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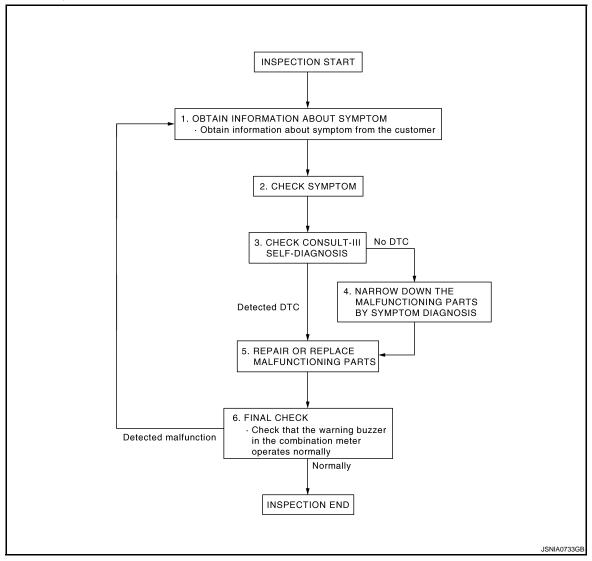
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# **BASIC INSPECTION**

# 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-III SELF-DIAGNOSIS RESULTS

Connect CONSULT-III and perform self-diagnosis. Refer to WCS-13, "CONSULT-III Function (METER/M&A)".

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

#### < BASIC INSPECTION >

Are self-diagnosis results normal?

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

4. NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

# 5. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

NOTE:

If DTC is displayed, erase DTC after 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:0000000005806167

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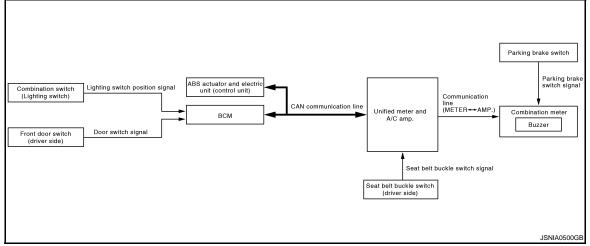
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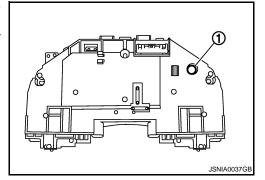


# WARNING CHIME SYSTEM: System Description

INFOID:0000000005806168

#### **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.

#### ВСМ

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	<ul><li>Lighting switch position signal</li><li>Door switch signal</li></ul>
Seat belt warning chime	Seat belt buckle switch signal

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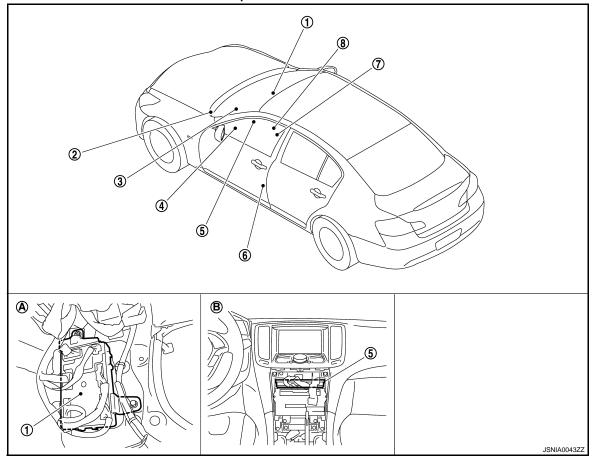
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# WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000005806169



- 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)

# WARNING CHIME SYSTEM : Component Description

INFOID:0000000005806170

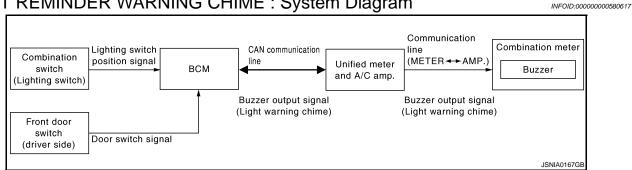
Unit	Description	
Combination meter	<ul> <li>Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.</li> <li>Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. with CAN communication line and the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

#### < 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

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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

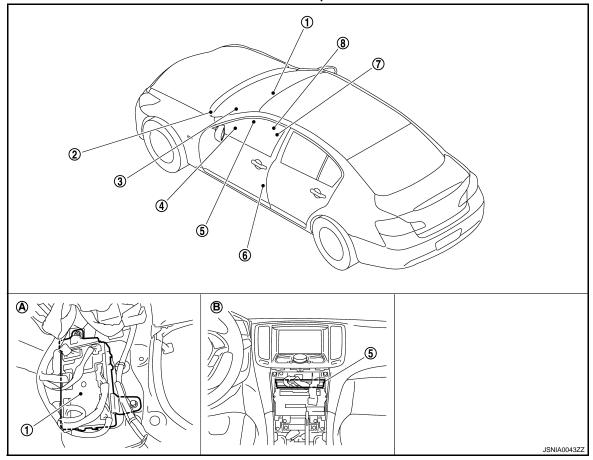
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WCS-7 Revision: 2009 November 2010 G37 Sedan

# LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:000000000580773



- 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

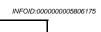
INFOID:0000000005806174

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**

#### < SYSTEM DESCRIPTION >

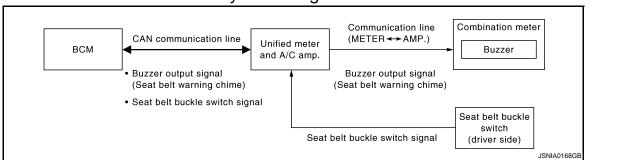
# SEAT BELT WARNING CHIME: System Diagram



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# SEAT BELT WARNING CHIME: System Description

INFOID:0000000005806176

#### **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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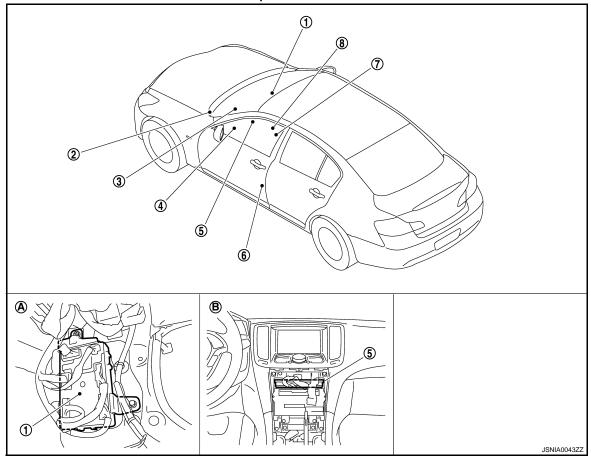
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# SEAT BELT WARNING CHIME: Component Parts Location

INFOID:0000000005807736



- 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

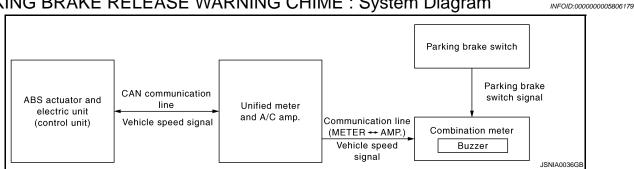
INFOID:0000000005806178

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.	<ul> <li>Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM via CAN communication line.</li> <li>Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line.</li> </ul>		
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

#### < SYSTEM DESCRIPTION >

# PARKING BRAKE RELEASE WARNING CHIME: System Diagram



# PARKING BRAKE RELEASE WARNING CHIME: System Description

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#### 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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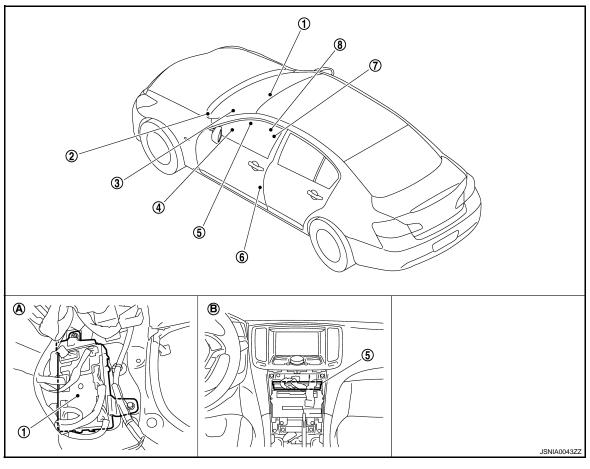
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**WCS-11** Revision: 2009 November 2010 G37 Sedan

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# PARKING BRAKE RELEASE WARNING CHIME: Component Parts Location

VFOID:0000000005807737



- 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-000000005806182

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-III Function (METER/M&A)

INFOID:0000000005886744

X: Applicable

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#### CONSULT-III APPLICATION ITEMS

CONSULT-III 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.
METERNINGA	Data Monitor	Displays unified meter and A/C amp. input/output data in real time.

#### SELF DIAG RESULT

Refer to MWI-107, "DTC Index".

#### DATA MONITOR

Display Item List

TRUNK/GLAS-H

[On/Off]

MAIN Display item [Unit] Description **SIGNALS** Value of vehicle speed signal received from ABS actuator and electric unit (control SPEED METER unit) with CAN communication line. Χ [km/h] NOTE: 655.35 is displayed when the malfunction signal is received. Vehicle speed signal value transmitted to other units with CAN communication SPEED OUTPUT line. Χ NOTE: [km/h] 655.35 is displayed when the malfunction signal is received. ODO OUTPUT Odometer signal value transmitted to other units with CAN communication line. [km/h or mph] Value of the engine speed signal received from ECM with CAN communication **TACHO METER** line. Χ [rpm] NOTE: 8191.875 is displayed when the malfunction signal is received. **FUEL METER** Χ Fuel level indicated on combination meter. Value of engine coolant temperature signal received from ECM with CAN commu-W TEMP METER nication line. Χ NOTE: [°C] 215 is displayed when the malfunction signal is input. ABS W/L Status of ABS warning lamp judged from ABS warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line. [On/Off] Status of VDC OFF indicator lamp judged from VDC OFF indicator lamp signal re-VDC/TCS IND WCS ceived from ABS actuator and electric unit (control unit) with CAN communication [On/Off] SLIP IND Status of SLIP indicator lamp judged from slip indicator lamp signal received from [On/Off] 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. BRAKE W/L [On/Off] Displays "Off" if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON. DOOR W/L Status of door warning judged from door switch signal received from BCM with [On/Off] CAN communication line.

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CAN communication line.

Status of trunk warning judged from trunk switch signal received from BCM with

### < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
HI-BEAM IND [On/Off]		Status of high beam indicator lamp judged from high beam request signal received from BCM with CAN communication line.
TURN IND [On/Off]		Status of turn indicator lamp judged from turn indicator signal received from BCM with CAN communication line.
FR FOG IND [On/Off]		Status of front fog lamp indicator lamp judged from front fog light request signal received from BCM with CAN communication line.
RR FOG IND [Off]		This item is displayed, but cannot be monitored.
LIGHT IND [On/Off]		Status of tail lamp indicator lamp judged from position light request signal received from BCM with CAN communication line.
OIL W/L [On/Off]		Status of oil pressure warning lamp judged from oil pressure switch signal received from IPDM E/R with CAN communication line.
MIL [On/Off]		Status of malfunction indicator lamp judged from malfunctioning indicator lamp signal received from ECM with CAN communication line.
GLOW IND [On/Off]		This item is displayed, but cannot be monitored.
C-ENG2 W/L [On/Off]		This item is displayed, but cannot be monitored.
CRUISE IND [On/Off]		Status of CRUISE indicator judged from ASCD status signal received from ECM with CAN communication line.
SET IND [On/Off]		Status of set indicator judged from ASCD SET indicator signal received from ECN 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 tire pressure signal received from BCM with CAN communication line.
KEY G/Y W/L [On/Off]		Status of key warning lamp (G/Y) judged from key warning signal received from BCM with CAN communication line.
AFS OFF IND [On/Off]		Status of AFS OFF indicator lamp judged from AFS OFF indicator lamp signal received from AFS control unit with CAN communication line.
4WAS/RAS W/L [On/Off]		Status of 4WAS warning lamp judged from 4WAS warning lamp signal received from 4WAS main control unit with CAN communication line.
DDS W/L [On/Off]		This item is displayed, but cannot be monitored.
LANE W/L [On/Off]		This item is displayed, but cannot be monitored.
LDP IND [On/Off]		This item is displayed, but cannot be monitored.

## < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
LCD [B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY,OUTKY, LK WN, C&P N,C&P I]		Displays status of Intelligent Key system warning judged from meter display signal received from BCM with CAN communication line.
ACC TARGET [On/Off]		Status of vehicle ahead detection indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
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 mode 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.
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.)

## < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description	
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit with CAN communication line.	
BUZZER [On/Off]	Х	Buzzer status (in the combination meter) is judged with the buzzer output signal received from each unit with CAN communication line and the warning output condition of the combination meter.	

#### NOTE:

Some items are not available according to vehicle specification.

## **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000005886745

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#### APPLICATION ITEM

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

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	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 Diagnosis mode System Sub system selection item Work Support **Data Monitor Active Test** Door lock DOOR LOCK X × × REAR DEFOGGER Rear window defogger X × Warning chime **BUZZER** X × Interior room lamp timer INT LAMP × X X Exterior lamp **HEAD LAMP** × × × **WIPER** Wiper and washer × × **FLASHER** Turn signal and hazard warning lamps × AIR CONDITONER\* · Intelligent Key system INTELLIGENT KEY × X × · Engine start system Combination switch COMB SW × Body control system **BCM** X **IVIS - NATS IMMU** × × **BATTERY SAVER** Interior room lamp battery saver × × X Trunk lid open TRUNK × X THEFT ALM Vehicle security system X × X RAP system **RETAINED PWR** X Signal buffer system SIGNAL BUFFER × × **TPMS** TPMS (AIR PRESSURE MONITOR) X × X

#### NOTE:

#### FREEZE FRAME DATA (FFD)

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

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

# **DIAGNOSIS SYSTEM (BCM)**

### < SYSTEM DESCRIPTION >

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

# BUZZER

# BUZZER: CONSULT-III Function (BCM - BUZZER)

INFOID:0000000005806185

## **CONSULT-III APPLICATION ITEMS**

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

#### **DATA MONITOR**

# **DIAGNOSIS SYSTEM (BCM)**

## < SYSTEM DESCRIPTION >

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).
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).

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

< DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

**COMBINATION METER: Diagnosis Procedure** 

INFOID:0000000005886753

### 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
IVIOS	21	Giouna	ON	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

# 3. CHECK GROUND CIRCUIT

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

UNIFIED METER AND A/C AMP.

## UNIFIED METER AND A/C AMP. : Diagnosis Procedure

INFOID:0000000005886754

# 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				
(+)			Ignition switch	Voltage (Approx.)
Unified meter	Unified meter and A/C amp.			
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.	Ground	Continuity	
Connector	Terminals		Continuity	
M67	55	Glound	Existed	
IVIO7	71		Existed	

#### 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 navyor cupply	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.

	Terminals					
(	+)	(-)	Voltage			
В	СМ		(Approx.)			
Connector	Terminal	Ground				
M118	1	Giodila	Pottony voltago			
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:0000000005806189 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:0000000005806190 1. CHECK OPERATION OF METER BUZZER Select "BUZZER" of "BCM" on CONSULT-III. 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-80, "Removal and Installation". Diagnosis Procedure INFOID:0000000005806191 $oldsymbol{1}$ .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:000000005806192

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

## Component Function Check

INFOID:0000000005806193

# $1.\mathsf{CHECK}$ UNIFIED METER AND A/C AMP. INPUT SIGNAL

- Connect the CONSULT-III.
- 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:0000000005806194

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

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

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

#### Is the inspection result normal?

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

NO >> GO TO 2.

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

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

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

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

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

#### SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

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

Seat belt buckle s	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.

