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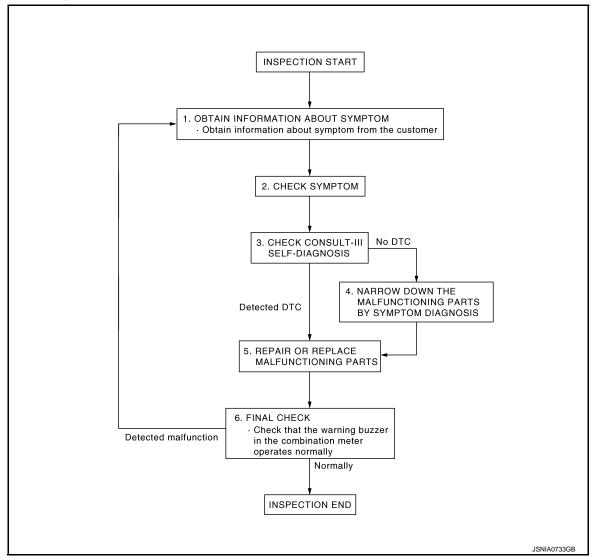
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# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORKFLOW

Work Flow INFOID:0000000005022053 В

#### **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

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## **DIAGNOSIS AND REPAIR WORKFLOW**

#### < BASIC INSPECTION >

Connect CONSULT-III and perform "Self Diagnostic Result" of "METER/M&A". Refer to MWI-37, "CONSULT-III Function (METER/M&A)".

#### 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

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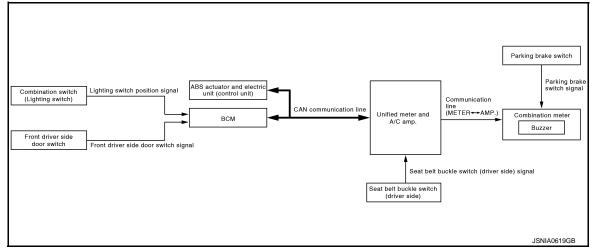
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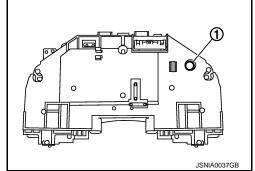


# WARNING CHIME SYSTEM: System Description

INFOID:0000000005022055

#### **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.
- 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.



#### UNIFIED METER AND A/C AMP.

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

#### **BCM**

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

BCM warning function list

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

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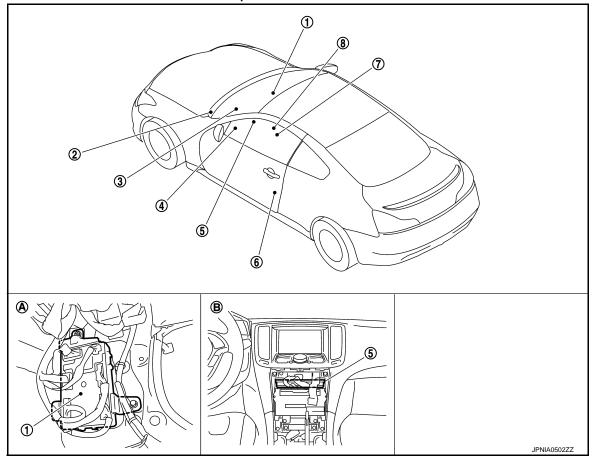
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# WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000005022056



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

# WARNING CHIME SYSTEM : Component Description

INFOID:0000000005022057

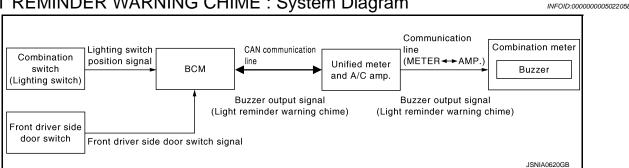
Unit	Description			
Combination meter	<ul> <li>Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.</li> <li>Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. with communication line and the parking 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> <li>Receives a vehicle speed signal from ABS actuator and electric unit (control unit) 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 (driver side) 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 driver side door switch	Transmits the front driver side door switch signal to BCM.
Parking brake switch Refer to MWI-60, "Description".	

# LIGHT REMINDER WARNING CHIME

# LIGHT REMINDER WARNING CHIME: System Diagram



# LIGHT REMINDER WARNING CHIME: System Description

#### DESCRIPTION

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

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

#### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

#### WARNING CANCEL CONDITIONS

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

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

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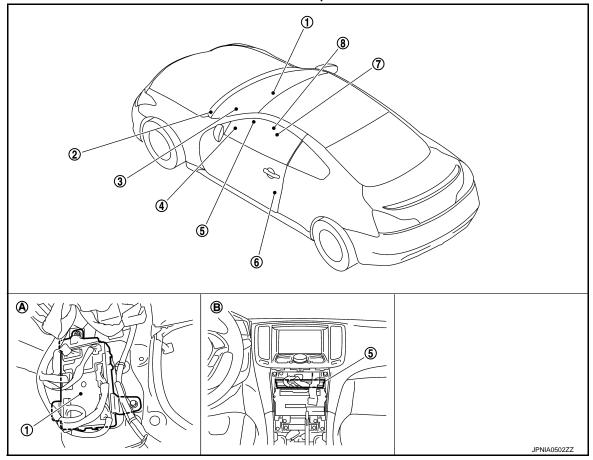
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# LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:0000000005022060



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

# LIGHT REMINDER WARNING CHIME : Component Description

INFOID:0000000005022061

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.		
ВСМ	Judges the light warning chime conditions from the signals provided by various switches and tramits a buzzer output signal to the unified meter and A/C amp. via CAN communication line if ressary.		
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.		
Front driver side door switch	Transmits the front driver side door switch signal to BCM.		
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## SEAT BELT WARNING CHIME

Unified meter

and A/C amp.

Communication line (METER ← ► AMP.)

Buzzer output signal

(Seat belt warning chime)

Seat belt buckle switch (driver side) signal

#### < SYSTEM DESCRIPTION >

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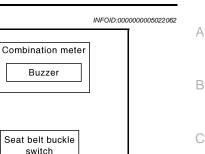
# SEAT BELT WARNING CHIME: System Diagram

CAN communication line

(Seat belt warning chime)

• Seat belt buckle switch signal

Buzzer output signal



JSNIA0621GB

(driver side)

# SEAT BELT WARNING CHIME: System Description

INFOID:0000000005022063

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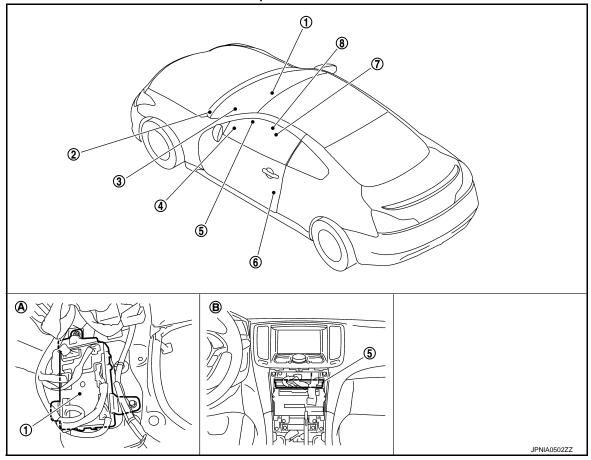
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# SEAT BELT WARNING CHIME: Component Parts Location

INFOID:0000000005022064



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

# SEAT BELT WARNING CHIME : Component Description

INFOID:0000000005022065

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 (driver side) signal from the seat belt buckle switch (driver side) and transmits it to BCM via CAN communication line.</li> <li>Receives a buzzer output signal from 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 chime 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 >

ABS actuator and

electric unit

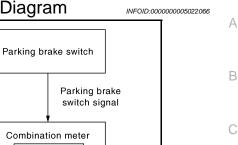
(control unit)

# PARKING BRAKE RELEASE WARNING CHIME: System Diagram

CAN communication

line

Vehicle speed signal



JSNIA0622GB

# PARKING BRAKE RELEASE WARNING CHIME: System Description

Unified meter

and A/C amp.

Communication line

(METER ↔ AMP.) Vehicle speed

signal

Buzzer

INFOID:0000000005022067

#### DESCRIPTION

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

#### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

#### WARNING CANCEL CONDITIONS

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

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

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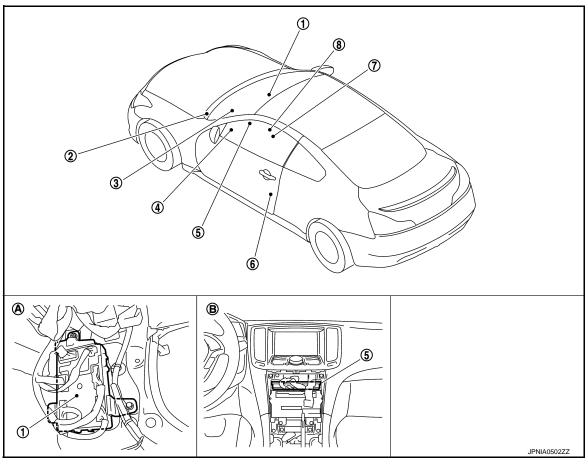
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# PARKING BRAKE RELEASE WARNING CHIME: Component Parts Location

IFOID:0000000005022068



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

# 

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 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 unified meter and A/C amp. via CAN communication line.		
Parking brake switch	Refer to MWI-60, "Description".		

< SYSTEM DESCRIPTION >

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

# CONSULT-III Function (METER/M&A)

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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
	Self Diagnostic Result	Unified meter and A/C amp. checks the conditions and displays memorized error.
METER/M&A Da	Data Monitor	Displays unified meter and A/C amp. input/output data in real time.
	Ecu Identification	The unified meter and A/C amp. part number is displayed.

## **SELF DIAG RESULT**

Refer to MWI-102, "DTC Index".

#### DATA MONITOR

Display Item List

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

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## < 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 [Off]		This item is displayed, but cannot be monitored.
RR FOG IND [Off]		This item is displayed, but cannot be monitored.
LIGHT IND [Off]		This item is displayed, but cannot be monitored.
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 [Off]		This item is displayed, but cannot be monitored.
C-ENG2 W/L [Off]		This item is displayed, but cannot be monitored.
CRUISE IND [On/Off]		Status of CRUISE indicator judged from ASCD status signal received from ECM with CAN communication line.
SET IND [On/Off]		Status of SET indicator judged from ASCD SET indicator signal received from ECM with CAN communication line.
CRUISE W/L [On/Off]		Status of CRUISE warning lamp judged from ASCD status signal received from ECM with CAN communication line.
BA W/L [On/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 [Off]		This item is displayed, but cannot be monitored.
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 [Off]		This item is displayed, but cannot be monitored.
DDS W/L [Off]		This item is displayed, but cannot be monitored.
LANE W/L [Off]		This item is displayed, but cannot be monitored.
LDP IND [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, Short, Middle, 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		Display ICC set vehicle speed 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 [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 [Off]		This item is displayed, but cannot be monitored.	
M RANGE SW [On/Off]		Status of manual mode switch.	
NM RANGE SW [On/Off]		Status of not manual mode switch.	
AT SFT UP SW [On/Off]		Status of A/T shift up switch.	
AT SFT DWN SW [On/Off]		Status of A/T shift down switch.	
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.	
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.	
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the engine coolant temperature and the acceleration degree.	
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 (driver side).	
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:0000000005183579

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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.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
_	MULTI REMOTE ENT*1			
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×* <sup>2</sup>	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER*1			
Intelligent Key system     Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk lid open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

#### NOTE:

- \*1: This item is displayed, but is not used.
- \*2: At models with rain sensor this mode is displayed, but is not used.

#### FREEZE FRAME DATA (FFD)

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# **DIAGNOSIS SYSTEM (BCM)**

# < SYSTEM DESCRIPTION >

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

CONSULT screen item	Indication/Unit	Description		
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected		
Odo/Trip Meter	km	Total mileage (Odometer	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		While turning power supply position from "OFF" to "LOCK"	
Vehicle Condition	OFF>ACC	Power position status of the moment a particular	While filthing hower clinning hocition from "OFF" to "ALT"	
	ON>CRANK	DTC is detected	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:0000000005022072

#### **CONSULT-III APPLICATION ITEMS**

Test item	Diagnosis mode	Description	
BUZZER	Data Monitor	Displays BCM input data in real time.	
DOZZEN	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:0000000005183576

## 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.

# CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector terminal and ground.

Terminals					
(+)			Ignition switch	Voltage (Approx.)	
Combination meter		(–)	ignition switch		
Connector	Terminals				
M53	1	Ground	OFF	Battery voltage	
	21	Glound	ON	Dattery Voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

# 3. CHECK GROUND CIRCUIT

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

Combination meter			Continuity
Connector	Terminals		Continuity
	5	Ground	Existed
M53	15		
	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:0000000005183577

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

#### Is the inspection result normal?

YES >> GO TO 3.

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

# 3. CHECK GROUND CIRCUIT

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

Unified meter	and A/C amp.		Continuity	
Connector	Terminals	Ground	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	1
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 voltogo
M119	11		Battery voltage

#### Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	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:0000000005022076 • 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:0000000005022077 ${f 1}$ .CHECK OPERATION OF METER BUZZER Connect the CONSULT-III. 2. Perform "LIGHT WARN ALM" in "ACTIVE TEST" of "BCM (BUZZER)". D Does meter buzzer beep? YES >> INSPECTION END Е NO >> GO TO 2. 2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL Select the "Data Monitor" of "METER/M&A" and check the "BUZZER" monitor value. F "BUZZER" Under the condition of buzzer input : On : Off Except above Is the inspection result normal? YES >> Replace combination meter. NO >> Replace BCM. Refer to BCS-82, "Removal and Installation". Diagnosis Procedure INFOID:0000000005022078 $oldsymbol{1}$ .CHECK POWER SUPPLY OF COMBINATION METER Check power supply of combination meter. Refer to WCS-20, "COMBINATION METER: Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. K >> 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 WCS-20, "UNIFIED METER AND A/C AMP.: Diagnosis Procedure". Is the inspection result normal? YES M >> INSPECTION END NO >> Repair power supply circuit of unified meter and A/C amp.

