAN communication line.
TACHO METER [rpm]	Х	Value of the engine speed signal received from ECM with CAN communication line. 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]	х	Value of engine coolant temperature signal received from ECM with CAN communication line. NOTE: 215 is displayed when the malfunction signal is input.
FUEL CAP W/L [On/Off]		Status of fuel filler cap warning display detected from fuel filler cap warning display signal received from ECM via CAN communication.
ABS W/L [On/Off]		Status of ABS warning lamp judged from ABS warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp judged from VDC OFF indicator lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
SLIP IND [On/Off]		Status of VDC warning lamp judged from VDC warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.

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NOTE:

Status of brake warning lamp judged from brake warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.

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.

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
DOOR W/L [On/Off]		Status of door warning judged from door switch signal received from BCM with CAN communication line.
TRUNK/GLAS-H [On/Off]		Status of trunk warning judged from trunk switch signal received from BCM with CAN communication line.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp judged from high beam request signal received from BCM with CAN communication line.
TURN IND [On/Off]		Status of turn indicator lamp judged from turn indicator signal received from BCM with CAN communication line.
FR FOG IND [On/Off]		Status of front fog lamp indicator lamp judged from front fog light request signal received from BCM with CAN communication line.
RR FOG IND [Off]		This item is displayed, but cannot be monitored.
LIGHT IND [On/Off]		Status of tail lamp indicator lamp judged from position light request signal received from BCM with CAN communication line.
OIL W/L [On/Off]		Status of oil pressure warning lamp judged from oil pressure switch signal received from IPDM E/R with CAN communication line.
MIL [On/Off]		Status of malfunction indicator lamp judged from malfunctioning indicator lamp signal received from ECM with CAN communication line.
GLOW IND [On/Off]		This item is displayed, but cannot be monitored.
C-ENG2 W/L [On/Off]		This item is displayed, but cannot be monitored.
CRUISE IND [On/Off]		Status of CRUISE indicator judged from ASCD status signal received from ECM with CAN communication line.
SET IND [On/Off]		Status of SET indicator judged from ASCD SET indicator signal received from ECM with CAN communication line.
CRUISE W/L [On/Off]		Status of CRUISE warning lamp judged from ASCD status signal received from ECM with CAN communication line.
BA W/L [Off]		This item is displayed, but cannot be monitored.
ATC/T-AMT W/L [On/Off]		Status of A/T check warning lamp judged from A/T check indicator signal received from TCM with CAN communication line.
4WD W/L [On/Off]		Status of AWD warning lamp judged from AWD warning lamp signal received from AWD control unit with CAN communication line.
4WD LOCK IND [Off]		This item is displayed, but cannot be monitored.
FUEL W/L [On/Off]		Low-fuel warning lamp status judged by the identified fuel level.
WASHER W/L [On/Off]		Status of washer warning lamp judged from washer level switch input to combination meter.
AIR PRES W/L [On/Off]		Status of low tire pressure warning lamp judged from TPMS malfunction warning lamp signal received from BCM with CAN communication line.
KEY G/Y W/L [On/Off]		Status of key warning lamp (G/Y) judged from key warning signal received from BCM with CAN communication line.
AFS OFF IND [On/Off]		Status of AFS OFF indicator lamp judged from AFS OFF indicator lamp signal received from AFS control unit with CAN communication line.
4WAS/RAS W/L [On/Off]		Status of 4WAS warning lamp judged from 4WAS warning lamp signal received from 4WAS main control unit with CAN communication line.
DDS W/L [On/Off]		This item is displayed, but cannot be monitored.
LANE W/L [On/Off]		This item is displayed, but cannot be monitored.

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description	
LDP IND [On/Off]		This item is displayed, but cannot be monitored.	
LCD [B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY,OUTKY, LK WN, C&P N, C&P I]		Displays status of Intelligent Key system warning judged from meter display signal received from BCM with CAN communication line.	
ACC TARGET [On/Off]		Status of vehicle ahead detection indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	С
ACC DISTANCE [Off, SHOR, MID, LONG]		Status of set distance indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	D
ACC OWN VHL [On/Off]		Status of own vehicle indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	_
ACC SET SPEED		Display ICC set vehicle speed from meter display signal received from ICC sensor integrated unit with CAN communication line.	Е
ACC UNIT [On/Off]		Status of display unit judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	F
O/D OFF SW [On/Off]		This item is displayed, but cannot be monitored.	
SHIFT IND [P, R, N, D, M1, M2, M3, M4, M5, M6, M7]		Status of shift position indicator judged from shift position signal and manual mode indicator signal received from TCM with CAN communication line.	G
AT S MODE SW [On/Off]		Status of snow mode switch.	
AT P MODE SW [On/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 not manual mode switch.	
AT SFT UP SW [On/Off]		Status of A/T shift up switch.	
AT SFT DWN SW [On/Off]		Status of A/T shift down switch.	
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.	L
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.	M
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the water temperature and the acceleration degree.	
4WD LOCK SW [Off]		This item is displayed, but cannot be monitored.	
PKB SW [On/Off]		Status of parking brake switch.	
BUCKLE SW [On/Off]		Status of seat belt buckle switch.	
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.	
DISTANCE [km]		Value of possible driving distance calculated by unified meter and A/C amp.	

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
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 with CAN communication line.
BUZZER [On/Off]	Х	Buzzer status (in the combination meter) is judged with the buzzer output signal received from each unit with CAN communication line and the warning output condition of the combination meter.

NOTE:

Some items are not available according to vehicle specification.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008788784

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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	This function is not used even though it is displayed.

SYSTEM APPLICATION

System

Turn signal and hazard warning lamps

BCM can perform the following functions for each system.

NOTE:

Door lock

Warning chime

Exterior lamp

Wiper and washer

Rear window defogger

Interior room lamp timer

· Intelligent Key system

· Engine start system Combination switch

Body control system

Vehicle security system

Signal buffer system

Interior room lamp battery saver

IVIS - NATS

Trunk lid open

RAP system

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

DOOR LOCK

BUZZER

INT LAMP

WIPER

FLASHER

COMB SW

BCM

IMMU

TRUNK

THEFT ALM

HEAD LAMP

REAR DEFOGGER

AIR CONDITONER*

INTELLIGENT KEY

BATTERY SAVER

RETAINED PWR

SIGNAL BUFFER

AIR PRESSURE MONITOR

Sub system selection item

Data Monitor Active Test × × X × X \times × X × × × × X × × M × ×

×

X

X

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×

x: Applicable item

Diagnosis mode

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Work Support

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X

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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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^{*:} 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		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	
	RUN>URGENT	Power supply position status of the moment a particular DTC is detected	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	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 		

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:0000000008161134

CONSULT APPLICATION ITEMS

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

DATA MONITOR

NOTE:

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

Display item [Unit]	Description	
VEH SPEED 1 [Km/h]	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line.	
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.	
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	J
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).	K
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).	L

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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:0000000008748616

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	11
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 terminal and ground.

Terminals				
(+)			Ignition switch	Voltage (Approx.)
Combina	Combination meter		Igrillion switch	
Connector	Terminals			
M53	1	Ground	OFF	Battery voltage
	21	Glound	ON	Ballery Vollage

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 terminal and ground.

Combination meter			Continuity
Connector	Terminals		Continuity
	5	Ground	
M53	15		Existed
	22		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

UNIFIED METER AND A/C AMP.

UNIFIED METER AND A/C AMP. : Diagnosis Procedure

INFOID:0000000008748617

1. CHECK FUSE

Check for blown fuses.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Power source	Fuse No.
Battery	11
Ignition switch ACC or ON	19
Ignition switch ON or START	3

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 unified meter and A/C amp. harness connector terminal and ground.

	Terminals				
((+) Unified meter and A/C amp.		Ignition switch	Voltage (Approx.)	
Unified meter			ignition switch		
Connector	Terminals				
	54		OFF		
M67	41	Ground	ACC	Battery voltage	
	53		ON		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between unified meter and A/C amp. and fuse.

3. CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect unified meter and A/C amp. connector. 2.
- Check continuity between unified meter and A/C amp. harness connector terminal and ground.

Unified meter	and A/C amp.		Continuity	
Connector	Connector Terminals		Continuity	
M67	55	Ground	Existed	
IVIO7	71		LAISIEU	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Pottory navyor gunnly	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

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- 1. 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	Giodila	Pottony voltogo	
M119	11		Battery 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	Connector Terminal		Continuity
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT Α Description INFOID:0000000008161138 • 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:0000000008161139 ${f 1}$.CHECK OPERATION OF METER BUZZER Connect the CONSULT. 2. Perform "LIGHT WARN ALM" in "ACTIVE TEST" of "BCM (BUZZER)". D Does meter buzzer beep? YES >> INSPECTION END Е NO >> GO TO 2. 2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL Select the "Data Monitor" of "METER/M&A" and check the "BUZZER" monitor value. F "BUZZER" Under the condition of buzzer input : On : Off Except above Is the inspection result normal? YES >> Replace combination meter. NO >> Replace BCM. Refer to BCS-79, "Removal and Installation". Diagnosis Procedure INFOID:0000000008161140 $oldsymbol{1}$.CHECK POWER SUPPLY OF COMBINATION METER Check power supply of combination meter. Refer to WCS-20, "COMBINATION METER: Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. K NO >> Repair power supply circuit of combination meter. 2.CHECK BATTERY POWER SUPPLY OF UNIFIED METER AND A/C AMP. Check battery power supply of unified meter and A/C amp. Refer to WCS-20, "UNIFIED METER AND A/C AMP.: Diagnosis Procedure". Is the inspection result normal? YES M >> INSPECTION END NO >> Repair power supply circuit of unified meter and A/C amp.