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

#### Is the inspection result normal?

YES >> INSPECTION END

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

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Wiring Diagram - WARNING CHIME -

INFOID:0000000005806196  $\begin{array}{l} \begin{tabular}{ll} $\langle A \rangle$ : With AT \\ \hline $\langle M \rangle$ : With MT \\ \hline $\langle PA \rangle$ : With automatic drive positioner or 4WAS \\ \hline $\langle AP \rangle$ : Without automatic drive positioner and 4WAS \\ \hline $\langle AP \rangle$ : Without automatic drive positioner and 4WAS \\ \hline \end{tabular}$ COMBINATION METER (BUZZER) ,(M123) BCM (BODY CONTROL MODULE) (M118), (M122), ( DATA LINK CONNECTOR M24 FUSE BLOCK (J/B) (M1), (M3) 53 54 7 27 3 UNIFIED METER AND A/C AMP. (M66), (M67) COMBINATION SWITCH IGNITION SWITCH ON or START WARNING CHIME M6 M6 40 A BATTERY 2009/10/30

## < DTC/CIRCUIT DIAGNOSIS >

DS FL  DP FR  DP FR  DD FR  DD FR  DD FR  DD FL  DD	A B C
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ification]  ification]  ification]  ification]	Е
Name   PARKING BRAKE SWITCH	F
Connector No.   B14	G
	Н
	J
N	K
S   S   S   S   S   S   S   S   S   S	L
Signal Name (Specification)	M
CHIME BI THOOFW-CSIG-TMA THOOF	WCS
Commercer Name   WARNING CHIME COMMercer   WARE TO WING COMMERCE   WING COMM	0
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Convector Name   WIRE TO WIRE   Convector Name   SLISE BLOCK (J. IV)   Convector Name   SLISE	WARNIN Connector No.	NING or No.	WARNING CHIME Connector No.   E106	57	GR	-	Connector No. MI
Signal Name (Specification)   Signal Name (Specification)   Color	Connect	or Name	WIRE TO WIRE	58	> 0	1 1	
Signal Name   Specification   Colorestor Name   Colorestor Name	Connect	or Type	TH80FW-CS16-TM4	8 18	۵.	ı	Т
1				82	9	1	4
Color   Colo	修			83	۸	-	
Color   Colo	É		10 10 10 10 10 10 10 10 10 10 10 10 10 1	84	٦	1	
Colore   C		-		85	W	-	<u> </u>
Color   Signal Name   Specification   Color   Color			R 80 9 99 8 80 8 80 8 80 8 80 8 80 8 80 8	98	GR	1	A 7 7 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Signal Name (Specification)   Sign				87	ΒŢ	I	NA POLICE TO
Signal Name (Specification)   Sign				88	-	T.	
Signal Name (Specification)   Sign		L		68	æ :	1	L
No.   No.	Termina	_		6	≥ 9	1	Color
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National Parameter   Nationa	9	۵	1	97	>	1	1
National Part   National Par	7	٦	,	86	SHIELD	1	L
P	=	>	1	66	٦	1	В
R         Commettor No.         E107         Commettor No.         RISPIN.           SB         -         Commettor Name         PARKING BRAKE SWITCH         Commettor Name         FUSE BLG           LG         -         -         Commettor Name         FUSE PARKING BRAKE SWITCH         Commettor Name         FUSE BLG           LG         -         -         Commettor Type         ITBOI FW         Commettor Type         INSIZPIW           V         -         -         -         Commettor Type         INSIZPIW           V         -         -         -         Commettor Type         INSIZPIW           W         -         -         -         Commettor Type         INSIZPIW           W         -         -         -         -         Commettor Type         INSIZPIW           W         -	12	Ь	-	100	Ь		8A L
W         —         Connector No.         E107         Gonnector No.         MS           GR         —         Connector Name         PARKING BRAKE SWITCH         Connector Name         FUSE BLG           LG         —         —         Connector Type         INSIGNA-           LG         —         —         Connector Type         INSIGNA-           P         —         —         ALS         ALS           P         —         —         ALS         ALS           BG         —         —         ALS         ALS           W         —         —         ALS         ALS           BG         —         —         ALS         ALS           C         —         —         ALS         ALS           BG         —         —         BC         BC           C         —         —         BC         BC         BC           C         —         —         BC         BC         BC         BC           C         —         —         BC         BC         BC         BC         BC           C         —         —         —         BC         BC	13	œ	-				
CR         Connector No.         E107         Connector No.         M3           CR         -         Connector Name         PARKING BRAKE SWITCH         Connector Name         FUSE BL           LG         -         -         Connector Name         FUSE BL           LG         -         -         Connector Name         FUSE BL           LG         -         -         Connector Name         FUSE BL           P         -         -         -         Connector Name         FUSE BL           R         -         -         -         -         -         -           R         -         -         -         -         -         -         -           R         -         -         -         -         -         -         -         -	14	Μ	1				
Sign	15	٦	-	Connecto		E107	
15   15   15   15   15   15   15   15	16	GR	1	Connecto		DARKING BRAKE SWITCH	
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Color   Colo	18	LG G	1	Connecto	П	TB01FW	
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Color   Colo	32	Α	-			]	
G	36	BG	1				
R	37	g	-				- 1-
LG	38	۳	_	Terminal		Signal Name [Specification]	Color
1	40	ч	-	No.		Oignal Marine Copecinication	of Wire
SB     -       LC     -       LC     -       GR     -       GR     -       BB     -       V     -       SR     -       SR     -       P     -       P     -       C     -	41	ΓC	-	1	BG	-	Н
G   W   S   W   W	45	SB	-				B
LG	43	9	1				*
GR     -       BR     -       Y     -       V     -       RB     -       N	4	2	1				BG
110   120   120   130	45	g	1				-
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> & @ a U U B	48	>	1				ł
ж 88 с о в	46	>	1				
SB G P	20	~	-				
G 0 B	51	SB	1				
ъ В	25	۵	1				
8	53	9	1				
	54	В	-				

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## < DTC/CIRCUIT DIAGNOSIS >

Indication   Ind	А
CONNECTOR   CONNEC	В
9 10	С
Connector No.   Connector No.   Connector Name   Connector Name   Connector Type   Connec	D
	Е
	F
	G
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Н
E TO WIRE  OWN-CS IG-TM4  Signal Name [Specification]	I
	J
S	K
	L
Signal Name (Specification)  Signal Name (Specification)	M
WIPE TO WIPE THROWN-CS16-TW4  Signal Name  Signal Name  - IW	WCS
Connector Name   WARNING CHIME   Connector No.   M6   Connector No.   M6   Connector No.   M6   Connector Type   TH80MW-CC No.   M7   Connector Type   TH80MW-CC No.   M8   Connector Type   Temminal of Wire   Connector Type	0
No         0	
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Terminal   Color   Signal Name [Specification]   No.   of Wire   Signal Name [Specification]     W   BAT (F/L)   2	55 56 Connector Name Connector Type	SH HS	11121314151617	AL NAL	AAL Terminal Color Cimal Name [Consideration]	No. of Wire	LY 5 P PASSENGER DOOR UNLOCK OUTPUT	7 SB	> 8	9 G DRIVE	JUND         P         REAR DOOR UNLOCK OUTPUT           ND         11         R         RAT (FIISF)	13 B	JND 14 W PUSH-BUTTON IGNITION SWILL GND	TURN SIG	18 BG TURN SIGNAL LH (FRONT)	19 V ROOM LAMP TIMER CONTROL	SUPPLY	T	1		T									
M67 UNIFED METER AND A.C AMP. TH22FW-NH	43 44 45 46 47 48 49 50 51 52 53 54 59 60 61 62 65 69 70	Signal Name [Specification]	FUEL LEVEL SENSOR SIGNAL	IN TAKE SENSOR SIGNAL IN-VEHICLE SENSOR SIGNAL	SUNLOAD SENSOR SIGNAL	GAS SENSOR SIGNAL	BATTERY POWER SUPPLY	GROUND	CAN-H	BRAKE FLUID LEVEL SWITCH	FUEL LEVEL SENSOR GROUND INTAKE SENSOR GROUND	IN-VEHICLE SENSOR GROUND	AMBIENT SENSOR GROUND	ION CONTROL MODE OUTPUT SIGNAL	ECV SIGNAL	A/C LAN SIGNAL	EACH DOOR MOTOR POWER SUPPLY	GROUND CAN-L		577	MII8	BCM (BODY CONTROL MODULE)	M03FB-LC			7		7		
Connector No. Connector Name Connector Type	87 58 57 58	Terminal Color No. of Wire	Н	43 BK 44 LG	45 V 46 Y	Н	54 SB W	H	26 L	27 LG	58 ×	Н	61 B	+	65 BG	+	70 R	- 62 - 62	!		Connector No.	Connector Name	Connector Type	Œ	2	2				
ILL GND ILL IGNITION SIGNAL GROUND COMMUNICATION SIGNAL (LCD->AMP) COMMUNICATION SIGNAL (LAMP>LCD) VEHICLE SPEED SIGNAL (B-PULSE) PARRING RRACK SWITCH SIGNAL PERRING RRACK SWITCH SIGNAL	SEAT BELT BUCKLE SW SIGNAL (DRIVER SIDE) SEAT BELT BUCKLE SW SIGNAL (DRIVER SIDE) SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE) WASHER I EVET SWITCH SIGNAL	ILLUMINATION CONTROL SIGNAL SELECT SWITCH SIGNAL FATTER SWITCH SIGNAL	TRIP A/B RESET SWITCH SIGNAL	ILLUMINATION CONTROL SWITCH SIGNAL (+) ILLUMINATION CONTROL SWITCH SIGNAL (+)		M66	UNIFIED METER AND A/C AMP.	TH40FW-NH				4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	94 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40		Signal Name [Specification]		STOP LAMP SWITCH SIGNAL	MANUAL MODE SHIFT OF SIGNAL PADDLE SHIFTER UP SIGNAL	COMMUNICATION SIGNAL (AMP>METER)	VEHICLE SPEED SIGNAL (2-PULSE)	SEAT BELLI BUCKLE SWITCH SIGNAL (DRIVER SIDE) MANITAL MODE SIGNAL	NON-MANUAL MODE SIGNAL	COMMUNICATION SIGNAL (LCD->AMP.)	ION ON / OFF SIGNAL AT SNOW SWITCH SIGNAL	MANUAL MODE SHIFT DOWN SIGNAL	PADDLE SHIFTER DOWN SIGNAL	COMMUNICATION SIGNAL (METER->AMP.)	VEHICLE SPEED SIGNAL (8-PULSE)	COMMINICATION SIGNAL (AMP -> I CD)	BLOWER MOTOR CONTROL SIGNAL
19 B 20 R 21 G 22 B 24 BR 25 Y 7		33 R R A A A A A A A A A A A A A A A A A	Н	40 BG T		Connector No.	Connector Name	Connector Type		2	H.S.	1 2 3	21 22 23		nal	No. of Wire	. G	9 BG	H	H	SR SR	╀	14 BR	20 BR	25 V	26 G	$\exists$	Z8 R	30 ×	
	<u> </u>		П	LÌ TI		ő	log T	Ş	∏é ∏	<u>ょ</u>	<b>1</b>				Ter				1		Т Г		Ц		_				I T	Ľ T
WARNING CHIME Journector Name COMBINATION SWITCH Journector Type THIGFW-NH  H.S.	1     2     3     4     5     6       7     8     9     10     11     12     13     14	Signal Name [Specification]	OUTPUT 4	GND	INPUT 3 OUTPUT 5	INPUT 2	INPUT 1	OUTPUT 1	INPUT 5	OUTPUT 2		M53	COMBINATION METER	SAB40FW				4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	3/24/25  26 27 28 29 30 31 32 33 34 35  36 37 38 39 40			Signal Name [Specification]	BATTERY POWER SUPPLY	COMMUNICATION SIGNAL (METER->AMP.)	GROUND	ALTERNATOR SIGNAL	AIR BAG SIGNAL	SECURITY SIGNAL	GROUND GROUND METER CONTROL SWITCH GROUND	ILL GND
WARNING Connector No. Connector Type		al Color of Wire	S .	- B	BBG	× (	¥ 9	۵	<b>&gt;</b>	g		Connector No.	Connector Name	Connector Type			7	123	21 22 23		John	_	>	9 E	<u>а</u>	W	ΓC	>	m (#	<u> </u>
WARNIN Connector No. Connector Typ		Terminal No.	-   2	ဂ ဖ	7 8	6	2 =	12	13	4		Connec	Connec	Connec	4	季	SH				Tormino	No.	-	3 2	S	9	7	₽ !	15	2 22

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WARNING CHIME

Connector No.	r No.	M122	Connector No.	r No.	M123
Connector Name	vr Name	BCM (BODY CONTROL MODULE)	Connector Name	r Name	BCM (BODY CONTROL MODULE)
Connector Type	r Type	TH40FB-NH	Connector Type	r Type	TH40FG-NH
偃 H.S.			優 H.S.		
	91 90 89 8	88 677 66 657 644 659 82 61 60 759 77 76 75 74 75 72 72 72 17 17 17 17 17 17 17 17 17 17 17 17 17		151 150 149 1	डिव हुए एक एक एक प्रज १२व १२व १२व १४व १४व १४व १४व १४व १४व १४व १४व १४व १४
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
72	~	ROOM ANT 2-	112	~	RAIN SENSOR SERIAL LINK
73	5	ROOM ANT 2+	113	BG	OPTICAL SENSOR
74	SB	PASSENGER DOOR ANT-	114	œ	CLUTCH INTERLOCK SW
75	BR	PASSENGER DOOR ANT+	116	SB	STOP LAMP SW 1
76	>	DRIVER DOOR ANT-	118	BR	STOP LAMP SW 2
77	re	DRIVER DOOR ANT+	119	SB	DR DOOR UNLOCK SENSOR
78	>	ROOM ANT 1-	121	SB	KEY SLOT SW
79	BR	ROOM ANT 1+	123	>	IGN F/B
80	GR	NATS ANT AMP.	124	œ	PASSENGER DOOR SW
81	W	INATS ANT AMP.	129	ВG	TRUNK LID OPENER CANCEL SW
82	SB	IGN RELAY (F/B) CONT	132	۸	POWER WINDOW SW COMM
83	٨	KEYLESS ENTRY RECEIVER COMM	133	٦	PUSH-BUTTON IGNITION SWILL POWER
87	>	COMBI SW INPUT 5	134	Ρ	LOCK IND
88	9B	COMBI SW INPUT 3	137	98	RECEIVER / SENSOR GND
88	BR	PUSH SW	138	۸	RECEIVER / SENSOR POWER SUPPLY
06	d	CAN-L	139	٦	TIRE PRESSURE RECEIVER COMM
91	٦	CAN-H	140	В	SHIFT N/P
95	ΓC	KEY SLOT ILL	141	М	SECURITY INDICATOR LAMP
93	GR	ON IND	142	BR	COMBI SW OUTPUT 5
92	BG	ACC RELAY CONT	143	Ь	COMBI SW OUTPUT 1
96	GR	A/T SHIFT SELECTOR POWER SUPPLY	144	5	COMBI SW OUTPUT 2
6	٦	S/L CONDITION 1	145	7	COMBI SW OUTPUT 3
86	Ь	S/L CONDITION 2	146	SB	COMBI SW OUTPUT 4
66	٣	SHIFT P [With A/T]	149	М	TIRE PRESSURE WARN CHECK SW
66	BR	ICC CLUTCH SW [With M/T and ICC]	150	GR	DRIVER DOOR SW
66	BR	ASCD CLUTCH SW [With M/T without ICC]	151	9	REAR WINDOW DEFOGGER RELAY CONT
100	>	PASSENGER DOOR REQUEST SW			
101	۵	DRIVER DOOR REQUEST SW			
102	BG	BLOWER FAN MOTOR RELAY CONT			
103	۵	KEYLESS ENTRY RECEIVER POWER SUPPLY			
106	SB	S/L UNIT POWER SUPPLY			
107	ΓC	COMBI SW INPUT 1			
108	œ	COMBI SW INPUT 4			
109	W	COMBI SW INPUT 2			
110	5	HAZARD SW			
111	λ	S/L UNIT COMM			

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### **COMBINATION METER**

< ECU DIAGNOSIS INFORMATION >

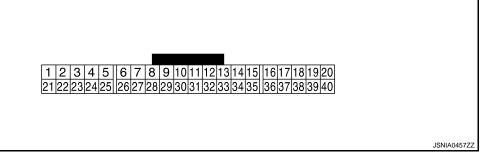
# **ECU DIAGNOSIS INFORMATION**

# **COMBINATION METER**

Reference Value

VALUES ON THE DIAGNOSIS TOOL Refer to WCS-49, "Reference Value".

