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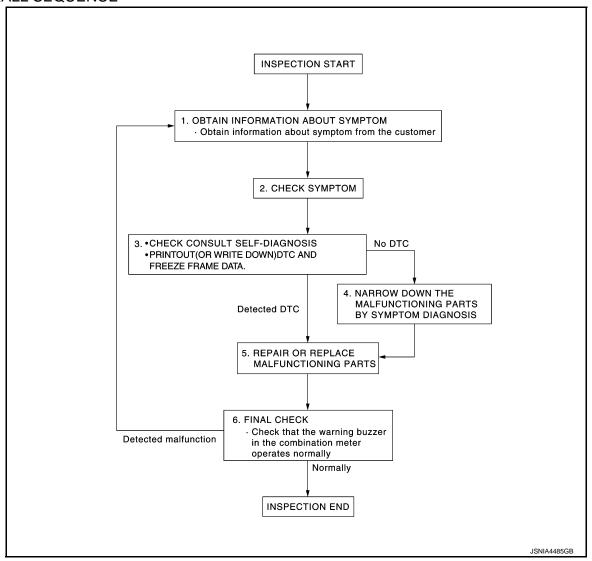
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BASIC INSPECTION

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>WCS-45, "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:0000000008295907 Parking brake switch Parking brak Combination switch (Lighting switch) Communication line (METER ← AMP. CAN communication line Unified meter and A/C amp. Combination meter Buzzer Door switch signa Front door switch Seat belt buckle switch signal JSNIA0500GB

WARNING CHIME SYSTEM: System Description

INFOID:00000000008295908

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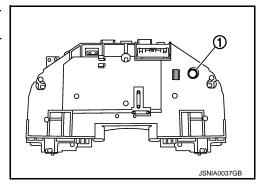
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COMBINATION METER

- 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 signalDoor switch signal
Seat belt warning chime	Seat belt buckle switch signal

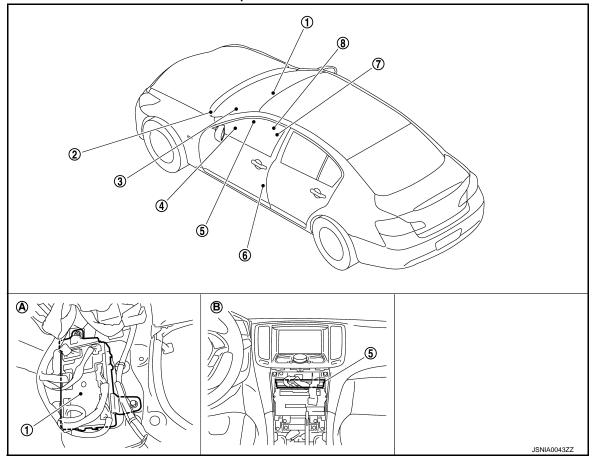
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WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000008295909



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

- Combination meter
- 6. Front door switch (driver side)

WARNING CHIME SYSTEM : Component Description

INFOID:0000000008295910

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 comunication 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 signal to the unified meter and A/C amp.		
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.		

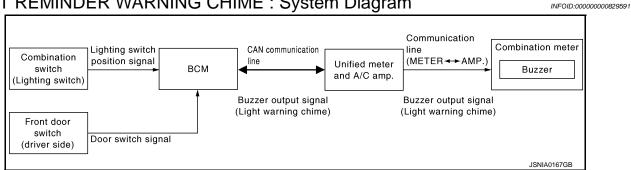
WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

Unit	Description	
Front door switch (driver side)	Transmits the 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:0000000008295912

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DESCRIPTION

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

- BCM detects ignition switch in OFF or ACC position, front door switch (driver side) 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 door switch (driver side) is ON

WARNING CANCEL CONDITIONS

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

- Lighting switch OFF
- Ignition switch ON
- Front door switch (driver side) is OFF

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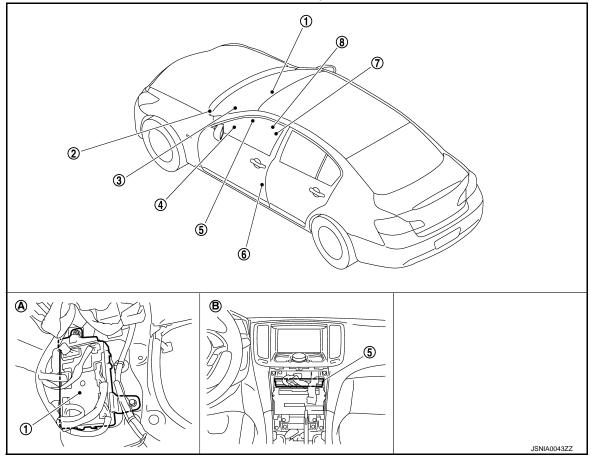
WCS-7 Revision: 2012 August 2013 G Sedan

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LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:0000000008295913



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

LIGHT REMINDER WARNING CHIME : Component Description

INFOID:0000000008295914

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 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 door switch (driver side)	Transmits the door switch signal to BCM.	

SEAT BELT WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

SEAT BELT WARNING CHIME: System Diagram

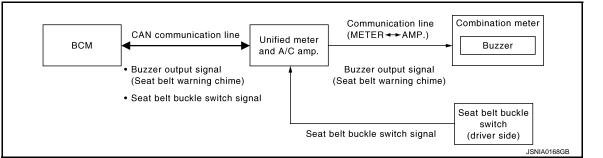


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SEAT BELT WARNING CHIME: System Description

INFOID:0000000008295916

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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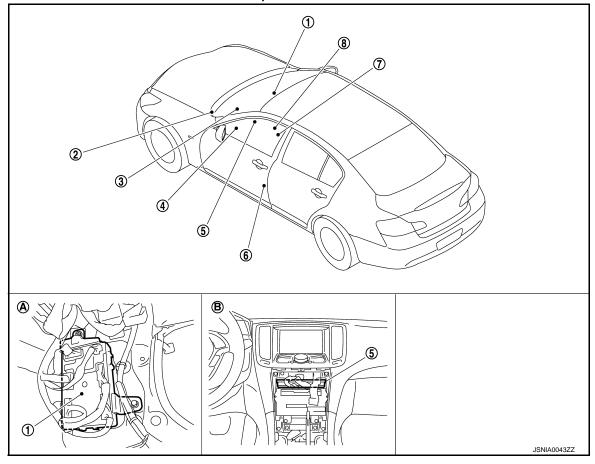
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SEAT BELT WARNING CHIME: Component Parts Location

INFOID:0000000008295917



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

SEAT BELT WARNING CHIME : Component Description

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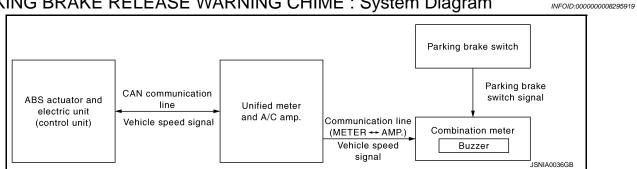
Unit	Description	
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.	
Unified meter and A/C amp.	 Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM via CAN communication line. Receives a buzzer 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 condition from the seat belt buckle switch signal received from 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



PARKING BRAKE RELEASE WARNING CHIME: System Description

INFOID:0000000008295920

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 communi-
- 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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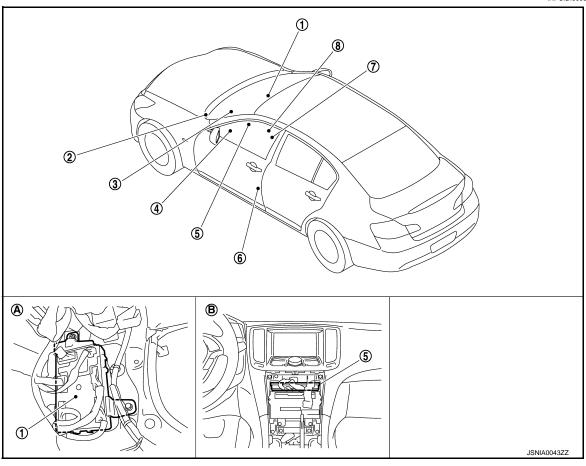
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PARKING BRAKE RELEASE WARNING CHIME: Component Parts Location

IFOID:0000000008295921



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

- 3. Combination meter
- 6. Front door switch (driver side)

PARKING BRAKE RELEASE WARNING CHIME: Component Description INFOID-000000000295922

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 communication 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:0000000008838198

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	Self Diagnostic Result	Unified meter and A/C amp. checks the conditions and displays memorized error.
METERVINICA	Data Monitor	Displays unified meter and A/C amp. input/output data in real time.