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SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description INFOID:0000000008161141

Transmits a seat belt buckle switch signal to the unified meter and A/C amp.

Component Function Check

INFOID:0000000008161142

1. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

- Connect the CONSULT.
- 2. Select the "Data Monitor" of the "METER/M&A" and check the "BUCKLE SW" monitor value.

"BUCKLE SW"

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

>> INSPECTION END

Diagnosis Procedure

INFOID:0000000008161143

1. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

- Turn ignition switch ON.
- 2. Check voltage between unified meter and A/C amp. harness connector terminal and ground.

Terminal					
(+) Unified meter and A/C amp.			Condition	Voltage (Approx.)	
		(-)	Condition		
Connector	Terminal				
M66	9	Ground	When seat belt is fastened	12 V	
IVIOO 9		Giodila	When seat belt is unfastened	0 V	

Is the inspection result normal?

YES >> Replace unified meter and A/C amp.

NO >> GO TO 2.

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

- Turn ignition switch OFF.
- 2. Disconnect unified meter and A/C amp. connector and seat belt buckle switch (driver side) connector.
- 3. Check continuity between unified meter and A/C amp. harness connector terminal and seat belt buckle switch (driver side) harness connector terminal.

Unified meter	and A/C amp.	Seat belt buckle s	Continuity	
Connector	Terminal	Connector Terminal		Continuity
M66	9	B13 1		Existed

4. Check harness continuity between unified meter and A/C amp. harness connector terminal and ground.

Unified meter and A/C amp.			Continuity
Connector	Terminal	Ground	Continuity
M66	9		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) GROUND CIRCUIT

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Seat belt buckle switch (driver side)			Continuity
Connector Terminal		Ground	Continuity
B13	2		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

Component Inspection

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 1 and 2.

Terminal		Seat belt buckle switch (driver side)	Continuity
1	1 2	When seat belt is fastened	Not existed
ı	2	When seat belt is unfastened	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the seat belt buckle switch (driver side). Refer to <u>SB-8, "SEAT BELT BUCKLE : Removal and Installation".</u>

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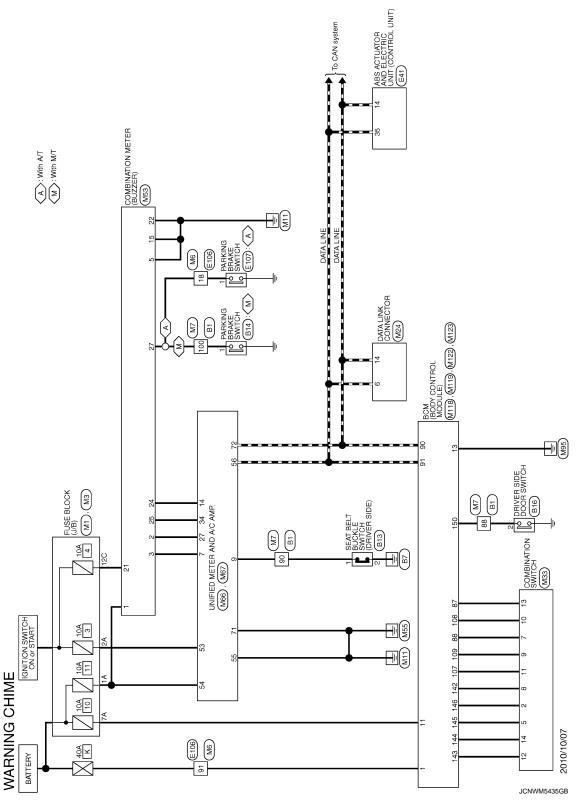
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WARNING CHIME SYSTEM

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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< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value INFOID:0000000008748618 В

VALUES ON THE DIAGNOSIS TOOL

Refer to WCS-34, "Reference Value".

TERMINAL LAYOUT

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PHYSICAL VALUES

	nal No. e color)	Description			O an distant	Value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
1 (V)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	
2 (LG)	Ground	Communication signal (METER→ AMP.)	Output	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB	
3 (GR)	Ground	Communication signal (AMP.→ METER)	Input	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB	
5 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
6				Ignition	Charge warning lamp ON	0 V	
(W)	Ground	Alternator signal	Input	switch ON	Charge warning lamp OFF	12 V	
7		A	1	Ignition	Air bag warning lamp ON	4 V	
(LG)	Ground	Air bag signal	Input	switch ON	Air bag warning lamp OFF	0 V	
10				Ignition	Security warning lamp ON	0 V	
(W)	Ground	Security signal	Input	switch OFF	Security warning lamp OFF	12 V	

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< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
16 (BR)	Ground	Meter control switch ground		Ignition switch ON	_	0 V
21 (G)	Ground	Ignition signal	Input	Ignition switch ON	_	12 V
22 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
24 (BR)	Ground	Communication signal (LCD→ AMP.)	Output	Ignition switch ON	_	(V) 15 10 5 400 μs JSNIA0028GB
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition switch ON	_	(V) 6 4 2 0 → 200 µs JSNIA0027GB
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	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).
					Parking brake applied	0 V
27 (P)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake released	(V) 8 4 0 10 ms JSNIA0007GB

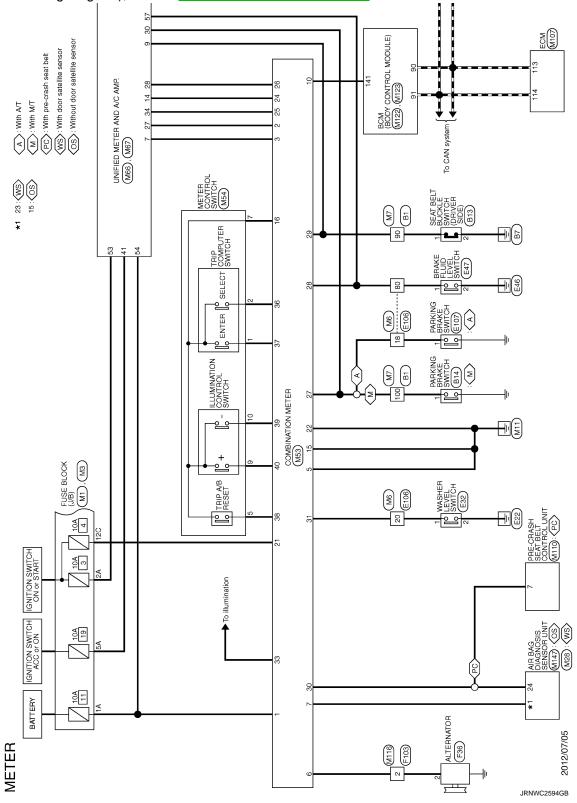
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color) Description			0		Value		
+	_	Signal name	Input/ Output	Condition		(Approx.)	
28 (SB)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal.	(V) 10 0 10 ms JSNIA0008GB	
					The brake fluid level is low- er than the low level	0 V	
29	Ground	Seat belt buckle switch signal (driver side)	Input	Ignition switch ON	When driver seat belt is fastened	12 V	
(P)	Glodila				When driver seat belt is un- fastened	0 V	
30	0		senger seat When passenger seat Unassenger side) Input switch senger seat belt is fastened		 When passenger seat 	12 V	
(G)	Ground			0 V			
31		Washer level switch signal	Input	Ignition switch ON	Washer level switch ON	0 V	
(L)	Ground				Washer level switch OFF	5 V	
33 (R)	Ground	Illumination control signal	Output	Ignition switch ON	Lighting switch ON, then operate the illumination control switch.	NOTE: When brightness level is midway (V) 10 0 JSNIA0010GB	
36	16	Select switch signal	Input	Ignition switch	When is pressed	0 V	
(LG)	(BR)	3 3	1	ON	Other than the above	5 V	
37 (Y)	16 (BR)	Enter switch signal	Input	Ignition switch ON	When is pressed Other than the above	0 V 5 V	
38 (G)	16 (BR)	Trip A/B reset switch signal	Input	Ignition switch ON	When trip A/B reset switch is pressed	0 V	
39	16	Illumination control switch signal (–)	Input	Ignition switch	When S switch is pressed	5 V 0 V	
(P)	(BR)			ON	Other than the above	5 V	
40 (BG)	16 (BB)	Illumination control switch	Input	Ignition switch	When 👣 + switch is pressed	0 V	
(BG)	(BR)	signal (+)	•	ON	Other than the above	5 V	

