# SECTION WARNING CHIME SYSTEM

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< BASIC INSPECTION >

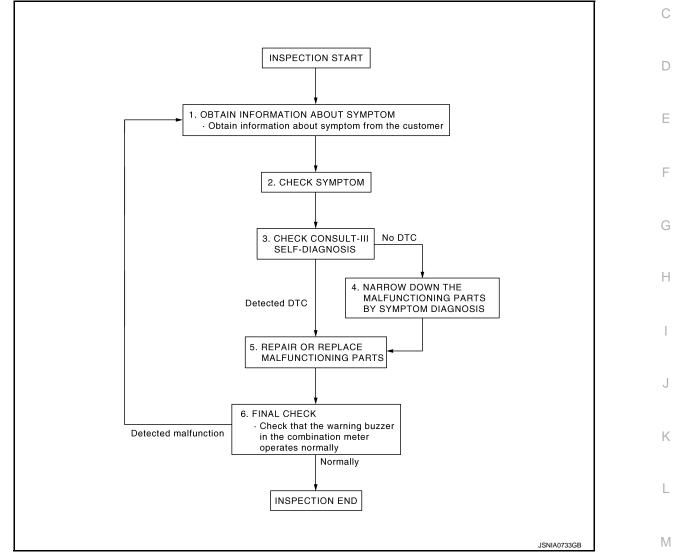
# BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

#### Work Flow

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#### DETAILED FLOW

#### **1.**OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

#### >> GO TO 2.

2.CHECK SYMPTOM

• Check the symptom based on the information obtained from the customer.

• Check that any other malfunctions are present.

#### >> GO TO 3.

**3.**CHECK CONSULT-III SELF-DIAGNOSIS RESULTS

Connect CONSULT-III and perform self-diagnosis. Refer to MWI-42, "CONSULT-III Function (METER/M&A)".

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### DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

Are self-diagnosis results normal?

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

4.NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

5. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

NOTE:

If DTC is displayed, erase DTC after repair or replace malfunctioning parts.

>> GO TO 6.

**6.**FINAL CHECK

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

Does it operate normally?

YES >> INSPECTION END NO >> GO TO 1.

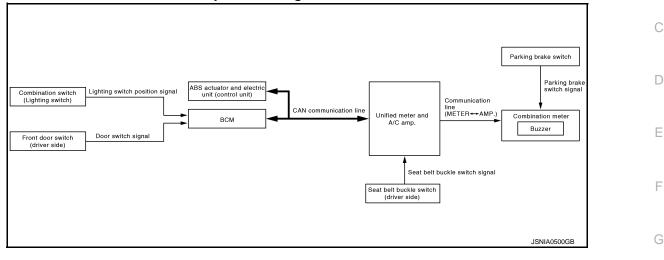
#### < SYSTEM DESCRIPTION >

# SYSTEM DESCRIPTION

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM

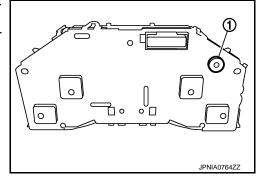
# WARNING CHIME SYSTEM : System Diagram



# WARNING CHIME SYSTEM : System Description

#### COMBINATION METER

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



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

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

#### BCM

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

BCM warning function list

Signal name	
<ul><li>Lighting switch position signal</li><li>Door switch signal</li></ul>	0
Seat belt buckle switch signal	
	<ul><li>Lighting switch position signal</li><li>Door switch signal</li></ul>

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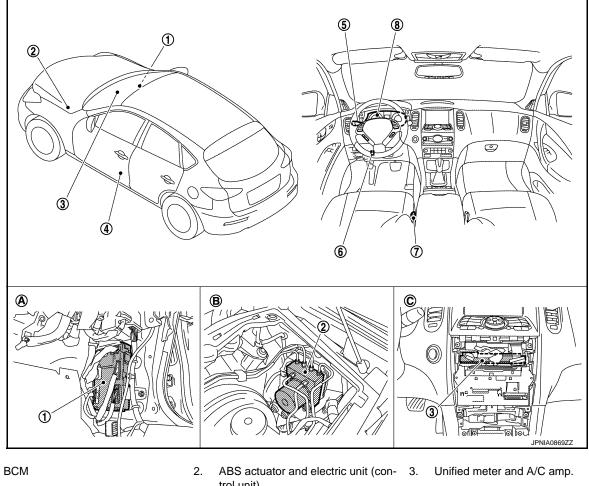
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#### < SYSTEM DESCRIPTION >

# WARNING CHIME SYSTEM : Component Parts Location

#### INFOID:000000006342779



4. Front door switch (driver side)

1.

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- trol unit)
- 5. Combination switch (lighting switch)
- Combination meter
- Dash side lower (passenger side) В.
- Seat belt buckle switch (driver side) 8.
  - Hoodledge cover (LH)
- 6. Parking brake switch
- Behind cluster lid C C.

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# WARNING CHIME SYSTEM : Component Description

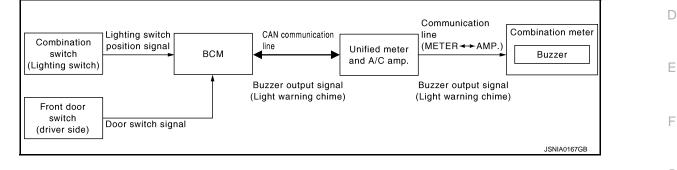
Unit	Description
Combination meter	<ul> <li>Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.</li> <li>Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. with CAN communication line and the parking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

#### < SYSTEM DESCRIPTION >

Unit	Description	^
Combination switch (lighting switch)	Transmits the lighting switch position signal to BCM.	A
Front door switch (driver side)	Transmits the door switch signal to BCM.	В
Parking brake switch	Refer to <u>MWI-66, "Description"</u> .	

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

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

#### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Lighting switch is at 1ST or 2ND position
- Ignition switch is at OFF or ACC
- Front door switch (driver side) is ON

#### WARNING CANCEL CONDITIONS

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

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

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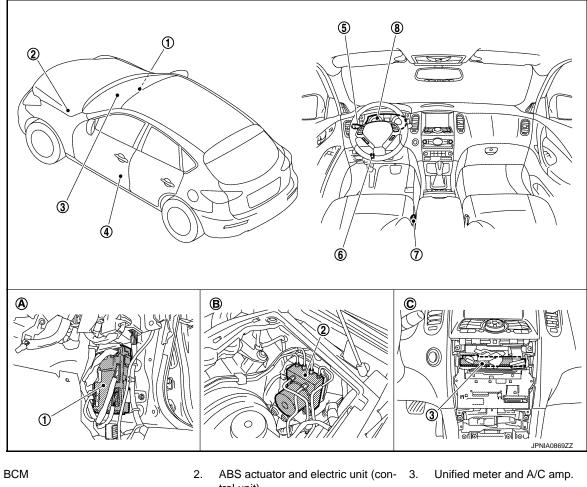
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#### < SYSTEM DESCRIPTION >

#### LIGHT REMINDER WARNING CHIME : Component Parts Location

INFOID:000000006342783



4. Front door switch (driver side)

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- trol unit)
- 5. Combination switch (lighting switch)
- Seat belt buckle switch (driver side) 8. Combination meter
- Dash side lower (passenger side) Hoodledge cover (LH) Β.
- 6. Parking brake switch
- C. Behind cluster lid C

# LIGHT REMINDER WARNING CHIME : Component Description

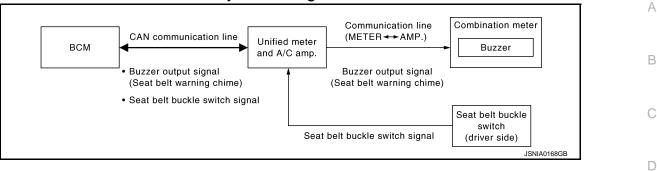
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Unit	Description
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.
Unified meter and A/C amp.	Receives a buzzer output signal from BCM via CAN communication line and transmits it to the com-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

# SEAT BELT WARNING CHIME

#### < SYSTEM DESCRIPTION >

# SEAT BELT WARNING CHIME : System Diagram



# SEAT BELT WARNING CHIME : System Description

#### 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 belt buckle switch (driver side) is ON (driver seat belt not fastened)

WARNING CANCEL CONDITIONS

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

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

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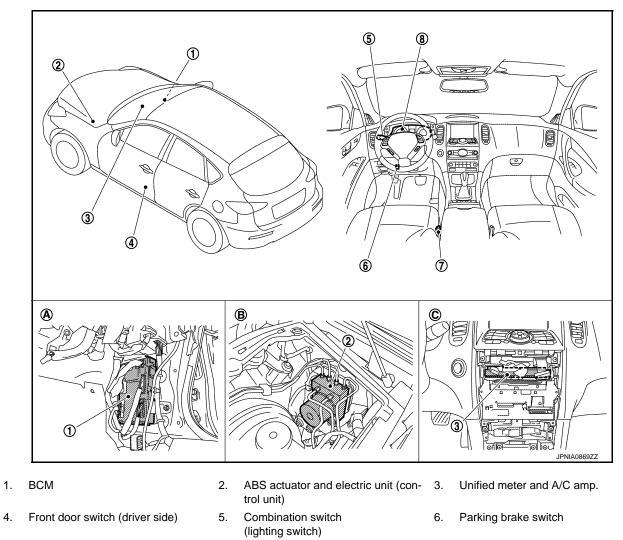
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#### < SYSTEM DESCRIPTION >

# SEAT BELT WARNING CHIME : Component Parts Location

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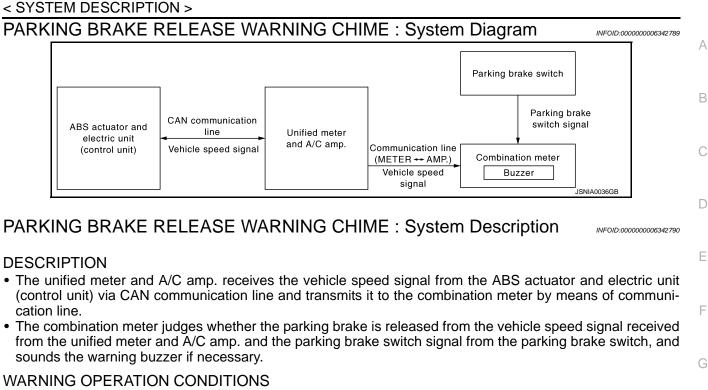
- 7. Seat belt buckle switch (driver side)
  - 8. Combination meter
- A. Dash side lower (passenger side)
- B. Hoodledge cover (LH)
- C. Behind cluster lid C

INFOID:000000006342788

SEAT BELT WARNING CHIME : Component Descrip	otion
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Unit	Description
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.
Unified meter and A/C amp.	<ul> <li>Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM via CAN communication line.</li> <li>Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line.</li> </ul>
BCM	Judges the seat belt warning condition from the seat belt buckle switch signal received from the uni- fied 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 <u>WCS-24, "Description"</u> .

# PARKING BRAKE RELEASE WARNING CHIME



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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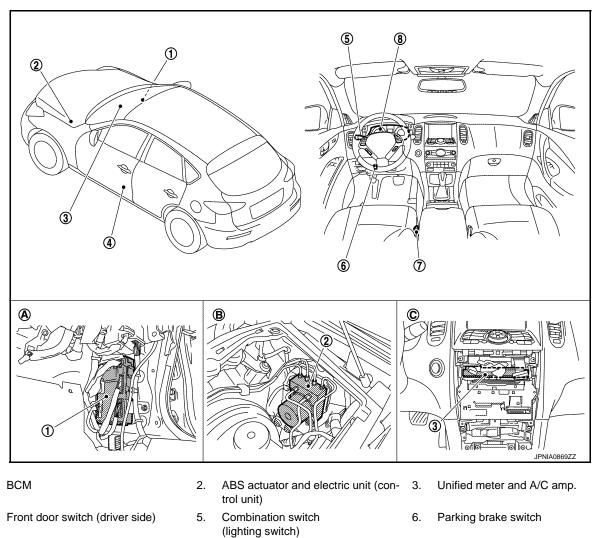
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#### < SYSTEM DESCRIPTION >

PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location

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Seat belt buckle switch (driver side) 7. Dash side lower (passenger side)

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- Combination meter 8.
- В. Hoodledge cover (LH)
- C. Behind cluster lid C

PARKING BRAKE RELEASE WARNING CHIME : Component Description INFOID:00000006342792

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 com- munication line and transmits it to the combination meter by means of communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to unified meter and A/C amp. via CAN communication line.
Parking brake switch	Refer to <u>MWI-66, "Description"</u> .

#### < SYSTEM DESCRIPTION >

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

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

#### CONSULT-III APPLICATION ITEMS

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

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

#### SELF DIAG RESULT

Refer to MWI-106, "DTC Index".

#### DATA MONITOR

**Display Item List** 

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X:	Applicable
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Display item [Unit]	MAIN SIGNALS	Description	
SPEED METER [km/h] or [mph]	х	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line. <b>NOTE:</b> 655.35 is displayed when the malfunction signal is received.	
SPEED OUTPUT [km/h] or [mph]	х	Vehicle speed signal value transmitted to other units with CAN communication line. <b>NOTE:</b> 655.35 is displayed when the malfunction signal is received.	
ODO OUTPUT [km/h] or [mph]		Odometer signal value transmitted to other units with CAN communication line.	
TACHO METER [rpm]	x	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]	x	Fuel level indicated on combination meter.	
W TEMP METER [°C] or [°F]	х	Value of engine coolant temperature signal received from ECM with CAN commication line. <b>NOTE:</b> 215 is displayed when the malfunction signal is input.	
FUEL CAP W/L [On/Off]		Status of fuel filler cap warning display detected from fuel filler cap warning display signal received from ECM via CAN communication.	
ABS W/L [On/Off]		Status of ABS warning lamp judged from ABS warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.	
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp judged from VDC OFF indicator lamp signal re- ceived 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. <b>NOTE:</b> 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.	

#### < 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]		Status of front fog light indicator lamp detected from front fog light request signal is received from BCM via CAN communication.	
RR FOG IND [Off]		This item is displayed, but cannot be monitored.	
LIGHT IND [On/Off]		Status of tail lamp indicator lamp judged from position light request signal received from BCM with CAN communication line.	
OIL W/L [On/Off]		Status of oil pressure warning lamp judged from oil pressure switch signal re- ceived 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]		<ul> <li>Status of SET indicator judged from ASCD status signal received from ECM with CAN communication line.</li> <li>Status of SET indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.</li> </ul>	
CRUISE W/L [On/Off]		Status of CRUISE warning lamp judged from ICC warning lamp signal receive from ICC sensor integrated unit with CAN communication line.	
BA W/L [Off]		Status of IBA OFF indicator lamp judged from IBA OFF indicator lamp signal re- ceived ICC sensor integrated unit with CAN communication line.	
ATC/T-AMT W/L [On/Off]		Status of A/T check warning lamp judged from A/T check indicator signal received from TCM with CAN communication line.	
4WD W/L [On/Off]		Status of AWD warning lamp judged from AWD warning lamp signal received from AWD control unit with CAN communication line.	
4WD LOCK IND [Off]		This item is displayed, but cannot be monitored.	
FUEL W/L [On/Off]		Low-fuel warning status judged by the identified fuel level.	
WASHER W/L [On/Off]		Status of washer warning 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 re- ceived 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 [On/Off]		Status of lane departure warning lamp judged from lane departure warning lamp signal received from lane camera unit with CAN communication line.	
LDP IND [On/Off]		Status of LDP ON indicator lamp judged from LDP ON indicator lamp signal re- ceived from lane camera unit with CAN communication line.	

#### < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description	
DCA IND [On/Off]		Status of DCA switch indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
BSW W/L [On/Off]		Status of BSW warning lamp judged from BSW warning lamp signal received from BSW control module with CAN communication line.	В
LCD [B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY, OUTKY, LK WN]		Displays status of Intelligent Key system warning judged from meter display signal received from BCM with CAN communication line.	С
ACC TARGET [On/Off]		Status of vehicle ahead detection indicator judged from meter display signal re- ceived from ICC sensor integrated unit with CAN communication line.	D
ACC DISTANCE [Off, SHORT, MID, LONG]		Status of set distance indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	F
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		Status of set vehicle speed indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	F
ACC UNIT [On/Off]		Status of display unit judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
SHIFT IND [P, R, N, D, L, M1, M2, M3, M4, M5, M6, M7]		Status of shift position indicator judged from shift position signal and manual mode indicator signal received from TCM with CAN communication line.	G
O/D OFF SW [Off]		This item is displayed, but cannot be monitored.	Н
AT S MODE SW [On/Off]		Status of snow mode switch.	Ι
AT P MODE SW [Off]		This item is displayed, but cannot be monitored.	
M RANGE SW [On/Off]		Status of manual mode switch.	J
NM RANGE SW [On/Off]		Status of non-manual mode switch.	K
AT SFT UP SW [On/Off]		Status of manual mode shift up switch.	
AT SFT DWN SW [On/Off]		Status of manual mode shift down switch.	L
ST SFT UP SW [Off]		This item is displayed, but cannot be monitored.	Μ
ST SFT DWN SW [Off]		This item is displayed, but cannot be monitored.	
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the water tem- perature and the acceleration degree.	WCS
4WD LOCK SW [Off]		This item is displayed, but cannot be monitored.	0
PKB SW [On/Off]		Status of parking brake switch.	
BUCKLE SW [On/Off]		Status of seat belt buckle switch (driver side).	Ρ
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.	
DISTANCE [km]		Value of possible driving distance calculated by unified meter and A/C amp.	

#### < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
OUTSIDE TEMP [°C] or [°F]		Ambient air temperature value converted from ambient sensor signal received from ambient sensor. <b>NOTE:</b> This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.)
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit with CAN com- munication 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.

# < SYSTEM DESCRIPTION > DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

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INFOID:00000006342794

### 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.	D	
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III opera- tion manual.	_	
Data Monitor	e 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.	F	
Configuration	<ul><li>Read and save the vehicle specification.</li><li>Write the vehicle specification when replacing BCM.</li></ul>		

#### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

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

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

#### NOTE:

\*: This item is displayed, but is not used.

#### FREEZE FRAME DATA (FFD)

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

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odomete	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" (Emer- gency stop operation)		
	ACC>OFF		While turning power supply position from "ACC" to "OFF"		
	OFF>LOCK	Power position status of the moment a particular DTC is detected	While turning power supply position from "OFF" to "LOCK"		
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"		
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"		
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode		
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode		
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steer- ing 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:000000006342795

#### CONSULT-III APPLICATION ITEMS

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

#### DATA MONITOR

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

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

#### ACTIVE TEST

Display item [Unit]	Description	G
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).	Н
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).	

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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**

#### **1.**CHECK FUSE

Check for blown fuses.

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

#### Is the inspection result normal?

YES >> GO TO 2.

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

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

	Т				
(+)			()	Ignition switch position	Value (Approx.)
Combination meter Terminal Signal name		(-)			
M53	1	Battery power supply	Ground	OFF	Battery voltage
MISS	21	Ignition signal	Ground	ON	Dattery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

### ${\it 3.}$ check ground circuit

1. Turn ignition switch OFF.

2. Disconnect combination meter connector.

3. Check continuity between combination meter harness connector and ground.

Combina	tion meter		Continuity
Connector	Terminal		Continuity
	5	Ground	
M53	15		Existed
	22		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

UNIFIED METER AND A/C AMP.

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

INFOID:000000006342797

1.CHECK FUSE

Check for blown fuses.

INFOID:000000006342796

# POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

	Power source			Fuse No.		
Battery			11			
Ignition	switch ACC	or ON	19			
Ignition s	switch ON or	START	3			
CHECK POWER SU	liminate ca					
Check voltage between	uninea me	ter and A/C amp. nam	less connec	aor and ground.		
	Term	inals				
	(+)		()	Ignition switch position	Value (Approx.)	
Unified meter and A/C amp.	Terminal	Signal name	(-)			
	54	Battery power supply		OFF		
M67	41	ACC power supply	Ground	ACC	Battery voltage	
	53	Ignition signal		ON		
. Check continuity be	ween unifi	ed meter and A/C am	p. narness o	connector and ground.		
Unified meter and	A/C amp.					
Unified meter and A	A/C amp. Terminal	Ground	Co	ontinuity		
	Terminal 55	Ground		ontinuity Existed		
Connector M67	Terminal 55 71	Ground				
Connector M67 <u>s the inspection result n</u> YES >> INSPECTIO NO >> Repair harm BCM (BODY CON	Terminal 55 71 ormal? N END ess or coni TROL N	nector. 10DULE)	E	Existed	INF01D:00000000689	
Connector M67 <u>s the inspection result n</u> YES >> INSPECTIO NO >> Repair harno BCM (BODY CON BCM (BODY CON	Terminal 55 71 ormal? N END ess or cont TROL M	nector. 10DULE) 0DULE) : Diagno	E	Existed	INF01D:00000000689	
Connector M67 <u>s the inspection result n</u> YES >> INSPECTIO NO >> Repair harno BCM (BODY CON BCM (BODY CON 1.CHECK FUSE AND F	Terminal 55 71 ormal? N END ess or con TROL M TROL M	nector. 10DULE) 0DULE) : Diagno INK	osis Proce	Existed	INF01D:00000000689	
Connector M67 <u>s the inspection result n</u> YES >> INSPECTIO NO >> Repair harnow BCM (BODY CON BCM (BODY CON CON CHECK FUSE AND F Check that the following	Terminal 55 71 ormal? N END ess or con TROL M TROL M	nector. 10DULE) 0DULE) : Diagno INK	osis Proce	Existed		
Connector         M67         s the inspection result n         YES       >> INSPECTIO         NO       >> Repair harm         BCM (BODY CON         BCM (BODY CON         CHECK FUSE AND F         Check that the following         Signal	Terminal 55 71 Ormal? N END ess or cond TROL M TROL M FUSIBLE L fuse and f gnal name	nector. IODULE) ODULE) : Diagno INK usible link are not blov	osis Proce	Existed		
Connector         M67         s the inspection result n         YES       >> INSPECTIO         NO       >> Repair harm         BCM (BODY CON         BCM (BODY CON         CHECK FUSE AND F         Check that the following         Signal	Terminal 55 71 ormal? N END ess or cont TROL M TROL M FUSIBLE L fuse and f	nector. IODULE) ODULE) : Diagno INK usible link are not blov	osis Proce	Existed edure Fuse and fusible link N		

1. Turn ignition switch OFF.

2. Disconnect BCM connectors.

# POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

#### 3. Check voltage between BCM harness connector and ground.

(·	+)	(-)	Voltage (Approx.)
BC	CM		(Approx.)
Connector	Terminal	Ground	
M118	1	Giouna	Pottony voltago
M119	11		Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

 $3. {\sf CHECK} \, {\sf GROUND} \, {\sf CIRCUIT}$ 

Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Connector Terminal		Continuity
M119	13	Ť	Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

# **METER BUZZER CIRCUIT**

< DTC/CIRCUIT DIAGNOSIS >	
METER BUZZER CIRCUIT	А
Description INFOID:00000006342799	A
<ul> <li>The buzzer for warning chime system is installed in the combination meter.</li> <li>The combination meter sounds the alarm buzzer based on the signals transmitted from various units.</li> </ul>	В
Component Function Check	-
1. CHECK OPERATION OF METER BUZZER	С
<ol> <li>Select "BUZZER" of "BCM" on CONSULT-III.</li> <li>Perform "LIGHT WARN ALM" of "ACTIVE TEST".</li> </ol>	D
Does meter buzzer beep?	
YES >> INSPECTION END NO >> GO TO 2.	E
2. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL	
Select the "Data Monitor" for the "METER/M&A" and check the "BUZZER" monitor value.	F
BUZZER	
Under the condition of buzzer input : On	0
Except above : Off	G
Is the inspection result normal?	
<ul> <li>YES &gt;&gt; Replace combination meter.</li> <li>NO &gt;&gt; Replace BCM. Refer to <u>BCS-86, "Removal and Installation"</u>.</li> </ul>	Н
Diagnosis Procedure	
1. CHECK POWER SUPPLY OF COMBINATION METER	I
Check power supply of combination meter. Refer to WCS-20, "COMBINATION METER : Diagnosis Proce-	
dure".	J
Is the inspection result normal? YES >> GO TO 2.	
NO >> Repair power supply circuit of combination meter.	Κ
<b>2.</b> CHECK POWER SUPPLY OF UNIFIED METER AND A/C AMP.	
Check power supply of unified meter and A/C amp. Refer to <u>MWI-55, "UNIFIED METER AND A/C AMP.</u> : <u>Diagnosis Procedure</u> ".	L
Is the inspection result normal?	
YES >> INSPECTION END	M
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

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

#### Component Function Check

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

Select the "Data Monitor" for 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

# 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 and ground.

Terminals					
(+)		(-)	Condition	Voltage	
Unified meter	Unified meter and A/C amp.		Condition	(Approx.)	
Connector	Terminal	Ground			
M66	M00 0		When driver seat belt is fastened	12 V	
IVIOO	9		When driver 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 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 and seat belt buckle switch (driver side) harness connector.

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 and ground.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

 ${f 3.}$ CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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

#### **WCS-24**

INFOID:000000006342802

INFOID:000000006342803

INFOID:000000006342804

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

36	at belt buckle	switch (driver side)			•
Con	nector	Terminal	Ground	Continuity	
В	13	2		Existed	-
the inspe	ection result	normal?			•
	INSPECTI				
		ness or connector.			
ompone	ent Inspe	ction			INFOID:000000006342805
CHECK	SEAT BELT	T BUCKLE SWITCH UN	NIT		
Discon		h OFF. at belt buckle switch co between terminals.	nnector.		
Terr	minal	Condition	Continuity	/	
1	2	When seat belt is fastened	Not existed	d	
•	~	AAR STATES AND A REPORT OF A STATES			
		When seat belt is unfasten	ed Existed		
/ES >>	ction result	normal? ON END			
′ES >>	INSPECTI	normal?		UCKLE : Removal and	Installation".
′ES >>	INSPECTI	normal? ON END		UCKLE : Removal and	Installation".

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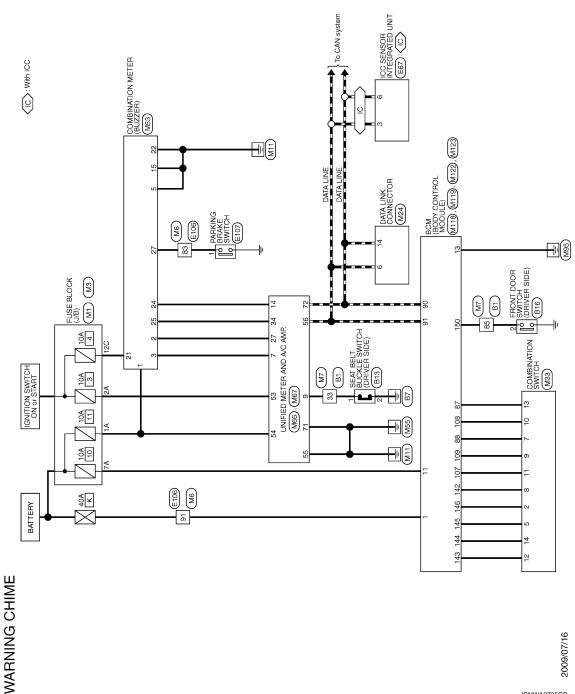
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#### < DTC/CIRCUIT DIAGNOSIS >

# WARNING CHIME SYSTEM

Wiring Diagram - WARNING CHIME -

INFOID:000000006342806



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#### < DTC/CIRCUIT DIAGNOSIS > FRONT DOOR SWITCH (DRIVER SIDE) Signal Name [Specification] Signal Name [Specification] ICC SENSOR INTEGRATED UNIT IGNITION S COMM-56 2 E67 Color of Wire Color of Wire Connector Name inector Name - m Terminal No. Ferminal No. 小 H.S. H.S. Connec ß SEAT BELT BUCKLE SWITCH (DRIVER SIDE) Signal Name [Specification] >[8] BR G BR Color of Wire ≥ ∰ a a G G ≥ nector No. 8-<u>ט</u>≻ GR v nector Name m m SB erminal No. H.S. E Signal Name [Specification] 0 1 0 0 0 0 1 0 0 WIRE TO WIRE WARNING CHIME R SHIELD SHIELD < GR GR ≺ ≺</pre> Color of Wire w SB ┙ᡆ nector Name 그 & 뚭 ype rminal No. íis. Ø JCNWA3402GB

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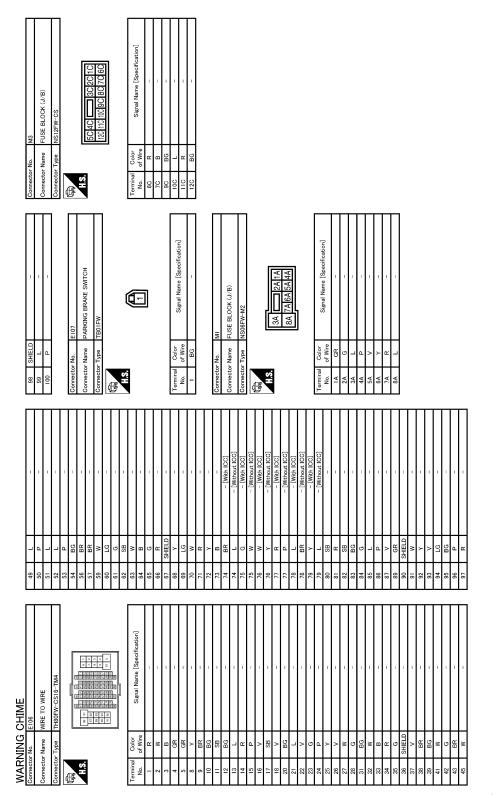
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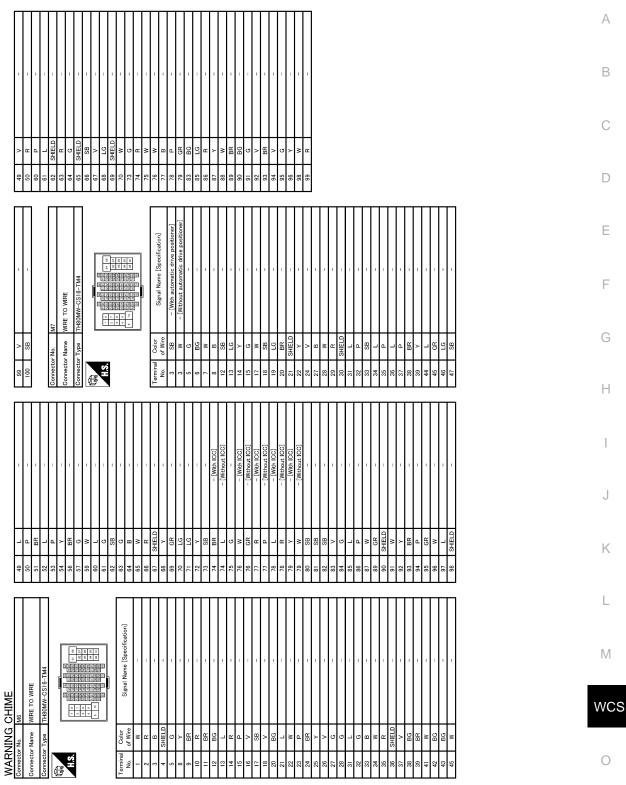
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#### < DTC/CIRCUIT DIAGNOSIS >



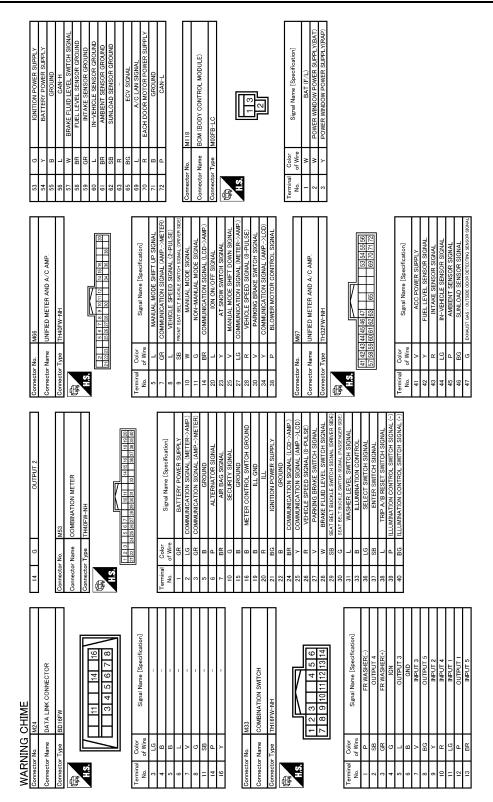
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#### < DTC/CIRCUIT DIAGNOSIS >