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## SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description INFOID:000000005022079

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

# Component Function Check

INFOID:0000000005022080

# 1. 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:0000000005022081

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

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

	Terminal			
(-	+)			Voltage
	ter and A/C np.	(-)	Condition	(Approx.)
Connector	Terminal			
M66	9	Ground	When seat belt is fastened	12 V
10100	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

- 1. Turn ignition switch OFF.
- 2. Disconnect unified meter and A/C amp. connector and seat belt buckle switch (driver side) connector.
- 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	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.

## SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

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

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-13, "SEAT BELT BUCKLE : Removal and Installation"</u>.

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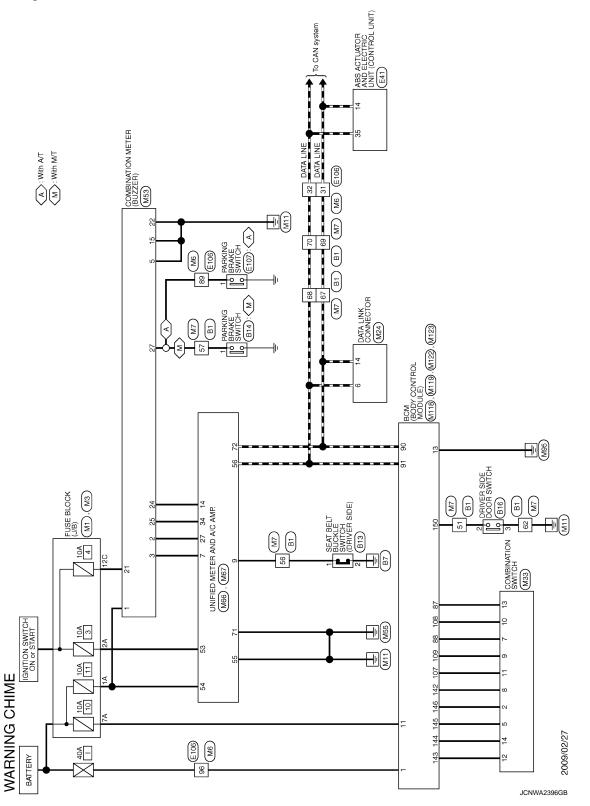
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INFOID:0000000005022083

# WARNING CHIME SYSTEM

Wiring Diagram - WARNING CHIME -



Second State   Seco	Connector Name	A B C
Connector No. B14  Connector Name POLFB-A  Terminal Octor of Name Signal Name (Specification)  Terminal Whee Signal Name (Specification)	Corrector Number 1507  Corrector Type TBO FW  Terminal Color of Number 1509 Nu	E F G
Connector No.   B13	Connector Name	J
Connector Numer   B1   Connector Numer   B1   Connector Numer   Connector Numer   Connector Numer   Connector Numer   TH80FW-CS16-TM4	Connector Numeror Mas Actuardo and Escring unit control, units Connector Type  BAAA2FB-AH24-LH  Terminal Codor of Signal Name (Specification)  No. Wive Signal Name (Specification)  14 P CANH-H  35 L CANH-H  CONN-H  CONN-H	M WCS O JCNWA2397GB

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MARNING CHIME Commercer Name Commercer Types  MS12FW-CS  Commercer Types  MS12FW-CS  MS12FW-CS  MS12FW-CS  EQ11C   100 9C   8C   70 9C    EQ11C   100 9C   8C   70 9C    MS2  Terminal Code of Signal Name [Specification]  120 R  Commercer No. MS3	Commerciar Name Commerciar Type H.S. H.S. H.S. H.S. S.	-No. Mof -Name WIRE TO WIRE -Types TH80MW-CS 16-TMA	Connector Name   Connector Name   Connector Name   Connector Name   Na	WIPE TO WIPE THEOMY-CSIG-TM4  THEOMY-CSI	M24   Ormester No.   M24	M24 DATA LINK CONNECTOR BDIGFW
THISFW-NH  1 2 3	Connector Name Connector Tree	2 23 24	2 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	TH40FW-NH	ne 42 43 4 58 59 6	THISTPLAND A.C. AMP.  THISTPLAND  46.646 47
Color of Signal Name [Specification] Wire	Terminal No.	Color of Wire	Terminal Color of No. Wire	Signal Name [Specification]	lar Co	Signal Name [Specification]
OUTPUT 4 OUTPUT 3	2	V BATTERY POWER SUPPLY LG COMMUNICATION SIGNAL (METER->AMP.)	9 SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	54 Y	BATTERY POWER SUPPLY
	က	COMMUNICATIO	H	COMMUNICATION SIGNAL (LCD->AMP.)	55 B	GROUND
BR OUTPUT 5	2		27 LG	COMMUNICATION SIGNAL (METER->AMP.)	+	CAN-H
INPUT 2	12		34 ×	COMMUNICATION SIGNAL (AMP>LCD)	+	GROUND
INPUT 4	21	R IGNITION SIGNAL B GROUND			72 P	CAN-L
P OUTPUT 1	24	COMMUNICATI				
Y INPUT 5	25	╀				
O OUTPUT 2	27	O PARKING BRAKE SWITCH SIGNAL				

JCNWA2398GB

# < DTC/CIRCUIT DIAGNOSIS >

			Α
No. M123  Type TH40FG-NH  Type TH40FG-NH  Use The transfer of the transfer of	Signal Name [Specification] COMBLISM OUTPUT 5 COMBLISM OUTPUT 2 COMBLISM OUTPUT 3 COMBLISM OUTPUT 3 COMBLISM OUTPUT 4 DRIVER DOOR SW PRIVER DOOR SW		В
M123 BCM (BODY O TH40FG-NH TH40FG-NH	1		С
Corrector No. Connector Name Connector Type H.S.	No. W W W W W W W W W W W W W W W W W W W		D
OL MODULE)	PUT 3 PUT 3 PUT 4 PUT 4 PUT 2		Е
M122 BOM (BODY CONTROL MODULE) TH40FB-NH TH40FB-NH TH40FB-NH TH40FB-NH TH40FB-NH TH40FB-NH	Signal Name [Swedireston] COMBI SW INPUT 5 COMBI SW INPUT 1 COMBI SW INPUT 1 COMBI SW INPUT 1 COMBI SW INPUT 2		F
88 88 01 001 001 100	N   D   D   D   D   D   D   D   D   D		G
Corrector Num Corrector Trape  Corrector Trape  M.S.  State  Stat	Transmist No.		Н
70L MODULE) 8 9 10 17 18 19	Signal Name (Seconfroation) BAT (FUSE) GND		I
MI19 BOM IBODY CONTROL MODULE) NSIGEW-CS 4 5 6 7	et le de de de le de		J
Connector No. Connector Name Connector Type  H.S. 11	Terminal Oldor of Wiley William Oldor of Wiley Wiley Wiley Wiley Oldor of Wiley Wile		K
E C			L
CHIME MITS BOM (BODY CONTROL MODULE) MAGFE-LC	Signal Name (Severification) BAT (F/L)	_	M
<u> </u>	W W Was of	V	NCS
WARNIN Connector No. Connector Name Connector Type H.S.	1	JCNWA2399GB	0
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< ECU DIAGNOSIS INFORMATION >

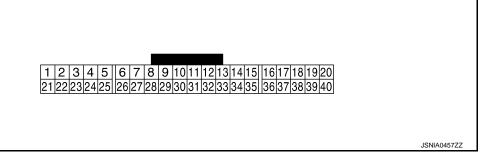
# **ECU DIAGNOSIS INFORMATION**

# **COMBINATION METER**

Reference Value

VALUES ON THE DIAGNOSIS TOOL Refer to MWI-83, "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 	
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	
(R)		Journal Journal Journal		OFF	Security warning lamp OFF	12 V	

## < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color) Description			Condition		Value		
+	_	Signal name	Input/ Output		Condition	(Approx.)	
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
16 (BR)	Ground	Meter control switch ground		Ignition switch ON	_	0 V	
21 (R)	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 µs JSNIA0027GB	
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).	
					Parking brake applied	JSNIA0012GB 0 V	1.
27 (O)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake released	(V) 8 4 0 10 ms JSNIA0007GB	V

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## < 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	Ground	Seat belt buckle switch sig-		Ignition switch	When driver seat belt is fastened	12 V
(L)	Ground	nal (driver side)	Input	ON	When driver seat belt is un- fastened	0 V
30	Ground	Seat belt buckle switch sig-	Input	Ignition switch ON	When getting in the passenger seat     When passenger seat belt is fastened	12 V
(G)	Oloulia	nal (passenger side)	три		When getting in the passenger seat     When passenger seat belt is unfastened	0 V
31	Cround	Washer level switch signal	Input	Ignition switch ON	Washer level switch ON	0 V
(L)	Ground				Washer level switch OFF	5 V
					Lighting switch 1ST     When meter illumination is maximum	(V) 15 10 5 0 2.5 ms  JPNIA1363GB
33 (R)	Ground	Illumination control signal	Output	Ignition switch ON	Lighting switch 1ST     When meter illumination is step 12	(V) 15 10 5 0 2.5 ms JPNIA1362GB
					Lighting switch 1ST     When meter illumination is minimum	10 V
36	16	Select switch signal	Input	Ignition switch	When is pressed	0 V
(LG)	(BR)			ON	Other than the above	5 V
37 (SB)	16 (BR)	Enter switch signal	Input	Ignition switch	When 🖬 is pressed	0 V
(SB)	(DK)			ON	Other than the above	5 V
38 (L)	16 (BR)	Trin //R recet ewitch cianal   Innut   ewitch   13 DIC33CU	0 V			
(-)	(511)			ON	Other than the above	5 V

# < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
39 (P)		Illumination control switch signal (–)	Input	'	When 💯 switch is pressed	0 V
	oignai ( )		ON	Other than the above	5 V	
40 (O)	16 (BR)	Input	R) signal (+) Input switch		When 🔥 + switch is pressed	0 V
(O) (Dit)	(Sit) Signal (1)	ON	Other than the above	5 V		

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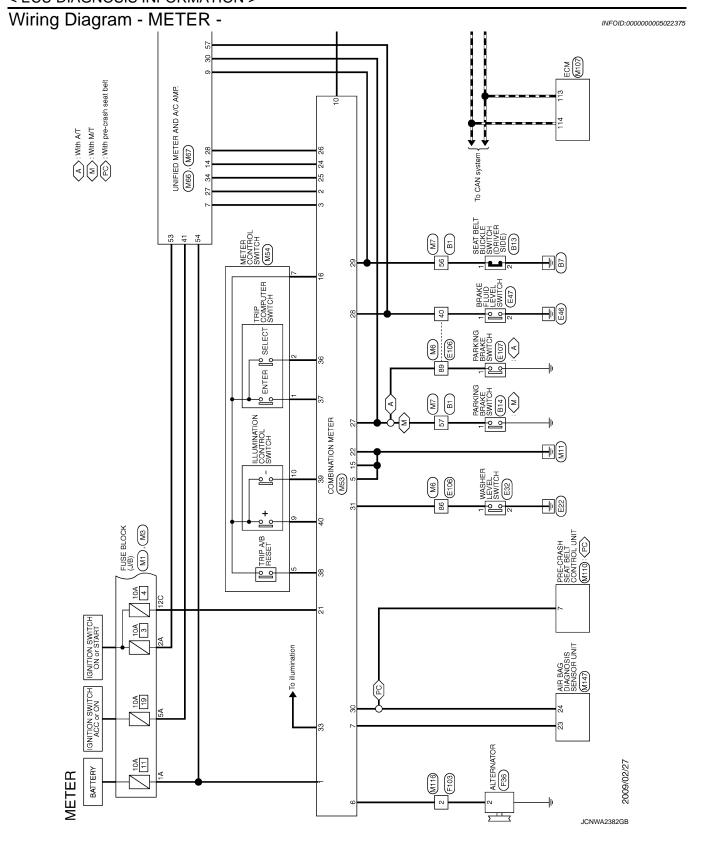
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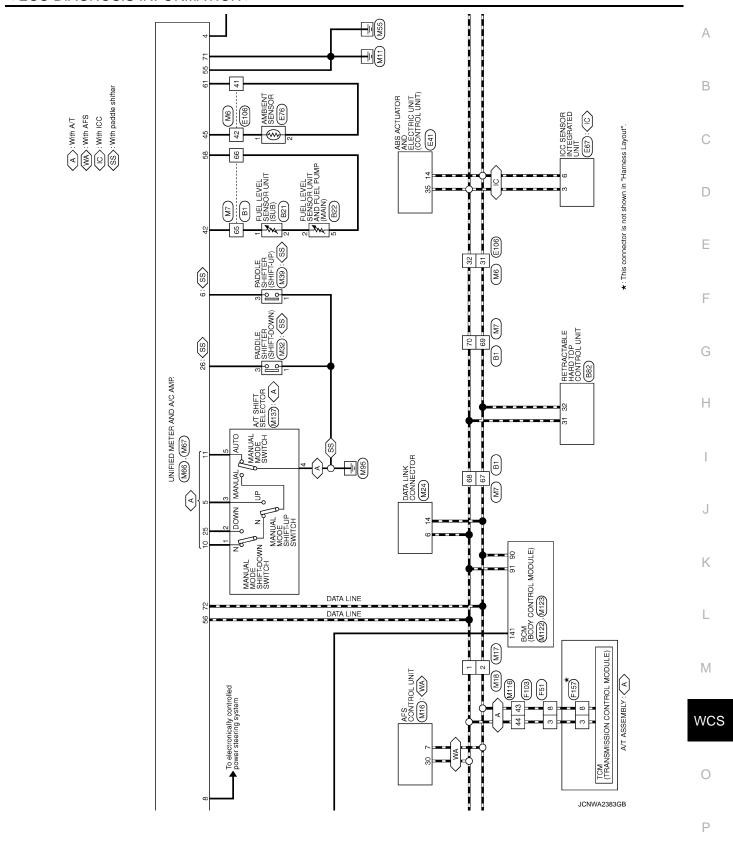
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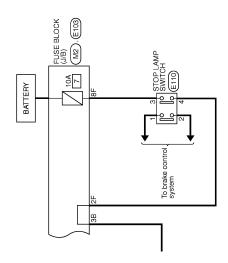
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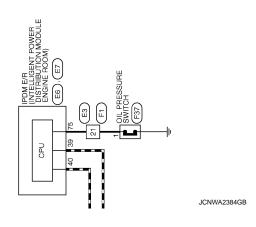
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## < ECU DIAGNOSIS INFORMATION >