**TERMINAL LAYOUT** 



#### PHYSICAL VALUES

Terminal No. (Wire 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	Ground	Alternator signal	Input	Ignition switch	Charge warning lamp ON	0 V	
(W)			'	ON	Charge warning lamp OFF	12 V	
7	Ground	Air bag signal	Input	Ignition switch	Air bag warning lamp ON	4 V	
(LG)			·	ON	Air bag warning lamp OFF	0 V	
10	Ground	Security signal	Input	Ignition switch	Security warning lamp ON	0 V	
(W)		7 - 3 -	1.55	OFF	Security warning lamp OFF	12 V	

## **COMBINATION METER**

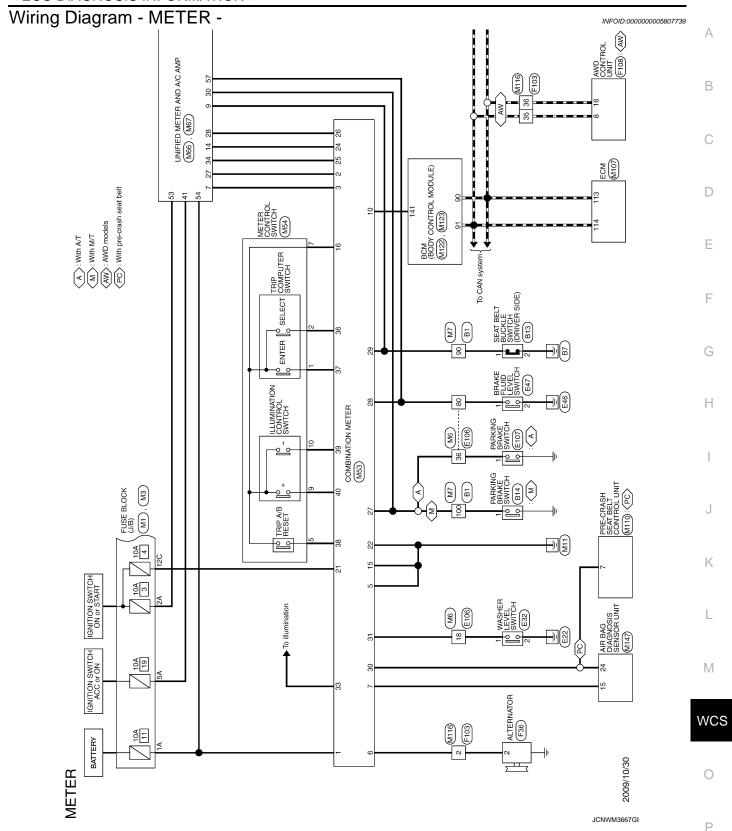
### < ECU DIAGNOSIS INFORMATION >

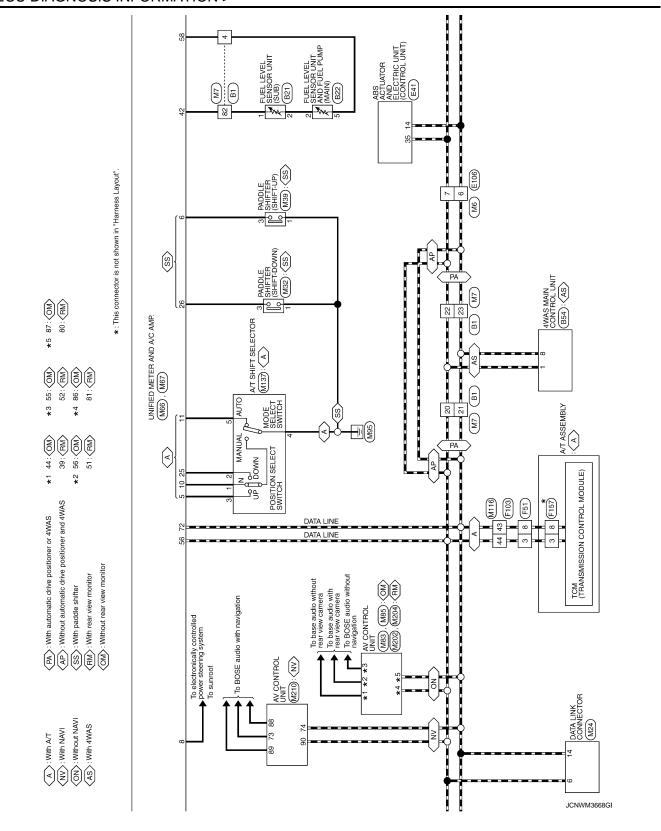
Terminal No. (Wire color)		Description		Condition		Value	
+	_	Signal name	Input/ Output			(Approx.)	
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
16 (BR)	Ground	Meter control switch ground	_	Ignition switch ON	_	0 V	
21 (G)	Ground	Ignition signal	Input	Ignition switch ON	_	12 V	
22 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
24 (BR)	Ground	Communication signal (LCD→ AMP.)	Output	Ignition switch ON	_	(V) 15 10 5 0 400 µs JSNIA0028GB	
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition switch ON	_	(V) 6 4 2 0 200 <i>u</i> s JSNIA0027GB	
				lanition	Speedometer operated	NOTE: The maximum voltage varies depending on the specification (destination unit).	
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	[When vehicle speed is approx. 40 km/h (25 MPH)]	0 20 ms JSNIA0012GB	
					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	

# **COMBINATION METER**

### < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		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	Cround	Seat belt buckle switch sig-	lanut	Ignition switch	When driver seat belt is fastened	12 V	
(P)	Ground	nal (driver side)	Input	ON	When driver seat belt is un- fastened	0 V	
30	Ground	Seat belt buckle switch sig-	logut	Ignition switch ON	<ul><li>When getting in the passenger seat</li><li>When passenger seat belt is fastened</li></ul>	12 V	
(G)	Ground	nal (passenger side)	Input		When getting in the passenger seat     When passenger seat belt is unfastened	0 V	
31 (L)	Ground	Washer level switch signal	Input	Ignition switch	Washer level switch ON	0 V	
33 (R)	Ground	Illumination control signal	Output	Ignition switch ON	Washer level switch OFF  Lighting switch ON, then operate the illumination control switch.	NOTE: When brightness level is midway  (V) 10 0 2 ms  JSNIA0010GB	
36 (LG)	16 (BR)	Select switch signal	Input	Ignition switch	When is pressed	0 V	
37 (Y)	16 (BR)	Enter switch signal	Input	ON Ignition switch ON	Other than the above  When is pressed  Other than the above	5 V 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 (P)	16 (BR)	Illumination control switch signal (–)	Input	Ignition switch ON	Other than the above  When **T* switch is pressed  Other than the above	5 V 0 V 5 V	
40	16	Illumination control switch	Input	Ignition switch	When 👣 + switch is pressed	0 V	
(BG)	(BR)	signal (+)		ON	Other than the above	5 V	

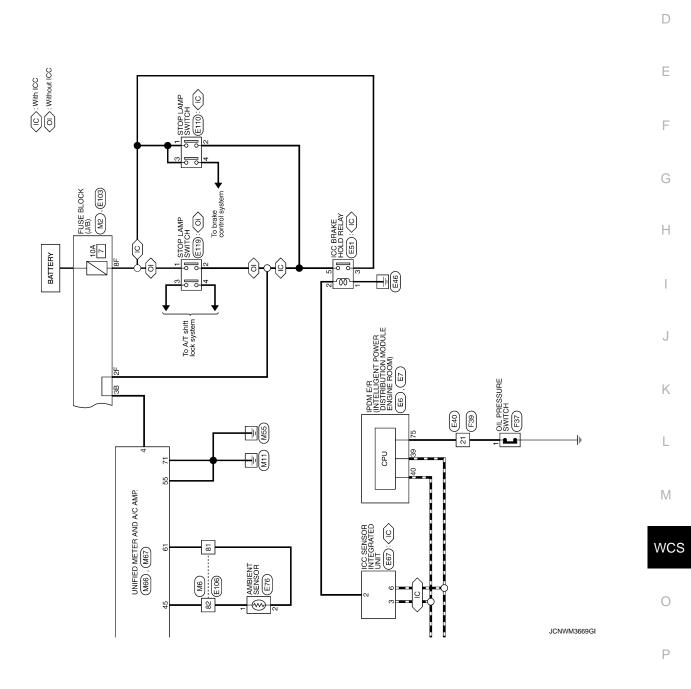




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METER	- a	L.	>		Connector No B14	>		
or integral in	T	2	+		I	> :		
Connector Name	Name WIRE TO WIRE	0 0	59 80 BR	1 1	Connector Name PARKING BRAKE SWITCH	5 ×	1	
Connector Type	TH80FW-CS16-TM4	9	H	-	Connector Type P01FB-A			
q		9	62 R	1	q	Connector No.	B54	
唐		9	4	-	医	Connector Name	4WAS MAIN CONTROL UNIT	
	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	9	+		[		7	
	97 00 00 00 00 00 00 00 00 00 00 00 00 00	٦	1	1		Connector Type	A36FW=M4	
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		1	╀			ΞŠ		
Terminal	Color	000	/ <sub>4</sub>		Terminal Golor	_	1 2 3 4 5 6 7 8 9 10 12 22 22 24 25 26 27 28 37 38 3940	
_	of Wire Signal Name [Specification]	<sup>∞</sup>	┝	1		1111213		
-	GR –	8	7 ×	1	1 GR			
2	BG -	8	85 G	-				
3	T	8	M 86	-		Terminal Color	Simal Nama [Snarification]	
4	Υ -	8	87 R	_	Connector No. B21	No. of Wire	O'B' IN TABLE COPCONICATION	
9	٦.	8	88 BR	_	Connector Name FILE LEVEL SENSOR LIMIT (SLIB)		CAN-H	
8		8	Н	1		<b>4</b> ≻	R-ANG MAIN SIG	
6		6	90 SB	-	Connector Type E02FGY-RS	2 M	R-ANG VCC	
15	Υ -	6	Н	-	4	7 R	R-ANG SUB SIG	
91	BR -	6	92 BR	-		8	CAN-L	
17	LG -	6	Н	-	П	15 G	R-ANG GND	
18	BG -	6	95 BG	-		22 GR	STOP/L SW	
20		6	Э6 Y	-	(31)	25 SB	R-MTR RLY	
21		¥	100 GR	-		Н	IGN	
22						31 BR	BUS-H	
23						32 Y	BUS-L	
24	- ^	Conr	Connector No.	B13	Terminal Color	34 B	GND	
25	- SB	Ċ	- N	CEAT DELY TOUR OF STATE OF STATE SIDE	No. of Wire olgrian varie Lopecinication.	36 LG	TOS S/d	
56	- 5	5	ector Manne	SEAT BELL BOONLE SWILCH (DRIVER SIDE)	- B		R-MTR PWR SUPPLY	
72	- M	Conr	Connector Type	A03FW	2 W -	38 R	R-MTR (RH)	
28		4				39 G	R-MTR (LH)	
31	^	ß	7	Ē		40 B	R-MTR GND	
32	SB	_	<u>ا</u> ق		Connector No. B22			
П	SHIELD -	•	3	-	CHELLENE CONTOURS AND CHELLENE CONTOURS AND CHELL DIMENTON			
34	M			c				
35	BR –			7 0	Connector Type E05FGY-RS			
1	_			າ	á			
┪	SHIELD -	l	- 1	]	性的			
38	_	Terr	Ferminal Color	Simal Name [Specification]				
39	SB -	No						
40			SB	1	(12345)			
41			2 B	1	<u>-    </u>			
Г	SHIELD -							
43								
П	- D				la			
45 SI	SHIELD -				No. of Wire			
46	SB -				1 P			
55	BR -				2 W -			
26	- 2				3 B			
					ł			

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## < ECU DIAGNOSIS INFORMATION >

	А
E47  Signal Name [Specification]  Signal Name [Specification]	В
E47 VY02FGY	С
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Offication]	Е
EAT  BAAZTE-AHZ4-LH  BAAZTE-AHZ4-LH  CAND  Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]	F
N	G
17 18 19 19 22 23 23 23 33 34 45 45 45 45 45 45 45 45 45 45 45 45 45	Н
C   C   C   C   C   C   C   C   C   C	I
E20 WASHER LEVEL SWITCH  2027 FBR  Signal Name [St. 10]   10   11   11   11   11   11   11	J
176   V   80   W   W   10   W   W   W   W   W   W   W   W   W	К
00) On J	L
26MT POWER DISTRIBUTION N. 12-M44 433 245 444 433 245 444 433 245 444 433 245 444 433 245 445 444 433 245 445 444 433 245 445 444 433 245 445 445 445 445 445 445 445 445 445	M
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METEK Connector No TEST	Connector No F76	Terminal	Color		- M 10
т	Τ	a di		Signal Name [Specification]	* ·
Connector Name ICC BRAKE HOLD RELAY	Connector Name AMBIENT SENSOR	<u>-</u>	>	1	╁
Connector Type MS02FL-M2-LC	Connector Type RS02FB	2	SB	1	SB
		3	BG	1	H
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8 1		9	Ь	-	П
		7	7		98 SHIELD -
2		Ξ	^	1	- T 66
		12	۵	1	<u>a</u>
		13	α	1	
		4	*	1	
Terminal Color	Terminal Color	12	-	1	Connector No. F107
	_	=	9	1	Т
	t	2 2	5 87	1	Connector Name PARKING BRAKE SWITCH
- 5	1	=	3 2	1	Connector Type TB01EW
3 -		2 00	2 0	1	1
1 3		5 6	, -		Œ
	-M4	5 8	18	1	至于
	Т	35	200	1	(1)
I	Connector Name FUSE BLOCK (J/B)	25	1	1	
Connector No. E67	т	34	> :	1	-]
Connector Name ICC SENSOR INTEGRATED UNIT	Connector Type NS16FW-CS	SS	^	1	]
	q	36	BG	1	
Connector Type RS06FB-PR	国	37	5	1	ı
		38	ď	_	ē
	7F 6F 5F 4F 1 3F 2F 1F	40	ч	_	No. of Wire
	40E 44E	41	LG	1	1 BG –
		42	SB		
( )   ( )		43	g		
4 5 6		44	FG	_	Connector No. E110
)	Terminal Golor	45	GR	1	HOTIMO GAMA I GOTO
		46	BR	-	
Color Simal Nama [Snacification]	IF SB -	47	В	-	Connector Type M04FW-LC
	2F W –	48	>	-	¢.
NOILINDI A	4F G -	49	^	-	
SB BRAKE HOLD RLY DRIVE SIGNAL	6F BR -	20	۳	1	
L	7	19	SB	1	Ġ.
GND	- d	25	۵	1	1 2
E CAN-I	1	53	. 6	1	3 4
		24	ď	1	
	Connector No. F106	5.7	æ	1	
	Т	S G	5 >	1	Torminal
	Connector Name WIRE TO WIRE	8 8		1	_
	Connector Type THROEW-CS16-TM4	8 2	ź a	1	t
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	20 00 00 00 00 00 00 00 00 00 00 00 00 0	88	٦	1	
		88	BR	1	

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### < ECU DIAGNOSIS INFORMATION >

NSIO NSIO NSIO Signal Name (Specification)		АВ
WIRE TO TK36FW-		С
Connector No.		D
		Е
F51 A7 ASSEMBLY RKI0FG-DGY RK10FG-DGY  RK10FG-DGY  RK10FG-DGY		F
N   N   N   N   N   N   N   N   N   N		G
		Н
Signal Name (Specification)		I
F78 SAA38FE TO I I I I I I I I I I I I I I I I I I I		J
Color Nume   Color Nume   Commentor Nume   Commentor Nume   Commentor Type   Commentor Type   Commentor Type   Commentor Type   Commentor Type   Color Nume   C		K
		L
Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]		M
F36  ATTERW  ATTERW  ATTERW  ATTERW  OUL PRES		WCS
HS  Connector Name Connector Type  I L  Z  W  Golder No.  Golder N		0
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Connector No. F108	Connector No. M1	Connector No. M3	31 L	1
Connector Name AWD CONTROL UNIT	Connector Name FUSE BLOCK (J/B)	Connector Name FUSE BLOCK (J/B)	+	I
	П	П	$\dashv$	1
Connector Type TH16FW-NH	Connector Type NS06FW-M2	Connector Type NS12FW-CS	-	1
4	4	4	35 BR	1
ほ	ほ	医	36 P	I
[			4	1
		50/40 30/20/10	38 G	1
1 2 3 4 5 6 7 8	0 A 7 A GA 5 A 1 A	19C11C11C11C11C11	40 ^	-
9 10 11 12 13 14 15 16	D+IUCIUCIU HX	000000000	41 LG	-
	]		42 R	
			43 G	ı
Terminal Color	Terminal Color	Terminal Color	44 G	ı
No. of Wire	No. of Wire	No. of Wire	45 B	- [With A/T]
1 BR AWD SOL (+)	- V VI		H	- [With M/T]
2 Y AWD SOL (-)	2A G -	H	F	П
3 W OIL TEMP (-)	7	L	H	ı
7 G IGN	4A P	- BG 26	48 ∀	1
8 L CAN-H	_	┞	49 L	1
9 O AWD SOL BAT	- × ¥9		50 R	1
	~	L	H	1
	H	ł	H	1
TC			H	1
>		Connector No. M6	ŀ	1
۵	Connector No M2	l	ŀ	
-	Т	Connector Name WIRE TO WIRE	╀	1
	Connector Name FUSE BLOCK (J/B)	Connector Type TH80MW-CS16-TM4	80 SB	
Connector No. F157	Connector Type NS10FW-CS	1	╀	1
т	1		ł	1
Connector Name TCM (TRANSMISSION CONTROL MODULE)			83 M	1
Connector Type SP10FG			╀	1
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(1 2 3 4 5)		Terminal Color	ŀ	1
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:: c	╀	╀	T	
		╀	301 85	
7 8	1	4 3	1	
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8 BR CAN-L		16 GR		
<b>&gt;</b>		┝		
10 W/B GND		╀		
		29 G		
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## < ECU DIAGNOSIS INFORMATION >