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#### < DTC/CIRCUIT DIAGNOSIS >



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	D
PR GND WER SUPPLY NUT 2 PUT 1 PUT 1 PUT 4 PUT 4	E
RECEIVER SENSOR GND TERE PRESSURE RECEIVER SUPPL THERE PRESSURE RECEIVER SUPPL SHITT NOT COMBL SW OUTPUT 5 COMBL SW OUTPUT 2 COMBL SW OUTPUT 1 COMBL SW OUTP	F
	G
137           138           138           138           141	Н
W         MATS ANT AMP.           R         INATS ANT AMP.           Y         KEVICSS ENTER/V (FeB.) CONT.           P         COMEI SW NRPUT 5           P         COMEI SW NRPUT 5           V         COMEI SW NRPUT 5           LL         COMEI SW NRPUT 3           V         POLODUE LANF CONT           KEY SLOT LANF CONT         CONT           V         S.L. UNIT CORN N	I
ECVLESS     ESSEPT     ES	J
81         W         81         W           83         83         87         N           83         83         87         N           83         93         87         N           93         93         87         N           93         93         87         N           93         93         87         N           93         101         100         5         10           101         103         10         10         10         10           111         103         10         7         V         N           111         103         10         10         10         10         10           111         V         V         N         N         N         N         N           111         V         V         N         N         N         N         N           113         No.         0         N         N         N         N         N           113         No.         0         N         N         N         N         N           113         No.         0         N         N<	Κ
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CHIME MI19 ECM (BGDY CONTROL MDULE) ECM (BGDY CONTROL MDULE) ECM (BGDY CONTROL MDULE) INS (6FW-CS) NG (6FW-CS) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) DRAVER DOOR FLEL LID UNCK OUTPUT DRAVER DOOR PLEL LID UNCK OUTPUT DRAVER DOOR VILLOK OUTPUT DRAVER DOOR VILL OK OUTPUT COM ANT - ROOM AN	Μ
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MARNING       Connector No.	0

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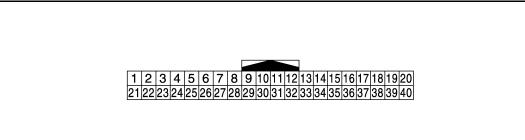
# ECU DIAGNOSIS INFORMATION COMBINATION METER

# **Reference Value**

INFOID:000000006834513

#### VALUES ON THE DIAGNOSIS TOOL Refer to <u>MWI-88, "Reference Value"</u>.

#### **TERMINAL LAYOUT**



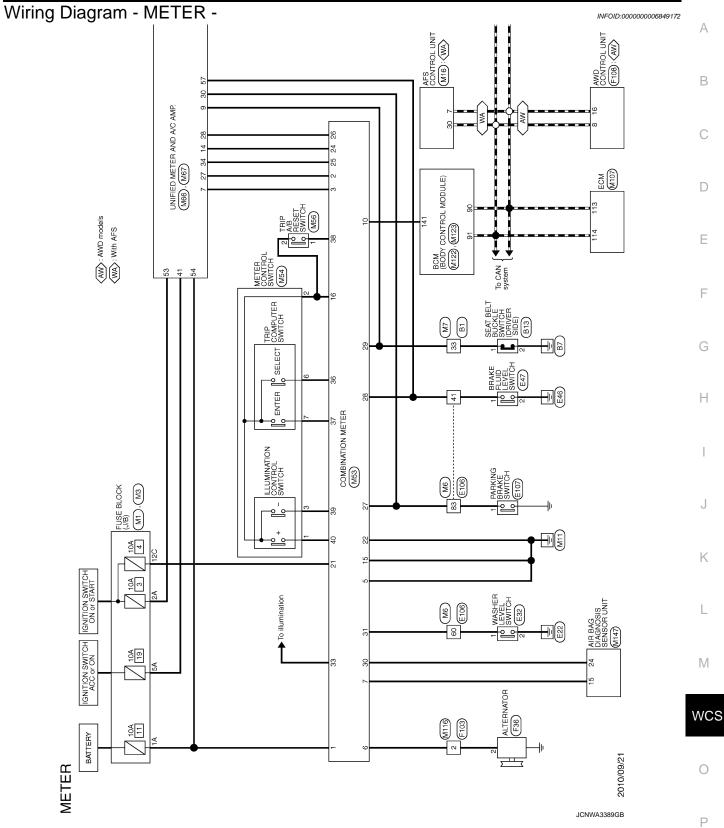
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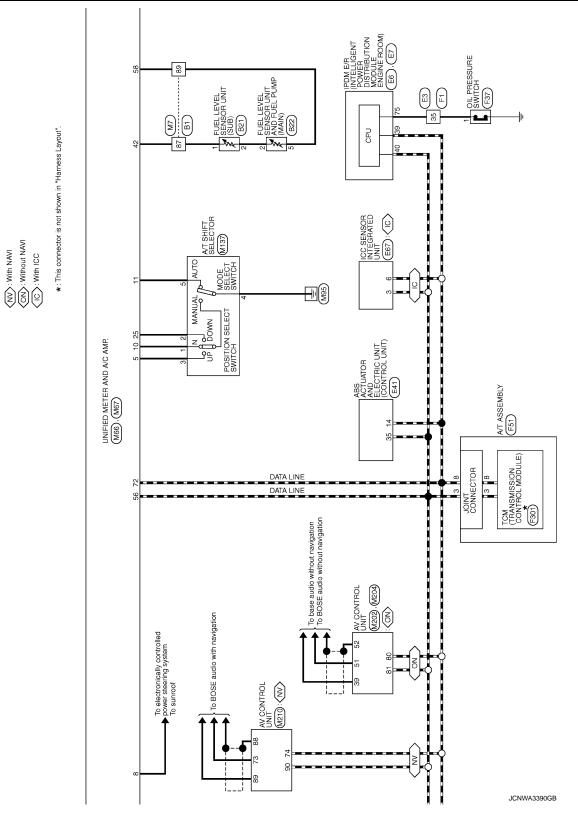
#### PHYSICAL VALUES

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output	Condition		(Approx.)
1 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
2 (LG)	Ground	Communication signal (METER $\rightarrow$ AMP.)	Output	Ignition switch ON		(V) 6 2 0 • • • • • • • • • • • • • • • • • • •
3 (GR)	Ground	Communication signal (AMP. $\rightarrow$ METER)	Input	Ignition switch ON		(V) 6 2 0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
5 (B)	Ground	Ground		Ignition switch ON	_	0 V
6	Ground	Alternator signal	Input	Ignition switch	Charge warning lamp ON	0 V
(P)	Giouna	Alternator signal	input	ON	Charge warning lamp OFF	Battery voltage
7	Cround		loout	Ignition	Air bag warning lamp ON	4 V
(BR)	Ground	Air bag signal	Input	switch ON	Air bag warning lamp OFF	0 V
10	0		Innut	Ignition	Security warning lamp ON	0 V
(G)	Ground	Security signal	Input	switch OFF	Security warning lamp OFF	12 V

Terminal No. (Wire color)		Description		Condition		Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
15 (B)	Ground	Ground		Ignition switch ON		0 V	
16 (B)	Ground	Meter control switch ground		Ignition switch ON	_	0 V	
21 (BG)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage	
22 (B)	Ground	Ground	—	Ignition switch ON	_	0 V	
24 (BR)	Ground	Communication signal (LCD $\rightarrow$ AMP.)	Output	lgnition switch ON		(V) 15 10 0 0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition switch ON		(V) 6 2 0 −−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−−	
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	lgnition 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 is applied	0 V	
27 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake is released	(V) 8 4 0 10 ms	
26		Brake fluid level switch sig-		Ignition	Brake fluid level is normal.	JSNIA0007GB 5 V	
28 (W)	Ground	nal	Input	switch ON	The brake fluid level is low- er than the low level	0 V	

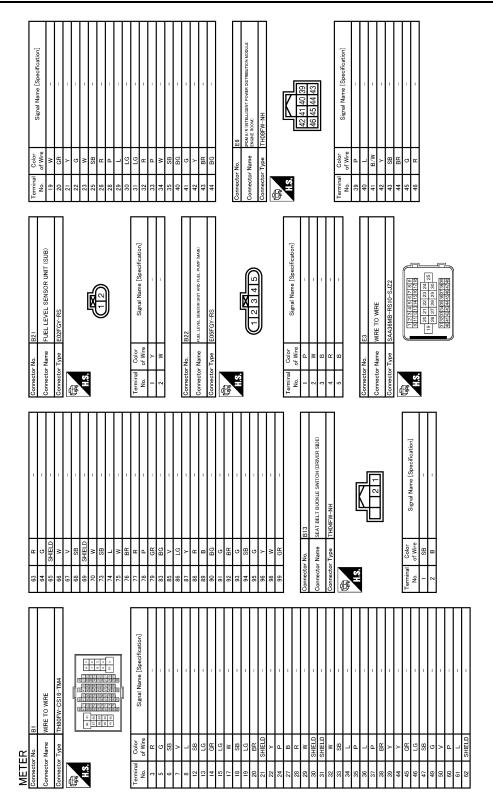
Terminal No. (Wire color)		Description		Condition		Value	
+	-	Signal name	Input/ Output	- Condition		(Approx.)	
29	Ground	Seat belt buckle switch sig- nal (driver side)	Input	Ignition switch ON	When driver seat belt is fas- tened	12 V	
(SB)					When driver seat belt is un- fastened	0 V	
30	Ground	Seat belt buckle switch sig- nal (passenger side)	Input	Ignition switch ON	<ul><li>When getting in the passenger seat</li><li>When passenger seat belt is fastened</li></ul>	12 V	
(G)					<ul><li>When getting in the passenger seat</li><li>When passenger seat belt is unfastened</li></ul>	0 V	
31	One and	Wesher level switch sizes	land	Ignition	Washer level switch ON	0 V	
(L)	Ground	Washer level switch signal	Input	switch ON	Washer level switch OFF	5 V	
33 (B)	Ground	Illumination control signal	Output	Ignition switch ON	Lighting switch ON, then operate the illumination control switch.	NOTE: When brightness level is midway	
36	16	Select switch signal	Input	Ignition switch ON	When is pressed	0 V	
(LG)	(B)				Other than the above	5 V	
37	16 (B)	Enter switch signal	Input	Ignition switch ON	When 🖵 is pressed	0 V	
(SB)					Other than the above	5 V	
38 (L)	16 (B)	Trip A/B reset switch signal	Input	Ignition switch ON	When trip A/B reset switch is pressed	0 V	
(Ľ)					Other than the above	5 V	
39 (P)	16 (B)	Illumination control switch signal (-)	Input	Ignition switch ON	When 💏 switch is pressed	0 V	
\ /					Other than the above	5 V	
40 (BG)	16 (B)	Illumination control switch signal (+)	Input	Ignition switch ON	When 💏 + switch is pressed	0 V	
. ,					Other than the above	5 V	





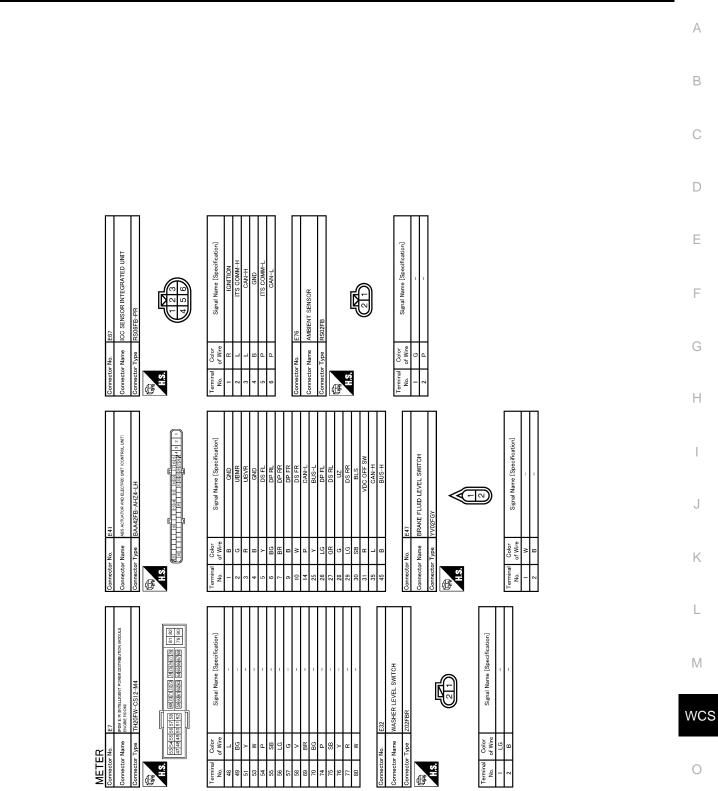
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UNIFIED METER AND AC AMP. (MEB) (ME7) SOR SOR SOR SOR SOR SOR SOR SOR		Μ
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#### < ECU DIAGNOSIS INFORMATION >