SELF DIAG RESULT

Refer to MWI-85, "DTC Index".

DATA MONITOR

NOTE:

[On/Off]

SLIP IND

BRAKE W/L

[On/Off]

[On/Off]

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

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [km/h]	×	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/h or mph]		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 [lit.]	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		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

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NOTE:

ceived from ABS actuator and electric unit (control unit) with CAN communication

Status of VDC warning lamp judged from VDC warning lamp signal received from

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.

ABS actuator and electric unit (control unit) with CAN communication line.

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

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< SYSTEM DESCRIPTION >

Display item [Unit] MAII SIGNA		S 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 Ewith CAN communication line.		
SET IND [On/Off]		Status of set indicator judged from ASCD SET indicator signal received from 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 [Off]		This item is displayed, but cannot be monitored.		
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 signar 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.	
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.	
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 [On/Off]		Status of set vehicle speed indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
ACC UNIT [On/Off]		Status of display unit judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
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 mod indicator signal received from TCM with CAN communication line.	
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 manual mode shift up switch.	
AT SFT DWN SW [On/Off]		Status of manual mode shift down switch.	
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.	
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.	
COMP FB 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]	×	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)

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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

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

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

NOTE:

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" (Vehicle is stopping and selector lever is except P position.)	
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	
	ACC>OFF	Power position status of the moment a particular DTC is detected	While turning power supply position from "ACC" to "OFF"	
V 1 · 1 · 0 · 10 ·	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:0000000008295925

CONSULT APPLICATION ITEMS

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

Test item	Diagnosis mode	node Description	
BUZZER	Data Monitor	Displays BCM input data in real time.	
BOZZEK	Active Test	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	
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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WCS

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER: Diagnosis Procedure

INFOID:0000000008838200

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.)	
Combination meter		(–)	ignition switch		
Connector	Terminals				
M53	1	Ground	OFF	Battery voltage	
	21	Glound	ON	Battery voltage	

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	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:0000000008838201

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
Unified meter			ignition switch	(Approx.)		
Connector	Terminals					
	54		OFF			
M67	41	Ground	ACC	Battery voltage		
	53		ON			

Is the inspection result normal?

YES >> GO TO 3.

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

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	Terminals	Ground		
M67	55	Glound	Existed	
	71		LXISTEU	

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.	
Pottony navor 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 (Approx.)
В	СМ		(Approx.)
Connector	Terminal	Ground	
M118	1	Giodila	Detterne
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	Terminal	Ground	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:0000000008295929 • 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:0000000008295930 1. CHECK OPERATION OF METER BUZZER Select "BUZZER" of "BCM" on CONSULT. D Perform "LIGHT WARN ALM" of "ACTIVE TEST". 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" for the "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-81, "Removal and Installation". Diagnosis Procedure INFOID:0000000008295931 $oldsymbol{1}$.CHECK POWER SUPPLY OF COMBINATION METER Check power supply of combination meter. Refer to MWI-51, "COMBINATION METER: Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. K >> Repair power supply circuit of combination meter. NO 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 MWI-51, "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:000000008295932

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

Component Function Check

INFOID:0000000008295933

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:0000000008295934

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

- 1. 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	
		(-)	Condition	(Approx.)	
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	Unified meter and A/C amp.		Seat belt buckle switch (driver side)	
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 2	When seat belt is fastened	Not existed	
1 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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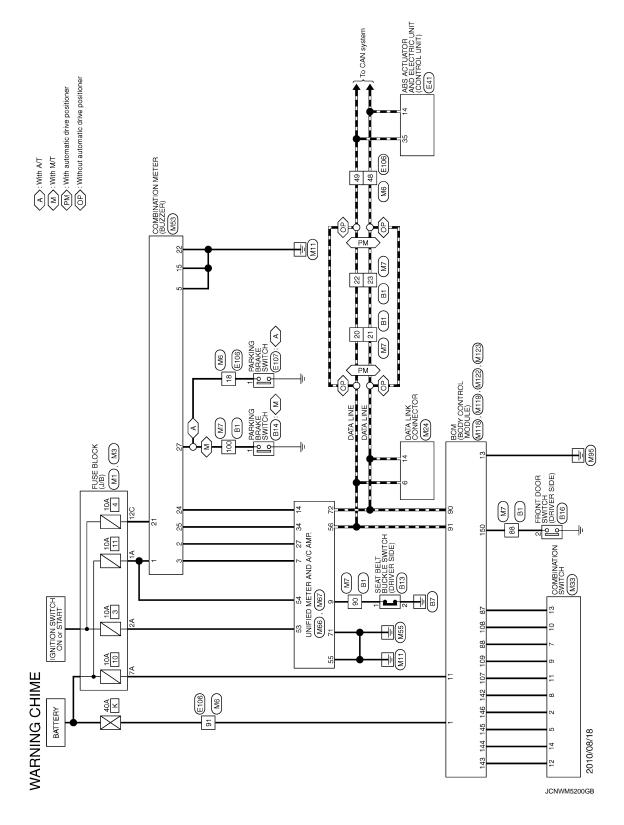
Revision: 2012 August WCS-25 2013 G Sedan

WARNING CHIME SYSTEM

Wiring Diagram - WARNING CHIME -

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (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

VALUES ON THE DIAGNOSIS TOOL

Refer to WCS-34, "Reference Value".

TERMINAL LAYOUT

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

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PHYSICAL VALUES

	nal No. e color)	Description		Condition		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	0	Alternator cianal	Innut	Ignition switch	Charge warning lamp ON	0 V						
(W)	Ground	Alternator signal				input	input	input	input	ON	Charge warning lamp OFF	12 V
7	Ground	Air bag signal	Input	Ignition switch	Air bag warning lamp ON	4 V						
(LG)	Giodila	All bay signal	1			input	input	input	ON	Air bag warning lamp OFF	0 V	
10	Ground	Socurity signal	Input	Ignition switch	Security warning lamp ON	0 V						
(W)			OFF	Security warning lamp OFF	12 V							

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< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire 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 ON	0 V	
27 (P)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake OFF	(V) 8 4 0 10 ms JSNIA0007GB	