Specification] WER SUPPLY INAL (METER->AMP) INAL (AMP>METER) UND OF SIGNAL (SIGNAL (SIGNAL SIGNAL (CO->AMP) ISTORAL (CO->CONTCH SIGNAL COH SIGNAL (CO-SIGNAL COH SIGNAL COH SIGNAL (CO-SIGNAL COH SIGNAL COH SIGNAL (CO->CONTCH SIGNAL COH SIGNAL (CO->CONTCH SIGNAL COH SIGNAL (CO->CONTCH SIGNAL CONTCH SIGNAL (CO->CONTCH SIGNAL (CO->C	А
Signal Name [Speedification]  BATTERY POWER SUPPLY COMMUNICATION SIGNAL (METER-YAMP.) GROUND ALTERATOR SIGNAL ALTERATOR SIGNAL ALTERATOR SIGNAL ALTERATOR SIGNAL AREA BAG SIGNAL SIGNAL GROUND METER CONTROL SWITCH GROUND ILL GNO ILL GNO ILL GNO COMMUNICATION SIGNAL (G-PULSE) PARAMON BRASE SWITCH SIGNAL SELECT SWITCH SIGNAL SATE TE URCHE SWITCH SIGNAL SATE TE URCHE SWITCH SIGNAL THER PAG RESE SWITCH SIGNAL SATE TE URCHE SWITCH SIGNAL SATE TE URCHE SWITCH SIGNAL THEN ALS RESE SWITCH SIGNAL SATE SWITCH SIGNAL THEN ALS RESE SWITCH SIG	В
Ociore Si V V B V C COMMUNINI GR COMMUNINI GR COMMUNI BR COMMUNI B	С
Terminal 1	D
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No.   M32	F
inial Color SAB4DIE:  IS B B B B B B B B B B B B B B B B B B B	G
16   R	Н
Nector	I
New-P   Signal   Si	J
B B C C C B B B C C C C C B B B C C C C	K
1   1   1   1   1   1   1   1   1   1	L
WINE  We see that the seed of the positioner  Without automatic drive positioner  Without automatic drive positioner	M
WIRE TO WIRE THROMN-CSIG-TM4  THROMN-CSI	WCS
AFTER   ATTER   ATTE	JCNWM3675GI
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	87 D CAN-I	- SB	9	90 SB AV COMM (H)	91 LG AV COMM (L)	R AUX SI	*	· ·	- H	>	. (5	BG	SB	œ																																				
Commonton Ma 14100	Mos	Connector Name AV CONTROL UNIT	Connector Type TH24FW-NH					47 46 45 44 43 42 41 40 39 38 37 36	58 57 56 55 54 53 52 51 50 49 48	20 20 20 20 20 20 20 20 20 20 20 20 20 2			of Wire Signal Name [Specification]	36 BR COMPOSITE IMAGE SIGNAL	37 Y COMPOSITE IMAGE GND	38 P RGB (B:BLUE) SIGNAL	39 L RGB (G:GREEN) SIGNAL	40 G RGB (R:RED) SIGNAL	41 W RGB SYNC	42 SHIELD SHIELD	43 B RGB AREA (YS) SIGNAL	44 L COMM (DISP->CONT)	45 R HP	46 LG SIGNAL GND	BG	48 BR COMP SYNC	49 Y SHIELD	90 SHIELD SHIELD	55 B SHIELD	56 LG COMM (CONT->DISP)	9	BR	59 Y INVERTER VCC		I	Т	Connector Name AV CONTROL UNIT	Connector Type TH32FW-NH					91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76	105 104 103 102 101 100 99 98 97 96 95			Terminal Color	_	S	85 B GND
ŀ	29 P VEHICLE SPEED SIGNAL (METER-/AMP.)	£ >	) 	38 P BLOWER MOTOR CONTROL SIGNAL			Connector No. M67	Т	Connector Name UNIFIED METER AND A/C AMP.	Connector Type TH32FW-NH	1			/	42 43 44 45 46 47 48 49 50 51 52 53	57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72			Terminal Color Simpl Name [Sacrification]	No. of Wire olgnar Name Lopecincation	41 L ACC POWER SUPPLY	42 BR FUEL LEVEL SENSOR SIGNAL	43 BR INTAKE SENSOR SIGNAL	44 LG IN-VEHICLE SENSOR SIGNAL	^	JS Y	9	53 W IGNITION POWER SUPPLY	54 SB BATTERY POWER SUPPLY	В (	7	P	<b>⊬</b>	as ;		61 B AMBIENI SENSOR GROUND 62 CP CHAIN OAD CENSOD CEOUND	NOI	BG	۵	R EACH DOC	GR	۵								
METER III	т	Connector Name METER CONTROL SWITCH	Connector Type TH12FW-NH	1	E			1 2 3 4 5 6	10	9		Terminal Color	_	- ×	2 LG -	3 B -	4 R -	5 G	7 BR –	8 GR	- 5g	- d 01			Connector No. M66	Connector Name   INIETED METER AND A / C AMP		Connector Type TH40FW-NH	¢	医		H	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20			Tournian   Oaloa	_	4 G STOP LAMP SWITCH SIGNAL	Ř	6 BG PADDLE SHIFTER UP SIGNAL	COM	۲	9 SEAT BELT BLICKLE SWITCH SIGNAL (DRIVER SIDE)	3	ž	BR COM	BR	Υ Α	>	26 G PADDLE SHIFTER DOWN SIGNAL

JCNWM3676GI

### < ECU DIAGNOSIS INFORMATION >

ER SUPPLY  and ICC  a		А
OM NON  AAT SHIET SELECTOR POWER SUPPLY  SAL CONDITION 1  SAL CONDITION 1  SAL CONDITION 1  SAL CONDITION 1  SAL CONDITION ATT]  ICC CLUTCH SW [With AATT]  RELOWER FAN WOTOR REQUEST SW  BLOWER FAN WOTOR REQUEST SW  SAL UNIT POWER SUPPLY  COMES SW INPUT 4  COMES SW INPUT 2  HAZARD SW  SAL UNIT COMM  SAL UNIT COMM		В
LG   CG   CG   CG   CG   CG   CG   CG		С
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MODULE)  MODULE)  MODULE)  MODULE)  MODULE)  MIT 2-  MIT 2-  MIT 1-  M		Е
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Connector No.   MI 10		K
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ECM  RR44FGV-R26-R-LH-Z  TER 124 [R111   M   M   M   M   M   M   M   M   M	Ī	M WCS
		7703
METER Connector Name Connector Name Connector Name Terminal Color Name 100 C R 89 89 P R 89 89 P R 89 100 C R 100 101 SB 100 102 C R 100 103 C R 100 104 C R 100 105 C R 100 106 C R 100 107 C R 100 108 C R 100 109 C R 100 109 C R 100 109 C R 100 100 C R 100 1		0
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### < ECU DIAGNOSIS INFORMATION >

MEIEK										
Connector No.	M123	Connector No.	M137	24 G	SEAT BEL	BELT	Connector No.	T	M204	
Connector Name	BCM (BODY CONTROL MODULE)	Connector Name	e A/T SHIFT SELECTOR	45 Y		DR 2 (+) CAN-L	Connector Name		AV CONTROL UNIT	
Connector Type	TH40FG-NH	Connector Type	TH12FW-NH	Н		AS 2 (+)	Connector Type	П	TH32FW-NH	
Œ		匮		48 Y	AS	AS 2 (-) ODS INPUT	修			
N. 181	28   28   27   28   27   28   28   27   29   29   29   29   29   29   29	K.	123456	Connector No.	M202		Σ. Σ	76 77 78 79 80 81	82 83 84 85 86 87 88	
00			7 8 9 10 11 12	Connector Name	AV CONTROL UNIT		_	92 93 94 95	<u> 1961 97   981 991 100 100 100 100 100 100 100 100 10</u>	
Terminal Color No. of Wire	or Signal Name [Specification]	Terminal Color No. of Wire	or Signal Name [Specification]	€	l		Terminal No.	Color of Wire	Signal Name [Specification]	
Н	RAIN	W	-			l <del>-7</del>	76	57	AV COMM (L)	
113 BG	OPTICAL SENSOR	> -	1 1	38	37 38 39 40 41 42 43	3 44 45 46 47	77	g S	AV COMM (H)	
ļ.		, 4	ı	48	49 50 51 52 53 54	55 56 57 58 59	79	88 23	AV COMM (H)	
118 BR	Ц	5 G	I	]]			80	Ь	CAN-L	
$^{+}$	DR DO	+	1	ŀ			81	٦	CAN-H	
121 SB	3	+	1	la I		Signal Name [Specification]	82	BB c	SW GND	
123 V	DASSENGER DOOR SW	9 B	1 1	36 BG		SIGNAL VCC	86	SHIELD	TEI VOICE SIGNAI (+)	
F	TRU	╁		+		SIGNAL GND	88	л Ф	TEL VOICE SIGNAL (-)	
┝	╁			H		<u></u>	95	œ	VEHICLE SPEED (8-PULSE)	
133 L	PUSH-BUTTON IGNITION SW ILL POWER			39 L	COMM (DIS	COMM (DISP->CONT)	93	SB	PARKING BRAKE	
134 LG		Connector No.	M147	T		RGB AREA (YS) SIGNAL	94	BG	REVERSE	
138	RECEIVER / SENSOR GIND RECEIVER / SENSOR DOWER SLIDDI Y	Connector Name	e AIR BAG DIAGNOSIS SENSOR UNIT	41 SHIELD		RGB SYNC	95	5 >	DISK EJECT SIGNAL	
139 L	TIRE PRESSURE RECEIVER COMM	Connector Type	TK28FY-EX-SC	╀	RGB	D) SIGNAL	3			
140 B	SHIFT N/P	4		44 L	RGB (G:GRE	RGB (G:GREEN) SIGNAL				
$\dashv$	SE	厚		45 P	RGB (B:BL	RGB (B:BLUE) SIGNAL				
4		9 i	12117	$\dashv$	4	COMPOSITE IMAGE GND				
143 P	COMBI SW OUTPUT 1		11 46 48 47 45 13 3	47 BR	1	COMPOSITE IMAGE SIGNAL				
╀	COMBI SW OUTBUT 3	1 4	10 10 15 14 51 00 50 18 50	49 BB		INVERTER GND				
146 SB		IJ	01 00 07 10 41 01 61 71	╁		d/ d/				
149 W	TIRE PR			51 LG		COMM (CONT->DISP)				
4	┪	la	or Signal Name [Specification]	1		SHIELD				
151	REAR WINDOW DEFOGGER RELAY CONT	No. of Wire		57 SHIELD		SHIELD				
		+		38 SHIEL						
		3 ×	OND ON 1 (+)							
		, ,	() LOD 1							
		>	AS 1 (+)							
		. y	AS 1 (-)							
		11 SB	BCZS (+)							
		$\dashv$								
		+	AIR							
		<del>ار</del>								
		8 F	CUTOFF TELLTALE							
		7	OSIN II							

JCNWM3678GI

	0	AV CONTROL UNIT	TH32FW-NH			85 66 67 68 69 70 71 72 73 74 75 76 81 82 83 84 85 86 87 88 89 90 91 92	Circust Money [Constitution]	olgnai Name Lopecinication]	PARKING BRAKE	COMPOSITE IMAGE GND	COMPOSITE IMAGE SIGNAL	MICROPHONE GND	MICROPHONE VCC	COMM (CONT->DISP)	CAN-L	AV COMM (L)	AV COMM (L)	ILLUMINATION	IGNITION	REVERSE	VEHICLE SPEED (8-PULSE)	SHIELD	MICROPHONE SIGNAL	SHIELD	COMM (DISP->CONT)	CAN-H	AV COMM (H)	0.0000000000000000000000000000000000000
	No. M210		Type TH3			61 62 63 64 77 78 79 80	Color	of Wire	SB	Ь	٦	SHIELD	g	re	Ь	re	57	٦	9	BG	ч	SHIELD	۳	В	7	٦	SB	ć
METER	Connector No.	Connector Name	Connector '	偃	E.S.		Terminal	No.	99	- 67	89	71	72	23	74	75	9/	62	08	81	82	83	48	88	68	06	16	00

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INFOID:0000000005807740

# 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		Reget to zero by evenending communication					
Fuel gauge		Reset to zero by suspending communication.					
Water temperature gauge							
Illumination control		When suspending communication, change to nighttime mode.					
Information display		The display turns off by suspending communication.					
Buzzer		The buzzer turns off by suspending communication.					
	ABS warning lamp						
	VDC OFF indicator lamp						
	SLIP indicator lamp	The lamp turns on by suspending communication.					
	Brake warning lamp	The lamp turns on by suspending communication.					
	CRUISE warning lamp						
	Malfunction indicator lamp						
	High beam indicator						
	Turn signal indicator lamp						
Warning lamp/indicator	Oil pressure warning lamp						
lamp	A/T CHECK warning lamp						
	AWD warning lamp						
	Low tire pressure warning lamp	The lamp turns off by suspending communication.					
	Key warning lamp	The lamp turns on by suspending communication.					
	AFS OFF indicator lamp						
	4WAS warning lamp						
	Master warning lamp						
	Tail lamp indicator lamp						
	Front fog lamp indicator lamp						

DTC Index

Refer to WCS-70, "DTC Index".

### < ECU DIAGNOSIS INFORMATION >

### UNIFIED METER AND A/C AMP.

Reference Value INFOID:0000000005807742

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#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM	1
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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	D
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received	Е
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	F G
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	Н
ABS W/L	Ignition switch	ABS warning lamp ON	On	
ADS W/L	ON	ABS warning lamp OFF	Off	ı
VDC/TCS IND	Ignition switch	VDC OFF indicator lamp ON	On	0
VDC/TCS IND	ON	VDC OFF indicator lamp OFF	Off	-
SLIP IND	Ignition switch	SLIP indicator lamp ON	On	K
SLIP IND	ON	SLIP indicator lamp OFF	Off	=
BRAKE W/L	Ignition switch	Brake warning lamp ON	On	
DIVARLE W/L	ON	Brake warning lamp OFF	Off	
DOOR W/L	Ignition switch	Door warning displayed	On	
DOOK W/L	ON	Door warning not displayed	Off	M
TRUNK/GLAS-H	Ignition switch	Trunk warning displayed	On	
TRONIVOEAG TI	ON	Trunk warning not displayed	Off	\A(C)
HI-BEAM IND	Ignition switch	Hi-beam indicator lamp ON	On	WC
II DE/III II D	ON	Hi-beam indicator lamp OFF	Off	
TURN IND	Ignition switch	Turn indicator lamp ON	On	0
TORIN IND	ON	Turn indicator lamp OFF	Off	_
FR FOG IND	Ignition switch	Front fog lamp indicator lamp ON	On	
	ON	Front fog lamp indicator lamp OFF	Off	Р
RR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
LIGHT IND	Ignition switch	Tail lamp indicator lamp ON	On	-
בוטוו וווט	ON	Tail lamp indicator lamp OFF	Off	•

Monitor Item		Condition	Value/Status
OIL W/L	Ignition switch	Oil pressure warning lamp ON	On
OIL W/L	ON	Oil pressure warning lamp OFF	Off
MIL	Ignition switch	Malfunction warning lamp ON	On
IVIIL	ON	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
CRUISE IND	Ignition switch	Cruise indicator displayed	On
CRUISE IND	ON	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	Cruise warning lamp ON	On
GROISE W/L	ON	Cruise warning lamp OFF	Off
BA W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
ATC/T-AMT W/L	Ignition switch	A/T check warning lamp ON	On
ATC/T-AIVIT VV/L	ON	A/T check warning lamp OFF	Off
4WD W/L	Ignition switch	AWD warning lamp ON	On
4VVD VV/L	ON	AWD warning lamp OFF	Off
4WD LOCK IND	Ignition switch	NOTE: This item is displayed, but cannot be monitored.	Off
	Ignition switch	Low-fuel warning displayed	On
FUEL W/L	ON	Low-fuel warning not displayed	Off
	Ignition switch	Washer warning displayed	On
WASHER W/L	ON	Washer warning not displayed	Off
	Ignition switch	Low tire pressure lamp ON	On
AIR PRES W/L	ON	Low tire pressure lamp OFF	Off
	Ignition switch	Key warning lamp ON	On
KEY G/Y W/L	ON	Key warning lamp OFF	Off
. = 0 0 = = 11.15	Ignition switch	AFS OFF indicator lamp ON	On
AFS OFF IND	ON	AFS OFF indicator lamp OFF	Off
4)A/A O/D A C \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	Ignition switch	4WAS warning lamp ON	On
4WAS/RAS W/L	ON	4WAS warning lamp OFF	Off
DDS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
LANE W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
LDP IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off

Monitor Item		Condition	Value/Status	Α.
	Ignition switch	Engine start information display (A/T model)	B&P I	– A
	ŎN	Engine start information display (M/T model)	C&P I	<del></del>
	Ignition switch	Engine start information display (A/T model)	B&P N	<del>-</del> В
	ACC	Engine start information display (M/T model)	C&P N	_
LCD	Ignition switch LOCK	Key ID warning display	ID NG	C
	Ignition switch LOCK	Steering lock information display	ROTAT	_
	Ignition switch LOCK	P position warning display	SFT P	D
	Ignition switch LOCK	Intelligent Key insert information display	INSRT	E
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT	
	Ignition switch ON	Take away warning display	NO KY	F
	Ignition switch LOCK	Key warning display	OUTKY	G
	Ignition switch ON	ACC warning display	LK WN	
	Ignition switch	Vehicle ahead detection indicator displayed	On	Н
ACC TARGET	ON	Vehicle ahead detection indicator not displayed	Off	
		When following distance set to "LONG"	LONG	
ACC DISTANCE	Ignition switch	When following distance set to "MIDDLE"	MID	
	ON	When following distance set to "SHORT"	SHORT	_
		Set distance indicator not displayed	Off	J
ACC OWN VHL	Ignition switch	Own vehicle indicator displayed	On	_
ACC OWN VIIL	ON	Own vehicle indicator not displayed	Off	K
ACC SET SPEED	Ignition switch	Set vehicle speed indicator not displayed	Off	_
ACC SET SPEED	ON	Set vehicle speed indicator displayed	On	_
ACC UNIT	Ignition switch	Set vehicle speed indicator unit display ON	On	
ACC UNIT	ON	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	M
		Shift position indicator P display	Р	\\/(
		Shift position indicator R display	R	_ W0
		Shift position indicator N display	N	== ' <u></u>
		Shift position indicator D display	D	0
		Shift position indicator M1 display	M1	_
SHIFT IND	Ignition switch ON	Shift position indicator M2 display	M2	_
	O14	Shift position indicator M3 display	M3	- P
		Shift position indicator M4 display	M4	<u> </u>
		Shift position indicator M5 display	M5	_
		Shift position indicator M6 display	M6	_
		Shift position indicator M7 display	M7	_

### < ECU DIAGNOSIS INFORMATION >

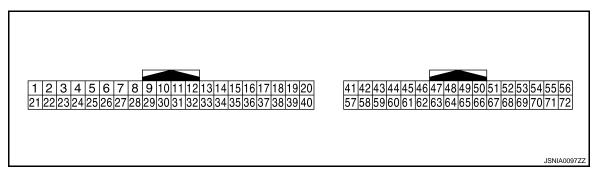
Monitor Item		Condition	Value/Status
AT S MODE SW	Ignition switch	Snow mode switch ON	On
AT 3 MODE 3W	ON	Snow mode switch OFF	Off
AT P MODE SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
M RANGE SW	Ignition switch	Selector lever manual mode position	On
W RANGE SW	ON	Other than the above	Off
NM RANGE SW	Ignition switch	Selector lever manual mode position	Off
NW RANGE SW	ON	Other than the above	On
AT SFT UP SW	Ignition switch	Selector lever + position	On
AT SET UP SW	ON	Other than the above	Off
AT SET DIAIN SIM	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	ŎN	Other than the above	Off
OT OFT DIAME OVA	Ignition switch	Paddle shifter switch down operation	On
ST SFT DWN SW	ON	Other than the above	Off
00MB E/B 010	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
DKD CW	Ignition switch	Parking brake switch ON	On
PKB SW	ON	Parking brake switch OFF	Off
DUCKI E OW	Ignition switch	Seat belt not fastened	On
BUCKLE SW	ON	Seat belt fastened	Off
DDAKE OH OW	Ignition switch	Brake fluid level switch ON	On
BRAKE OIL SW	ON	Brake fluid level switch OFF	Off
DISTANCE [km]	Ignition switch ON	_	Possible driving distance calculated by unified meter and A/C amp.
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	_	Equivalent to ambient temperature NOTE: This may not match the indicated value on the information display.
ELIEL LOW SIC	Ignition switch	Low-fuel warning displayed	On
FUEL LOW SIG	ŎN	Low-fuel warning not displayed	Off
DI 177ED	Ignition switch	Buzzer ON	On
BUZZER	ON	Buzzer OFF	Off

#### NOTE:

Some items are not available according to vehicle specification.