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EDITORIEL LEVEL SENSOR UNIT (SUB) EQDFOY-RS Signal Mane [Sentication]	E6 THOSEPH-NH THOSEPH-NH Signal Name (Severication)	A B C
Connector No. Connector Name Connector Type Terminal No. Ne. B Color of No. Ne. Ne. Ne. Ne. Ne. Ne. Ne. Ne. Ne. Ne	Connector No. Connector Type Connector Type HS. HS.  Terminal Color of No. We as D 40 L	D
WITH M/T)	ceton	Е
PARKING BRAKE SWITCH (WITH M/T) POIFB-A Signal Name [Specification]	E3 WIRE TO WIRE SAA36MB-RS9-SH28  SAA36MB-RS9-SH28    1	F
	N	G
Commetter Name Commetter Name Commetter Tree  Terminal  Oo  Name  Oo  Oo  Oo  Oo  Oo  Oo  Oo  Oo  Oo  O	Connector No. Connector Name Connector Type MS. H.S. Terminal Col. Ro. Ro. 21	Н
B13 A03FW  Signal Mane [Specification]	FETRACTABLE HARD TOP CONTROL UNIT   THAOFW-NH   THAO	J
Connector No. B13 Connector Name SEAT BELT E Connector Type A03FW  Terminal Color of No. No. 2  Terminal Color of No. 2  Terminal Color of No. 2  B S	Second Contractor No.   Second Contractor No.   Second Contractor Type   TH40FW-NH   TH4	К
ation	etcot)	L
TO WIRE FW-CS16-TM4 Signal Name (Specification)	E05 OV-RS E05 GV-RS  (12345) Signal Name [Secordation]	M -
18 MIRE TO W		WCS
METER Connector Num Connector Num Connector Type  H.S.  H.S.  Rec.  See See See See See See See See See S	Connector No. Connector Name Connector Type H.S. H.S.  Terminal Color of Wre S. S.B. S. S.B.	0
		JCNWA2385GB

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E47	BRAKE FLUID LEVEL SWITCH WY02FGY	Signal Name (Specification)	WIRE TO WIRE THROFTW-CS16-TM4	Signal Name (Specification)
Connector No.	Connector Name Connector Type H.S.	Code of Wire   Code of Wire   Wire   Wire   Code of	Connector No. Connector Type	Terminal Color of No. Wre 31 P P 32 L 40 W 41 P P 42 G 86 LG 89 O
Connector No. E41	2 9	Terminal   Color of   Signal Name [Specification]   No.   Wive   Signal Name [Specification]   No.   Wive   No.   No.	Осплектог Vive	Terminal   Color of   Color of
Connector No.	8 9	Terminal Color of Wire   Signal Name [Specification]	Connector No. E76 Connector Name AMBENT SENSOR Connector Type RSSOZFB	Terminal Color of Wire Signal Name [Specification]  1 G
MEIEK Connector No. 1E7	ne 148 45 55 56	Terminal Color of No. Wire Signal Name (Specification) 75 SB	Connector No. E67  Connector Name ICC SENSOR INTEGRATED UNIT  Connector Type RS06FB-PR  ALS  ALS  ALS  ALS  ALS  ALS  ALS  AL	Terminal   Color of   Signal Nane [Specification]   No.

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#### < ECU DIAGNOSIS INFORMATION >

	fration	- MODULE)	freation		A
F36 ALITERNATOR HS03FB	Signal Name (Sweetfeaton)	F157  TOM TRANSMISSION CONTROL MODULE)  SP10FG  (2 2 4 5)  (6 7 8 9 10)	Signal Name Essec/fication) CAN-L CAN-L		В
Connector Name Connector Type	Terminal Color of Nice Wire 2 G G	Commetor No. Commetor Name Commetor Type	Terminal Color of No. 9 R 8 BR		D
	[ration]	- U	featon		Е
F1   WIRE TO WIRE   SAA36FB-RS8-SHZ8	Signal Name (Specification)	No. F103  None WIFE TO WIFE  Type TX36FW-NS10  THE SECRET OF THE SECRET	Signal Name (Specification)		F
No. Name	Color of Wire BR	Connector No. F103 Connector Name WIRE 103 Connector Type ITA36F1  LS. SECTION STATES IN THE SECTION STATES IN	We of		G
Connector	Terminal No. 21	Connector No. Connector Na. Connector Typ.	Terminal R. R. 2 43 444 444		Н
ны.	Signal Name [Specification]  - [With ICG]  - [With ICC]  - [With ICC]  - [With ICC]  - [Without ICC]	<u> </u>	Signal Name [Specification]		I
STOP LAMP SWITCH MO4FW-LC	Source	F51 A/T ASSEMBLY RK10FG-DGY  5 4 3 3	Signal (S)		J
Connector No. Connector Nume STOP Commercer Types MO4F	Terminal Color of Mine Mine 1	Connector No. F51 Connector Name A-T Connector Type IRVI	Terminal Color of No. Wire 3 L L S 2 L		K
					L
EIO7 PARKING BRAKE SWITCH (WITH A.7) TBOLEW	Signal Name [Specification]	F37 OIL PRESSURE SWITCH EDIFGY-RS-AR	Signal Name [Specification]		M WCS
	Color of Wire O		Wire BR BR		
METER Connector No. Connector Type Connector Type H.S.	Terminal C No.	Connector No. Connector Name Connector Type H.S.	Terminal No.		0
				JCNWA2387GB	Р
					Р

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Connector No.	No.	M24	Connector No.		M32	Connector No. M39	
Connector Name	Name	DATA LINK CONNECTOR	Connector Name	Vame	PADDLE SHIFTER (SHIFT-DOWN)	Connector Name PADDLE SHIFTER (SHIFT-UP)	
Connector Type	Type	BD16FW	Connector Type	lype	A03FW	Connector Type A04FW	
E H.S.		12 13 14 16 4 5 6 7 1 8	H.S.			HS.	
Terminal No. 6	Color of Wire L	Signal Name [Specification] -	Terminal No.	Color of Wire W	Signal Name [Specification]  -	Terminal   Color of   Signal Name [Soverfreation]   No.   Wire     P   -	
Connector No.	No.	M53	24	BR	COMMUNICATION SIGNAL (LCD->AMP.)	Connector No. M54	
Connector Name	Name	COMBINATION METER	25	> 0	COMMUNICATION SIGNAL (AMP>LCD)	Connector Name METER CONTROL SWITCH	
Connector Type	Type	SAB40FW	22	Y C	PARKING BRAKE SWITCH SIGNAL	Connector Tone TH12FW-NH	
			28	SB	BRAKE FLUID LEVEL SWITCH SIGNAL		
图			29	- L	SEAT BELT BUCKLE SW SIGNAL (DRIVER SIDE)	B	
Ę			30	<sub>5</sub> -	WAS SIED FOR SMITCH SIGNAL (PASSENGER SIDE)		
	1 2 3	1 2 3 5 6 7 1011 1415 16 1819 20 21 22 22 24 25 28 22 28 23 30 31 23 24 34 37 38 39 40	33	- A	ILLUMINATION CONTROL SIGNAL	12345	
	100000	tabel tabelate	36	ΓG	SELECT SWITCH SIGNAL	7 8 9 10	
			37	SB	ENTER SWITCH SIGNAL		
			38	٦	TRIP A/B RESET SWITCH SIGNAL		
Terminal No.	Color of Wire	Signal Name [Specification]	39	a c	ILLUMINATION CONTROL SWITCH (-)	Terminal Color of Signal Name [Specification]	
-	>	BATTERY POWER SUPPLY	2			+	
2	. P	COMMUNICATION SIGNAL (METER->AMP.)				2 LG -	
3	GR	COMMUNICATION SIGNAL (AMP>METER)					
5	В	GROUND				7 BR -	
9	W	ALTERNATOR SIGNAL				- O 6	
7	ΓG	AIR BAG SIGNAL					
10	œ	SECURITY SIGNAL					
15	<u>а</u>	GROUND					
91	띪.	METER CONTROL SWITCH GROUND					
21	<u>د</u> ا	IGNITION SIGNAL					
22	œ	CNICAS					

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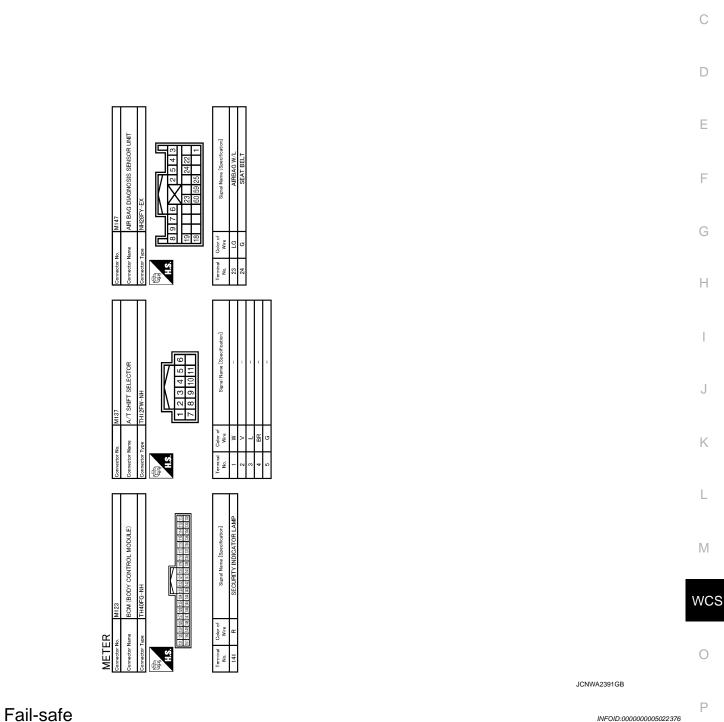
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]ر			
Connector No. M66	LG COMML	Connector No. M67	72 P CAN-L
Connector Name UNIFIED METER AND A/C AMP.	28 R VEHICLE SPEED (8-PULSE) 30 V PARKING BRAKE SWITCH SIGNAL	Connector Name UNIFIED METER AND A/C AMP.	
Connector Type TH40FW-NH	) V	Connector Type TH32FW-NH	
医		匮	
HS		HS.	
2 3 4 5 6 7 8 9 10 11         14 15 16         20           21 22 23         25 26 27 28         30         34         36         39         40		41 42 43 44 45 46 47     53 54 55 56       57 58 59 60 61 62 62     65 66	
Terminal Color of Signal Name [Specification] No. Wire		Terminal Color of Signal Name [Specification]	
5		٦	
M		H :	
6 O PADDLE SHIFTER UP SIGNAL 7 GR COMMUNICATION SIGNAL (AMP>METER)		45 V AMBIENT SENSOR SIGNAL 53 W IGNITION POWER SUPPLY	
Н		>	
9 SB SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)		55 B GROUND	
10 W MANUAL MODE SIGNAL		56 L CAN-H	
5		PT	
BR		Y FUEL	
>		61 R AMBIENT SENSOR GROUND	
26 G PADDLE SHIFTER DOWN SIGNAL		71 GR GROUND	
Connector No. M107	Connector No. M110	Connector No. M116	Connector No. M122
Connector Name ECM	Connector Name PRE-CRASH SEAT BELT CONTROL UNIT	Connector Name WIRE TO WIRE	Connector Name BCM (BODY CONTROL MODULE)
Connector Type RH24FGY-RZ8-R-LH-Z	Connector Type TH20FW-TB6	Connector Type TK36MW-NS10	Connector Type TH40FB-NH
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	\$ 1 minutes   1 mi	G G	優
107 114 110 106 117 118 108 105	1   2   3   7   8   10   4   5   6   13   14   15   6   15   14   15   15   15   15   15   15		
Terminal Color of Signal Name [Specification]	Terminal Color of Signal Name [Specification]	Terminal Color of Signal Name [Specification]	Terminal Color of Signal Name [Specification] No. Wire Signal Name [Specification]
╁	7 G INDICATOR	2 W =	90 P CAN-L
114 L VEHCAN-H1		L	91 L CAN-H
		44 L – –	

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# 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.

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#### < ECU DIAGNOSIS INFORMATION >

	Function	Specifications	
Speedometer			
Tachometer		Reset to zero by suspending communication.	
Fuel gauge		Reset to zero by suspending communication.	
Engine coolant temperatur	e 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.	
Warning lamp/indicator lamp	ABS warning lamp		
	VDC OFF indicator lamp		
	SLIP indicator lamp	The lamp turns on by suspending communication.	
	Brake warning lamp		
	CRUISE warning lamp		
	High beam indicator		
	Turn signal indicator lamp		
	Oil pressure warning lamp		
	Malfunction indicator lamp		
	A/T CHECK warning lamp	The lamp turns off by suspending communication.	
	Low tire pressure warning lamp		
	Key warning lamp		
	AFS OFF indicator lamp		
	Master warning lamp		

DTC Index

Refer to WCS-64, "DTC Index".