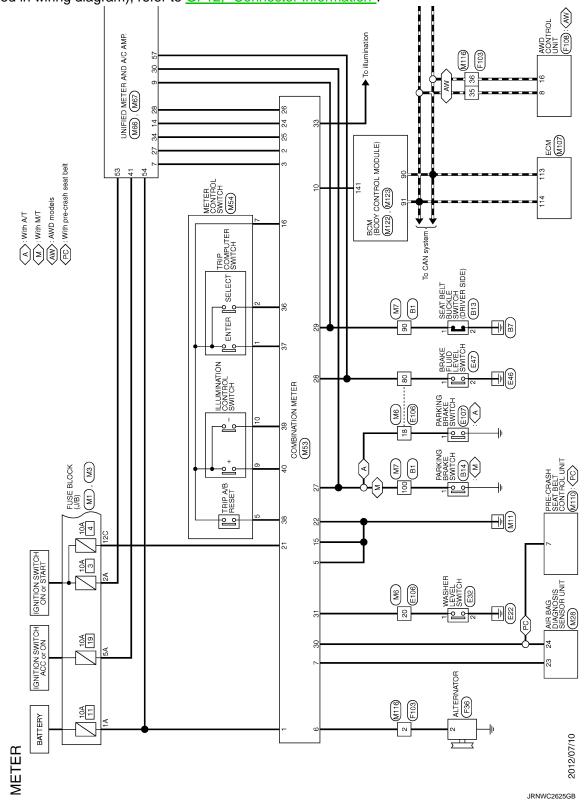
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color) Description		0 - 187		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 sig-	Input	Ignition switch	When driver seat belt is fastened	12 V	
(P)	Ground	nal (driver side)	mput	ON	When driver seat belt is un- fastened	0 V	
30	Ground	Seat belt buckle switch sig-	la conf	Ignition switch	When getting in the passenger seatWhen passenger seat belt is fastened	12 V	
(G)	2) Ground nat (nassenger side) Input Swi	• When getting in the passenger seat • When passenger seat • When passenger seat belt is unfastened	0 V				
31 0	Ground	Week as level assitely size at	1	Ignition	Washer level switch ON	0 V	
(L)	Ground	Washer level switch signal	Input	switch ON	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 2 ms JSNIA0010GB	
36	16	Select switch signal	Input	Ignition switch	When is pressed	0 V	
(LG)	(BR)	J		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		Ignition	Other than the above When 55 switch is	5 V 0 V	
(P) (BR)		signal (–)	Input		Other than the above	5 V	
40	16	Illumination control switch	Innut	Ignition switch	When 👣 + switch is pressed	0 V	
(BG) (BR)	signal (+)	Input	ON	Other than the above	5 V		

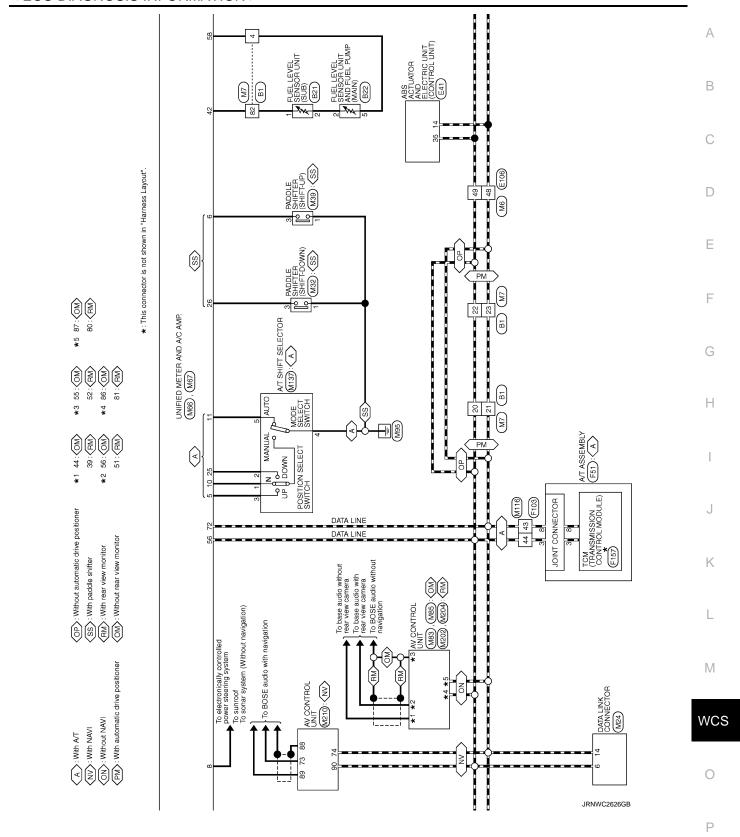
Wiring Diagram - METER -

INFOID:0000000008838204

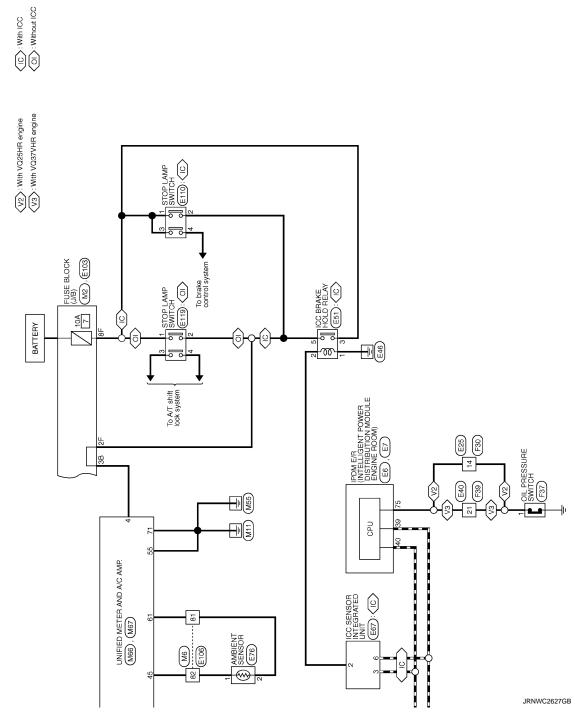
For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