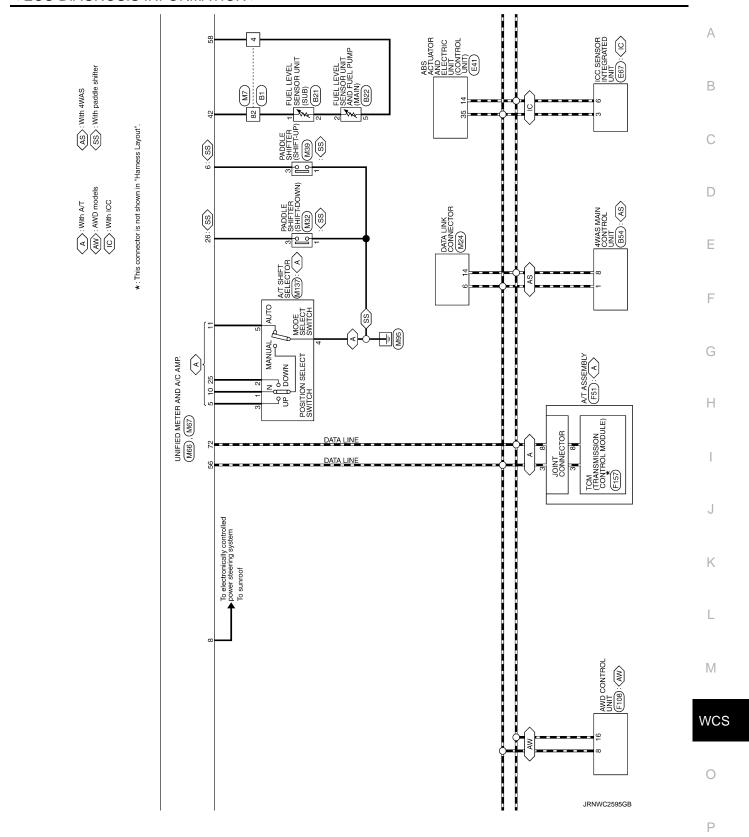
Wiring Diagram - METER -

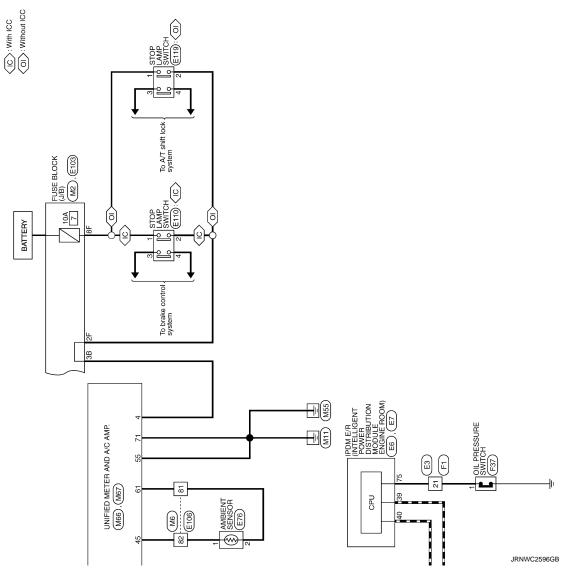
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For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



< ECU DIAGNOSIS INFORMATION >





Fail-safe

FAIL SAFE

Combination meter performs fail-safe operation when unified meter and A/C amp. communication is malfunction.

Solution for communication error between the unified meter and A/C amp. and combination meter.

< ECU DIAGNOSIS INFORMATION >

Function		Specifications	
Speedometer			
Tachometer		Reset to zero by suspending communication.	
Fuel gauge			
Water temperature gauge			
Illumination control		When suspending communication, change to nighttime mode.	
	Door open warning	The display turns off by suspending communication.	
	Parking brake release warning		
	Low tire pressure warning		
	Fuel filler cap warning		
Information display	Instantaneous fuel warning	When reception time of an abnormal signal is 2 seconds or	
	Average fuel consumption	less, the last received datum is used for calculation to indicate the result.	
	Average vehicle speed	When reception time of an abnormal signal is more than two	
	Travel distance	seconds, the last result calculated during normal condition is indicated.	
Buzzer	•	The buzzer turns off by suspending communication.	
	ABS warning lamp	The lamp turns on by suspending communication.	
	VDC warning lamp		
	Brake warning lamp		
	CRUISE warning lamp		
	Malfunction indicator lamp		
	High beam indicator		
	Turn signal indicator lamp		
	Oil pressure warning lamp		
Warning lamp/indicator	A/T CHECK warning lamp		
lamp	VDC OFF indicator lamp	The lamp turns off by suspending communication.	
	Low tire pressure warning lamp		
	Key warning lamp		
	AFS OFF indicator lamp		
	4WAS warning lamp		
	Master warning lamp		
	AWD warning lamp		
	Tail lamp indicator lamp		
	Front fog lamp indicator lamp		

DTC Index

Refer to WCS-45, "DTC Index".

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UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS INFORMATION >

UNIFIED METER AND A/C AMP.

Reference Value

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

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 malfunc tion signal is received
SPEED OUTPUT Ignition switch ON		While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfun tion signal is received
ODO OUTPUT [km]	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 malfunction 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
FUEL CAP W/L	Ignition switch	Fuel filler cap warning display ON	On
FUEL CAP W/L	ŎN	Fuel filler cap warning display OFF	Off
ABS W/L	Ignition switch	ABS warning lamp ON	On
ADO W/L	ON	ABS warning lamp OFF	Off
VDC/TCS IND	Ignition switch	VDC OFF indicator lamp ON	On
VB6/100 II (B	ON	VDC OFF indicator lamp OFF	Off
SLIP IND	Ignition switch ON	VDC warning lamp ON	On
		VDC warning lamp OFF	Off
BRAKE W/L	Ignition switch	Blake warning lamp ON	On
	ON	Blake warning lamp OFF	Off
DOOR W/L	Ignition switch	Door warning displayed	On
	ON	Door warning not displayed	Off
TRUNK/GLAS-H	Ignition switch	Trunk warning displayed	On
	ON	Trunk warning not displayed	Off
HI-BEAM IND	Ignition switch	Hi-beam indicator lamp ON	On
· <u>_</u> · · . · . · . · . · . · . · . · .	ON	Hi-beam indicator lamp OFF	Off
TURN IND	Ignition switch	Turn indicator lamp ON	On
	ON	Turn indicator lamp OFF	Off
FR FOG IND	Ignition switch	Front fog lamp indicator lamp ON	On
	ON	Front fog lamp indicator lamp OFF	Off

UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status	
RR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
LIGUTING	Ignition switch ON	Tail lamp indicator lamp ON	On	
LIGHT IND		Tail lamp indicator lamp OFF	Off	
	Ignition switch ON	Oil pressure warning lamp ON	On	
OIL W/L		Oil pressure warning lamp OFF	Off	
NAU	Ignition switch	Malfunction warning lamp ON	On	
MIL	ŎN	Malfunction warning lamp OFF	Off	
GLOW IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
C-ENG2 W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
CDUISE IND	Ignition switch ON	Cruise indicator displayed	On	
CRUISE IND		Cruise indicator not displayed	Off	
SET IND	Ignition switch	Set indicator lamp ON	On	
SELIND	ON	Set indicator lamp OFF	Off	
CDLUCE W/I	Ignition switch	Cruise warning lamp ON	On	
CRUISE W/L	ON	Cruise warning lamp OFF	Off	
BA W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
ATO (T. ANST 14/8)	Ignition switch	A/T check warning lamp ON	On	
ATC/T-AMT W/L	ŎN	A/T check warning lamp OFF	Off	
4WD W/L	Ignition switch	AWD warning lamp ON	On	
400D 00/L	ŎN	AWD warning lamp OFF	Off	
4WD LOCK IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
FUEL W/L	Ignition switch ON	Low-fuel warning lamp displayed	On	
FOEL W/L		Low-fuel warning lamp not displayed	Off	
WASHER W/L	Ignition switch	Washer warning displayed	On	
WASHER W/L	ON	Washer warning not displayed	Off	
AIR PRES W/L	Ignition switch ON	Low tire pressure lamp ON	On	
AIR FRES W/L		Low tire pressure lamp OFF	Off	
KEY G/Y W/L	Ignition switch ON	Key warning lamp ON	On	
KET G/T W/L		Key warning lamp OFF	Off	
AEC OFF IND	Ignition switch ON	AFS OFF indicator lamp ON	On	
AFS OFF IND		AFS OFF indicator lamp OFF	Off	
4\\\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Ignition switch	4WAS warning lamp ON	On	
4WAS/RAS W/L	ÓN	4WAS warning lamp OFF	Off	
DDS W/L Ignition switch ON		NOTE: This item is displayed, but cannot be monitored.	Off	
LANE W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	

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UNIFIED METER AND A/C AMP.

< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status	
LDP IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
	Ignition switch	Engine start information display (A/T model)	B&P I	
	ON	Engine start information display (M/T model)	C&P I	
	Ignition switch ACC	Engine start information display (A/T model)	B&P N	
		Engine start information display (M/T model)	C&P N	
	Ignition switch LOCK	Key ID warning display	ID NG	
	Ignition switch LOCK	Steering lock information display	ROTAT	
LCD	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	ICC sensor integrated unit warning display	LK WN	
	Ignition switch ON	Vehicle ahead detection indicator displayed	On	
ACC TARGET		Vehicle ahead detection indicator not displayed	Off	
	Ignition switch ON	When following distance set to "LONG"	LONG	
ACC DISTANCE		When following distance set to "MIDDLE"	MID	
AGO DIOTANOL		When following distance set to "SHORT"	SHORT	
		Set distance indicator not displayed	Off	
ACC OWN VHL	Ignition switch	Own vehicle indicator displayed	On	
	ON	Own vehicle indicator not displayed	Off	
ACC SET SPEED Ignition switch ON		ICC set vehicle speed display	Vehicle speed	
ACC UNIT	Ignition switch ON	Set vehicle speed indicator unit display ON	On	
7.00 OIVII		Set vehicle speed indicator unit display OFF	Off	
O/D OFF SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	

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< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status
		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 M1 display	M1
SHIFT IND	Ignition switch ON	Shift position indicator M2 display	M2
	ON	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
	Ignition switch	Snow mode switch ON	On
AT S MODE SW	ON	Snow mode switch OFF	Off
		NOTE:	
AT P MODE SW	Ignition switch ON	This item is displayed, but cannot be monitored.	Off
M DANCE OW	Ignition switch	Selector lever DS position	On
M RANGE SW	ŎN	Other than the above	Off
NIM DANIOE OW	Ignition switch	Selector lever DS position	Off
NM RANGE SW	ŎN	Other than the above	On
	Ignition switch	Selector lever up position	On
AT SFT UP SW	ON	Other than the above	Off
	Ignition switch	Selector lever – position	On
AT SFT DWN SW	ON	Other than the above	Off
	Ignition switch	Paddle shifter up operation	On
ST SFT UP SW	ON	Other than the above	Off
	Ignition switch	Paddle shifter down operation	On
ST SFT DWN SW	ON	Other than the above	Off
	Ignition switch	A/C compressor activation condition	On
COMP F/B SIG	ON	A/C compressor deactivation condition	Off
4WD LOCK SW	Ignition switch	NOTE: This item is displayed, but cannot be moni-	Off
		tored. Parking brake applied	On
PKB SW	Ignition switch ON	Parking brake applied Parking brake released	Off
		Seat belt (driver side) unfastened	
BUCKLE SW	Ignition switch ON	Seat belt (driver side) unfastened Seat belt (driver side) fastened	On Off
		Brake fluid level is lower than the low level	
BRAKE OIL SW	Ignition switch ON		On Off
DISTANCE		Brake fluid level is normal	_
DISTANCE [km]	Ignition switch ON	_	Possible driving distance calculated bunified meter and A/C amp.
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	_	Equivalent to ambient temperature NOTE: This may not match the indicated value on the information display.
FUEL LOW CO	Ignition switch	Low-fuel warning signal output	On
FUEL LOW SIG	ON	Low-fuel warning signal not output	Off

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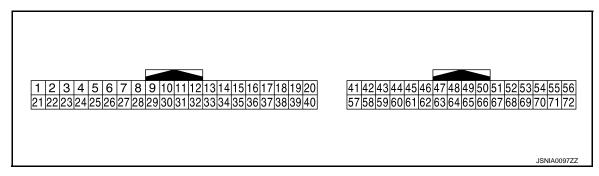
< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status
BUZZER	Ignition switch	Buzzer ON	On
DOZZEN	ON	Buzzer OFF	Off

NOTE:

Some items are not available according to vehicle specification.

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. color)	Description			Condition	Value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
4	0	Otro Lanco de Malada de La	1	Ignition	Brake pedal is depressed	12 V	
(G)	Ground	Stop lamp switch signal	Input	switch OFF	Other than the above	0 V	
5	Cround	Manual mode shift up sig-	Innut	Ignition	Selector lever up position	0 V	
(L)	Ground	nal	Input	switch ON	Other than the above	12 V	
6	Cravinal	Doddle skifter up signel	lanut	Ignition	Paddle shifter up operation	0 V	
(BG)	Ground	Paddle shifter up signal	Input	switch ON	Other than the above	12 V	
7 (GR)	Ground	Communication signal (AMP. → METER)	Output	Ignition switch ON	_	(V) 6 4 2 0 + 1 ms SKIA3362E	
8 (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).	
9	Ground	Seat belt buckle switch sig-	Input	Ignition switch	When seat belt (driver side) is fastened	12 V	
(SB)	2.333	nal (driver side)		ON	When seat belt (driver side) is unfastened	0 V	

	inal No. e color)	Description			Condition	Value	А
+	_	Signal name	Input/ Output		Condition	(Approx.)	
10	0	Manualmanda simal	lanat	Ignition	Selector lever DS position	0 V	В
(W)	Ground	Manual mode signal	Input	switch ON	Other than the above	12 V	
11	0	New ways and a simulation of	la a cat	Ignition	Selector lever DS position	12 V	С
(G)	Ground	Non-manual mode signal	Input	switch ON	Other than the above	0 V	
14 (BR)	Ground	Communication signal (LCD → AMP.)	Input	Ignition switch ON	_	(V) 15 10 → 400 µs JSNIA0028GB	D E
23				Ignition	Snow mode switch ON	12 V	- 1
(Y)	Ground	A/T snow switch signal	Input	switch ON	Snow mode switch OFF	0 V	
25 (V)	Ground	Manual mode shift down	Input	Ignition switch	Selector lever down position	0 V	G
(v)		signal		ON	Other than the above	12 V	Н
26	Ground	Paddle shifter down signal	Input	Ignition switch	Paddle shifter down operation	0 V	
(G)	Cround	T addie stiller de Wit signal	mpat	ON	Other than the above	12 V	
27 (LG)	Ground	Communication signal (METER → AMP.)	Input	Ignition switch ON	_	(V) 6 4 2 0 + 1ms SKIA3361E	J
						NOTE: The maximum voltage varies depending on the specification (destination unit).	L
28 (R)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	0	W
						20 ms	VV
					Parking brake applied	JSNIA0012GB	
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake released	(V) 8 4 0 10 ms	P

Terminal No. (Wire color) Description		Condition		Value	
-	Signal name	Input/ Output		Condition	(Approx.)
Ground	Communication signal (AMP. \rightarrow LCD)	Output	Ignition switch ON		(V) 6 4 2 0 US JSNIA0027GB
Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
Ground	Fuel level sensor signal	Input	Ignition switch ON	_	(V) 3 2 1 0 E 1/4 1/2 3/4 F JSNIA0013GB
Ground	Ambient sensor signal	Input	_		(V) 3 2 1 0 -10 (14) (32) (50) (68) (86) (86) (87) (86) (87) JSNIA0014GB
Ground	Ignition power supply	Input	Ignition switch ON	_	Battery voltage
Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
Ground	Ground	_	Ignition switch ON	_	0 V
Ground	CAN-H	_	_	_	_
Ground	Brake fluid level switch sig- nal	Input	Ignition switch ON	Brake fluid level is normal. The brake fluid level is low-	(V) 10 0 10 ms JSNIA0008GB
Ground	Fuel level sensor ground		Ignition switch	er than the low level	0 V
	-		ON Ignition		0 V
	Ground Ground Ground Ground Ground	Communication signal (AMP. → LCD) Ground ACC power supply Ground Fuel level sensor signal Ground Ignition power supply Ground Battery power supply Ground Ground Ground CAN-H Ground Brake fluid level switch signal Ground Fuel level sensor ground	Ground Communication signal (AMP. → LCD) Output Ground ACC power supply Input Ground Ambient sensor signal Input Ground Ignition power supply Input Ground Battery power supply Input Ground Ground — Ground CAN-H — Ground Brake fluid level switch signal Input Ground Fuel level sensor ground —	Ground Communication signal (AMP. → LCD) Ground ACC power supply Input Switch ON Ground Fuel level sensor signal Input Ignition switch ON Ground Ignition power supply Input Switch ON Ground Battery power supply Input Ignition switch ON Ground Ground Ground — Ignition switch ON Ground Battery power supply Input Ignition switch ON Ground Ground — Ignition switch ON Ground Brake fluid level switch signal Input	Ground Communication signal (AMP. → LCD) Ground ACC power supply Input Switch ACC Ground Fuel level sensor signal Input Input Switch ON Ground Ignition power supply Input Switch ON Ground Ignition power supply Input Switch ON Ground Ground Ground — Input Input Input Switch ON Ground Ground — Input

< ECU DIAGNOSIS INFORMATION >

	Terminal No. (Wire color) Description			- Condition		Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
71 (GR)	Ground	Ground	_	Ignition switch ON	_	0 V
72 (P)	Ground	CAN-L	_	_	_	_