#### < ECU DIAGNOSIS INFORMATION >

## UNIFIED METER AND A/C AMP.

Reference Value INFOID:0000000005022381

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#### VALUES ON THE DIAGNOSIS TOOL

Monitor Item		Condition	Value/Status	- C
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]	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 [L]	Ignition switch ON	_	Values according to fuel level	=
W TEMP METER [°C]	Ignition switch ON	_	Values according to engine coolant temperature NOTE: 215 is displayed when the malfunction signal is input	H
ABS W/L	Ignition switch	ABS warning lamp ON	On	-
ADS W/L	ON	ABS warning lamp OFF	Off	- .l
VDC/TCS IND	Ignition switch	VDC OFF indicator lamp ON	On	- 0
VDC/100 IIVD	ON	VDC OFF indicator lamp OFF	Off	=
SLIP IND	Ignition switch	SLIP indicator lamp ON	On	K
OEII IIVD	ON	SLIP indicator lamp OFF	Off	_
BRAKE W/L	Ignition switch	Blake warning lamp ON	On	_
	ON	Blake warning lamp OFF	Off	_
DOOR W/L	Ignition switch	Door warning displayed	On	_
	ON	Door warning not displayed	Off	M
TRUNK/GLAS-H	Ignition switch	Trunk warning displayed	On	
	ON	Trunk warning not displayed	Off	WC
HI-BEAM IND	Ignition switch	Hi-beam indicator lamp ON	On	VV C.
	ON	Hi-beam indicator lamp OFF	Off	=
TURN IND	Ignition switch	Turn indicator lamp ON	On	0
	ON	Turn indicator lamp OFF	Off	_
FR FOG IND	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off	Р
RR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
LIGHT IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	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
IVII E	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
0110101 III10	ON	Cruise indicator not displayed	Off
SET IND	Ignition switch	Set indicator lamp ON	On
021 1110	ON	Set indicator lamp OFF	Off
CRUISE W/L	Ignition switch	Cruise warning lamp ON	On
	ON	Cruise warning lamp OFF	Off
DA W//	Ignition switch	Models with ICC NOTE: This item is displayed, but cannot be monitored.	On
BA W/L	ŎN	Models without ICC 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-AWIT W/L	ON	A/T check warning lamp OFF	Off
4WD W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
4WD LOCK IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
	Ignition switch	Low-fuel warning lamp displayed	On
FUEL W/L	ON	Low-fuel warning lamp not displayed	Off
MACHED M/I	Ignition switch	Washer warning displayed	On
WASHER W/L	ON	Washer warning not displayed	Off
AIR PRES W/L	Ignition switch	Low tire pressure lamp ON	On
AIR FRES W/L	ON	Low tire pressure lamp OFF	Off
KEY G/Y W/L	Ignition switch	Key warning lamp ON	On
KLI G/I W/L	ON	Key warning lamp OFF	Off
AFS OFF IND	Ignition switch	AFS OFF indicator lamp ON	On
ALC OLL IND	ON	AFS OFF indicator lamp OFF	Off
4WAS/RAS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
DDS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
LANE W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off

#### < ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status	
LDP IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	— <i>F</i>
	Ignition switch	Engine start information display (A/T model)	B&P I	E
	ON	Engine start information display (M/T model)	C&P I	
	Ignition switch	Engine start information display (A/T model)	B&P N	
	ACC	Engine start information display (M/T model)	C&P N	
	Ignition switch LOCK	Key ID warning display	ID NG	
	Ignition switch LOCK	Steering lock information display	ROTAT	
LCD	Ignition switch LOCK	P position warning display	SFT P	
	Ignition switch LOCK	Intelligent Key insert information display	INSRT	
LOCK Ignitio ON	Ignition switch LOCK	Intelligent Key low battery warning display	BATT	
	Ignition switch ON	Take away warning display	NO KY	(
	Ignition switch LOCK	Key warning display	OUTKY	_
	Ignition switch ON	ICC sensor integrated unit warning display	LK WN	
	Ignition switch	Vehicle ahead detection indicator displayed	On	
ACC TARGET	ON 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"	Middle	
ACC DISTANCE ON Ignition switch	When following distance set to "SHORT"	Short		
		Set distance indicator not displayed	Off	
	Own vehicle indicator displayed	On		
SOO OVVIN VAL	ON	Own vehicle indicator not displayed	Off	_
ACC SET SPEED	Ignition switch ON	ICC set vehicle speed display	Vehicle speed	_
ACC UNIT	Ignition switch	Set vehicle speed indicator unit display ON	On	-
AOO 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	V

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Monitor Item		Condition	Value/Status
		Shift position indicator P display	Р
		Shift position indicator R display	R
		Shift position indicator N display	N
		Shift position indicator D display	D
		Shift position indicator M1 display	M1
SHIFT IND	Ignition switch ON	Shift position indicator M2 display	M2
		Shift position indicator M3 display	M3
		Shift position indicator M4 display	M4
		Shift position indicator M5 display	M5
		Shift position indicator M6 display	M6
		Shift position indicator M7 display	M7
AT C MODE CW	Ignition switch	Snow mode switch ON	On
AT S MODE SW	ON	Snow mode switch OFF	Off
AT P MODE SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
M DANCE CW	Ignition switch	Selector lever DS position	On
M RANGE SW	ŎN	Other than the above	Off
NIM DANIOE CVA	Ignition switch	Selector lever DS position	Off
NM RANGE SW	ON	Other than the above	On
AT OFT UP OW	Ignition switch	Selector lever up position	On
AT SFT UP SW	ŎN	Other than the above	Off
AT CET DIAINI CIAI	Ignition switch	Selector lever – position	On
AT SFT DWN SW	ON	Other than the above	Off
CT CET LID CW	Ignition switch	Paddle shifter up operation	On
ST SFT UP SW	ON	Other than the above	Off
ST SFT DWN SW	Ignition switch	Paddle shifter down operation	On
31 3F1 DWN 3W	ON	Other than the above	Off
COMP F/B SIG	Ignition switch	A/C compressor activation condition	On
COMP P/B 3IG	ON	A/C compressor deactivation condition	Off
4WD LOCK SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
PKB SW	Ignition switch	Parking brake applied	On
PKD SW	ON	Parking brake released	Off
BUCKLE SW	Ignition switch	Seat belt (driver side) unfastened	On
BUCKLE 3W	ON	Seat belt (driver side) fastened	Off
BRAKE OIL SW	Ignition switch	Brake fluid level is lower than the low level	On
DIVARE OIL 300	ON	Brake fluid level is normal	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.
FUEL LOW SIG	Ignition switch	Low-fuel warning signal output	On
FUEL LOW SIG	ON	Low-fuel warning signal not output	Off

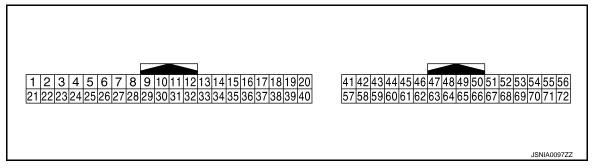
#### < ECU DIAGNOSIS INFORMATION >

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

#### NOTE:

Some items are not available according to vehicle specification.

#### **TERMINAL LAYOUT**



#### PHYSICAL VALUES

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
4				Ignition	Brake pedal is depressed	12 V
(G)	Ground	Stop lamp switch signal	Input	switch OFF	Other than the above	0 V
5	0	Manual mode shift up sig-	1	Ignition	Selector lever up position	0 V
(L)	Ground	nal	Input	switch ON	Other than the above	12 V
6		5		Ignition	Paddle shifter up operation	0 V
(O)	Ground	Paddle shifter up signal	Input	switch ON	Other than the above	12 V
7 (GR)	Ground	Communication signal (AMP. → METER)	Output	Ignition switch ON	_	(V) 6 4 2 0 + 1ms 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	Ground	Seat belt buckle switch sig-	Input	Ignition switch	When seat belt (driver side) is fastened	12 V
(SB)	Siound	nal (driver side)	IIIput	ON	When seat belt (driver side) is unfastened	0 V

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	nal No.	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
10	_		_	Ignition	Selector lever DS position	0 V
(W)	Ground	Manual mode signal	Input	switch ON	Other than the above	12 V
11		Not an extended to the stand	1	Ignition	Selector lever DS position	12 V
(G)	Ground	Not manual mode signal	Input	switch ON	Other than the above	0 V
14 (BR)	Ground	Communication signal (LCD $\rightarrow$ AMP.)	Input	Ignition switch ON		(V) 15 10 5 0 400 µs JSNIA0028GB
20*				Ignition	Blower motor: ON	0 V
(G)	Ground	ION ON/OFF signal	Output	switch ON	Blower motor: OFF	12 V
25	Ground	Manual mode shift down	Input	Ignition switch	Selector lever down position	0 V
(V)		signal		ON	Other than the above	12 V
26	Ground	Paddle shift down signal	Input	Ignition switch	Paddle shifter down operation	0 V
(G)				ON	Other than the above	12 V
27 (LG)	Ground	Communication signal (METER → AMP.)	Input	Ignition switch ON	_	(V) 6 4 2 0 + 1 ms SKIA3361E
28 (R)	Ground	Vehicle speed signal output (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 applied	0 V
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake released	(V) 8 4 0 10 ms JSNIA0007GB

	inal No. e color)	Description			Condition	Value	А
+	_	Signal name	Input/ Output		Condition	(Approx.)	
34 (Y)	Ground	Communication signal (AMP. → LCD)	Output	Ignition switch ON	_	(V) 6 4 2 0 JSNIA0027GB	С
38 (P)	Ground	Blower motor control signal	Output	Ignition switch ON	Fan speed: 1st speed (manual)	(V) 6 4 2 2 0 3 ms 3 JSIIA0096ZZ	E F
41 (L)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage	G
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	Н
43 (R)	Ground	Intake sensor signal	Input	Ignition switch ON	_	0 - 4.8 V Output voltage varies with intake temperature.	J
44 (LG)	Ground	In-vehicle sensor signal	Input	Ignition switch ON	_	0 - 4.8 V Output voltage varies with in-ve- hicle temperature.	K
45 (V)	Ground	Ambient sensor signal	Input	Ignition switch ON	_	(V) 4 3 2 1 0 -10 0 10 20 30 40 [-C] (14) (32) (50) (68) (86) (104) [-F]  JSNIA0014GB	M WCS
46 (O)	Ground	Sunload sensor signal	Input	Ignition switch ON	_	0 - 4.8 V Output voltage varies with amount of sunload.	0
47 <sup>*</sup> (G)	Ground	Gas sensor signal	Input	Ignition switch ON	NOTE: The signal is different by measurement environment of a vehicle	(V) 6 4 2 0 4 ms 2 JIA1163J	Р
53 (W)	Ground	Ignition power supply	Input	Ignition switch ON	_	Battery voltage	

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
54 (Y)	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 low- er than the low level	0 V
58 (Y)	Ground	Fuel level sensor ground	_	Ignition switch ON	_	0 V
59 (GR)	Ground	Intake sensor ground	_	Ignition switch ON	_	0 V
60 (L)	Ground	In-vehicle sensor ground	_	Ignition switch ON	_	0 V
61 (R)	Ground	Ambient sensor signal ground	_	Ignition switch ON	_	0 V
62 (SB)	Ground	Sunload sensor ground	_	Ignition switch ON	_	0 V
63 <sup>*</sup>		Ion control mode output	0	Ignition	Clean mode	12 V
(L)	Ground	signal	Output	switch ON	Ion control mode	0 V
65 (O)	Ground	ECV signal	Output	Ignition switch ON	Self-diagnosis. STEP-4 (Code No. 45)	(V) 15 10 5 0 11 11 11 11 11 11 11 11 11 11 11 11 1
69 (L)	Ground	A/C LAN signal	Input/ Output	Ignition switch ON	_	(V) 15 10 5 10 10 10 10 10 10 10 10 10 10 10 10 10

#### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
70 (R)	Ground	Each door motor power supply	Output	Ignition switch ON	_	Battery voltage
71 (GR)	Ground	Ground	_	Ignition switch ON	_	0 V
72 (P)	Ground	CAN-L	_		_	_