TERMINAL LAYOUT

#### < ECU DIAGNOSIS INFORMATION >



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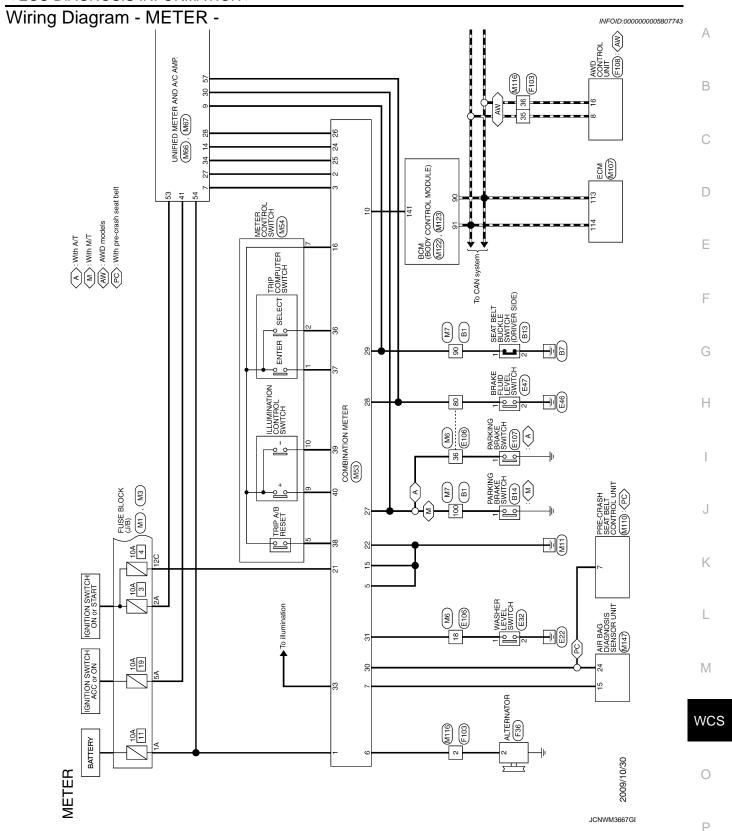
#### PHYSICAL VALUES

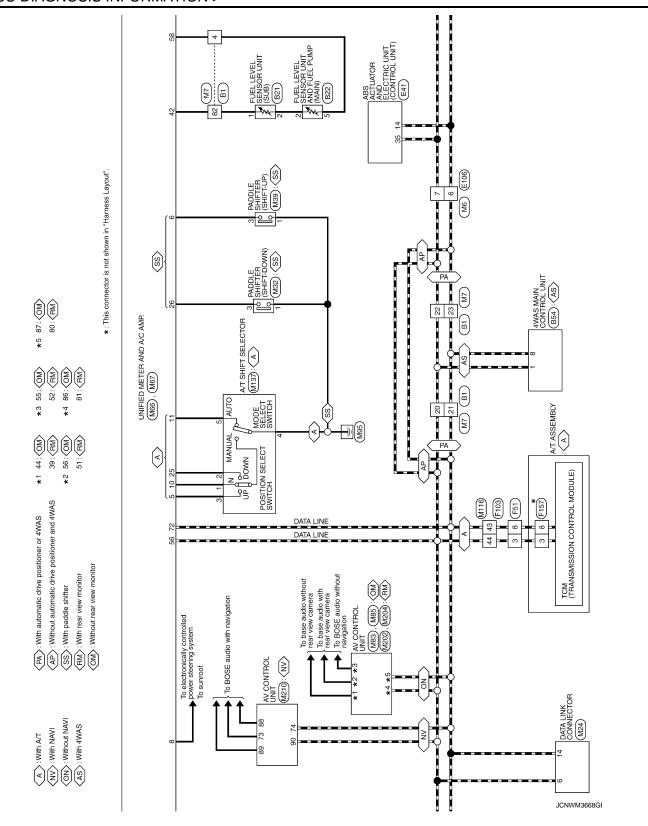
	nal No. color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
4	0	Oten Jenes eviteb eines	la a cat	Ignition	Brake pedal is depressed	12 V
(G)	Ground	Stop lamp switch signal	Input	switch OFF	Other than the above	0 V
5	Ground	Manual mode shift up sig-	Innut	Ignition switch	Selector lever UP operation	0 V
(L)	Giouria	nal	Input	ON	Other than the above	12 V
6 (BG)	Ground	Paddle shifter up signal	Input	Ignition switch ON	Selector lever DS position     Paddle shift up operation	0 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 fastened	0 V
10		Maria da sa da	1	Ignition	Selector lever DS position	0 V
(W)	Ground	Manual mode signal	Input	switch ON	Other than the above	12 V
11	0	Not assessed as a facility of	1	Ignition	Selector lever DS position	12 V
(G)	Ground	Not manual mode signal	Input	switch ON	Other than the above	0 V

	nal No. color)	Description			Condition	Value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
14 (BR)	Ground	Communication signal (LCD → AMP.)	Input	Ignition switch ON	<del>_</del>	(V) 15 10 5 0 400 µs JSNIA0028GB	
23	0	A/T are any anxistals account.	la a cat	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	Input	Ignition switch	Selector lever down operation	0 V	
(V)		signal		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	

	nal No. e color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
34 (Y)	Ground	Communication signal (AMP. → LCD)	Output	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB
41 (L)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
42 (BR)	Ground	Fuel level sensor signal	Input	Ignition switch ON	_	(V) 4 3 2 1 0 E 1/4 1/2 3/4 F JSNIA0013GB
45 (V)	Ground	Ambient sensor signal	Input	_	_	(V) 4 3 2 1 0 -10 0 10 20 30 40 [°C] (14) (32) (50) (68) (86) (104) [°F] JSNIA0014GB
53 (W)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage
54 (SB)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
55 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
56 (L)	Ground	CAN-H	_	_	_	_
57 (LG)	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 lower than the low level	0 V
58 (Y)	Ground	Fuel level sensor ground	_	Ignition switch ON	_	0 V
61 (B)	Ground	Ambient sensor ground	_	Ignition switch ON	_	0 V

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

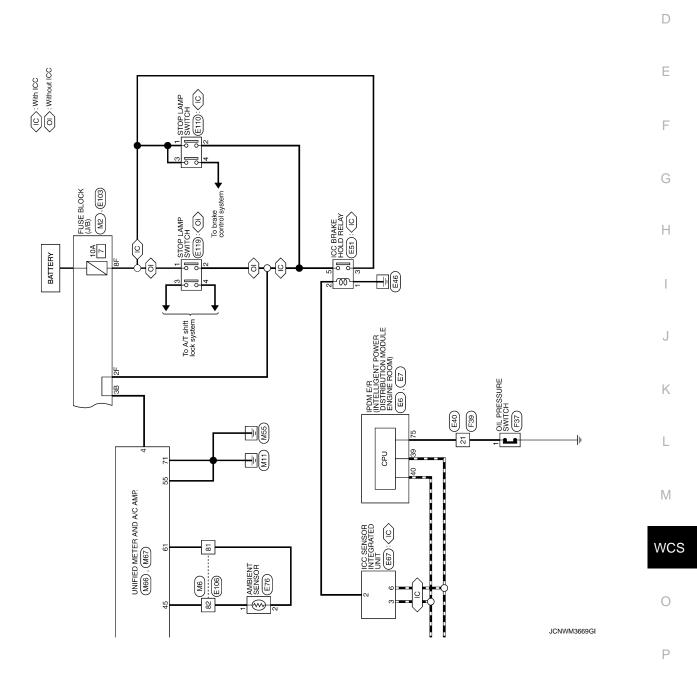




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METER	- a	L.	>		Connector No B14	>		
or integral in	T	2	+		I	> :		
Connector Name	Name WIRE TO WIRE	0 0	59 80 BR	1 1	Connector Name PARKING BRAKE SWITCH	5 ×	1	
Connector Type	TH80FW-CS16-TM4	9	H	-	Connector Type P01FB-A			
q		9	62 R	1	q	Connector No.	B54	
唐		9	4	-	医	Connector Name	4WAS MAIN CONTROL UNIT	
	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	9	+		[		7	
	97 00 00 00 00 00 00 00 00 00 00 00 00 00	٦	1	1		Connector Type	A36FW=M4	
	20 20 20 20 20 20 20 20 20 20 20 20 20 2		+		=	<b>4</b>		
	88 88 88 88 88 88 88 88 88 88 88 88 88		72 GK		]	李		
		1	╀			ΞŠ		
Terminal	Color	000	/ <sub>4</sub>		Terminal Golor	_	1 2 3 4 5 6 7 8 9 10 12 22 22 24 25 26 27 28 37 38 3940	
_	of Wire Signal Name [Specification]	<sup>∞</sup>	┝	1		1111213		
-	GR –	8	7 ×	1	1 GR			
2	BG -	8	85 G	-				
3	T	8	M 86	-		Terminal Color	Simal Nama [Snarification]	
4	Υ -	8	87 R	_	Connector No. B21	No. of Wire	O'B' IN TABLE COPCONICATION	
9	٦.	8	88 BR	_	Connector Name FILE LEVEL SENSOR LIMIT (SLIB)		CAN-H	
8		8	Н	1		<b>4</b>	R-ANG MAIN SIG	
6		6	90 SB	-	Connector Type E02FGY-RS	2 M	R-ANG VCC	
15	Υ -	6	Н	-	4	7 R	R-ANG SUB SIG	
91	BR -	6	92 BR	-		8	CAN-L	
17	LG -	6	Н	-	П	15 G	R-ANG GND	
18	BG -	6	95 BG	-		22 GR	STOP/L SW	
20		6	Э6 Y	-	(31)	25 SB	R-MTR RLY	
21		¥	100 GR	-		Н	IGN	
22						31 BR	BUS-H	
23						32 Y	BUS-L	
24	- ^	Conr	Connector No.	B13	Terminal Color	34 B	GND	
25	- SB	Ċ	N	CEAT DELY TOUR OF STATE OF STATE STATE	No. of Wire olgrian varie Lopecinication.	36 LG	TOS S/d	
56	- 5	5	ector Manne	SEAT BELL BOONLE SWILCH (DRIVER SIDE)	- B	_	R-MTR PWR SUPPLY	
72	- M	Conr	Connector Type	A03FW	2 W -	38 R	R-MTR (RH)	
28		4				39 G	R-MTR (LH)	
31	^	ß	7	Ē		40 B	R-MTR GND	
32	SB	_	<u>ا</u> ق		Connector No. B22			
П	SHIELD -	•	3	-	CHELLENE CORRODORNITAND CHICA DAMP (AMB)			
34	M			c				
35	BR –			7 0	Connector Type E05FGY-RS			
1	_			າ	á			
┪	SHIELD -	l	- 1	]	性的			
38	_	Terr	Ferminal Color	Simal Name [Specification]				
39	SB -	No						
40	_		SB	1	(12345)			
41			2 B	1	<u>-    </u>			
Г	SHIELD -							
43								
П	- D				la			
45 SI	SHIELD -				No. of Wire			
46	SB -				1 P			
55	BR -				2 W -			
26	- 2				3 B			
					ł			

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### < ECU DIAGNOSIS INFORMATION >

		А
E47 Signal Name (Specification)  Signal Name (Specification)		В
E43   R   G   G   G   G   G   G   G   G   G		С
5   7   6   6   6   6   6   6   6   6   6		D
ONTROLUMITY STEERS 4 3 2 1		Е
EE41  BAA427E-AH24-LH  GND  Signal Name [Specification]  Signal Name [Specification]  OND  UBMR  UBMR  UBMR		F
P   P   P   P   P   P   P   P   P   P		G
17 11 18 18 18 18 18 18 18 18 18 18 18 18		Н
C   C   C   C   C   C   C   C   C   C		I
E22  WASHER LEVEL SWITCH 202FBR  Signal Name [St  1		J
17		K
00) ]		L
12-M4  12-M4  12-M4  12-M4  12-M4  12-M4  12-M4  12-M4  13-M4  14-M30  15-M4  15-M4  15-M4  15-M4  15-M4		M
		wcs
Connector Name   Color		0
	JCNWM3671GI	Р

Revision: 2009 November WCS-61 2010 G37 Sedan

92 LG	Connector No E107 Connector Name PARKING BRAKE SWITCH Connector Type TB01FW	Terminal Color No. of Wire Signal Name [Specification]  1 BG — — — — — — — — — — — — — — — — — —	Terminal   Color   Signal Name [Specification]   No. of Wire   L
of Wire Signal Name [Specification] of Wire SB	M W W C C C C C C C C C C C C C C C C C	G G G G G G G G G G G G G G G G G G G	GR V V V V V V V V V V V V V V V V V V V
Terminal No. 1 2 2 3 3 7 7 11	13 16 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	37 98 98 98 41 42 43 44 44 44 46 46 46 46 46 47 48 48 48 48 48 48 48 48 48 48	57 80 80 81 82 83 84 86 86 86 88
Connector No. E76 Connector Name AMBIENT SENSOR Connector Type RS02TB	Terminal   Color   Signal Name [Specification]   1   1   2   P	2	Connector Name WIRE TO WIRE  Connector Type TH80FW-CS16-TM4
METER Connector No. Esi Connector Name ICC BRAKE HOLD RELAY Connector Type MS02FL-M2-LC  H.S.	Terminal   Color   Signal Name [Specification]   1   8   8   -	Connector Type   RS06FB-PR	

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### < ECU DIAGNOSIS INFORMATION >