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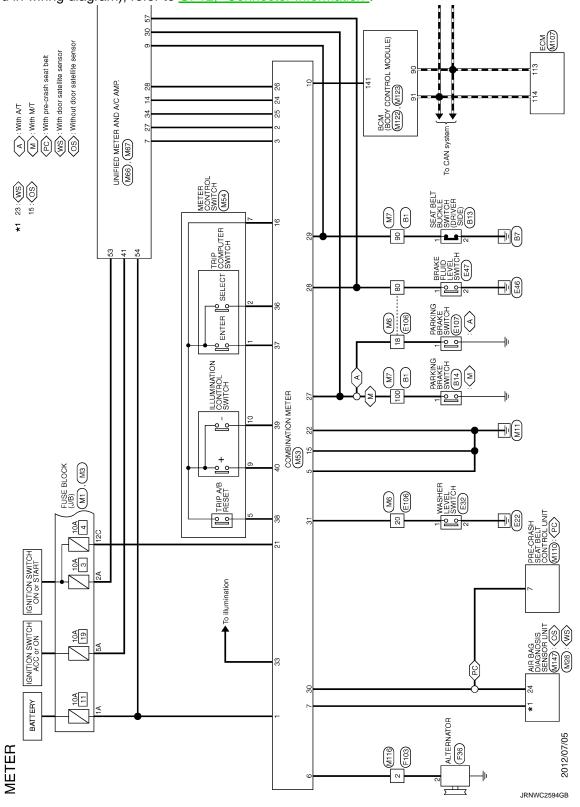
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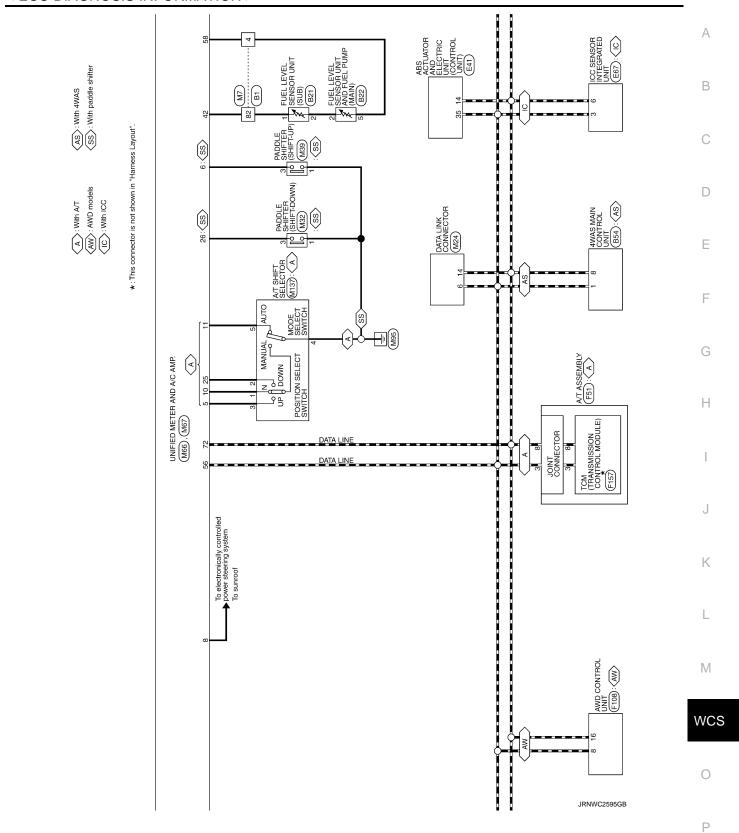
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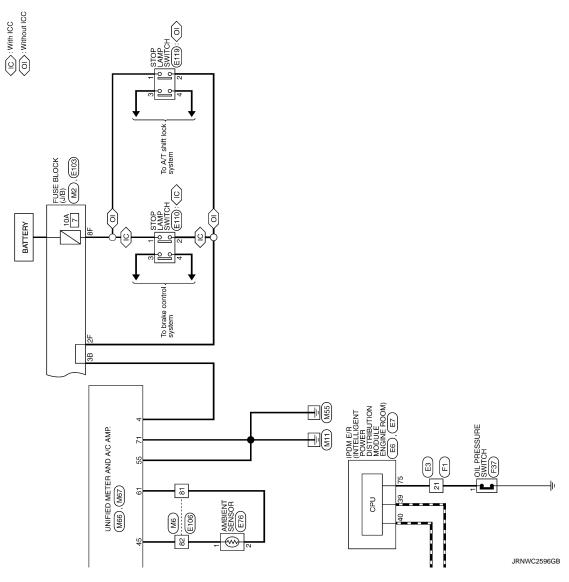
Wiring Diagram - METER -

INFOID:0000000008748623

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

Combination meter performs fail-safe operation when unified meter and A/C amp. communication is malfunction.

Solution for communication error between the unified meter and A/C amp. and combination meter.

< ECU DIAGNOSIS INFORMATION >

	Function	Specifications		
Speedometer				
Tachometer		Peget to zero by evenending communication		
Fuel gauge		Reset to zero by suspending communication.		
Water temperature gauge				
Illumination control		When suspending communication, change to nighttime mode.		
Door open warning Parking brake release warning Low tire pressure warning				
	Parking brake release warning	The display turns off by suspending communication		
	Low tire pressure 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	less, the last received datum is used for calculation to indicate the result.		
	Average vehicle speed	When reception time of an abnormal signal is more than two		
	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			
	Average vehicle speed Travel distance ABS warning lamp VDC warning lamp Brake warning lamp CRUISE warning lamp Malfunction indicator lamp High beam indicator Turn signal indicator lamp	The lamp turns on by suspending communication.		
	CRUISE warning lamp			
	Malfunction indicator lamp			
	High beam indicator			
	Turn signal indicator lamp			
	Oil pressure warning lamp			
Warning lamp/indicator	A/T CHECK warning lamp			
lamp	VDC OFF indicator lamp			
	Low tire pressure warning lamp			
	Key warning lamp	The lamp turns off by suspending communication.		
	AFS OFF indicator lamp			
	4WAS warning lamp			
	Master warning lamp			
	AWD warning lamp			
	Tail lamp indicator lamp			
	Front fog lamp indicator lamp			

DTC Index

Display contents of CONSULT	Ti	me	Diagnostic item is detected when	Refer to
U1000: CAN COMM CIRCUIT	CRNT	PAST	When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-42
U1010: CONTROL UNIT (CAN)	CRNT	PAST	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	MWI-43
B2201: COMM ERROR 1	CRNT	PAST	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-44
B2202: COMM ERROR 2	CRNT	PAST	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	<u>MWI-46</u>

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Display contents of CONSULT	Time		Diagnostic item is detected when	Refer to
B2205: VEHICLE SPEED	CRNT	PAST	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	<u>MWI-48</u>
B2267: ENGINE SPEED	CRNT	PAST	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-49
B2268: WATER TEMP	CRNT	PAST	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	<u>MWI-50</u>

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.

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

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VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
I IX WIII LIXIII	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
I K WII EK 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/AUTO	Off
I IX WIF LIX IIVI	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi- tion
TUDNI CIONAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CIONAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAND CVA	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LILDEANA CVA	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
HEAD LAWIP SW 1	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
HEAD LAWP SW 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	Front fog lamp switch OFF	Off
FK FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOD SW DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOD SW AC	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off
CDL LOCK SW	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK 3VV	Power door lock switch UNLOCK	On
KEN CALLIN SWI	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
KEY CYLLIN CW	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
LIAZADD CM	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TD CANCEL CW	Trunk lid opener cancel switch OFF	Off
TR CANCEL SW	Trunk lid opener cancel switch ON	On
TD/DD ODEN CW	Trunk lid opener switch OFF	Off
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	On
TONIC/LIAT MAITO	Trunk lid closed	Off
TRNK/HAT MNTR	Trunk lid opened	On
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
DKE 1 OCK	LOCK button of the Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of the Intelligent Key is pressed	On
DIVE LINILOGIA	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On
DVE TD/DD	TRUNK OPEN button of the Intelligent Key is not pressed	Off
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is pressed	On
DICE DANIC	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
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
OI HOAL SENSOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
NLW 3VV -DK	Driver door request switch is pressed	On
DEO SW. AS	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off

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Monitor Item	Condition	Value/Status	_ ^
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	- A
DEO CW/ DD/TD	Trunk lid opener request switch is not pressed	Off	_ D
REQ SW -BD/TR	Trunk lid opener request switch is pressed	On	– B
DUCU CW	Push-button ignition switch (push switch) is not pressed	Off	-
PUSH SW	Push-button ignition switch (push switch) is pressed	On	С
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	D
CLUCITEM	The clutch pedal is not depressed	Off	_
CLUCH SW	The clutch pedal is depressed	On	Е
	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	F
DDAKE CW 0	The brake pedal is not depressed	Off	=
BRAKE SW 2	The brake pedal is depressed	On	G
DETE/CANCL CVA/	Selector lever in P position (Except M/T models) The clutch pedal is depressed (M/T models)	Off	_ 0
DETE/CANCL SW	 Selector lever in any position other than P (Except M/T models) The clutch pedal is not depressed (M/T models) 	On	Н
CET DAI/ALC\A/	Selector lever in any position other than P and N	Off	_
SFT PN/N SW	Selector lever in P or N position	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	J
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off	K
UNLK SEN -DR	Driver door is unlocked	Off	_
ONER OEN DIX	Driver door is locked	On	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	L
1 COLLOW II DIVI	Push-button ignition switch (push-switch) is pressed	On	
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	M
ION KEIT -17B	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	
DETE SW -IPDW	Selector lever in P position	On	WCS
SFT PN -IPDM	 Selector lever in any position other than P and N (Except M/T models) The clutch pedal is not depressed (M/T models) 	Off	
OI I IN TEDIVI	Selector lever in P or N position The clutch pedal is depressed	On	0
CET D MET	Selector lever in any position other than P	Off	_
SFT P -MET	Selector lever in P position	On	P
OFT N. MET	Selector lever in any position other than N	Off	=
SFT N -MET	Selector lever in N position	On	_