< ECU DIAGNOSIS INFORMATION >



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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		Poset to zero by suspending communication	
Fuel gauge		Reset to zero by suspending communication.	
Engine coolant temperatur	e gauge		
	Door open warning		
	Parking brake release warning	The display turns off by suspending communication.	
	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 seconds, the last result calculated during normal condition is indicated.	
	Travel distance		
Illumination control		When suspending communication, change to nighttime mode.	
Buzzer		The buzzer turns off by suspending communication.	
	ABS warning lamp	The lamp turns on by suspending communication.	
	Brake warning lamp		
	CRUISE warning lamp		
	Malfunction indicator lamp		
	High beam indicator		
	Turn signal indicator lamp		
	Oil pressure warning lamp		
	A/T CHECK warning lamp		
Warning lamp/indicator lamp	VDC warning lamp		
·· F	VDC OFF indicator lamp		
	AWD warning lamp	The lamp turns off by suspending communication.	
	Low tire pressure warning lamp		
	Key warning lamp		
	AFS OFF indicator lamp		
	Master 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 malfunction signal is received	
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received	
ODO OUTPUT [km/h] or [mph]	Ignition switch ON	_	Equivalent to odometer reading in combination meter	
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading NOTE: 8191.875 is displayed when the malfunction signal is received	
FUEL METER [lit.]	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 ON	Fuel filler cap warning display ON	On	
FUEL CAP W/L		Fuel filler cap warning display OFF	Off	
ABS W/L	Ignition switch ON	ABS warning lamp ON	On	
ABO W/E		ABS warning lamp OFF	Off	
VDC/TCS IND	Ignition switch ON	VDC OFF indicator lamp ON	On	
126/166 HtB		VDC OFF indicator lamp OFF	Off	
SLIP IND	Ignition switch ON	VDC warning lamp ON	On	
OEN 1112		VDC warning lamp OFF	Off	
BRAKE W/L	Ignition switch ON	Brake warning lamp ON	On	
510 II.E 11/E		Brake warning lamp OFF	Off	
DOOR W/L	Ignition switch ON	Door warning displayed	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 ON	Hi-beam indicator lamp ON	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 ON	Front fog lamp indicator lamp 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	
	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	
	Ignition switch ON	Malfunction warning lamp ON	On	
MIL		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	
CDI IICE IND	Ignition switch	Cruise indicator displayed	On	
CRUISE IND	ŎN	Cruise indicator not displayed	Off	
SET IND	Ignition switch	Set indicator lamp ON	On	
SET IND	ON	Set indicator lamp OFF	Off	
CRUISE W/L	Ignition switch ON	Cruise warning lamp ON	On	
CRUISE W/L		Cruise warning lamp OFF	Off	
BA W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
ATO/T ABAT \A//I	Ignition switch ON	A/T check warning lamp ON	On	
ATC/T-AMT W/L		A/T check warning lamp OFF	Off	
414/15 14//	Ignition switch ON	AWD warning lamp ON	On	
4WD W/L		AWD warning lamp OFF	Off	
4WD LOCK IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
	Ignition switch ON	Low-fuel warning displayed	On	
FUEL W/L		Low-fuel warning not displayed	Off	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Ignition switch ON	Washer warning displayed	On	
WASHER W/L		Washer warning not displayed	Off	
AID DDEC W//	Ignition switch ON	Low tire pressure lamp ON	On	
AIR PRES W/L		Low tire pressure lamp OFF	Off	
KEN CW W/I	Ignition switch ON	Key warning lamp ON	On	
KEY G/Y W/L		Key warning lamp OFF	Off	
AES OEE IND	Ignition switch ON	AFS OFF indicator lamp ON	On	
AFS OFF IND		AFS OFF indicator lamp OFF	Off	
4WAS/RAS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
DDS 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 Off	
LANE W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.		
LDP IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
	Ignition switch ON	Engine start information display (A/T model)	B&P I	
		Engine start information display (M/T model)	C&P I	
	Ignition switch	Engine start information display (A/T model)	B&P N	
	ACC	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	ACC warning display	LK WN	
	Ignition switch ON	Vehicle ahead detection indicator displayed	On	
ACC TARGET		Vehicle ahead detection indicator not displayed	Off	
	E Ignition switch ON	When following distance set to "LONG"	LONG	
ACC DISTANCE		When following distance set to "MIDDLE"	MID	
ACC DISTANCE		When following distance set to "SHORT"	SHORT	
		Set distance indicator not displayed	Off	
ACC OWN VHL	Ignition switch ON	Own vehicle indicator displayed	On	
NOO OWN VIIL		Own vehicle indicator not displayed	Off	
ACC SET SPEED	Ignition switch ON	Set vehicle speed indicator not displayed	Off	
		Set vehicle speed indicator displayed	On	
ACC UNIT	Ignition switch ON	Set vehicle speed indicator unit display ON	On	
ACC CIVIT		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 RANGE SW	Ignition switch	Selector lever manual mode position	On
W RANGE SW	ON	Other than the above	Off
NIM DANCE OW	Ignition switch	Selector lever manual mode position	Off
NM RANGE SW	ON	Other than the above	On
AT OFT UP OW	Ignition switch	Selector lever + position	On
AT SFT UP SW	ON	Other than the above	Off
AT OFT DIAM OW	Ignition switch	Selector lever – position	On
AT SFT DWN SW	ON	Other than the above	Off
OT OFT UP OW	Ignition switch	Paddle shifter switch up operation	On
ST SFT UP SW	ON	Other than the above	Off
OT OFT DIAME ON	Ignition switch	Paddle shifter switch down operation	On
ST SFT DWN SW	ŎN	Other than the above	Off
OOMB E/D OLO	Ignition switch	A/C compressor activation condition	On
COMP F/B SIG	ŎN	A/C compressor deactivation condition	Off
4WD LOCK SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
	Ignition switch	Parking brake switch ON	On
PKB SW	ŎN	Parking brake switch OFF	Off
	Ignition switch	Seat belt not fastened	On
BUCKLE SW	ON	Seat belt fastened	Off
	Ignition switch	Brake fluid level switch ON	On
BRAKE OIL SW	ŎN	Brake fluid level switch OFF	Off
DISTANCE [km]	Ignition switch ON	_	Possible driving distance calculated by unified meter and A/C amp.
	Ignition switch ON	_	Equivalent to ambient temperature NOTE: This may not match the indicated value on the information display.
FUEL LOW OLO	Ignition switch	Low-fuel warning displayed	On
FUEL LOW SIG	ON	Low-fuel warning not displayed	Off
	Ignition switch ON Ignition switch ON Ignition switch	— Low-fuel warning displayed	Possible driving distance calculated unified meter and A/C amp. Equivalent to ambient temperature NOTE: This may not match the indicated ue on the information display. On

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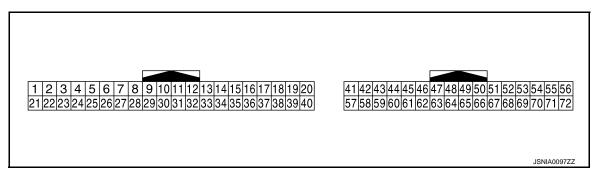
< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition Value/Status	
BI 177FR	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	Otan lama suitala sisual	la a cat	Ignition	Brake pedal is depressed	12 V
(G)	Ground	Stop lamp switch signal	Input	switch OFF	Other than the above	0 V
5	Cravinal	Manual mode shift up sig-	فيسما	Ignition	Selector lever UP operation	0 V
(L)	Ground	nal	Input	switch ON	Other than the above	12 V
				Ignition	Selector lever DS position	0 V
6 (BG)	Ground	Paddle shifter up signal	Input	switch ON	Paddle shift up operation	O V
				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 output (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		Seat belt buckle switch sig-		Ignition	When seat belt is fastened	12 V
(SB)	Ground	nal (driver side)	Input	switch ON	When seat belt is not fas- tened	0 V

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
10				Ignition	Selector lever DS position	0 V
(W)	Ground	Manual mode signal	Input	switch ON	Other than the above	12 V
11 (G)	Ground	Not manual mode signal	Input	Ignition switch ON	Selector lever DS position Other than the above	12 V 0 V
14 (BR)	Ground	Communication signal (LCD → AMP.)	Input	Ignition switch ON	_	(V) 15 10 5 0 400 µs JSNIA0028GB
23	0	A/T are annual state at are al	lanut	Ignition	Snow mode switch ON	12 V
(Y)	Ground	A/T snow switch signal	Input	switch ON	Snow mode switch OFF	0 V
25 (V)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Selector lever down operation	0 V
				ON	Other than the above	12 V
26 (G)	Ground	Paddle shifter down signal	Input	Ignition switch ON	Selector lever DS position Paddle shift down operation	0 V
					Other than the above	12 V
27 (LG)	Ground	Communication signal (METER → AMP.)	Input	Ignition switch ON	_	(V) 6 4 2 0 1ms SKIA3361E
28 (R)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).
					Parking brake ON	0 V
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake OFF	(V) 8 4 0 10 ms JSNIA0007GB