NSIO NSIO NSIO Signal Name (Specification)		АВ
WIRE TO TK36FW-		С
Connector No.		D
		Е
F51 A7 ASSEMBLY RKI0FG-DGY RK10FG-DGY  RK10FG-DGY  RK10FG-DGY		F
N   N   N   N   N   N   N   N   N   N		G
		Н
Signal Name (Specification)		I
F78 SAA38FE TO I I I I I I I I I I I I I I I I I I I		J
Color Nume   Color Nume   Commentor Nume   Commentor Nume   Commentor Type   Commentor Type   Commentor Type   Commentor Type   Commentor Type   Color Nume   C		K
		L
Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]		M
F36  ATTERW  ATTERW  ATTERW  ATTERW  OUL PRES		WCS
HS  Connector Name Connector Type  I L  Z  W  Golder No.  Gonnector Name Connector Type  Connector Name Connect		0
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METER	Constructors No.	Connection Mr	č		
Т	Т	Т	5 6	3 >	
Connector Name AWD CONTROL UNIT	Connector Name FUSE BLOCK (J/B)	Connector Name FUSE BLOCK (J/B)	33		
Connector Type TH16FW-NH	Connector Type NS06FW-M2	Connector Type NS12FW-GS	34	- M	
	1	1	35	BR =	
			36	-	
			37		
		5040 302010	38	- 5	
234567	8A 7A 6A 5A 4A	12C11C10C19C18C17C6C	40		
9 10 11 12 13 14 15 16			41		
			42		
L	Ŀ	H	43	9	
I erminal   Color   Signal Name [Specification]	Signal Name [Specification]	Signal Name [Specification]	44	G = DM#L A /T-1	
+	Ť	╈	45	[With A/T]	
	╀	7C B	46		
3 W OIL TEMP (-)	7	w	47	SB -	
7 G IGN	4A P	BG	48		
8 L CAN-H	P	10C L	49	-	
9 O AWD SOL BAT	- × ¥9	P	20	1	
10 B GND	7A R -	H	51		
В	8A		52	M	
TC OIL			53	- B	
15 Y VB		Connector No. M6	54	B	
16 P CAN-L	Connector No. M2	Connector Name WIRE TO WIRE	22	B	
	Connector Name FLISE BLOCK (17B)		58	Te	
		Connector Type TH80MW-CS16-TM4	80	SB	
Connector No. F157	Connector Type NS10FW-CS	4	81	P	
Connector Name TCM (TRANSMISSION CONTROL MODILIE)	ą		82	- ^	
┑	医	90 FO SOUTH 90 F	83	M	
Connector Type SP10FG		2 7 13.00 03.00 03.00 03.00 02.00 02.00 02.00 03.	84	7	
Q	48 38  18	8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	82		
	10B 0B 8B 7B 6B 5B		86		
SH SH			87	- 5	
1001		L	88		
ا د د	Ŀ	Signal Name [Specification]	68		
01 6 8 2 9	Signal Name [Specification]	No. Of Wire	16		
	+	- ·	36	- (°	
T			200		
	+	+	5 6	2	
t	5 00	A 0	Ge 90		
PATT			200		
2 0	- 0		T		
	- 0	- 0	+	- ^	
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7 6	as a	4 3	3	as as	
- GR		+			
8 BR CAN-L		GB GB			
Y. Y.		17 BR -			
W/B					
		29 G			
		1			

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### < ECU DIAGNOSIS INFORMATION >

Signal Name [Speedification]  BATTERY POWER SUPPLY COMMUNICATION SIGNAL (METER->MATTERNOM SIGNAL (METER->MATTERNOM SIGNAL (MAP->)METER ALTERNOM SIGNAL ALTERNAL SIGNAL ALTERNAL SIGNAL ARE BAG SIGNAL ARE BAG SIGNAL GROUND ILL GND IL	В
Signal Name  BATTERY PC MUNICATION SI MUNICATION SI MUNICATION SI SECURAT  SECURAT  ILL ILL ILL ILL ILL ILL ININATION CONTENT INATION CONTENT	
Color  V Were  LG COMMUNICATION SIGNAL (METER-NAMP.)  BG COMMUNICATION SIGNAL (METER-NAMP.)  BG COMMUNICATION SIGNAL  LG COMMUNICATION SIGNAL  LG ARE BAG SIGNAL  LG ARE BAG SIGNAL  REPRODUD  BR LL GNUD  BR LL GNUD  BR LL GNUD  GROUND  GROUND  BR LL GNUD  COMMUNICATION SIGNAL (B-PULSE)  P SECURITY SIGNAL (B-PULSE)  C SELECT SWITCH SIGNAL  B TRIP A A B RESET SWITCH SIGNAL  C SELECT SWITCH SIGNAL  B TRIP A A B RESET SWITCH SIGNAL  C SELECT SWITCH SIGNAL  C SELECT SWITCH SIGNAL  B TRIP A A B RESET SWITCH SIGNAL  C SELECT SWITCH SIGNAL  B TRIP A A B RESET SWITCH SIGNAL  C SELECT SWITCH SIGNAL  C SELECT SWITCH SIGNAL  B TRIP A A B RESET SWITCH SIGNAL  C SELECT SWITCH SIGN	С
Terminal Control of Co	D
Fration   Pi   Pi   Pi   Pi   Pi   Pi   Pi   P	Е
No.   M32	F
S R R R R R R R R R R R R R R R R R R R	G
	Н
INECTOR  Name (Specification)	I
Signal   Sig	J
N   N   N   N   N   N   N   N   N   N	K
56   60   60   60   60   60   60   60	L
	M
MATE TO MIRE TO THROWN THE TO	VCS
MAETER   Connector Name   Connector Name   Connector Type   Connector Ty	0
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			ŀ							Г
Connector No. M54		27	ဗ	METER->AMP.)	Connector No. M	M83	98	7	CAN-H	<u> </u>
Connector Name METER CONTROL SWITCH		28	R VEHICLE SPEED SIGNAL (8-PULSE	- (8-PULSE)	Connector Name	AV CONTROL UNIT	87	<u>ا</u> ا	CAN-L	Т
Connector Tone TH19EA-NH		8 %	COMMINICATION SIGNAL (AMD = N CD)	(AMD=>LCD)	Connector Type	TH24EW-NH	8 8	9 -	AV COMM (I)	Т
1		8	t	SOI SIGNAI	1	111111111111111111111111111111111111111	8 6	2 8	AV COMM (H)	Т
					1		16	97	AV COMM (L)	Г
					E		98	œ	AUX SOUND SIGNAL RH (+)	П
	_	Connector No.	No. M67				96	Μ	AUX SOUND SIGNAL LH (+)	
1 2 3 4 5 6		Connector Name	Name   INITIED METER AND A / C AMP	Q	47 46	44 43 42 41 40 39	97	В	AUX SOUND SIGNAL GND	
7 8 9 10 11 12		Colline			59 58 57	57 56 55 54 53 52 51 50 49 48	101	BR	SW GND	
1	=1	Connector Type	Type TH32FW-NH				103	^	EJECT SIGNAL	
		4					104	9	IGNITION	П
la	loation	厚			Terminal Color	Simal Name [Snacification]	105	BG	REVERSE	
No. of Wire	i caroni	Ę			No. of Wire	Oglar rane Copecincatory	106	SB	PARKING BRAKE	
			/	F	36 BR	COMPOSITE IMAGE SIGNAL	107	۳	PARKING BRAKE	٦
2 LG -			43 44 45 46 47 48 49 50 51 52	53 54 55 56	4	COMPOSITE IMAGE GND				
3 B			20 23 20 01 01 02 03 04 02 00 01 02	27 17 07 80	38 P	RGB (B:BLUE) SIGNAL				
- A					$\dashv$	RGB (G:GREEN) SIGNAL				
. G			•		40 G	RGB (R:RED) SIGNAL				
7 BR –		Terminal	Color Signal Name [Specification]	cation	41 W	RGB SYNC				
8 GR		No.	of Wire		42 SHIELD	SHIELD				
- BG 6		41	L ACC POWER SUPPL'	PLY	43 B	RGB AREA (YS) SIGNAL				
01		42	BR FUEL LEVEL SENSOR SIGNAL	SIGNAL	44 L	COMM (DISP->CONT)				
		43	BR INTAKE SENSOR SIGNAL	IGNAL	45 R	HP				
		44	LG IN-VEHICLE SENSOR SIGNAL	SIGNAL	46 LG	SIGNAL GND				
Connector No. M66		45	V AMBIENT SENSOR SIGNAL	SIGNAL	47 BG	SIGNAL VCC				
Connector Name   INJETED METER AND A / C. AMP	dy.	46	Y SUNLOAD SENSOR SIGNAL	SIGNAL	48 BR	COMP SYNC				
		47	G GAS SENSOR SIGNAL	SNAL	49 ∀	SHIELD				
Connector Type TH40FW-NH		53	W IGNITION POWER SUPPLY	UPPLY	50 SHIELD	SHIELD				
þ		54	SB BATTERY POWER SUPPLY	UPPLY	55 B	SHIELD				
医		22	B GROUND		56 LG	COMM (CONT->DISP)				
116		99	L CAN-H		57 G	VΡ				
		22	LG BRAKE FLUID LEVEL SWITCH	SWITCH	58 BR	INVERTER GND				
4 5 6 7	16 17 18 19 20	28	Y FUEL LEVEL SENSOR GROUND	GROUND	. Y 65	INVERTER VCC				
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35	36 37 38 39 40	59	GR INTAKE SENSOR GROUND	ROUND						
		09	W IN-VEHICLE SENSOR GROUND	GROUND						
		61	B AMBIENT SENSOR GROUND	ROUND	Connector No. N	M85				
la	Teation	62	SB SUNLOAD SENSOR GROUND	GROUND	Connector Name	AV CONTROL UNIT				
e e		63	ION CONTRO	TPUT SIGNAL	Т					
9	SIGNAL	çş			Connector Type	H32FW−NH				
5 L MANUAL MODE SHIFT UP SIGNAL	UP SIGNAL	- G	A/C LAN SIGNAL	AL.	1					
1	AND SMETED	2 7	CP CACH DOOR MOTOR FOR	YEN SUPPLI	李					
+	(9-DIII SE)	- 62			H.S.					
SB SEA	NAL (DRIVER SIDE)	4,			91 90 89	88 87 86 85 84 83 82 81 80 79 78 77 76				
*	IGNAL				107 106 105	형				
ž	SIGNAL									
COM	(LCD->AMP.)									
20 BR ION ON / OFF SIGNAL	GNAL				Terminal Color	Simal Nama [Snacification]				
>	SIGNAL				7					
>	OWN SIGNAL				84 SHIELD	SHIELD				
26 G PADDLE SHIFTER DOWN SIGNAL	WN SIGNAL				85 B	GND				

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### < ECU DIAGNOSIS INFORMATION >

R SUPPLY  without ICC  without ICC  WIT SW  W CONT WER SUPPLY  I SW  I S		А
NEY SLOT fil.  ON IND  ATC SHIET SELECTOR POWER SUPPLY  S.L. CONDITION I  I.C. CLUITOH SWI With A.T.]  COMBI SWI WELL A.T. CONT  KEVILESS BIRTY RECEIVER POWER SUPPLY  S.L. LIMIT POWER SUPPLY  S.L. LIMIT POWER SUPPLY  COMBI SWI INPUT 4  COMBI SWI INPUT 3  HAZARD SWI  S.L. LIMIT COMM  S.L. LIMIT COMM		В
LG   R   R   R   R   R   R   R   R   R		С
29 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		D
DOLL E)  DOLL E)  DOLL E)  Discontinuity  2-2-2-2-2-2-2-2-2-1-1-1-1-1-1-1-1-1-1-		Е
MI22  BCM (BODY CONTROL MODULE)  TH46FB-NH  TH46FB-NH  TH6FB-NH  PROM MAT 7-  ROOM ANT 1-  ROOM SI SWI NIPUT 3  COMBI SWI INPUT 3  COMBI SWI INPUT 3  CAN-H  CAN-H  CAN-H		F
		G
10   10   10   10   10   10   10   10		Н
Copy.TB6		I
1   1   1   1   1   1   1   1   1   1		J
Connector No.   MI10		K
		L
MIO7		M WCS
		-1100
METER   Commetter No.		0
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### < ECU DIAGNOSIS INFORMATION >

MEIEK										
Connector No.	M123	Connector No.	M137	24 G	SEAT BELT		Connector No.	T	M204	
Connector Name	e BCM (BODY CONTROL MODULE)	Connector Name	A/T SHIFT SELECTOR	45 Y	DR 2 (+)	T	Connector Name		AV CONTROL UNIT	
Connector Type	TH40FG-NH	Connector Type	TH12FW-NH	Н	AS 2 (+)		Connector Type	П	TH32FW-NH	
偃		匮		48 Y	AS 2 (~) ODS INPUT		匮			
131 130 131 130	28   28   27   28   28   27   28   28	H.S.	123456	Connector No.	M202		ES.	76 77 78 79 80 81	82 83 84 85 86 87 88	
nel lei			7 8 9 10 11 12	Connector Name	AV CONTROL UNIT		_	92 93 94 96	5   96   97   98   99   100 101 102 103 104 105 105 107	
Terminal Color No. of Wire	or Signal Name [Specification]	Terminal Color No. of Wire	or Signal Name [Specification]	€	l		Terminal No.	Color of Wire	Signal Name [Specification]	
Н	RAIN	T. W	1	-	[		76	57	AV COMM (L)	
113 BG	OPTICAL SENSOR	> -		38	37 38 39 40 41 42 43 44	45 46 47	77	g S	AV COMM (H)	
ļ.		, 4 B	1	48	49 50 51 52 53 54 55 56	57 58 59	79	88 23	AV COMM (H)	
118 BR	Ц	5 G	1	]			80	Ь	CAN-L	
$^{+}$	DR DO	+	1	ŀ			18	٦	CAN-H	
121 SB	3	+	1	la I	Signal Name [Specification]	ification]	82	BB c	SW GND	
123 V	IGN F/B PASSENGER DOOR SW	9 B	1 1	36 BG	SIGNAL VCC		86	SHIELD	TEI VOICE SIGNAI (+)	
F	TRU	╁	1	+			88	л Ф	TEL VOICE SIGNAL (-)	
┝	╁			H			92	œ	VEHICLE SPEED (8-PULSE)	
133 L	PUSH-BUTTON IGNITION SW ILL POWER			39 L	COMM (DISP->CONT)	CONT)	93	SB	PARKING BRAKE	
134 LG		Connector No.	M147	T	RGB AREA (YS) SIGNAL	SIGNAL	94	BG	REVERSE	
138	RECEIVER / SENSOR GIND RECEIVER / SENSOR DOWER SLIPPI Y	Connector Name	MIR BAG DIAGNOSIS SENSOR UNIT	41 SHIELD	ľ	T	96	5 >	DISK EJECT SIGNAL	
139 L	TIRE PRESSURE RECEIVER COMM	Connector Type	TK28FY-EX-SC	╀	RGB (R:RED) SIGNAL	GNAL	3			
140 B	H	4		44 L	RGB (G:GREEN) SIGNAL	SIGNAL				
+	SE	厚		45 P	RGB (B:BLUE) SIGNAL	IGNAL				
4		1.5	21 17	+	1	GE GND				
143 G P	COMBI SW OUTPUT 1		11 46 48 47 45 13 3	47 BR	COMPOSITE IMAGE SIGNAL INVERTER VCC	E SIGNAL				
H		16	12 19 15 14 51 23 50 18 52 2	49 BR		QN				
146 SB	Н	<u>1</u>	200	Н						
+	TIRE PR	Ŀ		7	COMM	(dSIQ				
151	REAR WINDOW DEFORGER RELAY CONT	No. of Wire	or Signal Name [Specification]	57 SHIFLIN	SHELD	Ī				
1	1	t	IGN	T						
		2 B								
		3	DR 1 (+)							
		4 :	DR 1 (-) DR 2 (-)							
		٠ م	AS I (+)							
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		+								
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		S								
		18 R	CUTO							
		21 L	GAN-H							

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### < ECU DIAGNOSIS INFORMATION >

MME  Donnace  Donnace	Γ	Connector No. MZ10	Connector Name AV CONTROL UNIT	Connector Type TH32FW-NH	[ ]	HS.	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 777778 779 81 82 82 82 82 82 82 82 82 82 82 82 82 82		Ferminal   Color   Signal Name [Specification]   No.   Of Wire   Signal Name [Specification]	65 SB PARKING BRAKE	67 P COMPOSITE IMAGE GND	68 L COMPOSITE IMAGE SIGNAL	71 SHIELD MICROPHONE GND	72 G MICROPHONE VCC	73 LG COMM (CONT->DISP)	74 P CAN-L	75 LG AV COMM (L)	76 LG AV COMM (L)	79 L ILLUMINATION	L	81 BG REVERSE	82 R VEHICLE SPEED (8-PULSE)	83 SHIELD SHIELD	87 R MICROPHONE SIGNAL	88 B SHIELD	89 L COMM (DISP->CONT)	90 L CAN-H	91 SB AV COMM (H)	
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# Fail-safe

#### FAIL-SAFE

The unified meter and A/C amp. activates the fail-safe control if CAN communication with each unit is malfunctioning.