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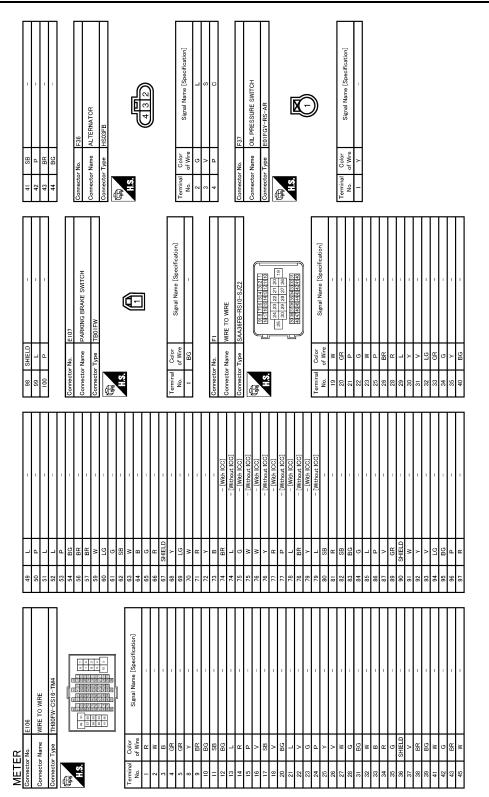
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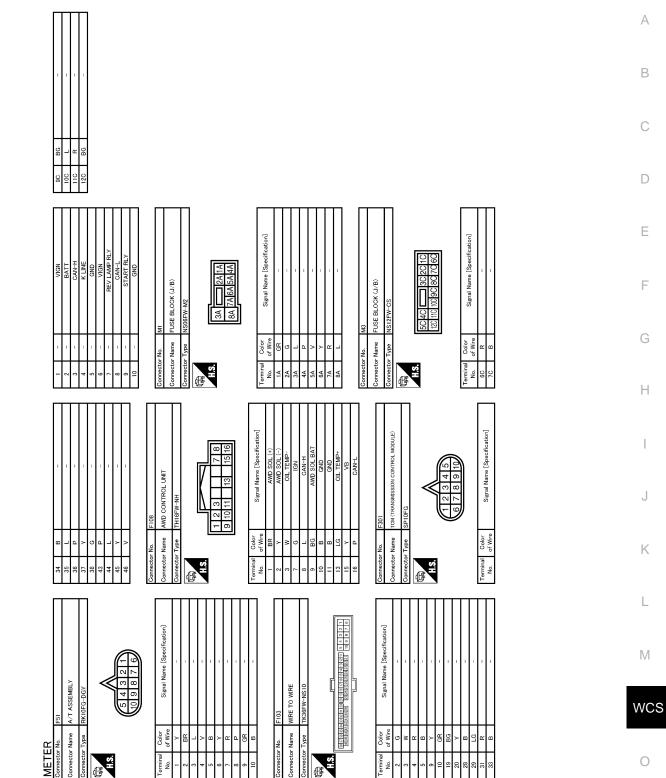
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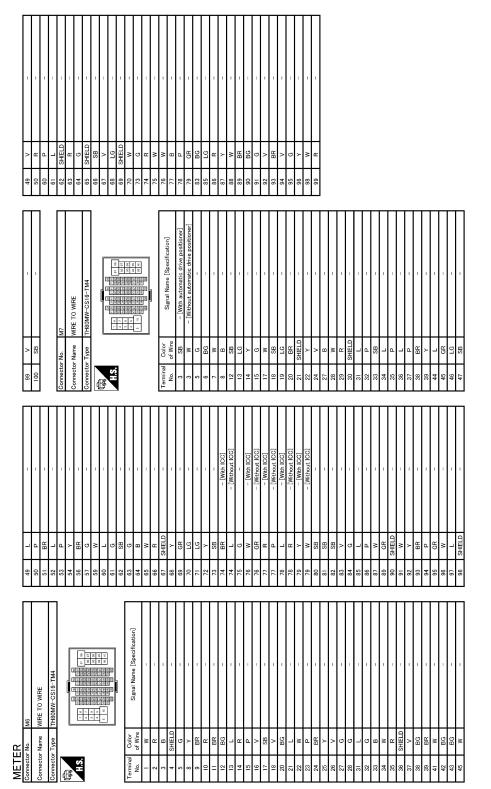
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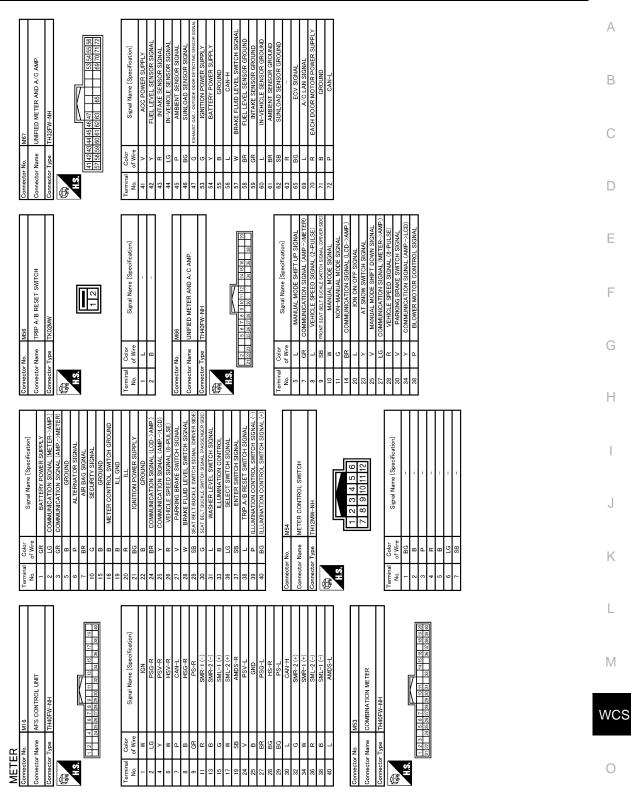
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#### < ECU DIAGNOSIS INFORMATION >



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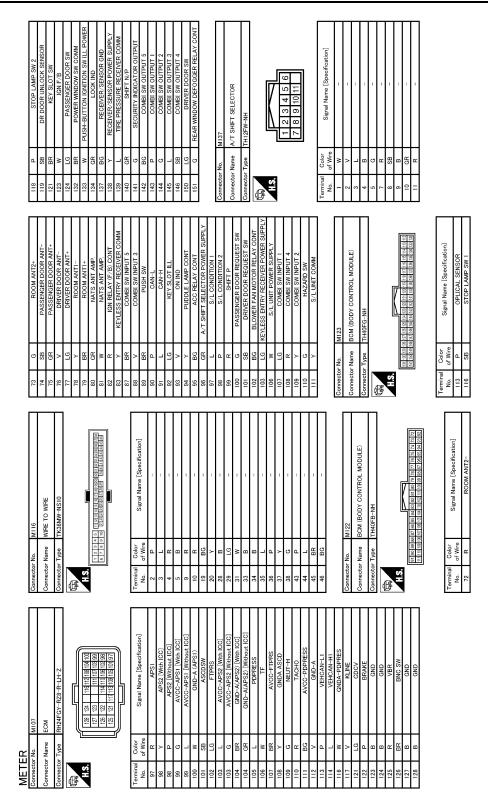
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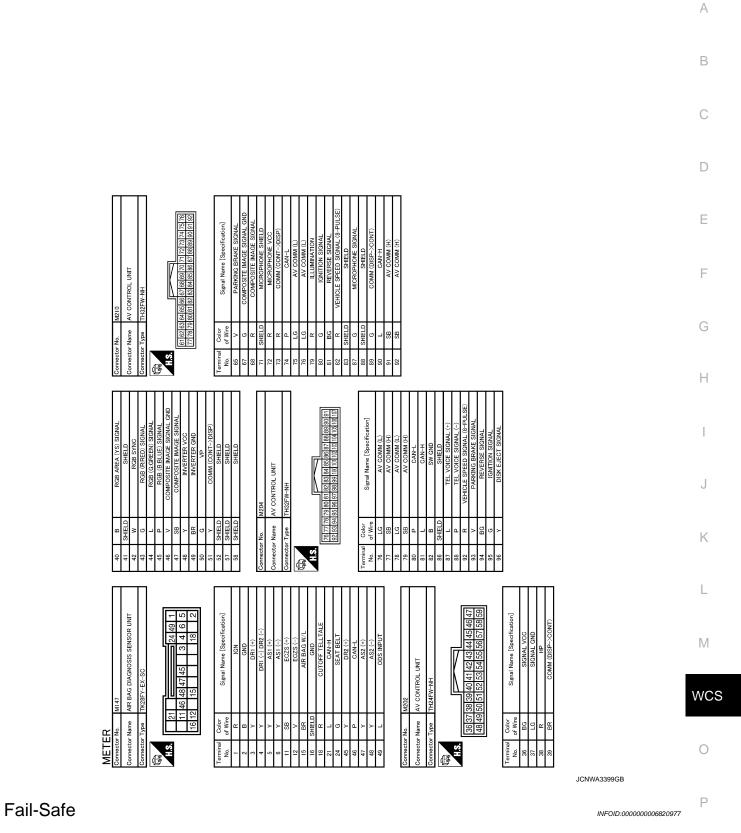
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#### < ECU DIAGNOSIS INFORMATION >



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#### < ECU DIAGNOSIS INFORMATION >



#### 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.

#### **WCS-45**

#### < ECU DIAGNOSIS INFORMATION >

	Function	Specifications	
Speedometer			
Tachometer		Deset to zero by even andia a communication	
Fuel gauge		<ul> <li>Reset to zero by suspending communication.</li> </ul>	
Water temperature gauge			
Illumination control		When suspending communication, change to nighttime mode.	
Information display		The display turns off by suspending communication.	
Buzzer		The buzzer turns off by suspending communication.	
	ABS warning lamp		
	SLIP indicator lamp		
	Brake warning lamp		
	CRUISE warning lamp	— The lamp turns on by suspending communication.	
	IBA OFF indicator lamp		
	Malfunction indicator lamp		
	High beam indicator		
	Turn signal indicator lamp		
	Tail lamp indicator lamp		
Warning lamp/indicator	Oil pressure warning lamp		
lamp	A/T CHECK warning lamp		
	AWD warning lamp		
	Low tire pressure warning lamp	<ul> <li>The lamp turns off by suspending communication.</li> </ul>	
	Key warning lamp		
	VDC OFF indicator lamp		
	BSW warning lamp		
	AFS OFF indicator lamp		
	Lane departure warning lamp		
	LDP ON indicator lamp		
	Master warning lamp		

### DTC Index

Refer to WCS-65, "DTC Index".

INFOID:000000006342810

#### < ECU DIAGNOSIS INFORMATION >

## UNIFIED METER AND A/C AMP.

### **Reference Value**

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item		Condition	Value/Status
SPEED METER [km/h] or [mph]	Ignition switch ON	While driving	Equivalent to speedometer reading <b>NOTE:</b> 655.35 is displayed when the malfunc- tion signal is received
SPEED OUTPUT [km/h] or [mph]	Ignition switch ON	While driving	Equivalent to speedometer reading <b>NOTE:</b> 655.35 is displayed when the malfunc- tion signal is received
ODO OUTPUT [km/h] or [mph]	Ignition switch ON	_	Equivalent to odometer reading in combination meter
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading <b>NOTE:</b> 8191.875 is displayed when the mal- function signal is received
FUEL METER [L]	Ignition switch ON	_	Values according to fuel level
W TEMP METER [°C] or [°F]	Ignition switch ON	_	Values according to engine coolant temperature <b>NOTE:</b> 215 is displayed when the malfunction signal is input
	Ignition switch	Fuel filler cap warning display ON	On
OEL CAP W/L	ON	Fuel filler cap warning display OFF	Off
	Ignition switch	ABS warning lamp ON	On
BS W/L Ignition switch ON	ABS warning lamp OFF	Off	
VDC/TCS IND	Ignition switch	VDC OFF indicator lamp ON	On
VDC/TC3 IND	ON	VDC OFF indicator lamp OFF	Off
SLIP IND	Ignition switch	SLIP indicator lamp ON	On
	ON	SLIP indicator lamp OFF	Off
BRAKE W/L	Ignition switch	Brake warning lamp ON	On
	ON	Brake warning lamp OFF	Off
DOOR W/L	Ignition switch	Door warning displayed	On
	ON	Door warning not displayed	Off
HI-BEAM IND	Ignition switch	Hi-beam indicator lamp ON	On
	ON	Hi-beam indicator lamp OFF	Off
TURN IND	Ignition switch	Turn indicator lamp ON	On
	ON	Turn indicator lamp OFF	Off
FR FOG IND	Ignition switch	Front fog light indicator lamp ON	On
	ON	Front fog light indicator lamp OFF	Off
RR FOG IND	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be moni- tored.	Off
	Ignition switch	Tail lamp indicator lamp ON	On
LIGHT IND	ON	Tail lamp indicator lamp OFF	Off

А

В

INFOID:000000006820999

Monitor Item		Condition	Value/Status
OIL W/L	Ignition switch	Oil pressure warning lamp ON	On
	ON	Oil pressure warning lamp OFF	Off
MIL	Ignition switch	Malfunction warning lamp ON	On
	ON	Malfunction warning lamp OFF	Off
GLOW IND	Ignition switch ON	NOTE: This item is displayed, but cannot be moni- tored.	Off
C-ENG2 W/L	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be moni- tored.	Off
CRUISE IND	Ignition switch	CRUISE indicator displayed	On
	ON	CRUISE indicator not displayed	Off
SET IND	Ignition switch	SET indicator lamp ON	On
SET IND	ŌN	SET indicator lamp OFF	Off
	Ignition switch	CRUISE warning lamp ON	On
CRUISE W/L	ŎN	CRUISE warning lamp OFF	Off
	Ignition switch	IBA OFF indicator lamp ON	On
BA W/L	<b>ON</b>	IBA OFF indicator lamp ON	Off
	Ignition switch	A/T check warning lamp ON	On
ATC/T-AMT W/L	ŎN	A/T check warning lamp OFF	Off
	Ignition switch	AWD warning lamp ON	On
4WD W/L	<b>ON</b>	AWD warning lamp OFF	Off
4WD LOCK IND	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be moni- tored.	Off
	Ignition switch	Low-fuel warning lamp displayed	On
FUEL W/L	ON	Low-fuel warning lamp not displayed	Off
	Ignition switch	Washer warning displayed	On
WASHER W/L	ON	Washer warning not displayed	Off
	Ignition switch	Low tire pressure warning lamp ON	On
AIR PRES W/L	ON	Low tire pressure warning lamp OFF	Off
	Ignition switch	Key warning lamp ON	On
KEY G/Y W/L	ON	Key warning lamp OFF	Off
	Ignition switch	AFS OFF indicator lamp ON	On
AFS OFF IND	ON	AFS OFF indicator lamp OFF	Off
4WAS/RAS W/L	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be moni- tored.	Off
DDS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be moni- tored.	Off
	Ignition switch	Lane departure warning lamp ON	On
LANE W/L	ON	Lane departure warning lamp OFF	Off
	Ignition switch	LDP ON indicator lamp ON	On
LDP IND	ON	LDP ON indicator lamp OFF	Off
	Ignition switch	DCA switch indicator displayed	On
DCA IND	ON	DCA switch indicator not displayed	Off

Monitor Item		Condition	Value/Status	Λ
BSW W/L	Ignition switch	BSW warning lamp ON	On	- A
	ON	BSW warning lamp OFF	Off	
	Ignition switch ON	Engine start information display	B&P I	В
	Ignition switch ACC	Engine start information display	B&P N	C
	Ignition switch LOCK	Key ID warning display	ID NG	
	Ignition switch LOCK	Steering lock information display	ROTAT	D
LCD	Ignition switch LOCK	P position warning display	SFT P	E
	Ignition switch LOCK	Intelligent Key insert information display	INSRT	- L
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT	F
	Ignition switch ON	Take away warning display	NO KY	_
L	Ignition switch LOCK	Key warning display	OUTKY	- G
	Ignition switch ON	ACC warning display	LK WN	Н
	Ignition owitch	Vehicle ahead detection indicator displayed	On	
ACC TARGET	Ignition switch ON	Vehicle ahead detection indicator not dis- played	Off	
		When following distance set to "LONG"	LONG	
ACC DISTANCE	Ignition switch	When following distance set to "MIDDLE"	MID	J
ACC DISTANCE	ON	When following distance set to "SHORT"	SHORT	
		Set distance indicator not displayed	Off	
ACC OWN VHL	Ignition switch	Own vehicle indicator displayed	On	K
	ON	Own vehicle indicator not displayed	Off	
	Ignition switch	Set vehicle speed indicator not displayed	Off	_
ACC SET SPEED	<b>ON</b>	Set vehicle speed indicator displayed	Indicates the set vehicle speed	
	Ignition switch	Set vehicle speed indicator unit display ON	On	
ACC UNIT	ON	Set vehicle speed indicator unit display OFF	Off	M
		Shift position indicator P display	Р	
		Shift position indicator R display	R	
		Shift position indicator N display	Ν	- WC
		Shift position indicator D display	D	
		Shift position indicator DS display	L	0
	Ignition switch	Shift position indicator M1 display	M1	_
SHIFT IND	ON ON	Shift position indicator M2 display	M2	
		Shift position indicator M3 display	M3	P
		Shift position indicator M4 display	M4	
		Shift position indicator M5 display	M5	_
		Shift position indicator M6 display	M6	
		Shift position indicator M7 display	M7	

#### < ECU DIAGNOSIS INFORMATION >

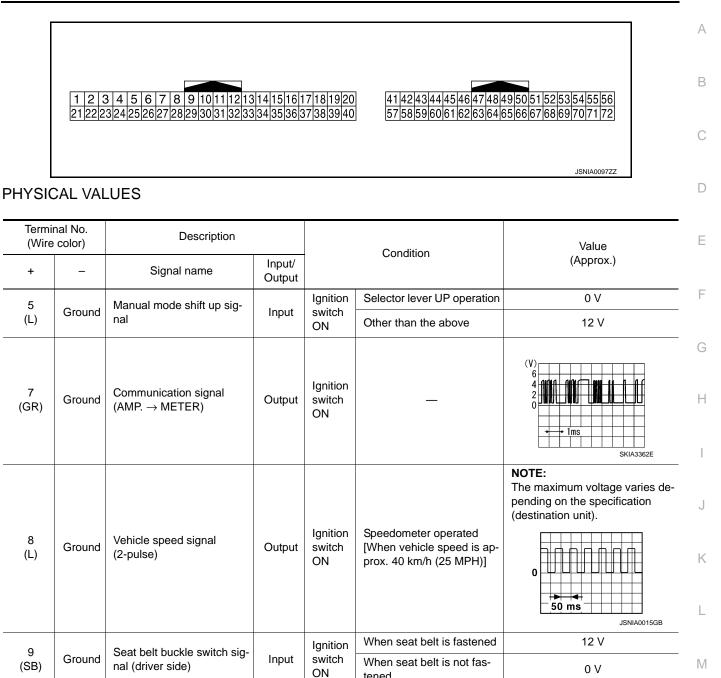
Monitor Item		Condition	Value/Status
O/D OFF SW	Ignition switch ON	NOTE: This item is displayed, but cannot be moni- tored.	Off
AT S MODE SW	Ignition switch	Snow mode switch ON	On
AT 3 MODE 3W	ON	Snow mode switch OFF	Off
AT P MODE SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
M RANGE SW	Ignition switch	Selector lever manual mode position	On
IN RANGE SW	ŌN	Other than the above	Off
	Ignition switch	Selector lever manual mode position	Off
NM RANGE SW	ŌN	Other than the above	On
AT SFT UP SW	Ignition switch	Selector lever + position	On
AT SET UP SW	<b>ON</b>	Other than the above	Off
	Ignition switch	Selector lever – position	On
AT SFT DWN SW	<b>ON</b>	Other than the above	Off
ST SFT UP SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
ST SFT DWN SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be moni- tored.	Off
	Ignition switch	A/C compressor activation condition	On
COMP F/B SIG	<b>ON</b>	A/C compressor deactivation condition	Off
4WD LOCK SW	Ignition switch ON	<b>NOTE:</b> This item is displayed, but cannot be monitored.	Off
	Ignition switch	Parking brake switch ON	On
PKB SW	ŌN	Parking brake switch OFF	Off
BUCKLE SW	Ignition switch	Driver seat belt not fastened	On
BUCKLE SW	ON	Driver seat belt fastened	Off
BRAKE OIL SW	Ignition switch	Brake fluid level switch ON	On
BRARE OIL SW	ON	Brake fluid level switch OFF	Off
DISTANCE [km]	Ignition switch ON	_	Possible driving distance calculated b unified meter and A/C amp.
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	_	Equivalent to ambient temperature <b>NOTE:</b> This may not match the indicated value on the information display.
	Ignition switch	Low-fuel warning signal output	On
FUEL LOW SIG	ŎN	Low-fuel warning signal not output	Off
	Ignition switch	Buzzer ON	On
BUZZER	ŎN	Buzzer OFF	Off

#### NOTE:

Some items are not available according to vehicle specification.