olor)	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 >

	nal No. 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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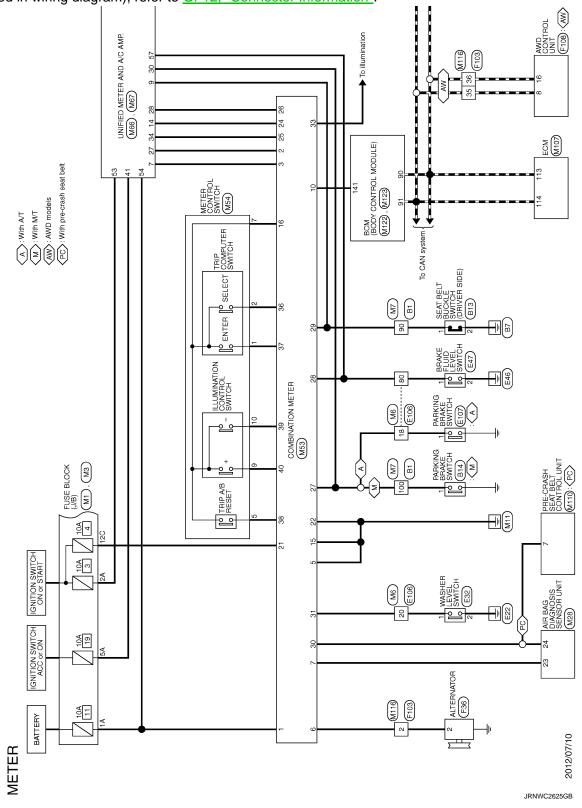
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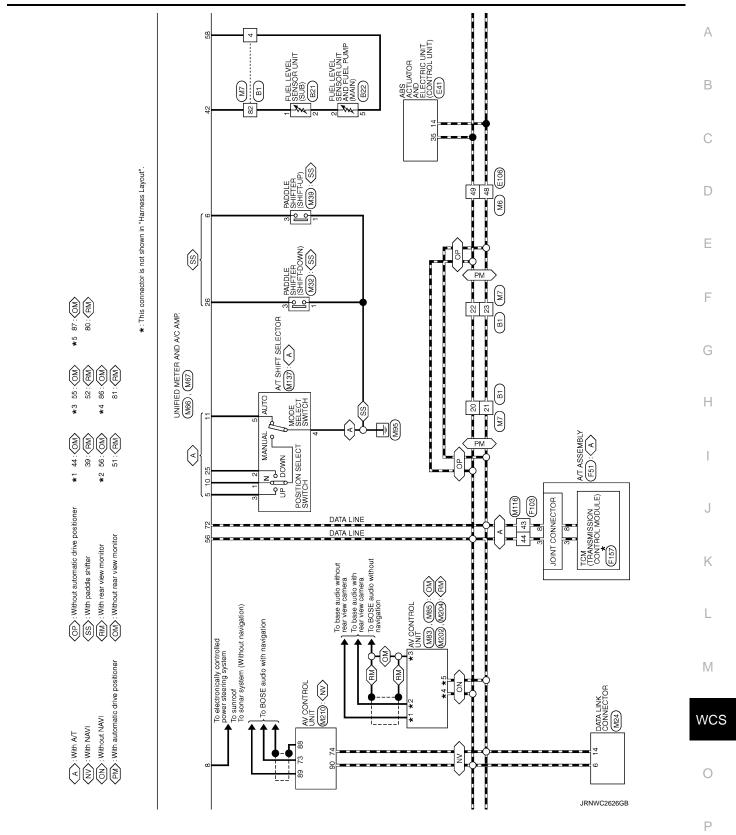
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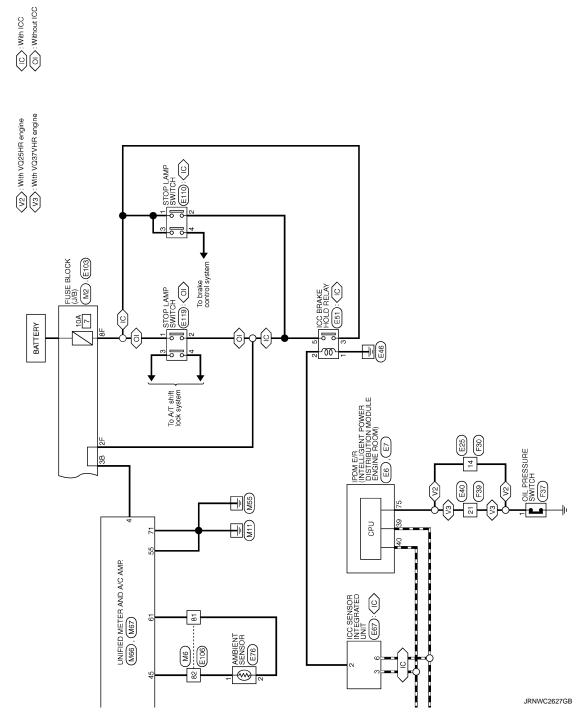
Wiring Diagram - METER -

INFOID:0000000008838208

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (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		Poset to zero by supponding communication	
Fuel gauge		Reset to zero by suspending communication.	
Engine coolant temperatur	re gauge		
	Door open warning		
	Parking brake release warning	The display turns off by suspending communication.	
	Low tire pressure warning	— The display turns on 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 indicated.	
Illumination control		When suspending communication, change to nighttime mode.	
Buzzer		The buzzer turns off by suspending communication.	
_	ABS warning lamp		
	Brake warning 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		
	A/T CHECK warning lamp		
Warning lamp/indicator lamp	VDC warning lamp		
ь	VDC OFF indicator lamp		
	AWD warning lamp	The lamp turns off by suspending communication.	
	Low tire pressure warning lamp		
	Key warning lamp		
	AFS OFF indicator lamp		
	Master warning lamp		
	Tail lamp indicator lamp		
	Front fog lamp indicator lamp		

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Display contents of CON- SULT	Time	Diagnostic item is detected when	Refer to
CAN COMM CIRCUIT [U1000]	CRNT, 1 - 39	When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-42, "Diagnosis Procedure"
CONTROL UNIT (CAN) [U1010]	CRNT, 1 - 39	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	MWI-43, "Diagnosis Procedure"
COMM ERROR 1 [B2201]	CRNT, 1 - 39	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, "Diagnosis Procedure"

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< ECU DIAGNOSIS IN	0	>	
Display contents of CON- SULT	Time	Diagnostic item is detected when	Refer to
COMM ERROR 2 [B2202]	CRNT, 1 - 39	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-46, "Diagnosis Procedure"
VEHICLE SPEED [B2205]	CRNT, 1 - 39	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-48, "Diagnosis Procedure"
ENGINE SPEED [B2267]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-49, "Diagnosis Procedure"
WATER TEMP [B2268]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-50. "Diagnosis Procedure"

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

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
FR WIPER HI	Other than front wiper switch HI	Off
I IX WIF LIX I II	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
FR WIFER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
FR WIFER INT	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 CIONIAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LANAD CVA	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LIL DE AM CIA/	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
LIEAD LAMB CVV C	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DACCING CW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIGHT CW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
ED EOC SW	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOD CW AC	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOD SW DD	Rear RH door closed	Off
DOOR SW-RR	Rear LH door opened	On

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Monitor Item	Condition	Value/Status
DOOR SW-RL	Rear LH door closed	Off
DOOK SW-KL	Rear LH door opened	On
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 LINII OCK SW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
CEV CVI LIC CW	Other than driver door key cylinder LOCK	Off
KEY CYL LK-SW	Driver door key cylinder LOCK	On
CEV CVI LINI CW	Other than driver door key cylinder UNLOCK	Off
KEY CYL UN-SW	Driver door key cylinder LOCK	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
IAZADD CW	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
ED CANCEL OW	Trunk lid opener cancel switch OFF	Off
ΓR CANCEL SW	Trunk lid opener cancel switch ON	On
ED/DD ODEN CW	Trunk lid opener switch OFF	Off
ΓR/BD OPEN SW	While the trunk lid opener switch is turned ON	On
	Trunk lid closed	Off
FRNK/HAT MNTR	Trunk lid opened	On
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
2/2 / 22/	LOCK button of the Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On
	TRUNK OPEN button of the Intelligent Key is not pressed	Off
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is pressed	On
	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
	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V
	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On