Monitor Item	Condition	Value/Status
	Engine stopped	Stop
ENGINE STATE	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
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Selector lever is in the P position except for M/T models)	Reset
	Ignition switch is ON	Set
DDMT ENG OTDT	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
KEY OW OLOT	The Intelligent Key is not inserted into key slot	Off
KEY 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	NOTE: The item is indicated, but not monitored.	-
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRINTID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
COINT IIXIVI 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
COINI IIXIVI IDS	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIDM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRM IDT	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
174	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
IF 3	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
IF Z	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
IFI	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 DECCT EL 4	ID of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
ID DECCE ED4	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECCE DD4	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECCT DL4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
MADNING LAND	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DUZZED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

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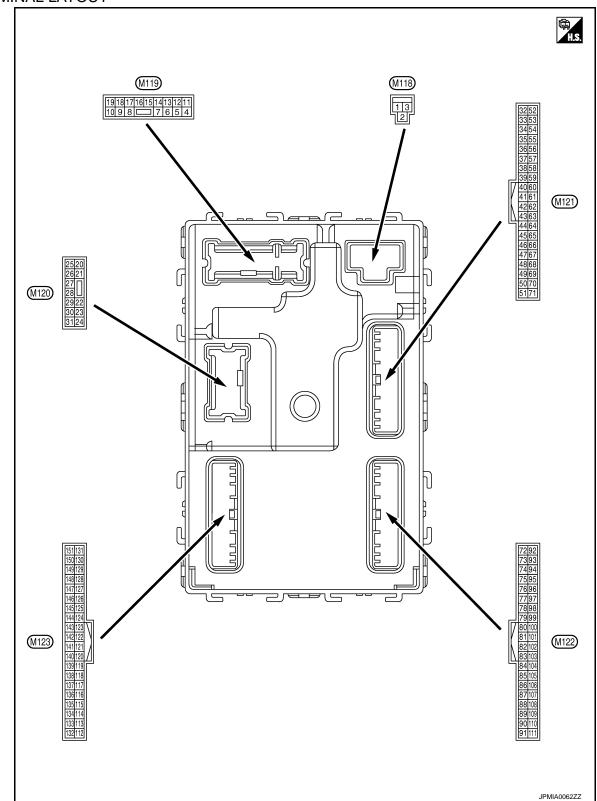
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TERMINAL LAYOUT



PHYSICAL VALUES

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description	I		O Prince	Value	<u>.</u> II
+	_	Signal name	Input/ Output		Condition	(Approx.)	-
1 (W)	Ground	Battery power supply	Input	Ignition switch (OFF	Battery voltage	
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (OFF	12 V	
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch (ON	12 V	-
					mp battery saver is activated. or room lamp power supply)	0 V	
4 (LG)	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	
(P)	Ground	LOCK	Output	door	Other than UNLOCK (Actuator is not activated)	0 V	
7	Ground	Step lamp	Output	Step lamp	ON	0 V	
(SB)	C. Julia		Carpat	Crop larrip	OFF	12 V	
8	Ground	All doors, fuel lid	Output	at All doors, fuel lid	LOCK (Actuator is activated)	12 V	.
(V)	Ground	LOCK			Other than LOCK (Actuator is not activated)	0 V	
9	Ground	Driver door, fuel lid	Output Driver door,	UNLOCK (Actuator is activated)	12 V	-	
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V	
11 (R)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage	
13 (B)	Ground	Ground	_	Ignition switch (DN	0 V	
					OFF	0 V	
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position.	.
		3.54.14				0 JSNIA0010GB	
15 (BG)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	
(66)					ACC	0 V	

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	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	0 V (V) 15 10 5 0 1 s PKID0926E 6.5 V
					Turn signal switch OFF	0 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
19	Ground	Interior room lamp	Output	Interior room	OFF	12 V
(V)	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	Onsurad	Tanah lidan sa	Outrast	To sale lid	OPEN (Trunk lid opener actuator is activated)	12 V
(LG)	Ground	Trunk lid open	Output	Trunk lid	Other than OPEN (Trunk lid opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
30	_			Trunk room	ON	0.5 V
(P)	Ground	Trunk room lamp	Output	lamp	OFF	12 V

	nal No.	Description				Value	/
+	color)	Signal name	Input/ Output		Condition	(Approx.)	,
34		Trunk room antenna		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	()
(SB)	Ground	(-)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	1
35	0	Trunk room antenna	0.4	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	ŀ
(V)	Ground	(+)	Output	ÖFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	ŀ
38	0	Rear bumper anten-	0.11	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	W
(B)	Ground	na (–)	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	F

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
39		Rear bumper anten-		When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB
(W)	Ground	na (+)	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
47	Cround	Ignition relay (IPDM	Outnut	lanition quitab	OFF or ACC	12 V
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V
50 (BG)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (Trunk lid is opened)	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	els)	When selector lever is not in P or N position	0 V
(R)	Ground	Starter relay control	Output	Ignition switch ON (M/T mod-	When the clutch pedal is depressed	Battery voltage
				els)	When the clutch pedal is not depressed	0 V
60	Ground	Push-button ignition	Input	Push-button ig- nition switch	Pressed	0 V
(BR)	Orodria	switch (Push switch)	mput	(Push switch)	Not pressed	Battery voltage
					ON (Pressed)	0 V
61 (SB)	Ground	Trunk lid opener request switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
		Intelligent Key warn-		Intelligent Key	Sounding	0 V
64 (G)	Ground	ing buzzer (Engine room)	Output	warning buzzer (Engine room)	Not sounding	12 V

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	inal No. e color)	Description	I		0 100	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Pressed Not pressed	0 V
						10 ms JPMIA0011GB 11.8 V
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
72 (R)	Ground	Room antenna 2 (-) (Center console)	Output	Ignition switch OFF	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 compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(G)	Giouria	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

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Ρ

	nal No.	Description				Value				
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)				
74		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				
(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 JMKIA0063GB				
75	Ground	Passenger door an-	sen	Output			When the passenger door re-		When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB
(BR)	Ciodila	tenna (+)	Cutput	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB				
76	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB				
(V)	Ground	Ground (-)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB				

Terminal No. Description (Wire color)			0 199	Value	Α	
color)	Signal name	Input/ Output		Condition	(Approx.)	^
	Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 S S S S S S S S S	B C
Ground	(+)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	E
					(V)[G
				When Intelligent Key is in the passenger compart- ment	10 5 0 1 1 s	Н
Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF			
				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0	J K
					JMKIA0063GB	L
				When Intelligent Key is in the passenger compartment	(V) 15 10 5 0	M
	D		1		JMKIA0062GB	WC
Ground	(Instrument panel)	Output	OFF		(V)	0
				When Intelligent Key is not in the passenger compartment	15 10 5 0	Ρ
	Ground Ground	Ground Room antenna 1 (-) (Instrument panel) Room antenna 1 (+)	Ground Signal name Input/Output Driver door antenna (+) Ground Room antenna 1 (-) (Instrument panel) Ground Room antenna 1 (+) Output Output	Ground Room antenna 1 (-) (Instrument panel) Ground Room antenna 1 (+) Output Ignition switch OFF	Ground Room antenna 1 (+) (Instrument panel) Ground Room antenna 1 (+) (Instrument panel)	Ground Room antenna 1 (-) (Instrument panel) Ground Room antenna 1 (+) Ground Room antenna 1 (-) (Instrument panel) Ground Room antenna 1 (+) Ground Roo

	nal No. color)	Description	I			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 (SB)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V 12 V
83	Ground	Remote keyless entry receiver communica-	Input/	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
(Y)	Clound	tion	Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 1 ms JMKIA0065GB
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					Any of the conditions below with all switches OFF Wiper volume dial 1 Wiper volume dial 2 Wiper volume dial 6 Wiper volume dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB

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

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BG)	Ground	Acc relay control	Output	ignition switch	ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
		Selector lever P posi-		0-1	P position	0 V
99		tion switch (A/T models)		Selector lever	Any position other than P	12 V
(R)* ¹ (BR)* ²	Ground	ASCD clutch switch	Input	ASCD clutch	OFF (Clutch pedal is depressed)	0 V
	(M/T mode	(M/T models)		switch	ON (Clutch pedal is not depressed)	12 V
					ON (Pressed)	0 V
100 (Y)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(BG)	Giodila	lay control	Output	igillion switch	ON	12 V
103 (P)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch (DFF	12 V