**TERMINAL LAYOUT** 

#### < ECU DIAGNOSIS INFORMATION >



tened

Selector lever DS position

Selector lever DS position

Other than the above

Other than the above

Ignition

switch

Ignition

switch

Ignition

switch

ON

ON

ON

Input

Input

Input

Revision: 2011 October

Manual mode signal

Non-manual mode signal

Communication signal

 $(LCD \rightarrow AMP.)$ 

10

(W)

11

(G)

14

(BR)

Ground

Ground

Ground

JSNIA0028GB

WCS

Ρ

0 V

12 V

12 V

0 V

	nal No. e color)	Description		Condition		Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
20 <sup>*1</sup> (L)	Ground	ION ON/OFF signal	Output	Ignition switch	Blower motor: ON Blower motor: OFF	0 V 12 V
25 (V)	Ground	Manual mode shift down signal	Input	ON Ignition switch	Selector lever down opera- tion	0 V
(•)		Signal		ON	Other than the above	12 V
27 (LG)	Ground	Communication signal (METER $\rightarrow$ AMP.)	Input	Ignition switch ON		(V) 6 2 0 • • 1 ms SKIA3361E
28 (R)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies de- pending on the specification (destination unit). 0 0 0 20 ms JSNIA0012GB
					Parking brake is applied	0 V
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake is released	(V) 8 4 0 10 ms JSNIA0007GB
34 (Y)	Ground	Communication signal (AMP. $\rightarrow$ LCD)	Output	Ignition switch ON		(V) 4 2 0 2 0 ↓ 2 0 0 µs ↓ JSNIA0027GB
41 (V)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
42 (Y)	Ground	Fuel level sensor signal	Input	lgnition switch ON		(V) 4 3 2 1 0 E 1/4 1/2 3/4 F JSNIA0013GB

#### < ECU DIAGNOSIS INFORMATION >

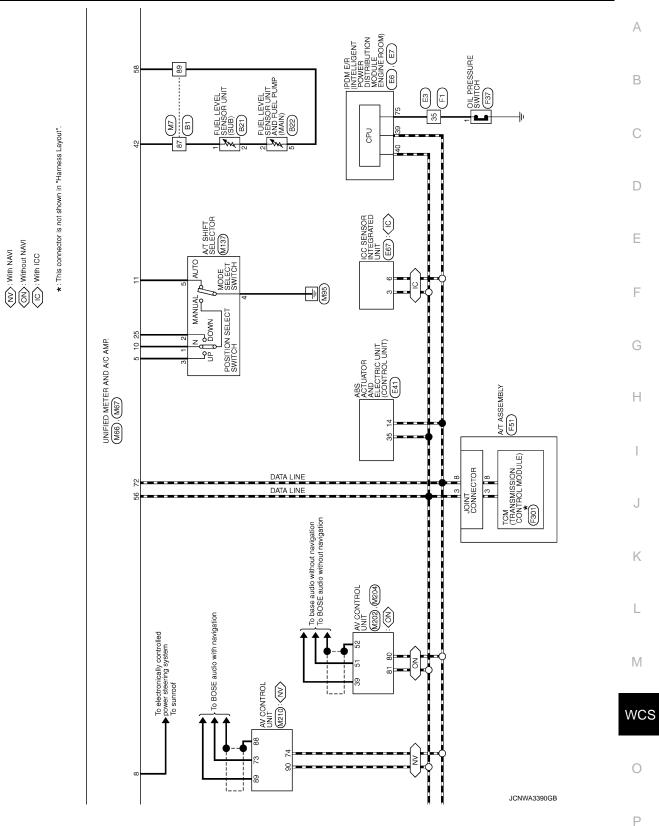
	nal No. e color)	Description				Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	
45 (P)	Ground	Ambient sensor signal	Input			(V) 3 4 0 -10 (14) (32) (50) (58)	B C D
47 <sup>*1</sup> (G)	Ground	Exhaust gas / outside odor detecting sensor signal	Input	Ignition switch ON	<b>NOTE:</b> The signal is different by measurement environment of a vehicle	(V) 6 4 2 0 4 4 ms ZJIA1163J	E
53 (G)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage	G
54 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	Н
55 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	I
56 (L)	Ground	CAN-H	_	_	_	_	J
57 (W)	Ground	Brake fluid level switch sig- nal	Input	Ignition switch	Brake fluid level is normal. The brake fluid level is low-	5 V 0 V	
58 (BR)	Ground	Fuel level sensor signal ground		ON Ignition switch ON	er than the low level	0 V	K
61 (BR)	Ground	Ambient sensor signal ground	_	Ignition switch ON	_	0 V	
63 <sup>*2</sup> (R)	Ground	_			_	_	Μ
71 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	wcs
72 (P)	Ground	CAN-L			_	_	0

\*1: With ACCS

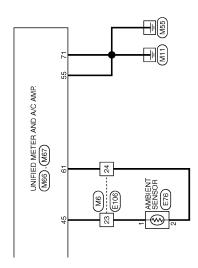
\*2: Unified meter and A/C amp. is not used for control.

Ρ

#### < ECU DIAGNOSIS INFORMATION > Wiring Diagram - METER -INFOID:000000006849173 AFS CONTROL UNIT M16): (WA) ETOB: AW 57 8 UNIFIED METER AND A/C AMP. (M66), (M67) ≸ ≶ 26 8 24 25 34 ECM M107 27 BCM (BODY CONTROL MODULE) (M122) . (M123) ARBEACH SWITCH AWD models WA>: With AFS 0 4 Б To CAN METER CONTROL SWITCH M54 53 41 54 TRIP COMPUTER SWITCH SEAT BELT BUCKLE SWITCH (DRIVER SIDE) B13 LM (B) 33 SELECT BRAKE FLUID LEVEL SWITCH ല ا 🖒 ENTER 41 80 COMBINATION METER ILLUMINATION CONTROL SWITCH PARKING BRAKE SWITCH E107 We lite FUSE BLOCK (J/B) M1 , M3 83 ഘ + 4 40A IGNITION SWITCH ON or START 10A WASHER LEVEL SWITCH E32 To illumination $\overline{\ }$ AIR BAG DIAGNOSIS SENSOR UNIT (M147) E100 9W 60 • IGNITION SWITCH ACC or ON 10A 24 15 ALTERNATOR F36 M110 E103 10Å BATTERY N 2010/09/21 METER JCNWA3389GB

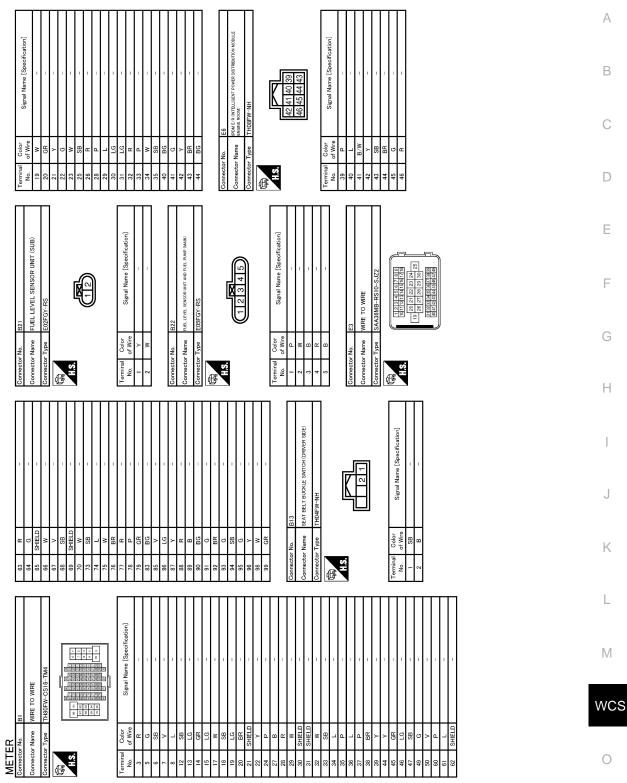


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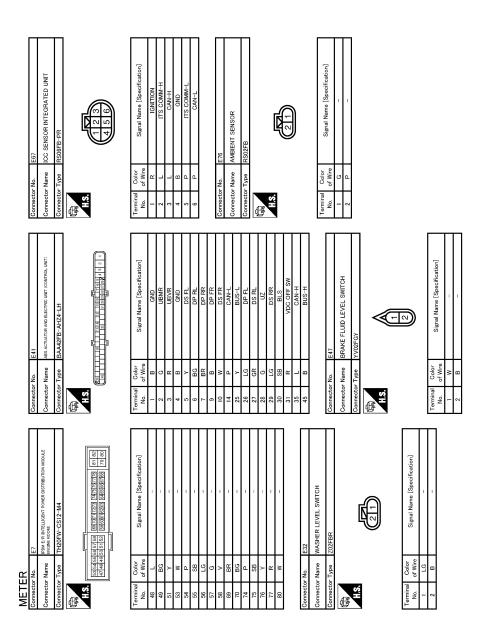
JCNWA3391GB

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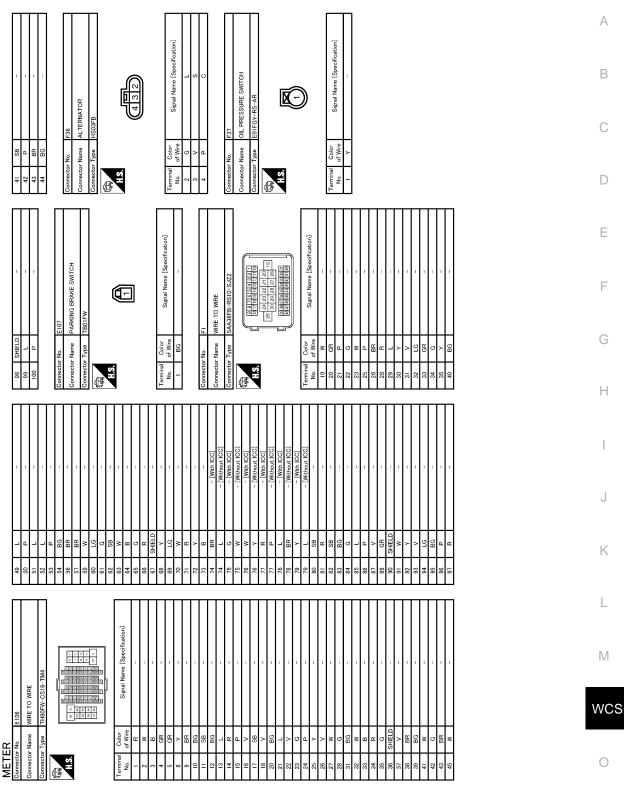
JCNWA3392GB

Ρ



JCNWA3393GB

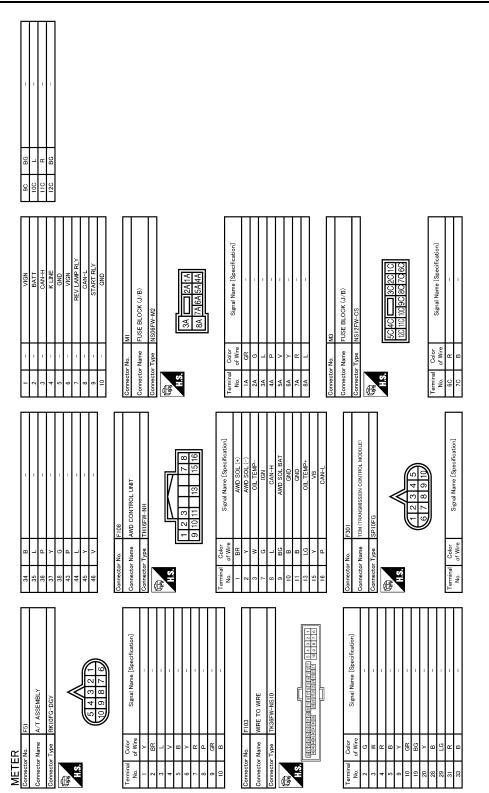
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JCNWA3394GB