### < ECU DIAGNOSIS INFORMATION >

	Function	Specifications			
Speedometer					
Tachometer		React to zero by augrending communication			
Fuel gauge		Reset to zero by suspending communication.			
Water temperature gauge					
Illumination control		When suspending communication, change to nighttime mode			
Information display		The display turns off by suspending communication.			
Buzzer		The buzzer turns off by suspending communication.			
	ABS warning lamp				
	VDC OFF indicator lamp				
	SLIP indicator lamp				
	Brake warning lamp				
	CRUISE warning lamp	The lamp turns on by suspending communication.			
	AWD warning lamp				
	Low tire pressure warning lamp				
	4WAS warning lamp				
Warning lamp/indicator	Malfunction indicator lamp				
lamp	AFS OFF indicator lamp	The lamp blinking caused by communication malfunction			
	High beam indicator				
	Turn signal indicator lamp				
	Oil pressure warning lamp				
	A/T CHECK warning lamp	The lamp turns off by augmending communication			
	Key warning lamp	The lamp turns off by suspending communication.			
	Master warning lamp				
	Tail lamp indicator lamp				
	Front fog lamp indicator lamp				

DTC Index

Display contents of CON- SULT-III	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"
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"

### < ECU DIAGNOSIS INFORMATION >

Display contents of CON- SULT-III	Time	Diagnostic item is detected when	Refer to
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"

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## **BCM (BODY CONTROL MODULE)**

### < ECU DIAGNOSIS INFORMATION >

# **BCM (BODY CONTROL MODULE)**

Reference Value

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
TIC VVIII EICTII	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
TR WII ER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
TR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
I IX WIF LIX IIVI	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial position
TUDN CICNAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CIONALI	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL   AAAD 0\A4	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
1154514450144	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
115 A D 1 A M D O M 4	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO L 101 IT 014	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
ED E00 0W	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
D00D 0W DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOD OW 12	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
D00D 0W ==	Rear RH door closed	Off
DOOR SW-RR	Rear LH door opened	On
	Rear LH door closed	Off
DOOR SW-RL	Rear LH door opened	On

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### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off
CDL LOCK CW	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
CDL LINI COK CW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEN ON TROM	Other than driver door key cylinder LOCK	Off
KEY CYL LK-SW	Driver door key cylinder LOCK	On
1/E)/ 0)// 1/b) 0)//	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
LIAZADD OW	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off
IR CANCEL SW	Trunk lid opener cancel switch ON	On
TR/BD OPEN SW	Trunk lid opener switch OFF	Off
IR/BD OPEN 5W	While the trunk lid opener switch is turned ON	On
TONIC/LIAT MAITO	Trunk lid closed	Off
TRNK/HAT MNTR	Trunk lid opened	On
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
RRE-LOCK	LOCK button of the Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off
KKE-TK/DD	TRUNK OPEN button of the Intelligent Key is pressed	On
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
RRE-PAINIC	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
RRE-F/W OF LIN	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
OI HOAL SENSOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
NEW OW -DIX	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
NEW SW -49	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off

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Monitor Item	Condition	Value/Status
REQ SW -BD/TR	Trunk lid opener request switch is not pressed	Off
NEQ 3W -BD/TK	Trunk lid opener request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
-0311344	On	
GN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
IGN RLY2 -F/B	Ignition switch in ON position	On
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
BRAKE SW 2	The brake pedal is not depressed	Off
SIVALLE ON A	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/ORNOL 3W	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
SEL FIN/IN SVV	Selector lever in P or N position	On
S/L -LOCK	Steering is unlocked	Off
S/L -LOCK	Steering is locked	On
C/L LINILOCK	Steering is locked	Off
S/L -UNLOCK	Steering is unlocked	On
S/L DELAVE/D	Ignition switch in OFF or ACC position	Off
S/L RELAY-F/B	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
DINLK SEN -DR	Driver door is locked	On
DUCU OW IDDM	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
CNDIV1 F/D	Ignition switch in OFF or ACC position	Off
GN RLY1 -F/B	Ignition switch in ON position	On
DETE SWA IDDAA	Selector lever in any position other than P	Off
DETE SW -IPDM	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
SI I FIN -IF DIVI	Selector lever in P or N position (Except M/T models)     The clutch pedal is depressed (M/T models)	On
DET D. MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
CET N. MET	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On

Monitor Item	Condition	Value/Status			
	Engine stopped	Stop			
ENGINE STATE	While the engine stalls	Stall			
	At engine cranking	Crank			
	Engine running	Run			
S/L LOCK-IPDM	Steering is unlocked	Off			
3/L LOCK-IPDIVI	Steering is locked	On			
S/L UNLK-IPDM	Steering is locked	Off			
3/L UNLK-IPDIVI	Steering is unlocked	On			
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off			
S/L RELAT-REQ	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK	On			
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			
D OK FLAG	Steering is locked	Reset			
D OK FLAG	Steering is unlocked	Set			
PRMT ENG STRT	The engine start is prohibited	Reset			
- KWII LING STICT	The engine start is permitted	Set			
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset			
KEY OW OLOT	The Intelligent Key is not inserted into key slot	Off			
KEY SW -SLOT	The Intelligent Key is inserted into key slot	On			
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency o 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			
CONFRIMID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done			
CONFIDM IDA	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			
CONFIDM ID2	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.				

Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
COM IKW ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRMIDI	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
1P 4	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
173	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
IP 2	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 REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGST FLT	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGST FRT	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
ID REGST RRT	ID of rear RH tire transmitter is not registered	Yet
ID DECCE 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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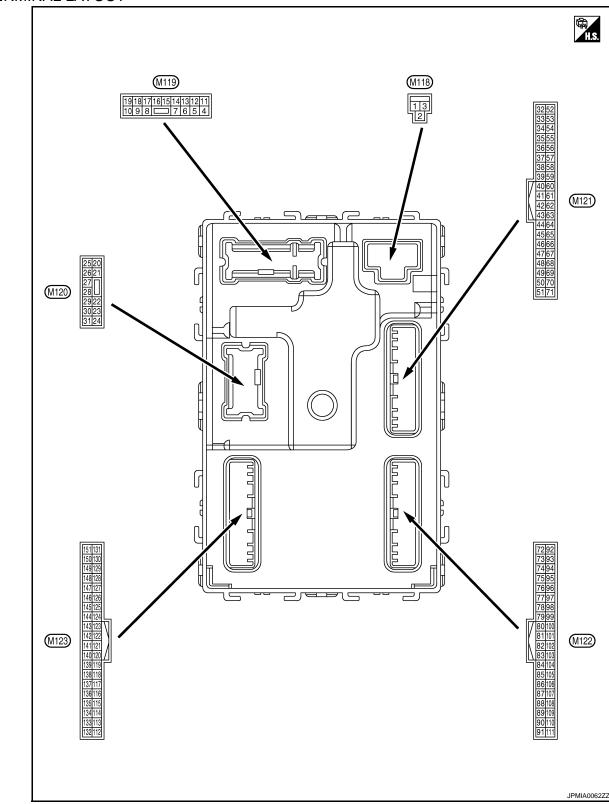
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### TERMINAL LAYOUT



PHYSICAL VALUES

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	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (	OFF	12 V
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch (	ON	12 V
					np 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	0	Passenger door UN-	Outrout	Passenger	UNLOCK (Actuator is activated)	12 V
(P)	Ground	LOCK	Output	door	Other than UNLOCK) Actuator is not activated	0 V
7	Cround	Cton lawn	Outrout	Cton lower	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)	Ground	LOCK	Output	lid	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-	Output	Rear RH door and rear LH	UNLOCK (Actuator is activated)	12 V
(P)	Cround	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 (	NC	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  (V) 10 2 ms  JSNIA0010GB
15 (BG)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(23)					ACC	0 V

Terminal No. Des		Description				Value
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	15 10 5 0 1 s
					Turn signal switch OFF	6.5 V 0 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 PKID0926E 6.5 V
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF ON	12 V 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	Ground	Trunk lid open	Output	Output Trunk lid	OPEN (Trunk lid opener actuator is activated)	12 V
(LG)	Ciound	типк ви орен	Juipui		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	Ground	Trunk room lamp	Output	Trunk room	ON	0 V
(P)	Cround	am.room lamp	Carpar	lamp	OFF	12 V

	nal No.	Description				Value	
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)	
34		Trunk room antenna		Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1   S   S   S   S   S   S   S   S   S	
(SB)	Ground	(–)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 1	
35	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(V)	Glodina	(+) OFF	When Intelligent Key is	OFF	ut OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
38	Ground	Rear bumper anten-	Output	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(B)	Giodila	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	

	nal No. color)	Description			O a malitia m	Value	
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)	
39	Cround	Rear bumper anten-	Output	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 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 1 s	
47		Louistica acaless (IDDM			OFF or ACC	12 V	
47 (Y)	Ground	Ignition relay (IPDM 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	
					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	
64		Intelligent Key warn-		Intelligent Key	Sounding	0 V	
C 1	Ground	ing buzzer (Engine	Output	warning buzzer	Not sounding	12 V	

	nal No.	Description				Value
+ (VVire	color)	Signal name	Input/ Output		Condition	(Approx.)
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Pressed  Not pressed	0 V  (V) 15 10 5 0 JPMIA0011GB 11.8 V
68 (BG)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)  ON (When rear RH door	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
69 (L)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)  ON (When rear LH door opens)	(V) 15 10 5 0 10 ms 10 ms 11.8 V
72 (B)	Ground	Room antenna 2 (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)		(Center console)	·	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s  JMKIA0063GB

	inal No. e color)	Description			Condition	Value	А	
+	-	Signal name	Input/ Output		Condition	(Approx.)	, 1	
73		Room antenna 2 (+)		Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	С	
(G)	Ground	(Center console)	Output	ÖFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 0 1 s JMKIA0063GB	E F	
74		Passenger door an-		When the pas- senger door re- quest switch is	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	G H	
(SB)	Ground	tenna (–)	ignition switch OFF		Output		(V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10	J K
75		Passenger door an-		When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M WCS	
(BR)	Ground	tenna (+)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 15 11 1 S  JMKIA0063GB	O	

	nal No.	Description				Value	
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)	
76		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(V)	Ground	(-)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	
77	Ground	Driver door antenna	Output	When the driver door request	er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(LG)	Gloulu	(+)		·		switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area
78	Ground	Room antenna 1 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	
(Y)	Signific	(Instrument panel)	Сири	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	

### < ECU DIAGNOSIS INFORMATION >

	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 11 1 s  JMKIA0062GB
(BR)	Clound	(Instrument panel)	Cuput	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 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
				During waiting		(V) 15 10 5 0
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	When operating gent Key	geither button on the Intelli-	JMKIA0064GB  (V) 15 10 5 0 JMKIA0065GB

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	nal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA00411
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 JPMIA00370
					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 JPMIA0040

	nal No.	Description				Value	А
+	color)	Signal name	Input/ Output		Condition	(Approx.)	^
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	ВС
88	Ground	Combination switch	Input	Combination	Lighting switch HI (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	E
(BG)	Clound	INPUT 3	mput	switch	Lighting switch 2ND (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	G H I
					Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 2  Wiper volume dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	J K L
89 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ig- nition switch (push switch)	Pressed Not pressed	0 V Battery voltage	M
90 (P)	Ground	CAN-L	Input/ Output		_	_	
91 (L)	Ground	CAN-H	Input/ Output		_	_	WCS
					OFF	0 V	
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	Blinking	(V) 15 10 1 s JPMIA0015GB	O P
					ON	6.5 V 12 V	

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
93 (GR)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(=:-)					ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BG)	0.000	-	- Carpar		ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)	Ground	tion No. 1	прис	Oleching look	UNLOCK status	12 V
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V
(P)	Giodila	tion No. 2	прис	Steering lock	UNLOCK status	0 V
		Selector lever P posi-		_	P position	0 V
		tion switch (A/T models)		Selector lever	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)* <sup>1</sup> (BR)* <sup>2</sup>	Ground	ICC)	Input	switch	ON (Clutch pedal is not depressed)	12 V
		ICC clutch switch (M/		ICC clutch	OFF (Clutch pedal is depressed)	0 V
		T models with ICC)		switch	ON (Clutch pedal is not depressed)	12 V
					ON (Pressed)	0 V
100 (Y)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016G
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016G
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC	0 V 12 V
103 (P)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch (	DFF	12 V
106	Ground	Steering lock unit	Output	Ignition switch	OFF or ACC	12 V
(SB)	Ground	power supply	Output	iginuon switch	ON	0 V

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	А
+	color)	Signal name	Input/ Output		Condition	(Approx.)	^
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB	B C D
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB	E
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper volume dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB	G H I
					Front wiper switch LO	(V) 15 10 5 0 2 ms  JPMIA0038GB 1.3 V	J K L
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB	M WCS

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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
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB
(R)		INPUT 4		switch	Lighting switch 1ST (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
					Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 5  Wiper volume dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB

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

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					LOCK status	12 V
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	12 V
					15 seconds or later after UNLOCK	0 V
112 (R)	Ground	Light and rain sensor serial link	Input/ Output	Ignition switch C	N	(V) 15 10 5 0 10ms JPMIA0156GB 8.7 V
440				lauriti an annitale	When bright outside of the vehicle	Close to 5 V
113 (BG)	Ground	Optical sensor	Input	Ignition switch 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	mput	switch	ON (Clutch pedal is depressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2		Stop lamp	OFF (Brake pedal is not depressed)	0 V
118	0	(Without ICC)	1	switch	ON (Brake pedal is depressed)	Battery voltage
(BR)	Ground	Stop lamp switch 2	Input		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage
119 (SB)	Ground	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 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V

	nal No.	Description				Value	٨
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)	А
121 (SB)	Ground	Key slot switch	Input	slot	gent Key is inserted into key	12 V 0 V	В
123 (V)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V Battery voltage	С
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 JPMIA0011GB	D E F
					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	G H
					ON	JPMIA0012GB 1.1 V 0 V	I
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C		(V) 15 10 5 0 10 ms JPMIA0013GB	J K L
				Ignition quitab (	DEE or ACC	10.2 V 12 V	
				Ignition switch C	ON (Tail lamps OFF)	9.5 V	M
133 (L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.	WCS
					OFF	JPMIA0159GB	Р
134	C = 2 - 1	LOCK indicates less	0.45.4	LOCK indicator	OFF	Battery voltage	
(LG)	Ground	LOCK indicator lamp	Output	lamp	ON	0 V	
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C	ON	0 V	

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(V)	Orouna	power supply	Output	igilia ori o viitori	ACC or ON	5.0 V
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s
(L)		er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	12 V
(B)	Oround	position	IIIput	Colodiol level	Except P and N positions	0 V
					ON	0 V
141 (W)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 10 5 0 1 s JPMIA0014GB
					OFF	12 V
					All switches OFF	0 V
					Lighting switch 1ST	
				Combination	Lighting switch HI	(V)
142 (BR)	Ground	Combination switch	Output	switch	Lighting switch 2ND	10 5
(=: 1)	0.000	OUTPUT 5	Саграг	(Wiper volume dial 4)	Turn signal switch RH	0
					All switches OFF (Wiper volume dial 4)	0 V
					Front wiper switch HI (Wiper volume dial 4)	(V)
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	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	15 10 5 0 2 ms JPMIA0032GB

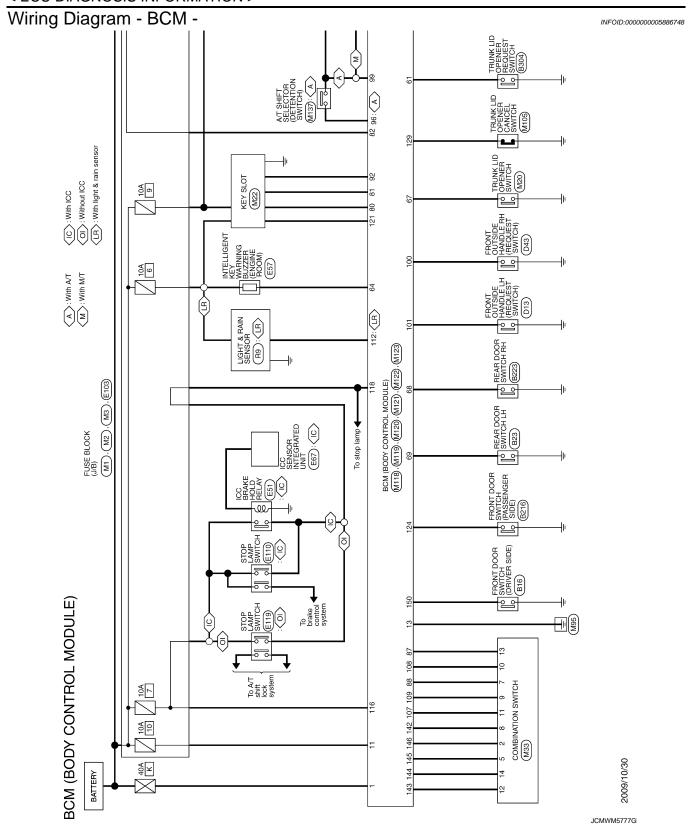
### < ECU DIAGNOSIS INFORMATION >

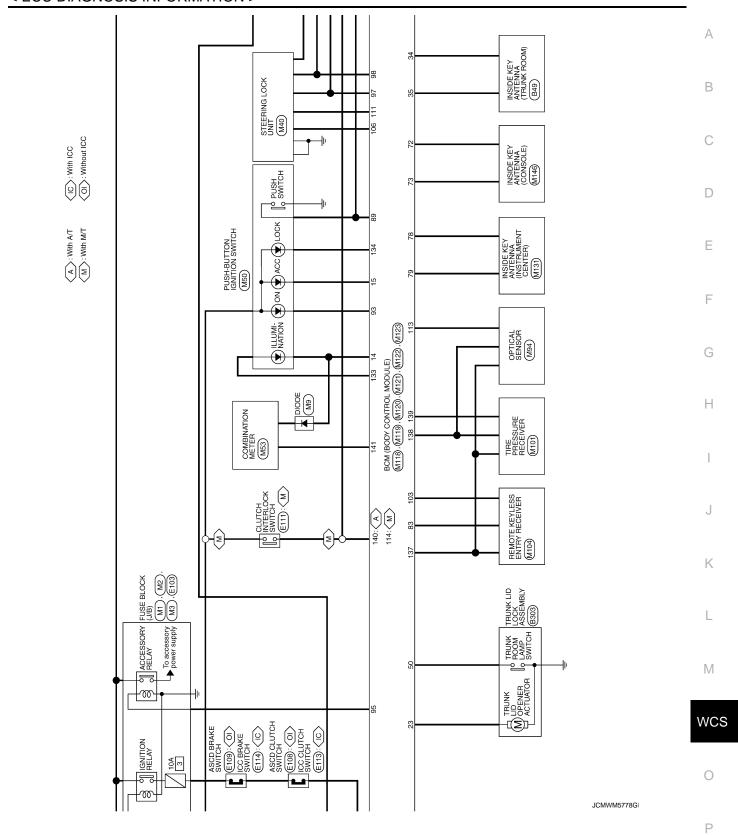
	nal No. color)	Description	<del></del>		0 - 186 -	Value	Δ
+	-	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper volume dial 4)	0 V	Е
					Front washer switch ON (Wiper volume dial 4)	(V)	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 5  Wiper volume dial 6	10.7 V	
					All switches OFF	0 V	Е
					Front wiper switch INT/ AUTO	(V)	
145		Combination switch		Combination switch	Front wiper switch LO	15	F
(L)	Ground	OUTPUT 3	Output	(Wiper volume dial 4)	Lighting switch AUTO	5 0 2 ms JPMIA0034GB	C
					All switches OFF	0 V	-
					Front fog lamp switch ON		
					Lighting switch 2ND	(V)	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper volume dial 4)	Lighting switch PASS  Turn signal switch LH	15 10 5 0 2 ms	J
						10.7 V	L
149 (W)	Ground	Tire pressure warning check switch	Input		_	12 V	k
						(V) 15 10 5	
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	11.8 V	W
					ON (Door open)	0 V	
151		Rear window defog-		Rear window	Active	0 V	
(G)	Ground	ger relay control	Output	defogger	Not activated	Battery voltage	