<sup>\*:</sup> With ACCS

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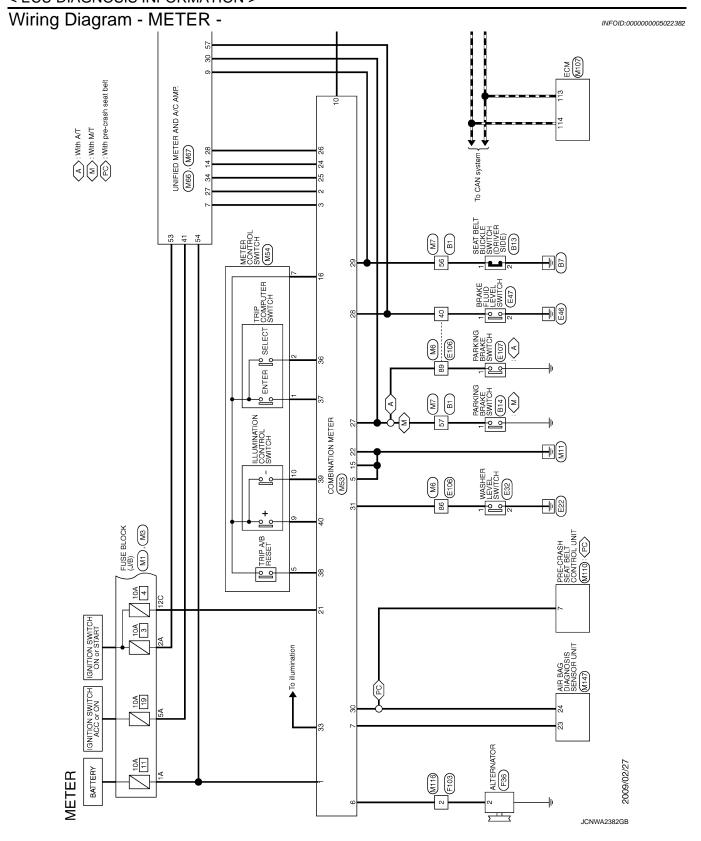
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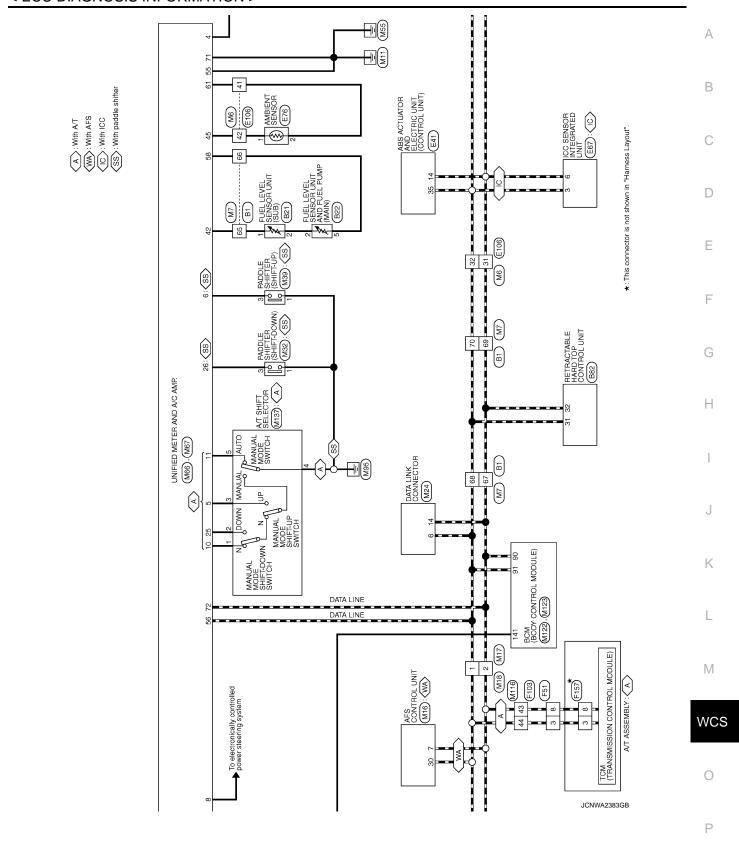
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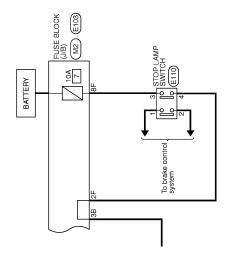
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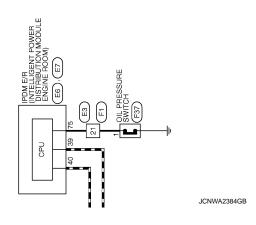
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#### < ECU DIAGNOSIS INFORMATION >

Pr No. B21 FUEL LEVEL SENSOR UNIT (SUB) Types EQ2FQY-RS    Color of Wire   Signal Name (Specification)     Wire	E6	В
Convector Name Convector Name Convector Type Convector Type Name Convector Type C	Commetter Name Commetter Name Commetter Type Commet	D
m HW/T)	Poo	Е
PARKING BRAKE SWITCH (WITH M./T) POLFB-A Signal Name [Specification]	SAAS6MB-RS9-SHZ8   SAAS6MB-RS9	F
ا أنه م	SB SB	G
Connector No. Connector Type Connector Type No. No.	Connector No. Connector Name Connector Type  H.S.  Terminal No. No. 21	Н
B13 A03FW A03FW Signal Name [Specification]	Name   RETRACTABLE HARD TOP CONTROL UNIT	J
B13	Connector No.  Connector Name  Connector Type  Connector Type  Connector Type  Terminal  Nice  N	K
		L
TO WIRE  TO WIRE  Signal Nama (Specification)	EUSE LEVEL SENSOR UNT AND FLEE, POUR GNAND EUSEGY-RS  Signal Name [Specification]	М
18 W MRE		WCS
METER   Commencer Name   Commencer Name   Commencer Type   Commencer Type   Commencer Type   Code of Name   Code of State	Connector No.  Connector Name Connector Type  H.S.  Terminal Code of Ne.  No.  2 W  5 SB	0
		JCNWA2385GB

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Connector No.  Connector Name BRAKE FLUID LEVEL SWITCH Connector Type VV02FGV	Terminal   Color of   Signal Mane (Seperfication)   No.   Wire     W	Corrector No.  Corrector Name  Connector Type  TH80FW-CS16-TM4  W. I.	Terminal   Color of Wee   Signal Mane (Specification)   31   Color of Wee   Signal Mane (Specification)   32   L   40   W     41   P     42   G     42   G     68   C   C     68   C     68   C     68
Согленств Name A85 ACTUATION AND BESCHIST UNIT (CONTROL UNIT)  Cornector Type BAA4276 - AH24-LH  (A)  (A)  (A)  (A)  (B)  (B)  (B)  (B)	Terminal   Color of   Signal Name [Specification]   No.   Wive   Color of   Signal Name [Specification]   Signal Name   Color of   Signal Name   Color of   Signal Name   Signal Name   Specification]   Signal Name   Signal Name   Specification   Signal Name   Signal	Connector No.  Connector Name FUSE BLOCK (J/B)  Connector Type NS16FW-CS  H.S.  (F 6F 5F 4F 3F 1F 1F 19F 9F 8F	Terminal   Color of   Number   Signal Name [Specification]   Signal Name [Specification]   Signal Name   Specification]   Specification   Sp
Connector No. E32 Connector Name WASHER LEVEL SWITCH Connector Type Z02FBR	Terminal Color of   Signal Name [Steoffcation]   Were   Signal Name [Steoffcation]     LC	Connector Nume RABIENT SENSOR Connector Type RSOZFB  AMBIENT SENSOR  Connector Type RSOZFB	Terminal   Color of   Signal Name [Specification]   Wire   Wire   Color of   Color of
METER  Connector Name  Connector Name  Connector Type  TH20PW-CS12-M4  LAS  ESCHERE GREEN	Terminal Color of No. Wire Signal Name [Specification] 75 SB -	Connector No.  Connector Name ICC SENSOR INTEGRATED UNIT  Connector Type RS30FB-PR  A.S.  A.S.	Terminal   Color of   Signal Name   Specification

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#### < ECU DIAGNOSIS INFORMATION >

Connector No.  Connector Name  ALTERNATOR  Connector Type  HS03FB  (4 3 2)  Terminal Color of No.  No.  Where Signal Name [Specification]	Connector No.   F157   Connector Name   TOM (TRANSMISSION CONTROL MODULE)		A B C
- S+28 - S+28 - S			E F
Commercer No.   F1	Connector No.   F103		G H
Signal Name [Specification]  Signal Name [Specification]  - [Wesh ICC] - [Withhout ICC]	F51 A/T ASSEMBLY PR(10FG-DGY  6 4 3 2 1  10 9 8 7 6  Signal Name [Specification]		I J
Commetter No.  Commetter Name S Commetter Types M Terminal Color of No. Mre 1 1 1 2 S 8 2 2 S 4 We 4	Connector No.   F5    Connector No.   F5    Connector No.   F7    Connector Type   PR(		K
FIO) TBOIFW Signal Name [Specification]	OIL PRESSURE SWITCH EDIFGY-RS-AR  Signal Name [Specification]		M
METER   Connector No.   Connector No.   Connector No.   Connector Type   TB01FW   Connector Type   TB01FW   T	Connector No.   F-37	JCNWA2387GB	WCS
		35/WWA2307 GB	Р

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MELEK	$\lceil$	ſ	ſ	
Connector No.	No. MI	Connector No. MZ	Connector No. M3	Connector No. Mb
Connector Name		Connector Name FUSE BLOCK (J/B)	Connector Name FUSE BLOCK (J/B)	Connector Name WIRE TO WIRE
Connector Type	Type NS06FW-M2	Connector Type NS10FW-CS	Connector Type NS12FW-CS	Connector Type TH80MW-CS16-TM4
€ H.S.	3A	48.38 (18 18 18 18 18 18 18 18 18 18 18 18 18 1	H.S. 504C 302C1C 120 III III III III 90 90 70 60	H.S. H.S. S.
Terminal No. 1A 2A 2A 5A	Coder of Signal Name [Saecification] Wire V C	Terminal Golder of Signal Name [Steoifcation] No. Wire 38 P	Terminal Color of Nure   Signal Name [Saperfractors]	Terminal   Color of   Signal Name [Specification]   No.   Wive   Signal Name [Specification]   Signal Name [Specification]   Signal Name [Specification]   Signal Name   Signal Name
Connector No. Connector Name Connector Type H.S.	Name  Theorem  Types  THEOMW-CSIG-TMA  Theorem  Theorem	Connector Nume	Corrector No. M17 Corrector Name WIPE TO WIPE Corrector Type TROZEW  TROZEW  TROZEW	Connector No. M18 Connector Name WIRE TO WIRE Connector Type TKOZMW  TKOZMW
Terminal No.	Color of Signal Name [Specification]	Terminal Color of Signal Name [Specification] No.	Terminal Color of Signal Name [Specification]	Terminal Color of Signal Name [Specification]
26		<u>а</u> .	<b>-</b>	- ا
57	0	30 L CAN-H	2 P -	2 P -
65	BR			
67	- 0			
89				
69	Δ			

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Connector No.	No.	M24	Connector No.	No.	M32	Connector No.	M39
Connector Name	Name	DATA LINK CONNECTOR	Connector Name	Name	PADDLE SHIFTER (SHIFT-DOWN)	Connector Name	PADDLE SHIFTER (SHIFT-UP)
Connector Type	Type	BD16FW	Connector Type	Type	A03FW	Connector Type	A04FW
H.S.		121314 16 4 5 6 7 8	H.S.			₹S.	
No. 9	Color of Wire P	Signal Name [Severification]	Terminal No. No.	Color of Wire W	Signal Name (Speedfeator)	Terminal   Dolor of Wire   No.   Wire	Signal Name (Saeofronton)
Connector No.	No.	M53	24	H	COMMUNICATION SIGNAL (LCD->AMP.)	Connector No.	M54
Connector Name	Name	COMBINATION METER	25	>	COMMUNICATION SIGNAL (AMP>LCD)	Connector Name	METER CONTROL SWITCH
			56	œ	VEHICLE SPEED SIGNAL (8-PULSE)		
Connector Type	Type	SAB40FW	27	0	PARKING BRAKE SWITCH SIGNAL	Connector Type	TH12FW-NH
Œ.			28	gs –	SEAT BELT BLICKLE SWITCH SIGNAL	E	
ď			08	n Q	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)	N.	
ĺ			31	-	WASHER LEVEL SWITCH SIGNAL		,
	21 22 23 2-	21 22 23 24 25 26 27 28 29 30 31 33 34 36 37 38 39 40	33	α	ILLUMINATION CONTROL SIGNAL		3
			36	97	SELECT SWITCH SIGNAL		7 8 9 10
			37	8S	ENTER SWITCH SIGNAL		
			38	٦	TRIP A/B RESET SWITCH SIGNAL		
Ferminal No.	Color of Wire	Signal Name [Specification]	39	م د	ILLUMINATION CONTROL SWITCH (-)	Terminal Color of No. Wire	Signal Name [Specification]
-	>	BATTERY POWER SUPPLY	2			+	
~	. 2	COMMUNICATION SIGNAL (METER->AMP.)				2 LG	1
က	gR	COMMUNICATION SIGNAL (AMP ->METER)				2 2	1
5	В	GROUND				7 BR	-
9	Μ	ALTERNATOR SIGNAL				6	1
7	PT	AIR BAG SIGNAL				10 P	-
10	α	SECURITY SIGNAL					
15	В	GROUND					
16	BR	METER CONTROL SWITCH GROUND					
21	œ	IGNITION SIGNAL					
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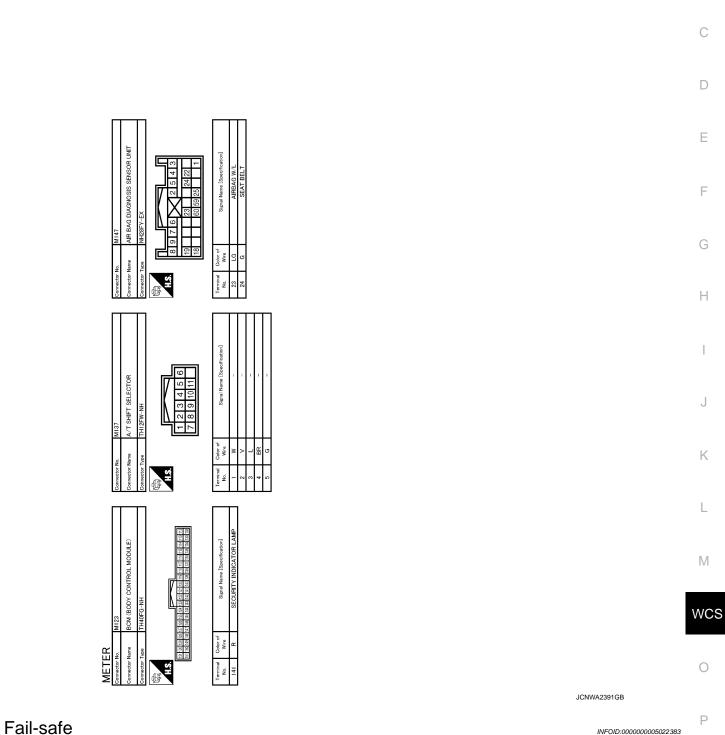
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72 P GAN-L					Connector No. M122 Connector Name BCM (BODY CONTROL MODULE)	Connector Type  1.3  1.3  1.3  1.3  1.3  1.4  1.5  1.5  1.5  1.5  1.5  1.5  1.5	Terminal   Color of Nime   Signal Name [Specification]   Wire   Signal Name [Specification]   90   P   CAN-H     91   L   CAN-H
Connector No.  Connector Name  UNIFIED METER AND A/C AMP.  Connector Type  TH32FW-NH	47 58 59 60 61 62 63 65 66 68 70 77 72	Wire U.	42 BR 1-04LE-VELS-BROKS NIGNAL 45 V AMBIENT SENSOR SIGNAL 53 W IGNITION POWER SUPPLY 54 Y BATTERY POWER SUPPLY 55 R GROUND	LG BRAKE FLUID Y FUEL LEVEL SY R AMBIENT GR	Connector No. M116 Connector Name WIRE TO WIRE	TK36MW-NS10   TK36MW-NS10   TK36MW-NS10   TK36MW-NS10   T	Terminal   Color of   Signal Name [Specification]   Wire   Wire   Signal Name [Specification]
27   LG   COMMUNICATION SIGNAL (METER-)AMP.)   28 R   VEHICLE SPEED (8-POLLSE)   30 V   PARRING BRAKE SMITCH SIGNAL   34 Y   COMMUNICATION SIGNAL (AMP->LCD)					Connector No. M110 Connector Name PRE-CRASH SEAT BELT CONTROL UNIT	Connector Type  H.S.  1 2 3 7 8 110 4 5 6  13 16 18 18 202122 2425	Terminal Coder of No.         Signal Name [Specification]           Ro.         N
METER MAG Connector Name Connector Name Connector Name TH40FW-NH  MSE  MSE  MSE  MSE  MSE  MSE  MSE  MS		nal Color of Wire G	5 L MANUAL MODE SHIFTER UP SIGNAL 6 O PADDLE SHIFTER UP SIGNAL 7 GR COMMUNICATION SIGNAL (AMP->METER) 8 L VEHICLE SPEED SHILES) 9 SIA BELL BILDICE SPEED SHILES)	W NANUAL MODE SIGNAL G NOT MANUAL MODE SIGNAL BR COMMUNICATION SIGNAL V NANUAL MODE SHIFTER DOWN SIGNAL G PADDLE SHIFTER DOWN SIGNAL	Connector No. M107 Connector Name ECM	Commercer Type   RH24FGV-RZ8-R-LH-Z    Commercer Type   RH24FGV-RZ8-R-LH-Z    Commercer Type   Commercer T	Terminal No.         Open of Wire         Signal Name [Specification]           No.         Wire         VEHCAN-L1           113         P         VEHCAN-H1           114         L         VEHCAN-H1