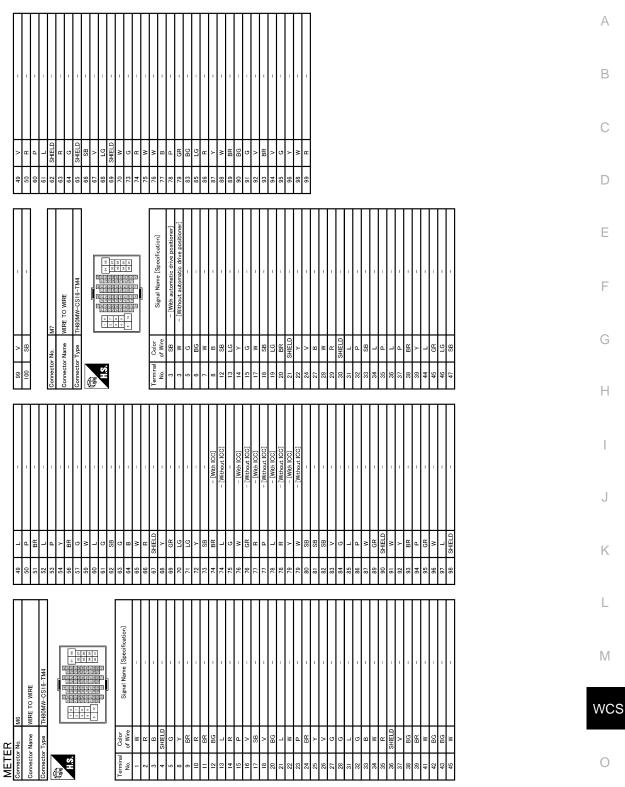
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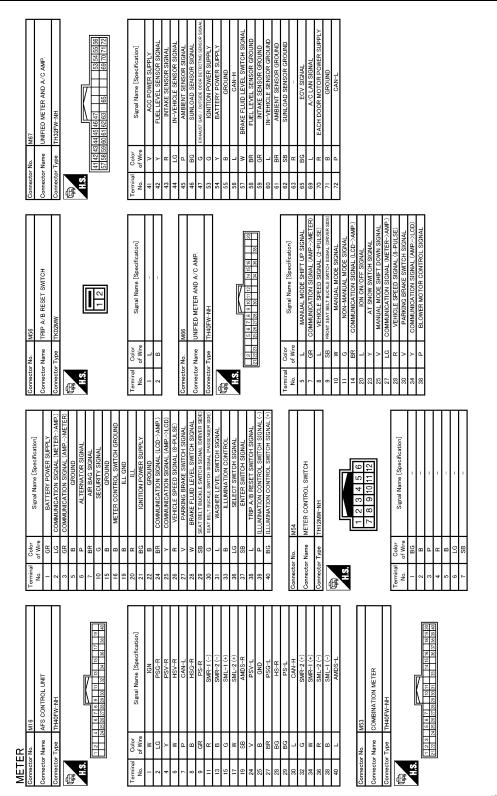
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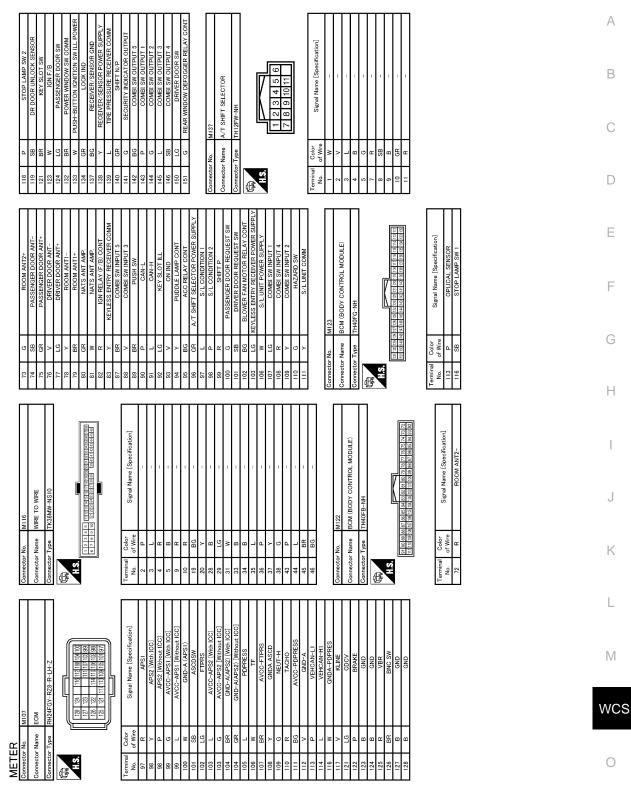
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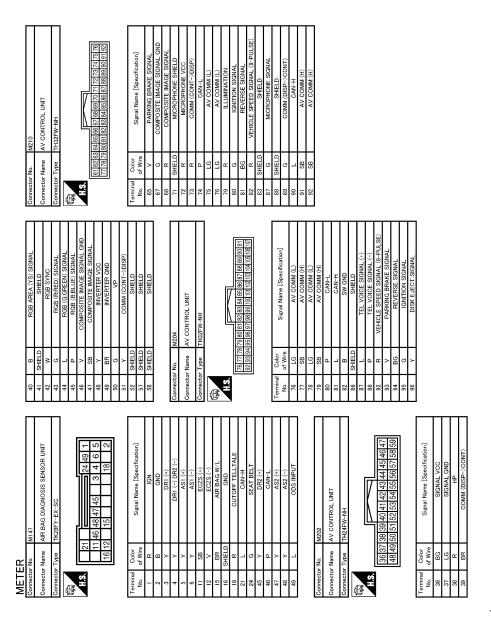
#### < ECU DIAGNOSIS INFORMATION >



JCNWA3398GB

Ρ

### < ECU DIAGNOSIS INFORMATION >



JCNWA3399GB

### Fail-Safe

INFOID:000000006820978

#### 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.

### **WCS-64**

#### < ECU DIAGNOSIS INFORMATION >

	Function	Specifications
Speedometer		
Tachometer		Beast to zero by suspending communication
Fuel gauge		<ul> <li>Reset to zero by suspending communication.</li> </ul>
Water temperature gauge		
Illumination control		When suspending communication, change to nighttime mode.
Information display		The display turns off by suspending communication.
Buzzer		The buzzer turns off by suspending communication.
	ABS warning lamp	
	SLIP indicator lamp	
	Brake warning lamp	The lamp turns on by suspending communication
	CRUISE warning lamp	— The lamp turns on by suspending communication.
	IBA OFF indicator lamp	
-	Malfunction indicator lamp	
	High beam indicator	
	Turn signal indicator lamp	
	Tail lamp indicator lamp	
Warning lamp/indicator	Oil pressure warning lamp	
lamp	A/T CHECK warning lamp	
	AWD warning lamp	
	Low tire pressure warning lamp	<ul> <li>The lamp turns off by suspending communication.</li> </ul>
	Key warning lamp	
	VDC OFF indicator lamp	
	BSW warning lamp	
	AFS OFF indicator lamp	
	Lane departure warning lamp	
	LDP ON indicator lamp	
	Master warning lamp	

## **DTC** Index

INFOID:000000006342814

				-
Display contents of CON- SULT-III	Time	Diagnostic item is detected when	Refer to	Μ
CAN COMM CIRCUIT [U1000]	CRNT, 1 - 39	When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	<u>MWI-46</u>	
CONTROL UNIT (CAN) [U1010]	CRNT, 1 - 39	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	<u>MWI-47</u>	- WCS
COMM ERROR 1 [B2201]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	<u>MWI-48</u>	0
COMM ERROR 2 [B2202]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	<u>MWI-50</u>	P
VEHICLE SPEED [B2205]	CRNT, 1 - 39	The abnormal vehicle speed signal is input from ABS actuator and elec- tric unit (control unit) for 2 seconds or more.	<u>MWI-52</u>	-

Display contents of CON- SULT-III	Time	Diagnostic item is detected when	Refer to
ENGINE SPEED [B2267]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	<u>MWI-53</u>
WATER TEMP [B2268]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	<u>MWI-54</u>

### < ECU DIAGNOSIS INFORMATION >

# BCM (BODY CONTROL MODULE)

## **Reference Value**

### VALUES ON THE DIAGNOSIS TOOL

#### CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status	
FR WIPER HI	Other than front wiper switch HI	Off	C
	Front wiper switch HI	On	
FR WIPER LOW	Other than front wiper switch LO	Off	D
	Front wiper switch LO	On	
	Front washer switch OFF	Off	
FR WASHER SW	Front washer switch ON	On	E
	Other than front wiper switch INT	Off	
FR WIPER INT	Front wiper switch INT	On	F
	Front wiper is not in STOP position	Off	
FR WIPER STOP	Front wiper is in STOP position	On	
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position	G
	Other than rear wiper switch ON	Off	
RR WIPER ON	Rear wiper switch ON	On	F
	Other than rear wiper switch INT	Off	
RR WIPER INT	Rear wiper switch INT	On	1
	Rear washer switch OFF	Off	1
RR WASHER SW	Rear washer switch ON	On	
RR WIPER STOP	Rear wiper is in STOP position	Off	J
	Rear wiper is not in STOP position	On	
	Other than turn signal switch RH	Off	K
TURN SIGNAL R	Turn signal switch RH	On	n
	Other than turn signal switch LH	Off	
TURN SIGNAL L	Turn signal switch LH	On	L
	Other than lighting switch 1ST and 2ND	Off	
TAIL LAMP SW	Lighting switch 1ST or 2ND	On	
	Other than lighting switch HI	Off	N
HI BEAM SW	Lighting switch HI	On	
	Other than lighting switch 2ND	Off	W
HEAD LAMP SW 1	Lighting switch 2ND	On	
	Other than lighting switch 2ND	Off	
HEAD LAMP SW 2	Lighting switch 2ND	On	С
PASSING SW	Other than lighting switch PASS	Off	
PASSING SW	Lighting switch PASS	On	P
	Other than lighting switch AUTO	Off	
AUTO LIGHT SW	Lighting switch AUTO	On	
	Front fog lamp switch OFF	Off	
FR FOG SW	Front fog lamp switch ON	On	
RR FOG SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	

Revision: 2011 October

А

В

INFOID:000000006893742

Monitor Item	Condition	Value/Status
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
DOOR SW-RR	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
JOON SWINE	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
JOOR SW-BR	Back door opened	On
	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
	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
NET UTL LN-OW	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
LET CTL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
	Back door opener switch OFF	Off
FR/BD OPEN SW	While the back door opener switch is turned ON	On
IRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneous- ly	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V

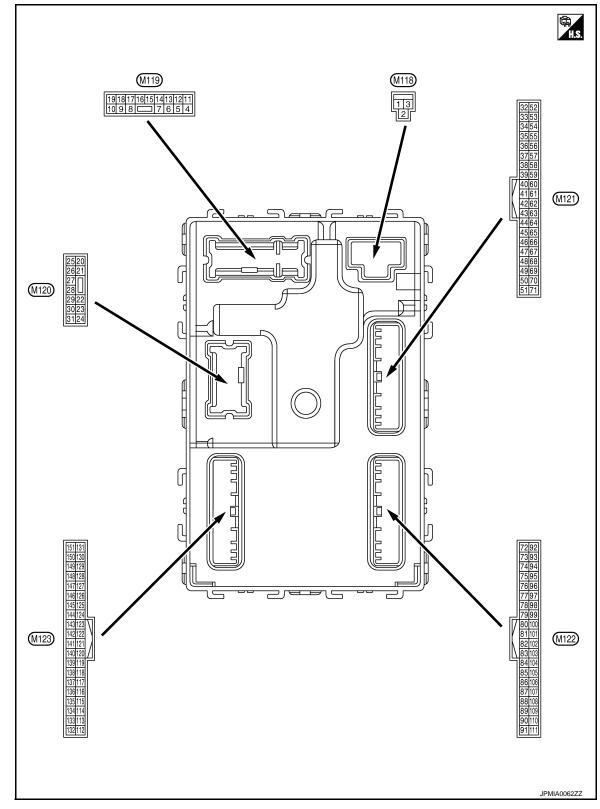
Monitor Item	Condition	Value/Status
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
EQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
EQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
	Back door request switch is not pressed	Off
REQ SW -BD/TR	Back door request switch is pressed	On
	Push-button ignition switch (push switch) is not pressed	Off
USH SW	Push-button ignition switch (push switch) is pressed	On
	Ignition switch in OFF or ACC position	Off
N RLY2 -F/B	Ignition switch in ON position	On
CC RLY -F/B	NOTE:           The item is indicated, but not monitored.	Off
LUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
RAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
	The brake pedal is not depressed	Off
RAKE SW 2	The brake pedal is depressed	On
	Selector lever in P position	Off
ETE/CANCL SW	Selector lever in any position other than P	On
	Selector lever in any position other than P and N	Off
T PN/N SW	Selector lever in P or N position	On
L-LOCK	Steering is unlocked	Off
<b>DTE:</b> or models without steering lock it, this item is not monitored.	Steering is locked	On
L -UNLOCK	Steering is locked	Off
TE: r models without steering lock it. this item is not monitored.	Steering is unlocked	On
L RELAY-F/B	Ignition switch in OFF or ACC position	Off
TE: r models without steering lock it. this item is not monitored.	Ignition switch in ON position	On
	Driver door is unlocked	Off
NLK SEN -DR	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
JSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
N RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On Off
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On

Monitor Item	Condition	Value/Status
	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
	Engine stopped	Stop
ENCINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM NOTE:	Steering is unlocked	Off
For models without steering lock unit, this item is not monitored.	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
<b>NOTE:</b> For models without steering lock unit, this item is not monitored.	Steering is unlocked	On
S/L RELAY-REQ NOTE:	Steering lock system is not the LOCK condition and the changing condi- tion from LOCK to UNLOCK.	Off
For models without steering lock unit, this item is not monitored.	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK.	On
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Steering is locked	Reset Set
ID OKT LAO	Steering is unlocked	
DDMT ENG STDT	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
	The key is not inserted into key slot	Off
KEY SW -SLOT	The key is inserted into key slot	
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives accords with the fourth key ID reg- istered to BCM.	Done

Monitor Item	Condition	Value/Status	
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet	/
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done	E
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet	
	The key ID that the key slot receives accords with the second key ID reg- istered to BCM.	Done	(
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet	I
	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done	
TP 4	The ID of fourth key is not registered to BCM	Yet	
IF 4	The ID of fourth key is registered to BCM	Done	
TD 0	The ID of third key is not registered to BCM	Yet	
TP 3	The ID of third key is registered to BCM	Done	
	The ID of second key is not registered to BCM	Yet	
TP 2	The ID of second key is registered to BCM	Done	
TP 1	The ID of first key is not registered to BCM	Yet	
	The ID of first 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 of front LH tire transmitter is registered	Done	
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet	
	ID of front RH tire transmitter is registered	Done	
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet	
	ID of rear RH tire transmitter is registered	Done	
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet	
	ID of rear LH tire transmitter is registered	Done	
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet	
WARNING LAMP	Tire pressure indicator OFF	Off	W
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	
	Tire pressure warning alarm is sounding	On	(

< ECU DIAGNOSIS INFORMATION >

**TERMINAL LAYOUT** 



PHYSICAL VALUES

	inal No.	Description				Value
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON	l	Battery voltage
4					o battery saver is activated. room lamp power supply)	0 V
4 (LG)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is not activat- ed. (Outputs the interior room lamp power supply)		Battery voltage
5	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
(L)	Giouna	LOCK	Ouipui	rassenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Ground	Step lamp	Output	Step lamp	ON	0 V
(Y)	Cround		Supur		OFF	Battery voltage
8 (V) Ground All doors, fue LOCK	All doors, fuel lid	Output	All doors	LOCK (Actuator is activated)	Battery voltage	
	LOCK	ouput		Other than LOCK (Actuator is not activated)	0 V	
9 Ground	Driver door, fuel lid	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage	
(G)	Cround	UNLOCK	Output Driver door		Other than UNLOCK (Actuator is not activated)	0 V
10	Ground	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(BR)	Cround	LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON	I	0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V NOTE: When the illumination brighten- ing/dimming level is in the neutral position
15			0.1	1	OFF or ON	Battery voltage
(Y)	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0 V

	inal No.	Description				
(Wire	e color)	Cignal name	Input/		Condition	Value (Approx.)
+	-	Signal name	Output			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s
					Turn signal switch OFF	0 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s 1 s FKID0926E 6.5 V
19	Cround	Room lamp timer	Output	Interior room	OFF	Battery voltage
(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 Fillo 15 10 10 10 10 10 10 10 10 10 10
23	Oracia	Daala daar ay ay	Output	De ale de ar	OPEN (Back door opener actuator is activated)	Battery voltage
(G)	Ground	Back door open	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
(G)	Ground		Juipui		ON (Operated)	Battery voltage

	inal No.	Description				Value	
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	А
34	0	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(SB)	Ground	na (-)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	E
35	Ground	Luggage room anten- na (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H
(V)					When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	J K L
38	Ground	Back door antenna (–	Output	When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 0 0 15 0 15 0 15 0 15 0 15 0 15 0 1	M WC
38 (B)	Ground	)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P