Monitor Item	Condition	Value/Status	_
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	_
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	
DEO CW. DD/TD	Trunk lid opener request switch is not pressed	Off	_
REQ SW -BD/TR	Trunk lid opener request switch is pressed	On	-
DUCH CW	Push-button ignition switch (push switch) is not pressed	Off	-
PUSH SW	Push-button ignition switch (push switch) is pressed	On	_
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off	_
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	=
CLUCH SW	The clutch pedal is not depressed	Off	_
CLUCH SW	The clutch pedal is depressed	On	_
	The brake pedal is depressed when No. 7 fuse is blown	Off	_
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On	_
DDAKE OW 2	The brake pedal is not depressed	Off	_
BRAKE SW 2	The brake pedal is depressed	On	_
DETE/CANCL SW	Selector lever in P position (Except M/T models) The clutch pedal is depressed (M/T models)	Off	=
DETE/CANCE SW	 Selector lever in any position other than P (Except M/T models) The clutch pedal is not depressed (M/T models) 	On	_
SFT PN/N SW	Selector lever in any position other than P and N	Off	_
3F1 PIN/IN 3W	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	
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off	_
UNLK SEN -DR	Driver door is unlocked	Off	_
	Driver door is locked	On	_
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	_
	Push-button ignition switch (push-switch) is pressed	On	_
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	
	Ignition switch in ON position	On	V
DETE SW -IPDM	Selector lever in any position other than P	Off	
DE.E 011 11 DIVI	Selector lever in P position	On	_
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	_
	Selector lever in P or N position (Except M/T models) The clutch pedal is depressed (M/T models)	On	_
SFT P -MET	Selector lever in any position other than P	Off	_
	Selector lever in P position	On	_
SFT N -MET	Selector lever in any position other than N	Off	•
OI IN -WIL I	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 (Shift position is in the P position)	Reset
	Ignition switch ON	Set
DDMT ENG CTDT	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 CW CLOT	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
CONFRIVI ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIDM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIDMIDS	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIDMIDS	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 DI 4	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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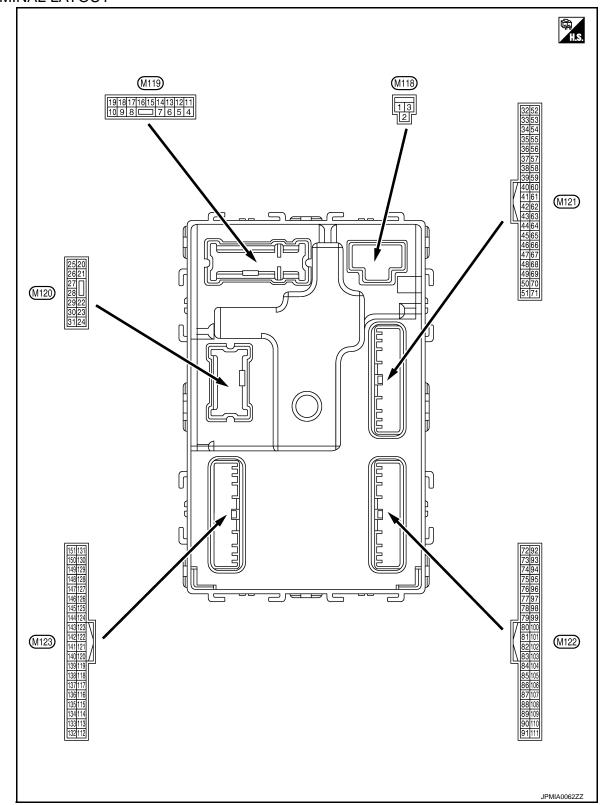
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TERMINAL LAYOUT



PHYSICAL VALUES

	nal No.	Description	Ι .		Condition	Value	
+	_	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 (DN	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	Juiput	door	Other than UNLOCK) Actuator is not activated	0 V	
7	Graves	Stop Jama	Outeris	Stop lamp	ON	0 V	
(SB)	Ground	Step lamp	Output	Step lamp	OFF	12 V	
8	Ground	All doors, fuel lid	Output	All doors, fuel	LOCK (Actuator is activated)	12 V	
(V)	Giound	LOCK	Output	IIG	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	
10	Ground	Rear RH door and rear LH door UN-	Outout	Rear RH door		UNLOCK (Actuator is activated)	12 V
(P)	Ground	LOCK	Output	door	Other than UNLOCK (Actuator is not activated)	0 V	
11 (R)	Ground	Battery power supply	Input	Ignition switch (OFF	Battery voltage	
13 (B)	Ground	Ground	_	Ignition switch (ON	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.	
					OFF (LOCK indicator is	Z ms JSNIA0010GB	
15 (BG)	Ground	ACC indicator lamp	Output	Ignition switch	not illuminated)	Battery voltage	
(20)					ACC	0 V	

	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 11 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 FKID0926E 6.5 V
19	0	Interior room lamp	0	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	Tambidana	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	A
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	F
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	C
34 (SB)	Ground	Trunk room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	E
35		Trunk room antenna		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 11 1 s JMKIA0062GB	(-
(V)	Ground	(+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	ŀ
38		Rear bumper anten-		When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 1	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 0 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	Ground	Ignition relay (IPDM	Output	Ignition switch	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

	nal No. color)	Description			0 100	Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	
					Pressed	0 V	В
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Not pressed	(V) 15 10 5 0 10 ms 10 ms JPMIA0011GB	C
68 (BG)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms 10 ms JPMIA0011GB	E F
					ON (When rear RH door opens)	0 V	Н
69 (L)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	J
					ON (When rear LH door opens)	0 V	K
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0	L
72 (R)	Ground	Room antenna 2 (–) (Center console)	Output	Ignition switch OFF		JMKIA0062GB	WC
					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0	0
						1 s	Р

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
70		Poom antonna 2 (1)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
74	Ground	Passenger door an-	Output	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)	Glound	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-	Output	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(BR)	Giouria	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

	nal No. color)	Description	I		O Bit	Value	А
+	- COIOF)	Signal name	Input/ Output		Condition	(Approx.)	\wedge
76	Ground	Driver door antenna	Outout	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	ВС
(V)	Glound	(-)	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 1 s JMKIA0063GB	E F
							G
					When Intelligent Key is in the antenna detection area	(V) 15 10 5 0	Н
77	Ground Dilver door afficilità Output switch is oper-	when the driv- er door request switch is oper-		JMKIA0062GB	I		
(LG)		(+)		ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0	J K
						JMKIA0063GB	L
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	M WCS
78 (Y)	Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF			0
					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	Р

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
79	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(BR)		(Instrument panel)		OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
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)	Giouria	tion	Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms JMKIA0065GB

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	Λ
+ (VVire	color)	Signal name	Input/ Output		Condition	(Approx.)	Α
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	В
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 1.3 V	E
					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 1.3 V	G H

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	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
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)	Sistant	INPUT 3		switch	Lighting switch 2ND (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 3	(V) 15 10 5 0 2 ms JPMIA0040GB
90 (P)	Ground	CAN-L	Input/ Output		_	_
91 (L)	Ground	CAN-H	Input/ Output		_	_
			'		OFF	12 V
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	Blinking	(V) 15 10 10 1 s JPMIA0015GB
					ON OFF (LOCK indicator is	0 V
93 (GR)	Ground	ON indicator lamp	Output	Ignition switch	not illuminated)	Battery voltage
. ,					ON	0 V