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	Λ											
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	Α											
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	С											
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	E											
						1.5 V	G											
107 (LG)	Ground	Combination switch INPUT 1	ion switch Input	Input Combination switch (Wiper volume dial 4)	switch (Wiper volume	switch (Wiper volume	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	- 									
						(1/1)	J											
				Front wiper switch LO	(V) 15 10 5 0 2 ms	K												
						1.3 V	L											
																Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	W

Р

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

	nal No.	Description		. Value		Value	А
+	color)	Signal name	Input/ Output		Condition	(Approx.)	Α
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	С
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB	E F
109 (W)		n Input	Combination switch (Wiper volume dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	G H	
				Front wiper switch INT/ AUTO	(V) 15 10 5 0 2 ms JPMIA0038GB	J K	
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	W
					ON	0 V	0
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	Р

	nal No.	Description				Volue		
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)		
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 JPMIA0156GB 8.7 V		
113	Cround	Ontical canaar	lanut	Ignition switch	When bright outside of the vehicle	Close to 5 V		
(BG)	Ground	Optical sensor	Input	ON	When dark outside of the vehicle	Close to 0 V		
114	Ground	Clutch interlock	Input	Clutchinterlock switch OFF (Clutch pedal is not depressed) ON (Clutch pedal is depressed)		0 V		
(R)	Ground	switch	при			Battery voltage		
116 (SB)	Ground	Stop lamp switch 1	Input	_		Battery voltage		
		Stop lamp switch 2		Stop lamp switch	OFF (Brake pedal is not depressed)	0 V		
118	Ground	(Without ICC)	Vithout ICC) Input		ON (Brake pedal is depressed)	Battery voltage		
(BR)	Cround	Stop lamp switch 2	mpat		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V		
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	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 1.1 V		
					UNLOCK status (Unlock switch sensor ON)	0 V		
121	Ground	Key slot switch	Input	When the Intellig	gent Key is inserted into key	12 V		
(SB)	Sibulia	They slot switch	прис	When the Intellique key slot	gent Key is not inserted into	0 V		
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V		
(V)	Cround	. 5.1.15500001	put	-g	ON	Battery voltage		

	nal No. color)	Description	I		O IV	Value	Α
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)	^
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB	ВС
					ON (Door open)	11.8 V 0 V	D
129 (BG)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB	E F G
					ON	1.1 V 0 V	G
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C	DN	(V) 15 10 10 ms 10.2 V	H
				Ignition switch C	1	12 V	
133 (L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps OFF) ON (Tail lamps ON)	9.5 V NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10	K L
				LOOKin II at	OFF OFF	JPMIA0159GB 0 V Battery voltage	WCS
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0 V	0
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C	N	0 V	Р
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V	-

	nal No.	Description	1			Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s OCC3881D
(L)		er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0
140* ¹	Ground	Selector lever P/N	Input	Selector lever P or N position		12 V
(B)	Cround	position	mpat	Colootor lover	Except P and N positions ON	0 V 0 V
141 (W)	Ground	Security indicator lamp	Output	Security indica- tor lamp	Blinking	(V) 15 10 5 0 11.3 V
142 (BR)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper volume dial 4)	OFF All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	12 V 0 V (V) 15 10 5 0 2 ms JPMIA0031GB
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper volume dial 4) Front wiper switch HI (Wiper volume dial 4) Any of the conditions below with all switches OFF Wiper volume dial 1 Wiper volume dial 2 Wiper volume dial 3 Wiper volume dial 6 Wiper volume dial 7	0 V (V) 15 10 5 0 2 ms JPMIA0032GB

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description	ı		0 111	Value		
+	-	Signal name	Input/ Output		Condition	(Approx.)		
					All switches OFF (Wiper volume dial 4)	0 V		
			Front washer switch ON (Wiper volume dial 4)	(V)				
144 (G)	Ground	Combination switch OUTPUT 2	Output	SWITCH Any of the conditions be		switch Any of the conditions below with all switches OFF Wiper volume dial 1 Wiper volume dial 5		JPMIA0033GB 10.7 V
					All switches OFF	0 V		
				Combination	Front wiper switch INT/ AUTO	(V)		
145		Combination switch	_		Front wiper switch LO	15		
(L)		(Wiper volume	Lighting switch AUTO	2 ms JPMIA0034GB				
					All switches OFF	0 V		
					Front fog lamp switch ON			
				Combination	Lighting switch 2ND	(V) 15		
146	Ground	Combination switch	Output	switch	Lighting switch PASS	10		
(SB)	Ground	OUTPUT 4	Output	(Wiper volume dial 4)	Turn signal switch LH	0 JPMIA0035GB 10.7 V		
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)	Ground	ger relay control	Cutput	defogger	Not activated	Battery voltage		

^{• *1:} A/T models

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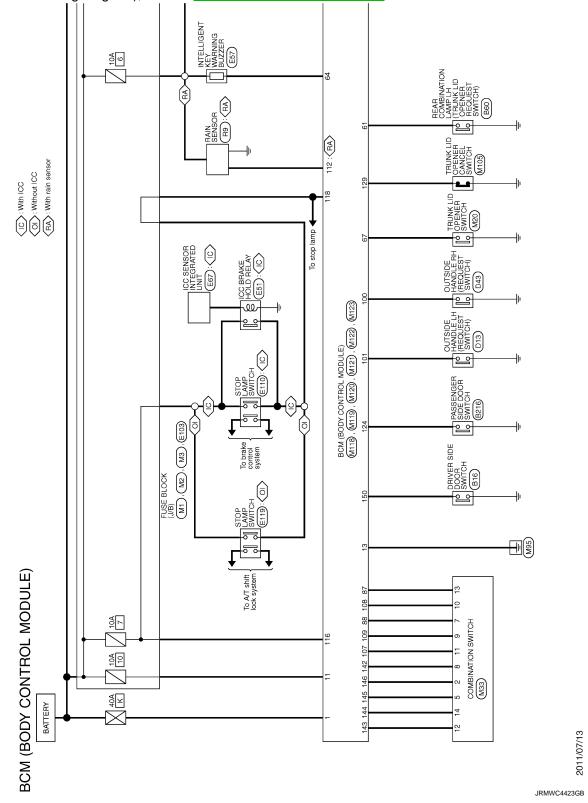
^{• *2:} M/T models

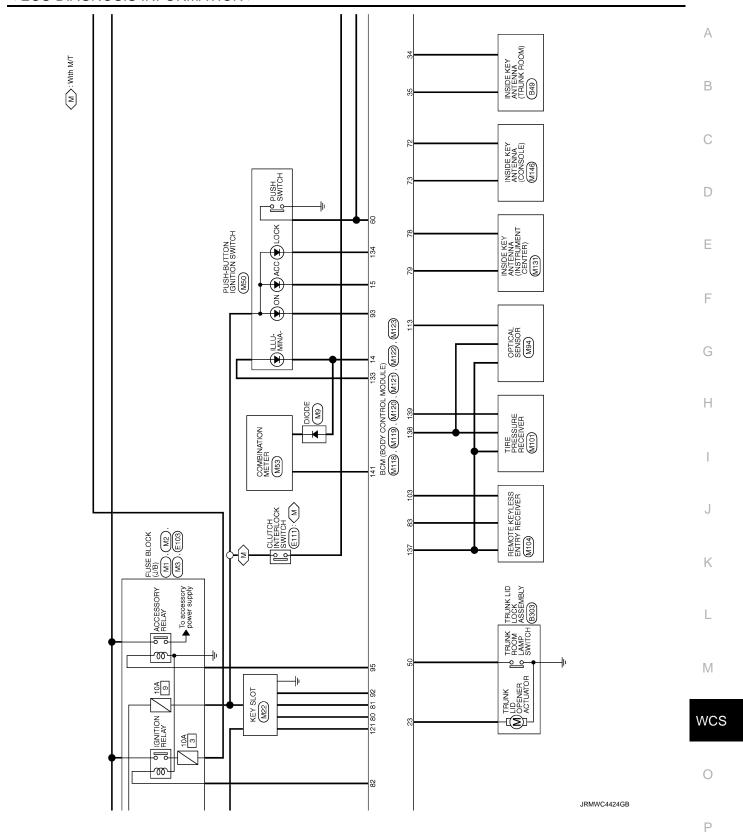
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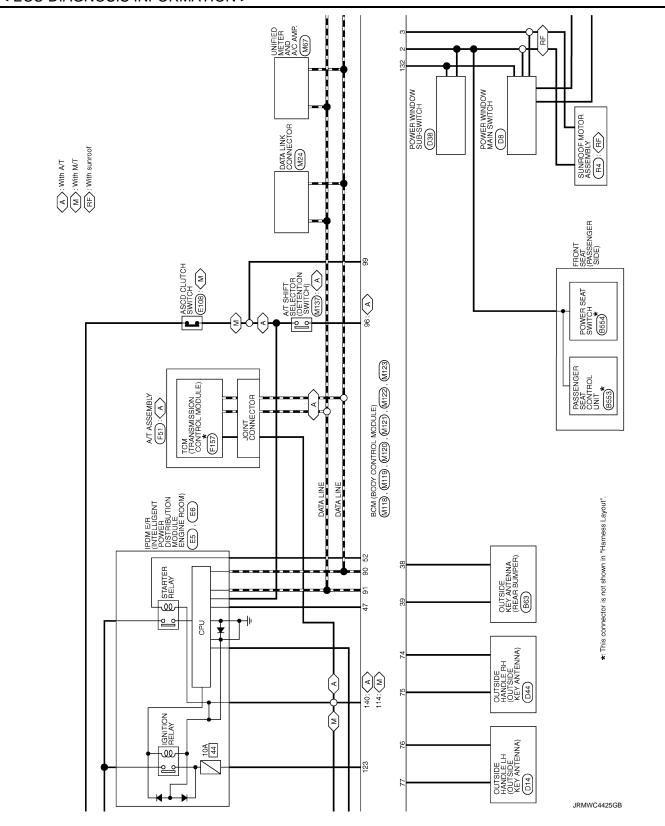
Wiring Diagram - BCM -