(HING DAM)       Signal name       Input/ Output       Condition       (Approx.)         +       -       Signal name       Input/ Output       Output       When the back door opener re- operated with ig- nition switch OFF       When Intelligent Key is in the antenna detection area       (%)         47 (Y)       Ground       Ignition relay (IPDM E/R) control       Output       Ignition switch       OFF or ACC       Battery voltage         52 (SB)       Ground       Starter relay control       Output       Ignition switch ON       OV       When selector lever is n P or N position       Battery voltage         60*1 (BR)       Ground       Push-button ignition switch (Push switch)       Output       Ignition switch (push switch)       Pressed       O V         61: Cround       Back door opener re- switch (Push switch)       Input       Push-button ignition switch (push switch)       Pressed       O V		ninal No.					Value
39 (W)       Ground       Back door antenna (+)       Output       When the back door opener re- quest switch is operated with ig- nition switch OFF       When Intelligent Key is in the antenna detection area       15 (V) (V) (V) (V) (V) (V) (V) (V) (V) (V)	-	1				Condition	
(W)       (+)       (		Ground	nd	Outout	door opener re-		
47 (Y)       Ground E/R) control       Ignition relay (IF DM E/R) control       Output       Ignition switch ON       ON       0 V         52 (SB)       Ground       Starter relay control       Output       Ignition switch ON       When selector lever is in P or N position       Battery voltage         60*1 (BR)       Ground       Push-button ignition switch (Push switch)       Input       Push-button ignition switch)       Pressed       0 V         61       Ground       Back door opener re- tor in point       Input       Back door opener re- Input       Back door opener       0 V	(W)	Ground	(+)	Guput	quest switch is operated with ig- nition switch OFF	in the antenna detection	
(Y)       E/R) control       I       I       ON       0 V         52 (SB)       Ground       Starter relay control       Output       Ignition switch ON       Ignition switch ON       When selector lever is in P or N position       Battery voltage         60*1 (BR)       Ground       Push-button ignition switch (Push switch)       Input       Push-button igni- tion switch (push switch)       Pressed       0 V         61       Ground       Back door opener re- tor in the intervention       Input       Back door opener re- Input       Back door opener       ON (Pressed)       0 V		Ground		Output	Ignition switch	OFF or ACC	Battery voltage
52 (SB)     Ground     Starter relay control     Output     Ignition switch ON     or N position     Battery voltage       (SB)     Ground     Starter relay control     Output     Ignition switch ON     When selector lever is not in P or N position     0 V       60*1 (BR)     Ground     Push-button ignition switch (Push switch)     Input     Push-button igni- tion switch (push switch)     Pressed     0 V       61     Ground     Back door opener re- tion     Input     Back door opener     ON (Pressed)     0 V	(Y)	Cround	E/R) control	Output	ignition switch	-	0 V
(SB)     When selector lever is not in P or N position     0 V $60^{*1}$ (BR)     Ground     Push-button ignition switch (Push switch)     Input     Push-button igni- tion switch (push switch)     Pressed     0 V $61$ Ground     Back door opener re- tion     Input     Back door opener re- linput     ON (Pressed)     0 V		Ground	nd Starter relay control	Output			Battery voltage
60*1 (BR)       Ground       Push-button ignition switch (Push switch)       Input       tion switch (push switch)       Not pressed       Battery voltage         61       Ground       Back door opener re- linput       Input       Back door opener re- linput       Back door opener       0 V	(SB)	Cround		ouput	ŌN		0 V
(BR)     switch (Push switch)     switch)     Not pressed     Battery voltage       61     Ground     Back door opener re-     Input     Back door opener     0 V	60* <sup>1</sup>	Ground	Push-button ignition	loout		Pressed	0 V
61 Ground Back door opener re- Input Back door opener	(BR)	Ground	switch (Push switch)	input		Not pressed	Battery voltage
JPMIA0016GE 1.0 V		Ground	quest switch	Input	request switch	OFF (Not pressed)	(V) 10 10 10 10 10 10 10 10 10 10
64 αρIntelligent Key warn- ing buzzer (EngineIntelligent Key warning buzzerSounding0 V		Ground		Output		Sounding	0 V
(V) Crown) Cutput warning bazzer (Engine room) Not sounding Battery voltage	(V)					Not sounding	Battery voltage
65 (BG)     Ground     Rear wiper stop position     Input     Rear wiper     In stop position     In stop position		Ground	na	Input	Rear wiper	In stop position	15 10 10 ms JPMIA0016GB
Not in stop position 0 V						Not in stop position	0 V

#### < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value
(vvire +		Signal name	Input/ Output		Condition	(Approx.)
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	(V) 15 0 10 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
					Pressed	0 V
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 10 10 10 11.8 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close) ON (Door open)	(V) 15 10 5 10 10 10 10 11.8 V 0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	(V) 15 0 10 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V

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	ninal No.	Description				Value
+	re color)	Signal name	Input/ Output	Condition		(Approx.)
72	Ground	Room antenna 2 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)		(Center console)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 15 0 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 15 15 15 15 15 15 15 15
73	Ground	Room antenna 2 (+) (Center console)	Output	lgnition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0062GB
(G)					When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB
74	Ground	Passenger door an-	Output	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)	Ground	nd tenna (–)	Gutput	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

	Terminal No. Description (Wire color)				Value		
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	A
75	0	Passenger door an-	Output	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB	B C D
(GR)	Ground	tenna (+)		quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
76	Ground	Driver door antenna (–)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	G H I
(V)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	J K L
77	Ground	Driver door antenna	Outout	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M WC
(LG)	Ground	(+)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P

	inal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
78	Ground	Room antenna 1 (-)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(Y) GI	Clound	(Instrument panel)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 10 10 10 10 10 10 10 10 10 10 10 10 1
79	Gaund	Room antenna 1 (+)	0.454	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)	Ground	(Instrument panel)	Output		When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the 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 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
(13)					ON	Battery voltage

	inal No.	Description				Value	
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
83	0	Remote keyless entry receiver communica- tion	Input/ Output	During waiting		(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	(
(Y) (Y)	Ground			When operating e	ither button on the key	(V) 15 10 5 0 1 1 ms JMKIA0065GB	
87 (BR)		Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	I
	Ground				Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 0 2.ms JPMIA0037GB 1.3 V	
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0039GB 1.3 V	ľ
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 0 2.ms JPMIA0040GB 1.3 V	(

	inal No.	Description				Value
(Wire +	e color) _	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 0 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 0 0 2 ms JPMIA0040GB 1.3 V
89* <sup>2</sup> (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button igni- tion switch (push switch)	Pressed Not pressed	0 V Battery voltage
90 (P)	Ground	CAN-L	Input/ Output	_		_
91 (L)	Ground	CAN-H	Input/ Output	_		_

	inal No.	Description				
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)
					OFF	Battery voltage
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10
					ON	0 V
93	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
(V)	Globalia		Output	Ignition switch	ON	0 V
94	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage
(Y)	Cround		Caiput		ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BG)	Croand		- a.pat	-gon othion	ACC or ON	Battery voltage
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output	_		Battery voltage
97* <sup>2</sup>	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)	Giouna	tion No. 1	mput	Sleening lock	UNLOCK status	Battery voltage
98* <sup>2</sup>	Ground	Steering lock condi-	Innut	Steering lock	LOCK status	Battery voltage
(P)	Giouna	tion No. 2	Input	Sleening lock	UNLOCK status	0 V
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V
(R)	Giouna	tion switch	Input	Selector level	Any position other than P	Battery voltage
					ON (Pressed)	0 V
100 (G)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms 10 ms JPMIA0016GB 1.0 V
400					OFF or ACC	0 V
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch		
(20)					ON	Battery voltage

	inal No.	Description				Value
+	e color) –	Signal name	Input/ Output	Condition		(Approx.)
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF	F	Battery voltage
106* <sup>2</sup> (W)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
	Ground	Combination quitab	Input	Combination switch (Wiper intermit- tent dial 4)	ON All switches OFF	0 V (V) 15 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 0 2 ms JPMIA0037GB 1.3 V
107 (LG)					Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch LO	(V) 15 0 2.ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 0 2 ms 1.3 V

#### < ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	0
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C D
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0038GB 1.3 V	E
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V	G H I
					Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	J K
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	M

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	inal No.	Description				Value	
	e color)	Signal name	Input/	Condition		(Approx.)	
+	Ground		Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	
					Lighting switch PASS	(V) 15 10 5 0 2.ms JPMIA0037GB 1.3 V	
109 (Y)		Combination switch INPUT 2			Lighting switch 2ND	(V) 15 0 2 ms JPMIA0036GB 1.3 V	
					Front wiper switch INT	(V) 15 0 2 ms JPMIA0038GB 1.3 V	
					Front wiper switch HI	(V) 15 10 2 ms JPMIA0040GB 1.3 V	
					ON	0 V	
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	

#### < ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value	
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
					LOCK status	Battery voltage	
111* <sup>2</sup> (Y)	Ground	Steering lock unit communication	Input/ Output		LOCK or UNLOCK	(V) 15 10 5 0 50 ms JMKIA0066GB	
					For 15 seconds after UN- LOCK	Battery voltage	
					15 seconds or later after UNLOCK	0 V	
113	Ground	Optical concor	locut	Ignition switch	When bright outside of the vehicle	Close to 5 V	
(P)	Ground Optical sensor Input ON		<b>ON</b>	When dark outside of the vehicle	Close to 0 V		
116 (SB)	Ground	Stop lamp switch 1	Input	_		Battery voltage	
		Stop lamp switch 2	– Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	
118	Ground	(Without ICC)		Stop lamp switch	ON (Brake pedal is de- pressed)	Battery voltage	
(P)	Ground	Stop lamp switch 2		Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF		0 V	
		(With ICC)		Stop lamp switch ON (Brake pedal is de- pressed) or ICC brake hold relay ON		Battery voltage	
119 (SB)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 0 5 0 10 ms JPMA0012GB	
					UNLOCK status	1.1 V 0 V	
404				When the key is in	(Unlock switch sensor ON)	Battery voltage	
121 (BR)	Ground	Key slot switch	Input	-	ot inserted into key slot	0 V	
123				-	OFF or ACC	0 V	
(W)	Ground	IGN feedback	Input	Ignition switch	ON	Battery voltage	

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	inal No. e color)	Description		Our dition		Value
+	-	Signal name	Input/ Output	Condition		(Approx.)
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch OFF (Door close) ON (Door open)		(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V 0 V
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 10 10 10 10 10 10 10 10 10
				Ignition switch OFF or ACC		Battery voltage
					ON (Tail lamps OFF)	9.5 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumi- nation	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator OFF ON		Battery voltage 0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor power supply	Output	Ignition switch		0 V
(Y)		power suppry			ACC or ON	5.0 V

e color) –	Signal name	Input/ Output		Condition	Value	A
					(Approx.)	
Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 + 0.2s OCC3881D	B C D
Glound	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 2 0 + 0.2s OCC3880D	F
Ground	Selector lever P/N position	Input	Selector lever	P or N position Except P and N positions	Battery voltage 0 V	G
		ecurity indicator Output	Security indicator	ON	0 V	Н
Ground	Security indicator			Blinking	(V) 15 0 1 s JPMIA0014GB 11.3 V	l J
				OFF	Battery voltage	K
Ground	Combination switch	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND	0 V	L
	OUTPUT 5			Turn signal switch RH	2 ms	MWCS
				All switches OFF (Wiper intermittent dial 4)	0 V	
Ground	Combination switch OUTPUT 1	Output	Combination switch	Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2	(V) 15 0 2 ms JPMIA0032GB	P
	Ground	Grounder communicationGroundSelector lever P/N positionGroundSecurity indicatorGroundSecurity indicatorGroundCombination switch OUTPUT 5	Grounder communicationOutputGroundSelector lever P/N positionInputGroundSecurity indicatorOutputGroundSecurity indicatorOutputGroundCombination switch OUTPUT 5Output	Ground       er communication       Output       ÖN         Ground       Selector lever P/N position       Input       Selector lever         Ground       Security indicator       Output       Security indicator         Ground       Security indicator       Output       Security indicator         Ground       Combination switch OUTPUT 5       Output       Security indicator         Ground       Combination switch OUTPUT 5       Output       Combination Switch (Wiper intermit- tent dial 4)	Ground       er communication       Output       ON       When receiving the signal from the transmitter         Ground       Selector lever P/N position       Input       Selector lever       P or N position         Ground       Selector lever P/N position       Input       Selector lever       P or N position         Ground       Security indicator       Output       Selector lever       P or N position         Ground       Security indicator       Output       Security indicator       ON         Ground       Security indicator       Output       Security indicator       Blinking         Ground       Combination switch OUTPUT 5       Output       Combination switch (Wiper intermitter dial 4)       All switches OFF         Ground       Combination switch OUTPUT 5       Output       Combination switch (Wiper intermitter dial 4)       Front wiper switch HI         Ground       Combination switch OUTPUT 1       Output       Combination switch HI       All switches OFF         Ground       Combination switch OUTPUT 1       Output       Combination switch HI       Front wiper switch HI         Ground       Combination switch OUTPUT 1       Output       Combination switch HI       All switches OFF         Wiper intermittent dial 4)       Front wiper switch HI       All switches OFF       Wi	Ground       Tire pressure receiv- er communication       Input/ Output       ignition switch ON       ignition switch OFF       ignition switch Intro ignition switch OUTPUT 1       ignition switch OUTPU

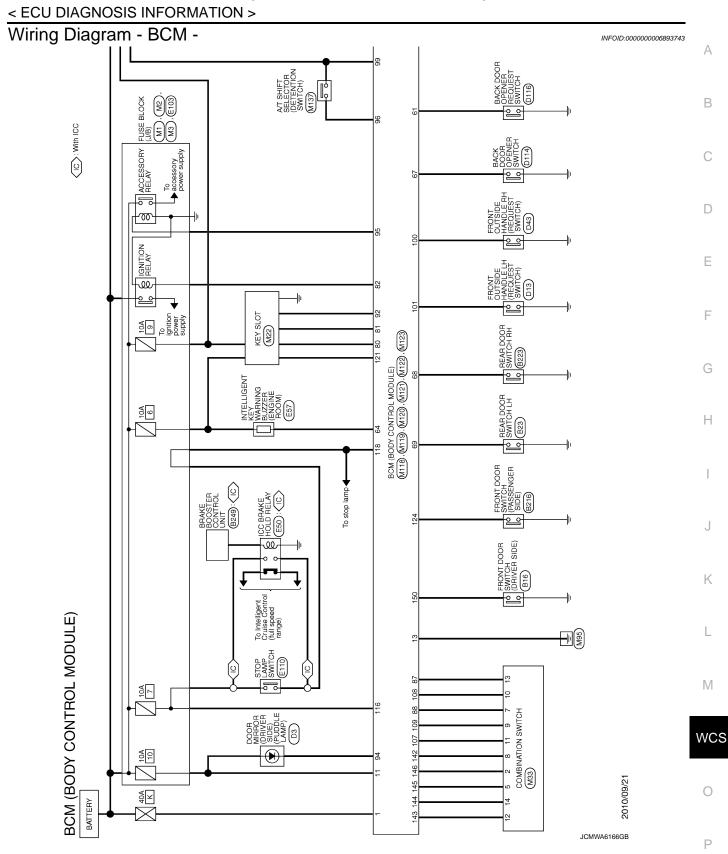
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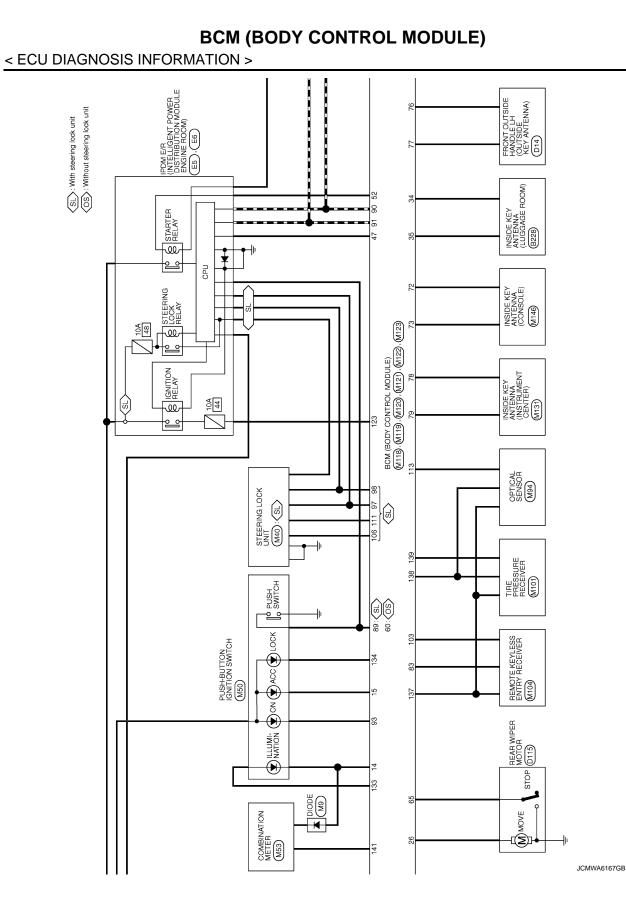
	inal No.	Description				Value
(VVire +	e color) -	Signal name	Input/ Output	Condition		(Approx.)
					All switches OFF (Wiper intermittent dial 4) Front washer switch ON	0 V
144		Combination switch		Combination	(Wiper intermittent dial 4) Rear wiper switch ON (Wiper intermittent dial 4)	
(G)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB
					All switches OFF	0 V
					Front wiper switch INT	
		Combination switch OUTPUT 3		Combination switch (Wiper intermit- tent dial 4)	Front wiper switch LO	(V) 15
145 (L)	Ground		Output		Lighting switch AUTO	10 0 2 ms JPMIA0034GB 10.7 V
					All switches OFF	0 V
		Combination switch OUTPUT 4 Output			Front fog lamp switch ON	
				<b>0</b>	Lighting switch 2ND	(V)
146	<b>a</b> .			Combination switch	Lighting switch PASS	
(SB)	Ground		Output	(Wiper intermit- tent dial 4)	Turn signal switch LH	3 0 2 ms JPMIA0035GB 10.7 V
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 0 10 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151	Ground	Rear window defog-	Output	Rear window de-	Active	0 V
(G)	Cround	ger relay control	Calput	fogger	Not activated	Battery voltage