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Open dittions		Value
+	-	Signal name	Input/ Output	Condition		(Approx.)
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BG)	0.00	-	o a.pa.	.9	ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
		Selector lever P posi-		Selector lever	P position	0 V
		tion switch (A/T models)		Selector level	Any position other than P	12 V
99		ASCD clutch switch (M/T models without		ASCD clutch	OFF (Clutch pedal is depressed)	0 V
(R)* ¹ (BR)* ²	Ground	ICC)	Input	switch	ON (Clutch pedal is not depressed)	12 V
		ICC clutch switch (M/ T models with ICC)		ICC clutch switch	OFF (Clutch pedal is depressed)	0 V
					ON (Clutch pedal is not depressed)	12 V
		Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
100 (Y)	Ground				OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 10 ms JPMIA0016GB 1.0 V
102	Cround	Blower fan motor re-	Outout	lanition switch	OFF or ACC	0 V
(BG)	Ground	lay control	Output	Ignition switch	ON	12 V
103 (P)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch C	DFF	12 V

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

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description			2 111	Value	А
+	-	Signal name	Input/ Output		Condition (Approx.)		/ (
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	С
108			Combination	Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	E	
(R)	Clound	INPUT 4		switch	Lighting switch 1ST (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	G H
					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	J K
						1.3 V	L

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

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	nal No.	Description			2	Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 JPMIA0156GB 8.7 V
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(BG)	Ground	Optical serisor	Input	ON	When dark outside of the vehicle	Close to 0 V
114	Ground	Clutch interlock	Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V
(R)	Ground	switch	прис	switch	ON (Clutch pedal is depressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2	_ Input	Stop lamp	OFF (Brake pedal is not depressed)	0 V
118	Ground			switch	ON (Brake pedal is depressed)	Battery voltage
(BR)				Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF		0 V
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage
119 (SB)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB
					UNLOCK status (Unlock switch sensor ON)	1.1 V 0 V
121	Ground	Key slot switch	Input	When the Intellig	gent Key is inserted into key	12 V
(SB)	Giouria	izak pior palifeli	Input	When the Intellig	gent Key is not inserted into	0 V
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(V)					ON	Battery voltage

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
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
					ON	1.1 V 0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB
				Ignition switch C	†	12 V
				Push-button ig-	ON (Tail lamps OFF)	9.5 V NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15
133 (L)	Ground	Push-button ignition switch illumination	Output	nition switch illumination	ON (Tail lamps ON)	JPMIA0159GB
					OFF OFF	0 V
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage 0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(V)		power supply		go 5 miles	ACC or ON	5.0 V

Terminal No. (Wire color) Description				Value			
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)	Α
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	С
(L)	Cround	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 ••• 0.2s	E
140 (B)	Ground	Selector lever P/N position	Input	Selector lever	P or N position Except P and N positions	12 V 0 V	
(-)		p-c			ON	0 V	G
141 (W)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking	(V) 15 10 5 0 1 s JPMIA0014GB	l J
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	K
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 10.7 V	C

	nal No.	Description				Value
+	color)	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	Combination switch	Any of the conditions below with all switches OFF Wiper volume dial 1 Wiper volume dial 5 Wiper volume dial 6	15 10 5 0 2 ms JPMIA0033GB
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V)
145		Combination switch OUTPUT 3	Output	Combination switch (Wiper volume dial 4)	Front wiper switch LO	15
(L)	Ground				Lighting switch AUTO	5 0 2 ms JPMIA0034GB 10.7 V
		Combination switch OUTPUT 4			All switches OFF	0 V
					Front fog lamp switch ON	
				Combination	Lighting switch 2ND	(V) 15
146	Ground		Output	switch	Lighting switch PASS	10
(SB)			'	(Wiper volume dial 4)	Turn signal switch LH	0
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)	2.34.14	ger relay control	- Sipat	defogger	Not activated	Battery voltage