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## 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		Reset to zero by suspending communication.		
Tachometer				
Fuel gauge		Indicates fuel level		
Engine coolant temperatur	e gauge	Reset to zero by suspending communication.		
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			
	CRUISE warning lamp			
	Low tire pressure warning lamp	The lamp turns ON after flashing for 1 minute.		
Warning lamp/indicator	AFS OFF indicator lamp	The lamp blinking caused by communication malfunction		
lamp	High beam indicator			
	Turn signal indicator lamp			
	Oil pressure warning lamp			
	Malfunction indicator lamp	The lamp turns off by suspending communication.		
	A/T CHECK warning lamp			
	Key warning lamp			
	Master warning lamp			

DTC Index

Display contents of CONSULT-III		me	Diagnostic item is detected when	Refer to
U1000: CAN COMM CIRCUIT	CRNT PAST		When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	<u>MWI-41</u>
U1010: CONTROL UNIT (CAN)	CRNT	PAST	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	<u>MWI-42</u>
B2201: COMM ERROR 1	CRNT	PAST	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-43
B2202: COMM ERROR 2	CRNT	PAST	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-45
B2205: VEHICLE SPEED	CRNT	PAST	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	<u>MWI-47</u>
B2267: ENGINE SPEED	CRNT	PAST	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-48
B2268: WATER TEMP	CRNT	PAST	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	<u>MWI-49</u>

#### NOTE:

The details of TIME display are as follows.

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

#### < ECU DIAGNOSIS INFORMATION >

# **BCM (BODY CONTROL MODULE)**

Reference Value

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#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITE	M
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Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
I IX WIF LIX I II	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
I K WIF LK LOW	Front wiper switch LO	On
ED WASHED SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
FR WIPER INT	Front wiper switch INT/AUTO	On
ED WIDER STOR	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi- tion
TURN SIGNAL R	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAWIP SW	Lighting switch 1ST or 2ND	On
	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
DA CCINIC CIA/	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIGHT OW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
ED EOC CW	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
DOOK SW-DK	Driver door opened	On
	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off

Monitor Item	Condition	Value/Status
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off
CDL LOCK SW	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
CDL LINI OCK SW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
KET CTL LK-SW	Driver door key cylinder LOCK position	On
KEN CAL TIN 6/1/	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
I IAZAIND 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
TIC OMNOEL OV	Trunk lid opener cancel switch ON	On
TR/BD OPEN SW	Trunk lid opener switch OFF	Off
THOSE OF ENGIN	While the trunk lid opener switch is turned ON	On
TRNK/HAT MNTR	Trunk lid closed	Off
TIMINITIAL INITIAL INI	Trunk lid opened	On
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
TARE EGON	LOCK button of the Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
INIC-ONLOOK	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off
ICICE-TIVIDO	TRUNK OPEN button of the Intelligent Key is pressed	On
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
INIC-I ANIC	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
TAKE 17W OF EIV	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
O. HOAL BLIGOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
NEW OW -DIV	Driver door request switch is pressed	On
DEO 811/ - A.S.	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off

#### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DEO SW. DD/TD	Trunk lid opener request switch is not pressed	Off
REQ SW -BD/TR	Trunk lid opener request switch is pressed	On
DUCH CW	Push-button ignition switch (push switch) is not pressed	Off
PUSH SW	Push-button ignition switch (push switch) is pressed	On
ION DIVO. E/D	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
	The clutch pedal is not depressed	Off
CLUCH SW	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
DDAKE CW C	The brake pedal is not depressed	Off
BRAKE SW 2	The brake pedal is depressed	On
DETE/CANCL CW	Selector lever in P position (Except M/T models)     The clutch pedal is depressed (M/T models)	Off
DETE/CANCL SW	<ul> <li>Selector lever in any position other than P (Except M/T models)</li> <li>The clutch pedal is not depressed (M/T models)</li> </ul>	On
OFT DAI/ALOVA/	Selector lever in any position other than P and N	Off
SFT PN/N SW	Selector lever in P or N position	On
0/1 1 0 0 1 /	Steering is unlocked	Off
S/L -LOCK	Steering is locked	On
	Steering is locked	Off
S/L -UNLOCK	Steering is unlocked	On
C/I DELAY E/D	Ignition switch in OFF or ACC position	Off
S/L RELAY-F/B	Ignition switch in ON position	On
LINILK CEN. DD	Driver door is unlocked	Off
UNLK SEN -DR	Driver door is locked	On
DUOLLOW IDDM	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
ICN DIVA E/D	Ignition switch in OFF or ACC position	Off
GN RLY1 -F/B	Ignition switch in ON position	On
DETE OW IDDM	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
CET DN IDDM	Selector lever in any position other than P and N (Except M/T models)     The clutch pedal is not depressed (M/T models)	Off
SFT PN -IPDM	Selector lever in P or N position     The clutch pedal is depressed	On
SET D MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
OFT N. BAFT	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On

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Monitor Item	Condition	Value/Status
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
C/L LOCK IDDM	Steering is unlocked	Off
S/L LOCK-IPDM	Steering is locked	On
C/L LINIL IZ IDDM	Steering is locked	Off
S/L UNLK-IPDM	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
5/L RELAY-REQ	Steering lock system are not 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
ID OK FLAG	Steering is locked	Reset
ID OK FLAG	Steering is unlocked	Set
PRMT ENG STRT	The engine start is prohibited	Reset
TRIMIT LING STREET	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
KET SW -SLOT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRIMID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIDMIDA	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.	Done

### < ECU DIAGNOSIS INFORMATION >

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
CONTINUIDZ	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
OOM IKWIDI	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
11 4	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
11.3	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
IP Z	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
IFI	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID DECCT EL 4	ID of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
ID DECOT ED4	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECOT DD4	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECOT DL 4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

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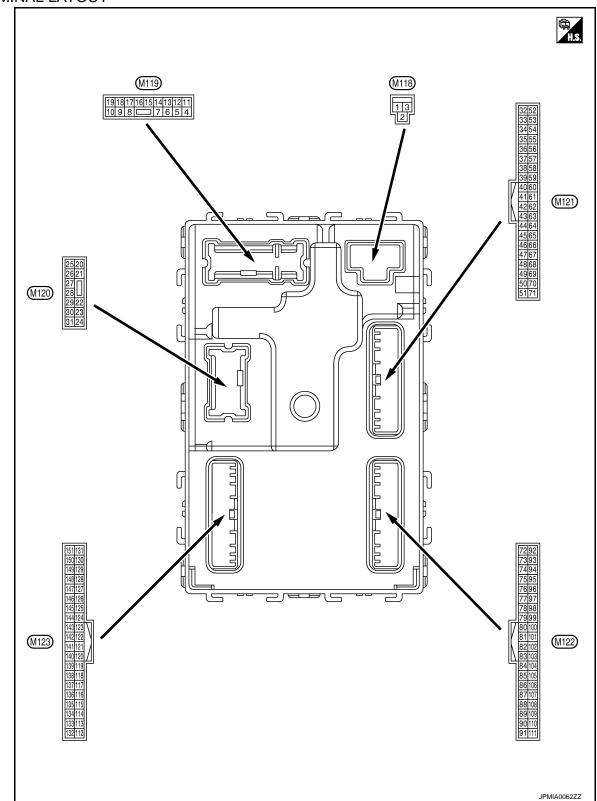
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### TERMINAL LAYOUT



PHYSICAL VALUES

### < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description	·		Condition	Value	Α
+	-	Signal name	Input/ Output	Condition		(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	В
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (	OFF	12 V	С
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch (	NC	12 V	
					np battery saver is activated. r room lamp power supply)	0 V	D
4 (LG)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V	E
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V	F
(P)	Ground	LOCK	Output	door	Other than UNLOCK (Actuator is not activated)	0 V	-
7	Ground	Step lamp	Output	Step lamp	ON	0 V	G
(SB)	Ground	Зієр іапір	Output	эсер каптр	OFF	12 V	•
8	Ground	All doors, fuel lid	0.44	All doors, fuel	LOCK (Actuator is activated)	12 V	Н
(V)	Ground	LOCK	Output	lid	Other than LOCK (Actuator is not activated)	0 V	
9	Ground	Driver door, fuel lid	0.1.1	Driver door,	UNLOCK (Actuator is activated)	12 V	
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V	J
11 (R)	Ground	Battery power supply	Input	Ignition switch (	OFF	Battery voltage	I/
13 (B)	Ground	Ground	_	Ignition switch (	ON	0 V	K
					OFF	0 V	
14 (W)	Ground	Push-button ignition switch illumination	Output	Tail lamp		NOTE: When the illumination brightening/dimming level is in the neutral position.	M
(vv)		ground			ON	10 0 2 ms JSNIA0010GB	W
15	Ground	ACC indicator lama	Outout	lanition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	_
(O)	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0 V	F

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Terminal No. (Wire color)		Description				Value
+ (Wire	color)	Signal name	Input/ Output	Condition		(Approx.)
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF  Turn signal switch RH	0 V  (V) 15 10 5 1
					Turn signal switch OFF	0.5 V
18 (O)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
19	Craund	Room lamp timer	Output	Interior room	OFF	12 V
(V)	Ground	control	Output	lamp	ON	0 V
					Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
23			0.1.1	T. 11:1	OPEN (Trunk lid opener actuator is activated)	12 V
(Y)	Ground	Trunk lid open	Output	Trunk lid	Other than OPEN (Trunk lid opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
30				Trunk room	ON	0.5 V
(P)	Ground	Trunk room lamp	Output	lamp	OFF	12 V

	nal No.	Description				Value	A
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	F
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	C
34 (SB)	Ground	Trunk room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	E
35		Trunk room antenna		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 11 1 s  JMKIA0062GB	(  -
(V)	Ground	(+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	ŀ
38		Rear bumper anten-		When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 1	W
(B)	Ground	na (–)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	F

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
39	Ground	Ground  Rear bumper anten- Ground  Rear bumper anten- Output  Quest switch is		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(W)		na (+)	Сара	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
47		Ignition relay (IPDM			OFF or ACC	12 V
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V
50 (G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					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
(SB)	Cround	ciarior rollay 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 1.0 V
		Intelligent Key warn-		Intelligent Key	Sounding	0 V
64 (G)	Ground	ing buzzer (Engine room)	Output	warning buzzer (Engine room)	Not sounding	12 V

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	nal No.	Description			0 199	Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	/ 1
					Pressed	0 V	В
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB	C
72	Ground	Room antenna 2 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	E F G
(R)		Сири	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	H	
73	73 Ground Room antenna 2 (+) Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB	J K L		
(G)	5.54.14	(Center console)	- Supur	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	WCS

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	nal No. color)	Description	I		0 100	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
74	Ground	Passenger door an-	Output	When the passenger door request switch is	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)	Ground	tenna (–)	Cutput	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
75	When the passenger door and senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB			
(BR)		tenna (+)		t quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s  JMKIA0063GB
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-		When Intelligent Key is not in the antenna detection area	(V) 15 10 1

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

	nal No. color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V 12 V
83	Ground	Remote keyless entry receiver communica-	Input/	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
(Y)	Glound	tion	Output	When operating either button on the Intelligent Key		(V) 15 10 5 1 ms  JMKIA0065GB
			Input	Combination switch	All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
87 (Y)	Ground	Combination switch INPUT 5			Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V
					Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 2  Wiper volume dial 6  Wiper volume dial 7	(V) 15 10 5 0 2 ms  JPMIA0040GB 1.3 V

Termin		Description				Value	А
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	$\vdash$
					All switches OFF (Wiper volume dial 4)	(V) 15 10 2 ms  JPMIA0041GB 1.4 V	B
88	Ground Combination switch	Input	Combination	Lighting switch HI (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	F	
(O)		INPUT 3		switch	Lighting switch 2ND (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	G H
					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	J K
89 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ig- nition switch (push switch)	Pressed  Not pressed	0 V Battery voltage	N
90 (P)	Ground	CAN-L	Input/ Output		_	_	
91 (L)	Ground	CAN-H	Input/ Output		_	_	W
					OFF	0 V	
92 (LG)	Ground	Key slot illumination	Output	Key slot illumi- nation	Blinking	(V) 15 10 5 0 1 s	F
			1			6.5 V	