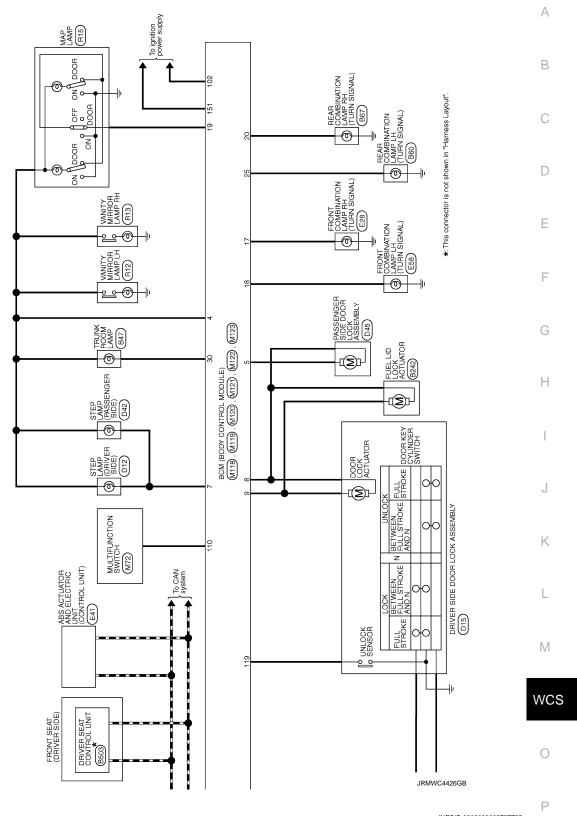
INFOID:0000000008787734

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 INFOID:0000000008787735

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	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (12 V) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
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: BCM	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

INFOID:0000000008787736

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 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

< ECU DIAGNOSIS INFORMATION >

Priority	DTC	
	B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED	
	B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS	
	B2604: PNP/CLUTCH SW B2605: PNP/CLUTCH SW B2608: STARTER RELAY B260A: IGNITION RELAY	
4	 B260F: ENG STATE SIG LOST B2614: BCM B2615: BCM B2616: BCM 	
	 B2617: BCM B2618: BCM B261A: PUSH-BTN IGN SW B261E: VEHICLE TYPE B26E8: CLUTCH SW 	
	B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED	
	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL 	
5	 C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL 	
	 C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT 	
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 BCS-16, "COM-MON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	_	_	_	BCS-36
U1010: CONTROL UNIT(CAN)	_	_	_	_	BCS-37
U0415: VEHICLE SPEED	_	_	_	_	BCS-38
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-51

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
B2191: DIFFERENCE OF KEY	×	_	_	_	<u>SEC-54</u>
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-55
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-57
B2195: ANTI-SCANNING	×	_	_	_	<u>SEC-58</u>
B2553: IGNITION RELAY	_	×	_	_	PCS-48
B2555: STOP LAMP	_	×	_	_	<u>SEC-59</u>
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-61
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-63</u>
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-64</u>
B2562: LOW VOLTAGE	_	×	_	_	BCS-39
B2601: SHIFT POSITION	×	×	×	_	SEC-65
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-68</u>
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-70</u>
B2604: PNP/CLUTCH SW	×	×	×	_	SEC-73
B2605: PNP/CLUTCH SW	×	×	×	_	<u>SEC-75</u>
B2608: STARTER RELAY	×	×	×	_	<u>SEC-77</u>
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-79
B2614: BCM	_	×	×	_	PCS-52
B2615: BCM	_	×	×	_	PCS-54
B2616: BCM	_	×	×	_	PCS-56
B2617: BCM	×	×	×	_	SEC-83
B2618: BCM	×	×	×	_	PCS-58
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-59
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	-	SEC-85
B2621: INSIDE ANTENNA	_	×	_	_	<u>DLK-55</u>
B2622: INSIDE ANTENNA	_	×	_	_	DLK-57
B2623: INSIDE ANTENNA	_	×	_	_	DLK-59
B26E8: CLUTCH SW	×	×	×	_	<u>SEC-80</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-82
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_		×	<u>WT-19</u>
C1706: LOW PRESSURE RR	_	_	_	×	<u>vv 1-19</u>
C1707: LOW PRESSURE RL	_	_	_	×	
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	\/\/T 24
C1710: [NO DATA] RR	_	_	_	×	<u>WT-21</u>
C1711: [NO DATA] RL	_	_	_	×	

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
C1716: [PRESSDATA ERR] FL	_	_	_	×	WT-24
C1717: [PRESSDATA ERR] FR	_	_	_	×	
C1718: [PRESSDATA ERR] RR	_	_	_	×	
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-25</u>
C1734: CONTROL UNIT	_	_	_	×	<u>WT-26</u>

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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:000000008161159

- The parking brake warning chime sounds continuously during vehicle travel though the parking brake is released.
- The parking brake warning chime does not sound at all even though driving the vehicle with the parking brake applied.

Diagnosis Procedure

INFOID:0000000008161160

1. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

- Connect the CONSULT.
- Select the "Data Monitor" of the "METER/M&A" and check the "PKB SW" monitor value. Refer to MWI-61,
 "Component Function Check".

Is the inspection result normal?

YES >> Replace combination meter.

NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Check the parking brake switch signal circuit. Refer to MWI-61, "Diagnosis Procedure (A/T models)" (A/T models) or MWI-62, "Diagnosis Procedure (M/T models)" (M/T models).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK PARKING BRAKE SWITCH

Check the parking brake switch. Refer to MWI-62, "Component Inspection".

Is the inspection result normal?

YES >> Replace combination meter.

NO >> Replace parking brake switch. Refer to <u>PB-6</u>, "<u>PEDAL TYPE</u>: <u>Exploded View</u>" (pedal type) or <u>PB-7</u>, "<u>LEVER TYPE</u>: <u>Exploded View</u>" (lever type).

THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >	
THE LIGHT REMINDER WARNING DOES NOT SOUND	А
Description INFOID:000000008161161	
Light reminder warning chime does not sound even though headlamp is illuminated.	В
Diagnosis Procedure	
1. CHECK COMBINATION SWITCH (LIGHT SWITCH) OPERATION	С
Check that the headlamps operate normally by operating the combination switch (light switch). Do they operate normally? YES >> GO TO 2.	D
NO >> Refer to BCS-76, "Symptom Table".	
2. CHECK FRONT DRIVER SIDE DOOR SWITCH SIGNAL CIRCUIT Check the front driver side door switch signal circuit. Befor to DLK 63. "Diognosis Broodure"	Е
Check the front driver side door switch signal circuit. Refer to DLK-62 . "Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 3. NO >> Repair harness or connector.	F
3. CHECK FRONT DRIVER SIDE DOOR SWITCH	
Check the front driver side door switch. Refer to DLK-63, "Component Inspection".	G
Is the inspection result normal? YES >> Replace BCM. Refer to BCS-79, "Removal and Installation". NO >> Replace front driver side door switch. Refer to DLK-217, "Removal and Installation".	Н
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THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

Description INFOID:0000000008161163

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

Diagnosis Procedure

INFOID:0000000008161164

1. CHECK SEAT BELT WARNING LAMP

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

Seat belt fastened : OFF Seat belt unfastened : ON

Is the inspection result normal?

YES >> Replace BCM.

NO >> GO TO 2.

2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

- 1. Connect the CONSULT.
- Select the "Data Monitor" of the "METER/M&A" and check the "BUCKLE SW" monitor value. Refer to WCS-24, "Component Function Check".

Is the inspection result normal?

YES >> Replace combination meter.

NO >> GO TO 3.

3.check seat belt buckle switch (driver side) signal circuit

Check the seat belt buckle switch (driver side) signal circuit. Refer to WCS-24, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

4. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Check the seat belt buckle switch (driver side). Refer to WCS-25, "Component Inspection".

Is the inspection result normal?

YES >> Replace unified meter and A/C amp.

NO >> Replace seat belt buckle switch (driver side). Refer to <u>SB-8. "SEAT BELT BUCKLE : Removal and Installation"</u>.

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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.

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.

Precaution for Battery Service

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.

WCS

WCS-81 Revision: 2012 July 2013 G Coupe

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INFOID:0000000008161166

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