^{• *1:} A/T models

^{• *2:} M/T models

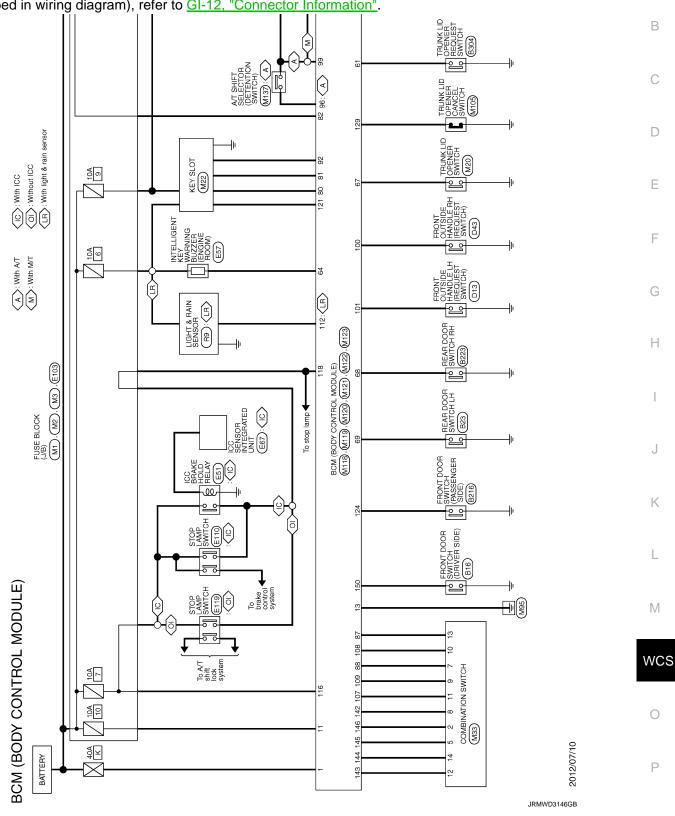
< ECU DIAGNOSIS INFORMATION >

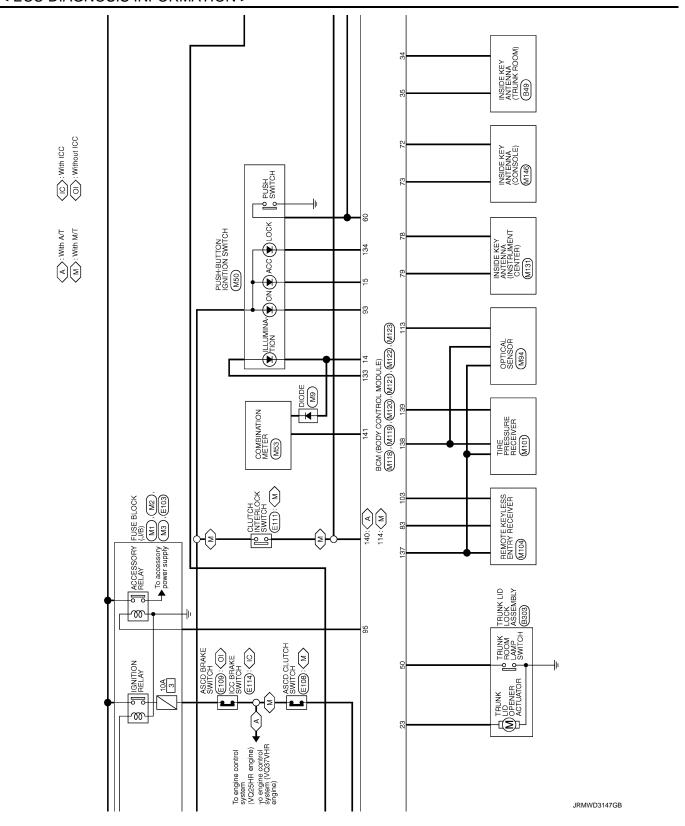
Wiring Diagram - BCM -

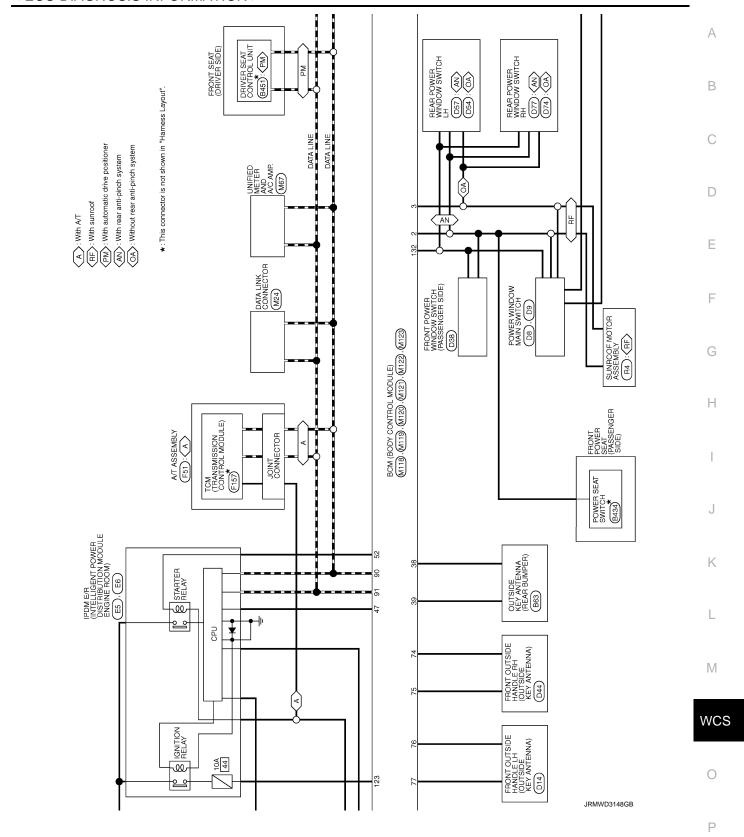
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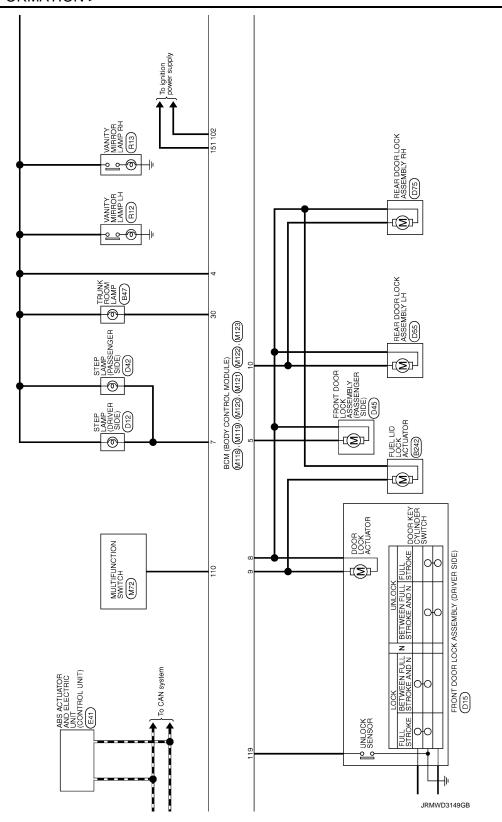
Α

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









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FAIL-SAFE CONTROL BY DTC

Fail-safe

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:0000000008838214

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 INFOID:0000000008838215

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 Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor 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-44

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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-47</u>
B2192: ID DISCORD BCM-ECM	×	_	_	_	<u>SEC-48</u>
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-50
B2195: ANTI-SCANNING	×	_	_	_	SEC-51
B2553: IGNITION RELAY	_	×	_	_	PCS-46
B2555: STOP LAMP	_	×	_	_	SEC-52
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-54
B2557: VEHICLE SPEED	×	×	×	_	SEC-56
B2560: STARTER CONT RELAY	×	×	×	_	SEC-57
B2562: LOW VOLTAGE	_	×	_	_	BCS-39
B2601: SHIFT POSITION	×	×	×	_	SEC-58
B2602: SHIFT POSITION	×	×	×	_	SEC-61
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-64
B2604: PNP/CLUTCH SW	×	×	×	_	SEC-67
B2605: PNP/CLUTCH SW	×	×	×	_	SEC-69
B2608: STARTER RELAY	×	×	×	_	SEC-71
B260A: IGNITION RELAY	×	×	×	_	PCS-48
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-73
B2614: BCM	_	×	×	_	PCS-50
B2615: BCM	_	×	×	_	PCS-52
B2616: BCM	_	×	×	_	PCS-54
B2617: BCM	×	×	×	_	SEC-78
B2618: BCM	×	×	×	_	PCS-56
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-57
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-80
B2621: INSIDE ANTENNA	_	×	_	_	DLK-59
B2622: INSIDE ANTENNA	_	×	_	_	DLK-61
B2623: INSIDE ANTENNA	_	×	_	_	DLK-63
B26E8: CLUTCH SW	×	×	×	_	<u>SEC-75</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-77</u>
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	\\/T 20
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-20</u>
C1707: LOW PRESSURE RL	_	_	_	×	
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	WT oo
C1710: [NO DATA] RR	_	_	_	×	<u>WT-22</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	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-25
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u> </u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-26</u>
C1734: CONTROL UNIT	_	_		×	<u>WT-27</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:0000000008295950

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

Diagnosis Procedure

INFOID:0000000008295951

1. CHECK PARKING BRAKE WARNING LAMP

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

Parking brake ON : ON
Parking brake OFF : OFF

Is the inspection result normal?

YES >> Replace the combination meter.

NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform a check for the parking brake switch signal circuit. Refer to <u>MWI-61, "Diagnosis Procedure (A/T models)"</u> (A/T models) or <u>MWI-62, "Diagnosis Procedure (M/T models)"</u> (M/T models).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK PARKING BRAKE SWITCH UNIT

Perform a unit check for the parking brake switch. Refer to MWI-62, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter.

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

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THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >	1
THE LIGHT REMINDER WARNING DOES NOT SOUND	А
Description INFOID:000000008295952	
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 EXL-128, "Diagnosis Procedure".	
2.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL CIRCUIT	Е
Perform the check for the front door switch (driver side) signal circuit. Refer to <u>DLK-66</u> , " <u>Diagnosis Procedure</u> ". <u>Is the inspection result normal?</u>	
YES >> GO TO 3.	F
NO >> Repair harness or connector. 3.CHECK FRONT DOOR SWITCH (DRIVER SIDE) UNIT	
Perform a unit check for the front door switch (driver side). Refer to <u>DLK-68</u> , "Component Inspection".	G
Is the inspection result normal?	
YES >> Replace the BCM. Refer to <u>BCS-81, "Removal and Installation"</u> . NO >> Replace the front door switch (driver side). Refer to <u>DLK-225, "Removal and Installation"</u> .	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:00000000829595

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

Diagnosis Procedure

INFOID:0000000008295955

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 not fastened : ON

Is the inspection result normal?

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

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

Check the buckle switch input signal with the "Data Monitor". Refer to WCS-24, "Component Function Check".

Is the inspection result normal?

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

NO >> GO TO 3.

3. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

Perform the check for the seat belt buckle switch circuit. Refer to WCS-24, "Diagnosis Procedure".

Is the inspection result normal?

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

NO >> Repair harness or connector.

4. CHECK SEAT BELT BUCKLE SWITCH UNIT

Perform a unit check for the seat belt buckle switch (driver side). Refer to <u>WCS-25, "Component Inspection"</u>. Is the inspection result normal?

YES >> Replace the combination meter.

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

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.

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