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
( v )					ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(O)	Ground	ACC relay control	Output	ignition switch	ACC or ON	12 V
96 (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	Input	Steering lock	UNLOCK status	12 V
98	Cround	Steering lock condi-	lanut	Input Steering lock	LOCK status	12 V
(P)	Ground	tion No. 2	input		UNLOCK status	0 V
		Selector lever P posi-		Selector lever	P position	0 V
		tion switch		Selector lever	Any position other than P	12 V
99		ASCD clutch switch (M/T models without ICC)		ASCD clutch switch	OFF (Clutch pedal is depressed)	0 V
(R)* <sup>1</sup> (BR)* <sup>2</sup>	Ground		Input		ON (Clutch pedal is not depressed)	12 V
(=. 1)		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 JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
102 (O)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC	0 V 12 V
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch (	DFF	12 V
106 (W)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	12 V 0 V

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	nal No. color)	Description			0	Value	А
+		Signal name	Input/ Output		Condition	(Approx.)	$\wedge$
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB	B C
					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
					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 1.3 V	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 1.4 V
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
(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 1.3 V

Termin	nal No. color)	Description			0 100	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB
109 (W)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper volume dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch INT/ AUTO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V

	nal No.	Description	ı			Value
+ (VVire	e 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	Rain sensor serial link	Input/ Output	Ignition switch C	N	(V) 15 10 5 0 10ms JPMIA0156GB 8.7 V
113	113		Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(O)	Ground	Optical sensor		ON	When dark outside of the vehicle	Close to 0 V
114	Ground	Clutch interlock	Innut	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V
(R)	Ground	switch	Input		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	Ground	(Without ICC)	Input	switch	ON (Brake pedal is depressed)	Battery voltage
(BR)	Greand	Stop lamp switch 2	mpat		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB
					UNLOCK status (Unlock switch sensor ON)	0 V

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	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
121	Ground	Key slot switch	Input	When the Intellig	gent Key is inserted into key	12 V
(SB)	Ground	Key Slot Switch	Input	When the Intelli- key slot	gent Key is not inserted into	0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V  Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (Door open)	0 V
129 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V
					ON	0 V
132 (V)	Ground	Power window switch and R.H.T. control unit communication	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0 10 ms JPMIA0013GB 10.2 V
				Ignition switch C	OFF or ACC	12 V
					ON (Tail lamps OFF)	9.5 V
133 (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.  (V) 15 10 5 0  JPMIA0159GB
					OFF	0 V
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage 0 V
137 (O)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V

	inal No.	Description				Value				
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)				
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V				
(Y)	Ground	power supply	Output	ignition switch	ACC or ON	5.0 V				
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
(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				
(GR)	Ground	position (A/T models)	Input	Selector level	Except P and N positions	0 V				
					ON	0 V				
141 (R)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking	(V) 15 10 5 0 1 s 1 s JPMIA0014GB				
					OFF	12 V				
					All switches OFF	0 V				
					Lighting switch 1ST					
				Combination	Lighting switch HI	(V)				
142	Ground	Combination switch	Output	switch	10					
(BR)	Ground	OUTPUT 5	Output	(Wiper volume dial 4)	Turn signal switch RH	0 2 ms JPMIA0031GB				
					All switches OFF (Wiper volume dial 4)	10.7 V 0 V				
					Front wiper switch HI (Wiper volume dial 4)	(V)				
143 (P)	Ground	Combination switch OUTPUT 1	Output	(Wiper volume dial 4)  Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 2  Wiper volume dial 3  Wiper volume dial 6  Wiper volume dial 7		15 10 5 0 2 ms JPMIA0032GB				

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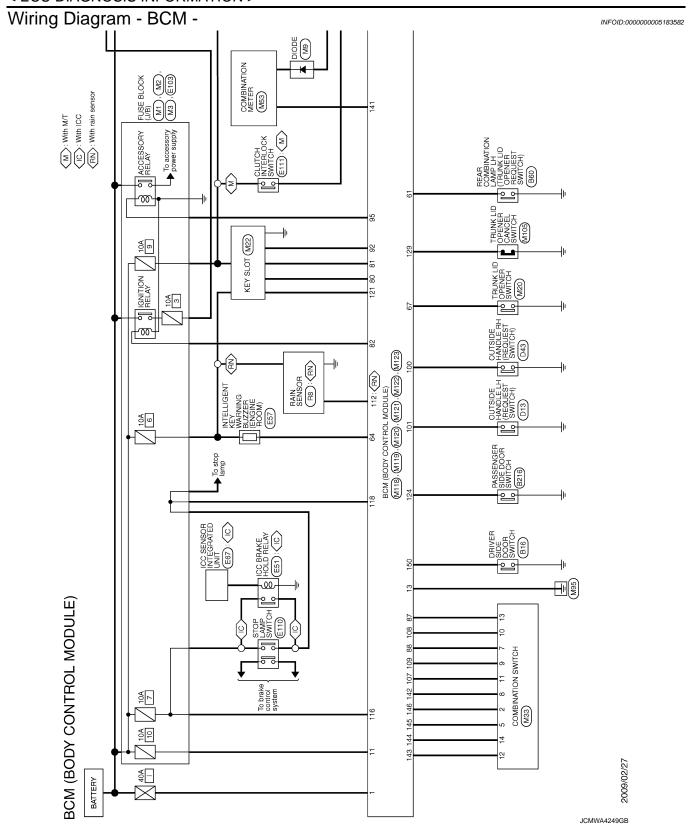
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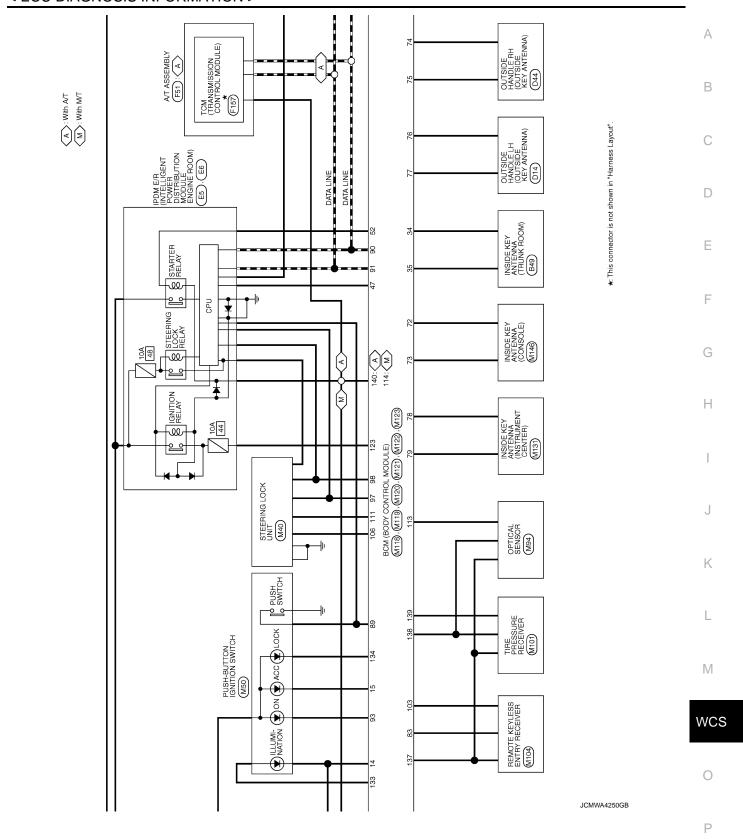
	nal No. color)	Description			O Fif	Value	А	
+	_	Signal name	Input/ Output		Condition	(Approx.)	Λ	
					All switches OFF (Wiper volume dial 4)	0 V	В	
					Front washer switch ON (Wiper volume dial 4)	(V)	0	
144 (O)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 5  Wiper volume dial 6	15 0 5 0 2 ms JPMIA0033GB	C D	
					All switches OFF	0 V	Е	
					Front wiper switch INT/ AUTO	(V)	_	
145		Combination switch		Combination switch	Front wiper switch LO	15 10 5	Γ	
(L)	Ground	OUTPUT 3	Output	(Wiper volume dial 4)	Lighting switch AUTO	2 ms JPMIA0034GB	G 034GB H	
					All switches OFF	0 V	- H	
					Front fog lamp switch ON	- · · ·	_	
					Lighting switch 2ND	(V)	I	
146	0	Combination switch	0	Combination switch	Lighting switch PASS	15	'	
(SB)	Ground	OUTPUT 4	Output	(Wiper volume dial 4)	Turn signal switch LH	0	J	
149 (W)	Ground	Tire pressure warning check switch	Input		_	10.7 V 12 V	- K	
						(V)	L	
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	10 5 0 10 ms JPMIA0011GB	M	
						11.8 V	WCS	
-					ON (Door open)	0 V	-	
151 (C)	Ground	Rear window defog-	Output	Rear window	Active	0 V	0	
(G)		ger relay control	·	defogger	Not activated	Battery voltage	-	

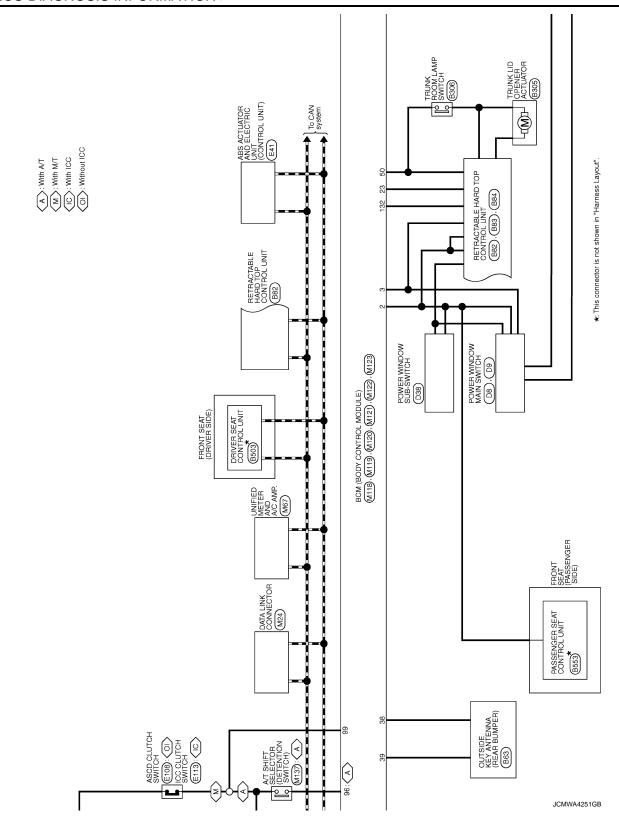
<sup>• \*1:</sup> A/T models

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<sup>• \*2:</sup> M/T models







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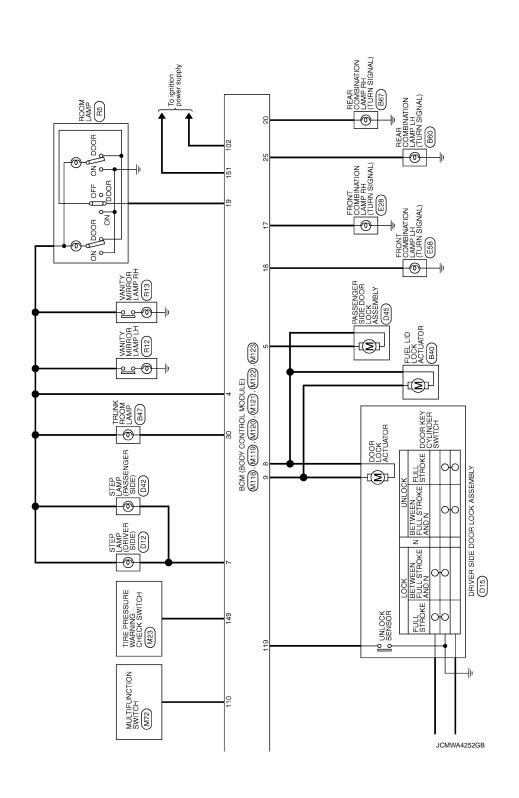
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19 V ROOM LAMP TIMER CONTROL		;	83 Y KEYLESS ENIRY RECEIVER COMM	- 0	BR	90 P CAN-L	+	92 LG NET SLOT ILL	O	GR A/T SHIFT	7	۵	99 BR ASCD/ICC CLUTCH SW [With M/T]  99 BR ASCD/ICC CLUTCH SW [With M/T]	Y PASSE	· a.	0 BF	103 L KEYLESS ENTRY RECEIVER POWER SUPPLY	106 W S/L UNIT POWER SUPPLY	107 LG COMBI SW INPUT 1	œ	м «	HAZARD SW	-
Остинестор Num.    M119   Domestor Num.e   BOM (BODY CONTROL MODULE)	Particular   Color of   Signal Name [Specification]     Nice   INTERIOR ROOM LAMP POWER SUPPLY     1	ſ	T	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FB-NH	a	PATE TO THE TO THE PATE TO THE		911 90 90 90 88 87 86 85 84 82 82 81 80 73 72 77 76 75 74 73 72 72 44 10 10 10 10 10 10 10 10 10 10 10 10 10	The last as the last tell section to the last and an extraction to the last to		ŀ	Terminal Color of Signal Name [Specification] No. Wire	+	5	SB PASS	75 BR PASSENGER DOOR ANT+	76 V DRIVER DOOR ANT-	77 LG DRIVER DOOR ANT+	>	BR.	+	82 R IGN RELAY (F/B) CONT
Commetter No. M118 Commetter Name BCM (BODY CONTROL MODULE) Commetter Type MMGFB-LC  TT 3	Terminal   Coder of   Signal Name [Standfichation]   Wine   Wine   Signal Name [Standfichation]   1   W   EAT (F/L)   2   Y   POWER WINDOW POWER SUPPLY (BAT)   3   O   POWER WINDOW POWER SUPPLY (RAP)		MIZI	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FGY-NH				51 50 49 48 47 46 46 44 43 42 41 40 39 38 37 36 38 34 33 32 32 32 34 35 36 36 37 36 38 38 38 38 38 38 38 38 38 38 38 38 38			ŀ	Terminal Color of Signal Name [Specification] No. Wire	$^{+}$	>	В	39 W REAR BUMPER ANT+	47 Y IGN RELAY (IPDM E/R) CONT	50 G TRUNK ROOM LAMP SW	SB	S «	64 G I-KEY WARN BUZZER (ENG ROOM)	NS.
BCM (BODY CONTROL MODULE)  Connector No. M33  Connector No. COMBINATION SWITCH  COMBINATION SWITCH  THISPW-NIH  1 2 3 1 4 5 6  7 8 9 10 11 12 13 14	Terminal   Color of   Signal Nane [Seachfactford]		Ī	Connector Name BCM (BODY CONTROL MODULE)	Connector Type NS12FW-CS	d)		1.3.	25 25 25 25 25 25 25 25 25 25 25 25 25 2	20 22 22 23		H	Terminal Color of Signal Name [Specification] No. Wire	+	23 Y TRUNK LID OPEN OUTPUT	>	30 P TRUNK ROOM LAMP						