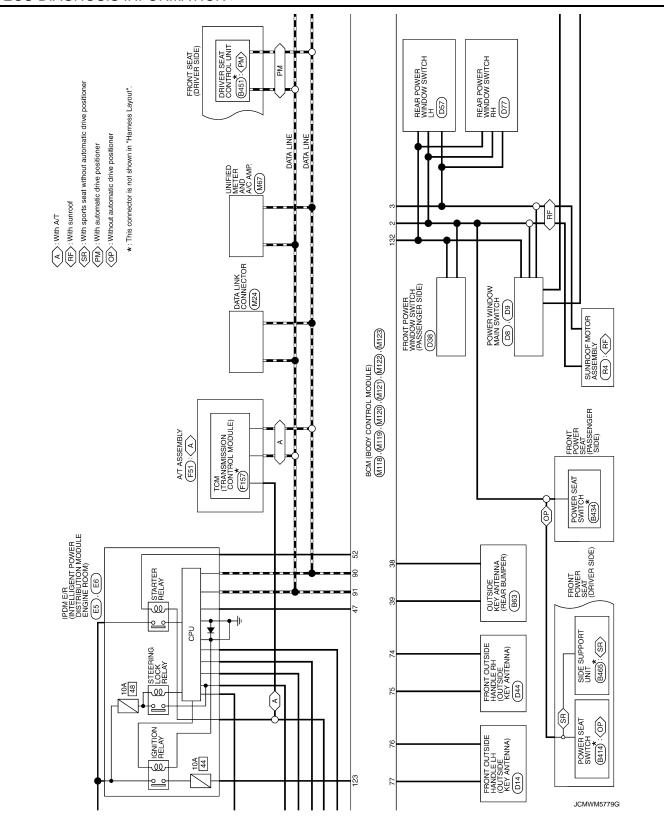
<sup>• \*1:</sup> A/T models

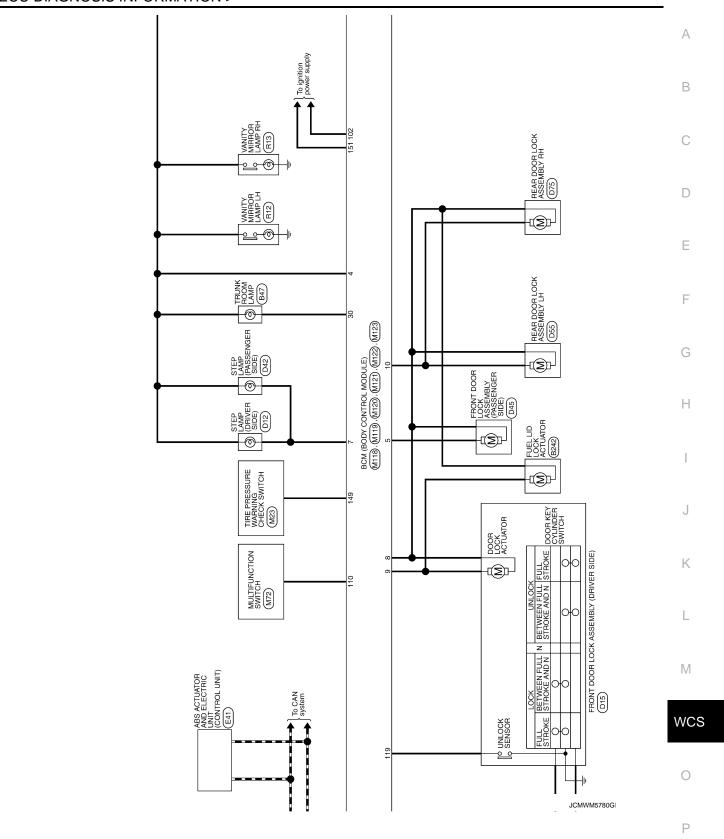
**WCS-95** 2010 G37 Sedan Revision: 2009 November

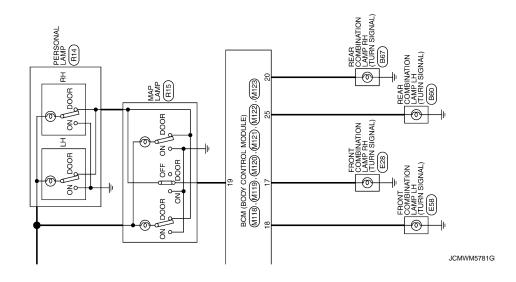
<sup>• \*2:</sup> M/T models Ρ







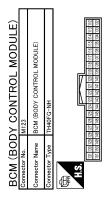




### < ECU DIAGNOSIS INFORMATION >

BOM GOOVED CONTROL MODULE   BOOK CONTROL M	COMM COMM SUPPLY SUPPLY TY	А
SOUR (BOLY) CONTROL MODULE)	SENTRY (F/B) GON SENTRY REQUESTION COMEI SWI INPUT 3 PUSISH SWI CAN-L CA	В
Section Name	<del>                                      </del>	С
Contract Name   Contract Nam	<del>                                      </del>	D
Contract Name   Contract Nam	DULE)    Content	Е
Contract Name   Contract Nam	Signal Name (See RANHER ROOM TRUNK ROOM TO Signal Name (See ROOM ANT ANT A INATS ANT A	F
Considerable   Part   Part   Considerable   Part   Part   Considerable   Part   Consid	1	G
BCM (BODY CONTROL MODULE)   Connector No.   Most	Commect   Comm	Н
BCM (BODY CONTROL MODULE)   Connector No.   Most	TROL MODULE)  TROL MODULE)  TO Specification  THE SPECIFICATION  TO SPECIFICATION  T	I
BCM (BODY CONTROL MODULE)   Connector No.   Most	119   19   19   19   19   19   19   1	J
Connector Name COMBINATION SWITCH Connector Name COMBINATION SWITCH Connector Name Comestor Type THISTW-NH  Connector Type THISTW-NH  Connector Name Signal Name (Specification)  Connector Name BCM (BODY CONTROL MODULE)  CONTROL NAME SUPPLY (BATAL MODULE)		К
Connector Name   Color   Col	((RAP))	L
Connector Name   Color   Col	Signal Name (Specification)  WER WINDOW POWER SUPPLY  WER WINDOW POWER SUPPLY  WER WINDOW POWER SUPPLY  WER WINDOW POWER SUPPLY	
JCMWM5782GI		WCS
	Decimination   Commenter   Commenter   Commenter   Commenter   Commenter   No.   12   12   13   14   14   14   14   14   14   14	0
	JCMWh	

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Terminal	Color	Signal Name [Specification]
112	2 00	RAIN SENSOR SERIAL LINK
113	BG	PTICAL SENSOR
114	æ	CLUTCH INTERLOCK SW
116	SB	STOP LAMP SW 1
118	BR	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	SB	KEY SLOT SW
123	۸	IGN F/B
124	ч	PASSENGER DOOR SW
129	BG	TRUNK LID OPENER CANCEL SW
132	۸	POWER WINDOW SW COMM
133	П	PUSH-BUTTON IGNITION SW ILL POWER
134	ΓG	LOCK IND
137	BG	RECEIVER / SENSOR GND
138	۸	RECEIVER / SENSOR POWER SUPPLY
139	٦	TIRE PRESSURE RECEIVER COMM
140	В	SHIFT N/P
141	W	SECURITY INDICATOR LAMP
142	BR	COMBI SW OUTPUT 5
143	Ь	COMBI SW OUTPUT 1
144	g	COMBI SW OUTPUT 2
145	٦	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
149	М	TIRE PRESSURE WARN CHECK SW
150	ЯĐ	DRIVER DOOR SW
151	5	REAR WINDOW DEFOGGER RELAY CONT

JCMWM5783G

INFOID:0000000005886749

### 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
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
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 → OFF
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
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
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent  • Selector lever P position switch signal  • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are ful- filled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (12 V) • Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	<ul> <li>500 ms after the following BCM recognition conditions are fulfilled</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P position switch signal: Except P position (12 V)</li> <li>Selector lever P/N position signal: Except P and N positions (0 V)</li> </ul>
B2604: PNP/CLUTCH SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled  Status 1  Ignition switch is in the ON position  Selector lever P/N position signal: P and N position (12 V)  P range signal or N range signal (CAN): ON  Status 2  Ignition switch is in the ON position  Selector lever P/N position signal: Except P and N positions (0 V)  P range signal and N range signal (CAN): OFF
B2605: PNP/CLUTCH SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled  Status 1  Ignition switch is in the ON position  Selector lever P/N position signal: Except P and N positions (0 V)  Interlock/PNP switch signal (CAN): OFF  Status 2  Ignition switch is in the ON position  Selector lever P/N position signal: P or N position (12 V)  PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent  • Steering lock relay signal (Request signal)  • Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

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### < ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
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)
B2609: S/L STATUS	Inhibit engine cranking     Inhibit steering lock	When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following conditions are fulfilled</li> <li>IGN relay (IPDM E/R) control signal: OFF (12 V)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled  • Power position changes to ACC  • Receives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine cranking     Inhibit steering lock	When any of the following conditions are fulfilled  Steering lock unit status signal (CAN) is received normally  The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
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
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output 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)
B26E9: S/L STATUS	Inhibit engine cranking     Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled  • Steering condition No. 1 signal: LOCK (0 V)  • Steering condition No. 2 signal: LOCK (12 V)

# DTC Inspection Priority Chart

INFOID:0000000005886750

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	
	B2013: ID DISCORD BCM-S/L	
	B2014: CHAIN OF S/L-BCM  B2552 LONITION BELAY	
	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	
	B2606: S/L RELAY     B2007: O''. BELAY	
	B2607: S/L RELAY     B2608: STARTER RELAY	
	B2609: S/L STATUS	
	B260A: IGNITION RELAY	
4	B260B: STEERING LOCK UNIT	
	B260C: STEERING LOCK UNIT	
	B260D: STEERING LOCK UNIT	
	B260F: ENG STATE SIG LOST	
	B2612: S/L STATUS	
	• B2614: BCM	
	B2615: BCM     B2616: BCM	
	• B2617: BCM	
	• B2618: BCM	
	• B2619: BCM	
	B261A: PUSH-BTN IGN SW	
	B261E: VEHICLE TYPE	
	B26E8: CLUTCH SW	
	B26E9: S/L STATUS     B26E4: VEV BEGINDED ATION	
	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	
_	• C1709: [NO DATA] FR	
5	• C1710: [NO DATA] RR	
	• C1711: [NO DATA] RL	
	C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR	
	C1717. [PRESSDATA ERR] FR  C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	C1734: CONTROL UNIT	
_	B2621: INSIDE ANTENNA	
6	B2622: INSIDE ANTENNA  B2622: INSIDE ANT	
	B2623: INSIDE ANTENNA	

DTC Index

INFOID:0000000005886751

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#### 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-14, "COM-MON ITEM: CONSULT-III 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-33
U1010: CONTROL UNIT(CAN)	_	_	_	_	BCS-34
U0415: VEHICLE SPEED	_	_	_	_	BCS-35
B2013: ID DISCORD BCM-S/L	×	×	_	_	<u>SEC-55</u>
B2014: CHAIN OF S/L-BCM	×	×	_	_	<u>SEC-56</u>
B2190: NATS ANTENNA AMP	×	_	_	_	<u>SEC-47</u>
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-50
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-51
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-53
B2195: ANTI-SCANNING	×	_	_	_	SEC-54
B2553: IGNITION RELAY	_	×	_	_	PCS-49
B2555: STOP LAMP	<del>_</del>	×	_	_	SEC-59
B2556: PUSH-BTN IGN SW	<del></del>	×	×	_	SEC-61
B2557: VEHICLE SPEED	×	×	×	_	SEC-63
B2560: STARTER CONT RELAY	×	×	×	_	SEC-64
B2562: LOW VOLTAGE	_	×	_	_	BCS-36
B2601: SHIFT POSITION	×	×	×	_	SEC-65
B2602: SHIFT POSITION	×	×	×	_	SEC-68
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-70
B2604: PNP/CLUTCH SW	×	×	×	_	SEC-73
B2605: PNP/CLUTCH SW	×	×	×	_	SEC-75
B2606: S/L RELAY	×	×	×	_	SEC-77
B2607: S/L RELAY	×	×	×	_	SEC-78
B2608: STARTER RELAY	×	×	×	_	SEC-80
B2609: S/L STATUS	×	×	×	_	SEC-82
B260A: IGNITION RELAY	×	×	×	_	PCS-51
B260B: STEERING LOCK UNIT	_	×	×	_	SEC-86
B260C: STEERING LOCK UNIT	<del></del>	×	×	_	SEC-87
B260D: STEERING LOCK UNIT	_	×	×	_	SEC-88
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-89
B2612: S/L STATUS	×	×	×	_	SEC-94
B2614: BCM	_	×	×	_	PCS-53
B2615: BCM	_	×	×	_	PCS-55
B2616: BCM	_	×	×	_	PCS-57
B2617: BCM	×	×	×	_	SEC-98
B2618: BCM	×	×	×	_	PCS-59
B2619: BCM	×	×	×	_	SEC-100
B261A: PUSH-BTN IGN SW	<del></del>	×	×	_	PCS-60
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-101

### < 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	Α
B2621: INSIDE ANTENNA	_	×	_	_	DLK-59	В
B2622: INSIDE ANTENNA	_	×	_	_	DLK-61	
B2623: INSIDE ANTENNA	_	×	_	_	DLK-63	
B26E8: CLUTCH SW	×	×	×	_	SEC-90	С
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	SEC-92	_
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-93	D
C1704: LOW PRESSURE FL	_	_	_	×	<u>WT-26</u>	Е
C1705: LOW PRESSURE FR	_	_	_	×		
C1706: LOW PRESSURE RR	_	_	_	×		
C1707: LOW PRESSURE RL	_	_	_	×		F
C1708: [NO DATA] FL	_	_	_	×		
C1709: [NO DATA] FR	_	_	_	×	W/T 00	
C1710: [NO DATA] RR	_	_	_	×	<u>WT-28</u>	G
C1711: [NO DATA] RL	_	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	_	×		Н
C1717: [PRESSDATA ERR] FR	_	_	_	×	<u>WT-31</u>	
C1718: [PRESSDATA ERR] RR	_	_	_	×		
C1719: [PRESSDATA ERR] RL	_	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	_	×	WT-33	
C1734: CONTROL UNIT	_	_	_	×	WT-35	J

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### WCS

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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:0000000005806210

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

#### Diagnosis Procedure

INFOID:0000000005806211

# 1. CHECK PARKING BRAKE WARNING LAMP

- Start the engine.
- 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?

>> Replace the combination meter. YES

NO >> GO TO 2.

### 2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

### 3.CHECK PARKING BRAKE SWITCH 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.

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

### THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS > THE LIGHT REMINDER WARNING DOES NOT SOUND	
Description INFOID:000000005806212	Α
Light reminder warning chime does not sound even though headlamp is illuminated.  Diagnosis Procedure	В
1. CHECK COMBINATION SWITCH (LIGHT SWITCH) OPERATION  Check that the headlamps operate normally by operating the combination switch (light switch).  Do they operate normally?	C
YES >> GO TO 2. NO >> Refer to EXL-160, "Diagnosis Procedure".  2.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL CIRCUIT  Perform the check for the front door switch (driver side) signal circuit. Refer to DLK-66, "Diagnosis Procedure".	E
Is the inspection result normal?  YES >> GO TO 3.  NO >> Repair harness or connector.  3.CHECK FRONT DOOR SWITCH (DRIVER SIDE) UNIT	F
Perform a unit check for the front door switch (driver side). Refer to <u>DLK-68, "Component Inspection"</u> . <u>Is the inspection result normal?</u> YES >> Replace the BCM. Refer to <u>BCS-80, "Removal and Installation"</u> .	G H
NO >> Replace the front door switch (driver side). Refer to <u>DLK-251, "Removal and Installation"</u> .	I
	J
	K
	M
	WC

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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:0000000005806214

- 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:0000000005806215

### 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.

#### **WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

#### **WARNING:**

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
  ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s)
  with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly
  causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

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