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#### < ECU DIAGNOSIS INFORMATION >

		133	L	PUSH-BUTTON IGNITION SW ILL POWER
		134	97	LOCK IND
		137	0	RECEIVER/SENSOR GND
		138	٨	RECEIVER/SENSOR POWER SUPPLY
1		139	7	TIRE PRESSURE RECEIVER COMM
		140	GR	SHIFT N/P
		141	В	SECURITY INDICATOR LAMP
		142	ВR	COMBI SW OUTPUT 5
		143	Ь	COMBI SW OUTPUT 1
		144	0	COMBI SW OUTPUT 2
		145	7	COMBI SW OUTPUT 3
		146	SB	COMBI SW OUTPUT 4
		149	W	TIRE PRESSURE WARN CHECK SW
		150	GR	DRIVER DOOR SW
П		121	5	REAR WINDOW DEFOGGER RELAY CONT
Ī	•			

BCM (BODY CONTROL MODULE)	M123	BCM (BODY CONTROL MODULE)	TH40FG-NH		Signal Name [Specification]	RAIN SENSOR SERIAL LINK	OPTICAL SENSOR	CLUTCH INTERLOCK SW	STOP LAMP SW 1	STOP LAMP SW 2	DR DOOR UNLOCK SENSOR	KEY SLOT SW	IGN F/B	PASSENGER DOOR SW	TRUNK LID OPENER CANCEL SW
(BOD		lame	ype	150 (22) (23) (29) (51) (51) (52) (53) (53) (53) (53) (53) (53) (53) (53	Color of Wire	œ	0	Я	SB	BR	SB	SB	W	PT PT	0
BCM	Connector No.	Connector Name	Connector Type	H.S.	Terminal No.	112	113	114	911	118	119	121	123	124	129

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INFOID:0000000005183583

## Fail-safe

#### FAIL-SAFE CONTROL BY DTC

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

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	<ul> <li>500 ms after the following signal reception status becomes consistent</li> <li>Selector lever P position switch signal</li> <li>P range signal (CAN)</li> </ul>
B2602: SHIFT POSITION	Inhibit steering lock	<ul> <li>5 seconds 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 (battery voltage)</li> <li>Vehicle speed: 4 km/h (2.5 MPH) or more</li> </ul>
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 (battery voltage)</li> <li>Selector lever P/N position signal: Except P and N positions (0 V)</li> </ul>
B2604: PNP SW	Inhibit steering lock	<ul> <li>500 ms after any of the following BCM recognition conditions are fulfilled</li> <li>Status 1</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P/N position signal: P and N position (battery voltage)</li> <li>P range signal or N range signal (CAN): ON</li> <li>Status 2</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P/N position signal: Except P and N positions (0 V)</li> <li>P range signal and N range signal (CAN): OFF</li> </ul>
B2605: PNP 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 (battery voltage)  - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following CAN signal communication status becomes consistent</li> <li>Steering lock relay signal (Request signal)</li> <li>Steering lock relay signal (Condition signal)</li> </ul>

#### < ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
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)
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 (Battery voltage)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled Power position changes to ACC Receives engine status signal (CAN)
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: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
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 (Battery voltage)

#### HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

#### NOTE:

The blinking speed is normal while activating the hazard warning lamp.

## DTC Inspection Priority Chart

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

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Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM U1010: CONTROL UNIT (CAN)
3	<ul> <li>B2190: NATS ANTENNA AMP</li> <li>B2191: DIFFERENCE OF KEY</li> <li>B2192: ID DISCORD BCM-ECM</li> <li>B2193: CHAIN OF BCM-ECM</li> <li>B2195: ANTI SCANNING</li> </ul>
4	B2013: ID DISCORD BCM-S/L  B2014: CHAIN OF S/L-BCM  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 POSITION  B2603: SHIFT POSITION  B2605: PNP SW  B2606: PNP SW  B2606: PNP SW  B2606: S/L RELAY  B2606: S/L RELAY  B2609: S/L STATUS  B2609: S/L STATUS  B2609: S/L STATUS  B2600: STEERING LOCK UNIT  B2600: STEERING LOCK UNIT  B2600: STEERING LOCK UNIT  B2601: S/L STATUS  B2612: S/L STATUS  B2615: BLOWER RELAY CIRC  B2615: BLOWER RELAY CIRC  B2616: IGN RELAY CIRC  B2616: IGN RELAY CIRC  B2617: STARTER RELAY CIRC  B2618: BCM  B2619: BCM  B2619: BCM  B2619: BCM  B2619: STATUS  B2616: VEHICLE TYPE  B2626: CLUTCH SW  B2626: KEY REGISTRATION  C1729: VHCLS PFEED SIG ERR  U0415: VEHICLE SPEED SIG

#### < ECU DIAGNOSIS INFORMATION >

Priority	DTC	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	
	C1708: [NO DATA] FL	
	C1709: [NO DATA] FR	
	C1710: [NO DATA] RR	
	C1711: [NO DATA] RL	
	C1712: [CHECKSUM ERR] FL	
	C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR	
	C1715: [CHECKSUM ERR] RL	
5	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	C1720: [CODE ERR] FL	
	C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	
	C1723: [CODE ERR] RL	
	C1724: [BATT VOLT LOW] FL	
	C1725: [BATT VOLT LOW] FR	
	C1726: [BATT VOLT LOW] RR	
	C1727: [BATT VOLT LOW] RL	
	C1734: CONTROL UNIT	
	B2621: INSIDE ANTENNA	
6	B2622: INSIDE ANTENNA	
	B2623: INSIDE ANTENNA	

DTC Index

#### NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <a href="BCS-15">BCS-15</a>, "COM-MON ITEM: CONSULT-III Function (BCM - COMMON ITEM)".

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CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	_	_	_	BCS-36
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-37
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-38
B2013: ID DISCORD BCM-S/L	×	×	_	_	SEC-46
B2014: CHAIN OF S/L-BCM	×	×	_	_	SEC-47
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-38
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-41
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-42
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-44
B2195: ANTI SCANNING	×	_	_	_	SEC-45
B2553: IGNITION RELAY	_	×	_	_	PCS-47
B2555: STOP LAMP	_	×	_	_	SEC-50

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-52
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-54</u>
B2560: STARTER CONT RELAY	×	×	×	_	SEC-55
B2562: LOW VOLTAGE	_	×	_	_	BCS-39
B2601: SHIFT POSITION	×	×	×	_	SEC-56
B2602: SHIFT POSITION	×	×	×	_	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-61
B2604: PNP SW	×	×	×	_	SEC-64
B2605: PNP SW	×	×	×	_	<u>SEC-66</u>
B2606: S/L RELAY	×	×	×	_	SEC-68
B2607: S/L RELAY	×	×	×	_	<u>SEC-69</u>
B2608: STARTER RELAY	×	×	×	_	SEC-71
B2609: S/L STATUS	×	×	×	_	SEC-73
B260A: IGNITION RELAY	×	×	×	_	PCS-49
B260B: STEERING LOCK UNIT	_	×	×	_	SEC-77
B260C: STEERING LOCK UNIT	_	×	×	_	SEC-78
B260D: STEERING LOCK UNIT	_	×	×	_	SEC-79
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-80
B2612: S/L STATUS	×	×	×	_	SEC-85
B2614: ACC RELAY CIRC	_	×	×	_	PCS-51
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-54
B2616: IGN RELAY CIRC	_	×	×	_	PCS-57
B2617: STARTER RELAY CIRC	×	×	×	_	SEC-89
B2618: BCM	×	×	×	_	PCS-60
B2619: BCM	×	×	×	_	SEC-91
B261A: PUSH-BTN IGN SW		×	×	_	PCS-61
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-92
B2621: INSIDE ANTENNA	_	×	_	_	DLK-61
B2622: INSIDE ANTENNA	_	×	_	_	DLK-63
B2623: INSIDE ANTENNA	_	×	_	_	DLK-65
B26E8: CLUTCH SW	×	×	×	_	<u>SEC-81</u>
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	SEC-83
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-84
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	\//T 47
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-17</u>
C1707: LOW PRESSURE RL	_	_	_	×	1

## < 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	А
C1708: [NO DATA] FL	_	_	_	×	- <u>WT-19</u>	В
C1709: [NO DATA] FR	_	_	_	×		
C1710: [NO DATA] RR	_	_	_	×		
C1711: [NO DATA] RL	_	_	_	×		С
C1712: [CHECKSUM ERR] FL	_	_	_	×	- <u>WT-22</u>	D
C1713: [CHECKSUM ERR] FR	_	_	_	×		
C1714: [CHECKSUM ERR] RR	_	_	_	×		
C1715: [CHECKSUM ERR] RL	_	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	_	×	WT-25	Е
C1717: [PRESSDATA ERR] FR	_	_	_	×		
C1718: [PRESSDATA ERR] RR	_	_	_	×		F
C1719: [PRESSDATA ERR] RL	_	_	_	×		1
C1720: [CODE ERR] FL	_	_	_	×	- <u>WT-27</u>	G
C1721: [CODE ERR] FR	_	_	_	×		
C1722: [CODE ERR] RR	_	_	_	×		
C1723: [CODE ERR] RL	_	_	_	×		Н
C1724: [BATT VOLT LOW] FL	_	_	_	×	WT-30	- 11
C1725: [BATT VOLT LOW] FR	_	_	_	×		
C1726: [BATT VOLT LOW] RR	_	_	_	×		
C1727: [BATT VOLT LOW] RL	_	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	_	×	WT-33	,
C1734: CONTROL UNIT	_	_	_	×	<u>WT-35</u>	J

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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:000000005022097

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

#### **Diagnosis Procedure**

INFOID:0000000005022098

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

- Connect the CONSULT-III.
- Select the "Data Monitor" of the "METER/M&A" and check the "PKB SW" monitor value. Refer to MWI-60, "Component Function Check".

#### Is the inspection result normal?

YES >> Replace combination meter.

NO >> GO TO 2.

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

Check the parking brake switch signal circuit. Refer to MWI-60, "Diagnosis Procedure (A/T models)" (with A/T models) or MWI-61, "Diagnosis Procedure (M/T models)" (with M/T models).

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

## 3.CHECK PARKING BRAKE SWITCH

Check the parking brake switch. Refer to BRC-76, "Component Inspection".

#### Is the inspection result normal?

YES >> Replace the combination meter.

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

## THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >	
THE LIGHT REMINDER WARNING DOES NOT SOUND	1
Description	INFOID:0000000005022099
Light reminder warning chime does not sound even though headlamp is illuminated.	I
Diagnosis Procedure	INFOID:0000000005022100
1. CHECK COMBINATION SWITCH (LIGHT SWITCH) OPERATION	(
Check that the headlamps operate normally by operating the combination switch (light switch)	
Do they operate normally? YES >> GO TO 2.	]
NO >> Refer to EXL-180, "Diagnosis Procedure".	
2.CHECK FRONT DRIVER SIDE DOOR SWITCH SIGNAL CIRCUIT	
Check the front driver side door switch signal circuit. Refer to <u>DLK-70, "Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 3.	1
NO >> Repair harness or connector.	
3. CHECK FRONT DRIVER SIDE DOOR SWITCH	(
Check the front driver side door switch. Refer to <u>DLK-71</u> , "Component Inspection". <u>Is the inspection result normal?</u>	
YES >> Replace the BCM. Refer to BCS-82, "Removal and Installation".	
NO >> Replace the front driver side door switch. Refer to <a href="DLK-317">DLK-317</a> , "Removal and Install."	<u>ation"</u> .
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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:0000000005022101

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

## Diagnosis Procedure

INFOID:0000000005022102

## 1. CHECK SEAT BELT WARNING LAMP

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

Seat belt fastened : OFF Seat belt unfastened : ON

#### Is the inspection result normal?

YES >> Replace the BCM.

NO >> GO TO 2.

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

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

#### Is the inspection result normal?

YES >> Replace the combination meter.

NO >> GO TO 3.

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

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

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

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

#### Is the inspection result normal?

YES >> Replace the unified meter and A/C amp.
NO >> Replace the seat belt buckle switch (driv.

>> Replace the seat belt buckle switch (driver side). Refer to <u>SB-8, "SEAT BELT BUCKLE : Removal and Installation".</u>

## **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 that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see 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.

#### Precaution for Battery Service

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

Service Procedure Precautions for Models with a Pop-up Roll Bar

#### **WARNING:**

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative, all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

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**WCS-103** Revision: 2010 March 2009 G37 Convertible