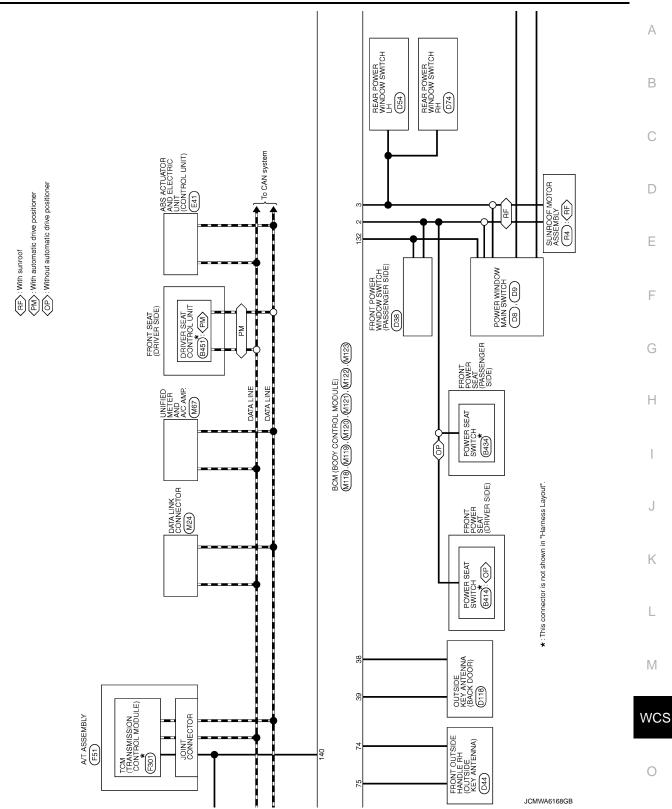
NOTE:

• \*1: Without steering lock unit

• \*2: With steering lock unit

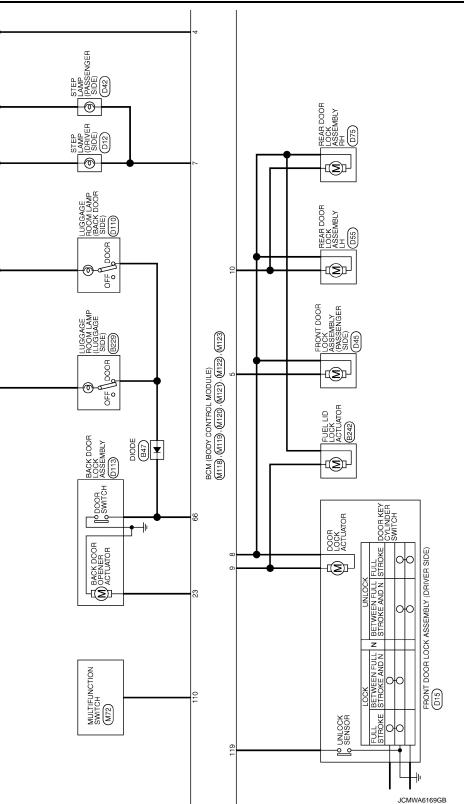




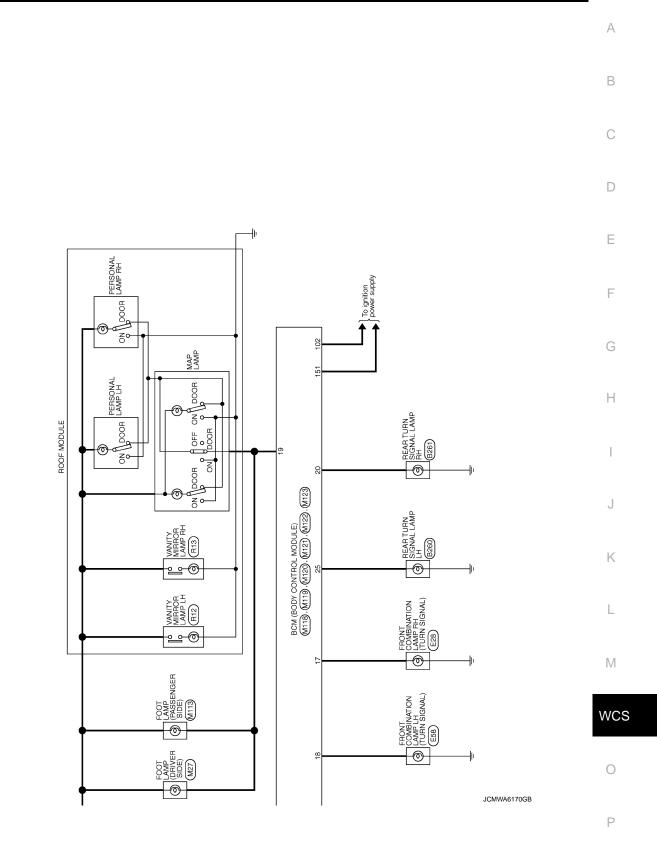


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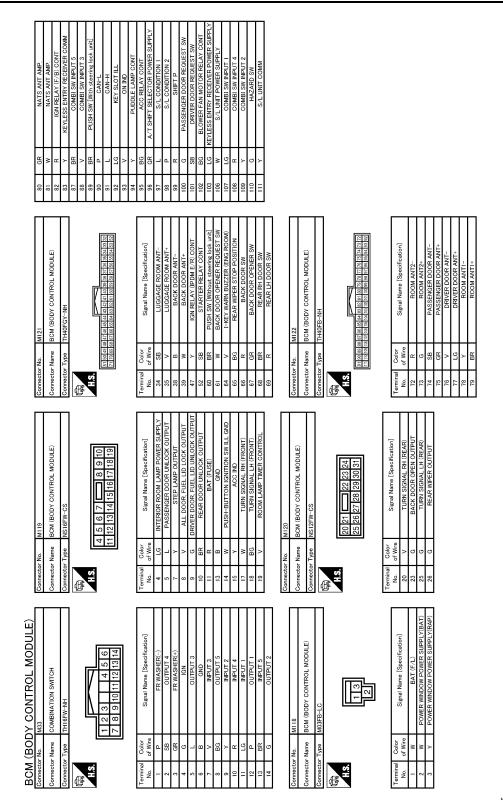
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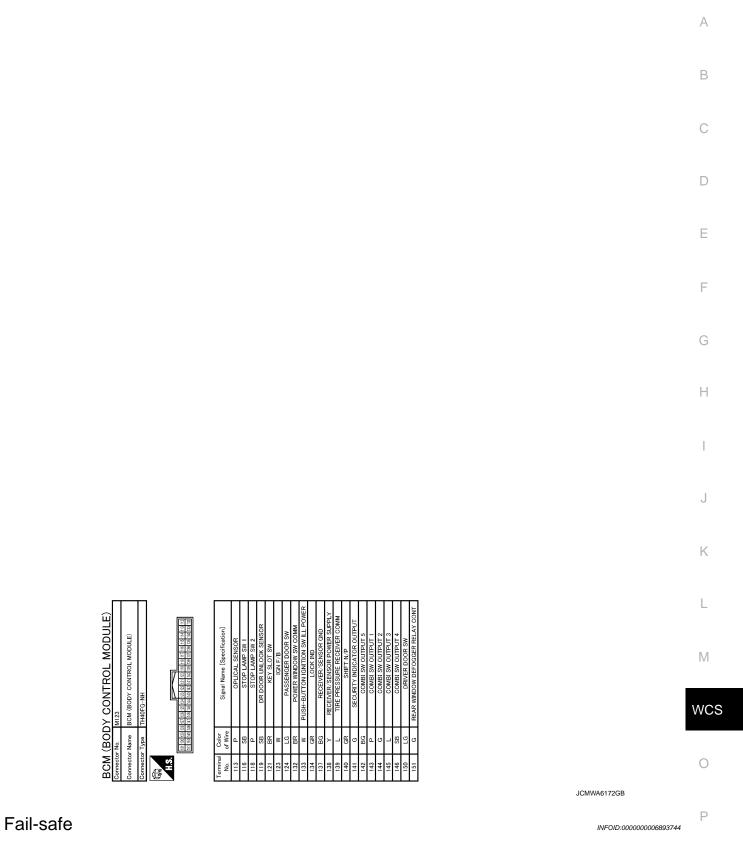


#### < ECU DIAGNOSIS INFORMATION >



JCMWA6171GB

#### < ECU DIAGNOSIS INFORMATION >



### 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 $ON \rightarrow OFF$
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actua- tor and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	<ul><li>500 ms after the following CAN signal communication status be- comes consistent</li><li>Starter control relay signal</li><li>Starter relay status signal</li></ul>
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	<ul> <li>500 ms after any of the following BCM recognition conditions are fulfilled</li> <li>Ignition switch is in the ON position</li> <li>Power position: IGN</li> <li>Selector lever P/N position signal: Except P and N positions (0 V)</li> <li>Interlock/PNP switch signal (CAN): OFF</li> <li>Status 2</li> <li>Ignition switch is in the ON position</li> <li>Selector lever P/N position signal: P or N position (battery voltage)</li> <li>PNP switch signal (CAN): ON</li> </ul>
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	<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>
B2608: STARTER RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following signal communication status becomes consistent</li> <li>Starter motor relay control signal</li> <li>Starter relay status signal (CAN)</li> </ul>
B2609: S/L STATUS	<ul><li>Inhibit engine cranking</li><li>Inhibit steering lock</li></ul>	<ul> <li>When the following steering lock conditions agree</li> <li>BCM steering lock control status</li> <li>Steering lock condition No. 1 signal status</li> <li>Steering lock condition No. 2 signal status</li> </ul>
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	<ul><li>When any of the following conditions are fulfilled</li><li>Power position changes to ACC</li><li>Receives engine status signal (CAN)</li></ul>
B2612: S/L STATUS	<ul> <li>Inhibit engine cranking</li> <li>Inhibit steering lock</li> </ul>	<ul> <li>When any of the following conditions are fulfilled</li> <li>Steering lock unit status signal (CAN) is received normally</li> <li>The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)</li> </ul>
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 be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	<ul><li>Inhibit engine cranking</li><li>Inhibit steering lock</li></ul>	<ul> <li>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</li> <li>Steering condition No. 1 signal: LOCK (0 V)</li> <li>Steering condition No. 2 signal: LOCK (Battery voltage)</li> </ul>

#### REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal. When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

- 1. More than 1 minute is passed after the rear wiper stops.
- 2. Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

#### DTC Inspection Priority Chart

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT     U1010: CONTROL UNIT (CAN)

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#### < ECU DIAGNOSIS INFORMATION >

Priority	DTC
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     B2555: STOP LAMP     B2556: PUSH-BTN IGN SW     B2557: VEHICLE SPEED     B2560: STARTER CONT RELAY     B2601: SHIFT POSITION     B2602: SHIFT POSITION     B2602: SHIFT POSITION     B2603: SHIFT POSI STATUS     B2604: PNP SW     B2606: S/L RELAY     B2606: S/L RELAY     B2607: S/L RELAY     B2607: S/L RELAY     B2607: S/L RELAY     B2608: STARTER RELAY     B2609: S/L STATUS     B2609: S/L STATUS     B26004: IGNITION RELAY     B2605: STEERING LOCK UNIT     B26005: STEERING LOCK UNIT     B26005: STEERING LOCK UNIT     B2607: S/L RELAY     B2607: S/L RELAY     B2608: STEERING LOCK UNIT     B2609: S/L STATUS     B2614: ACC RELAY CIRC     B2615: BLOWER RELAY CIRC     B2616: ISN RELAY CIRC     B2616: ISN RELAY CIRC     B2616: ISON     B2619: BCM     B2614: PUSH-BTN IGN SW     B2614: PUSH-BTN IGN SW
5	<ul> <li>C1704: LOW PRESSURE FL</li> <li>C1705: LOW PRESSURE FR</li> <li>C1706: LOW PRESSURE RR</li> <li>C1707: LOW PRESSURE RL</li> <li>C1708: [NO DATA] FL</li> <li>C1709: [NO DATA] FR</li> <li>C1710: [NO DATA] RR</li> <li>C1711: [NO DATA] RL</li> <li>C1716: [PRESSDATA ERR] FL</li> <li>C1717: [PRESSDATA ERR] FR</li> <li>C1718: [PRESSDATA ERR] RR</li> <li>C1719: [PRESSDATA ERR] RL</li> <li>C1734: CONTROL UNIT</li> </ul>
6	B2621: INSIDE ANTENNA     B2622: INSIDE ANTENNA     B2623: INSIDE ANTENNA

## DTC Index

#### NOTE:

The details of time display are as follows.

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

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#### < ECU DIAGNOSIS INFORMATION >

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-18, "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	B
No DTC is detected. further testing may be required.	_	_	_	_		
U1000: CAN COMM CIRCUIT				_	BCS-38	- D
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-39	-
U0415: VEHICLE SPEED SIG	_	_	_	_	<u>BCS-40</u>	E
B2013: ID DISCORD BCM-S/L*	×	×	_	_	<u>SEC-49</u>	-
B2014: CHAIN OF S/L-BCM*	×	×	_	_	<u>SEC-50</u>	-
B2190: NATS ANTENNA AMP	×	_	_	_	<u>SEC-42</u>	- F
B2191: DIFFERENCE OF KEY	×			_	<u>SEC-45</u>	-
B2192: ID DISCORD BCM-ECM	×	_		_	<u>SEC-46</u>	G
B2193: CHAIN OF BCM-ECM	×			_	<u>SEC-47</u>	
B2195: ANTI SCANNING	×	_		_	<u>SEC-48</u>	_
B2553: IGNITION RELAY		×	_	_	PCS-50	- H
B2555: STOP LAMP	_	×	_	_	<u>SEC-53</u>	_
B2556: PUSH-BTN IGN SW		×	×	_	<u>SEC-55</u>	-
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-57</u>	
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-58</u>	_
B2562: LOW VOLTAGE	_	×	_	_	BCS-41	J
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-59</u>	-
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-62</u>	- - K
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-64</u>	<u> </u>
B2604: PNP SW	×	×	×	_	<u>SEC-67</u>	-
B2605: PNP SW	×	×	×	_	<u>SEC-69</u>	- 
B2606: S/L RELAY*	×	×	×	_	<u>SEC-71</u>	_
B2607: S/L RELAY*	×	×	×	_	SEC-72	-
B2608: STARTER RELAY	×	×	×	_	<u>SEC-74</u>	- IV
B2609: S/L STATUS*	×	×	×	_	<u>SEC-76</u>	-
B260A: IGNITION RELAY	×	×	×	_	PCS-52	W
B260B: STEERING LOCK UNIT*	_	×	×	_	<u>SEC-80</u>	
B260C: STEERING LOCK UNIT*		×	×	_	<u>SEC-81</u>	-
B260D: STEERING LOCK UNIT*	_	×	×	_	<u>SEC-82</u>	0
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-83</u>	-
B2612: S/L STATUS*	×	×	×	_	<u>SEC-87</u>	- P
B2614: ACC RELAY CIRC		×	×	_	PCS-54	_ '
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-57	-
B2616: IGN RELAY CIRC	_	×	×	_	PCS-60	-
B2617: STARTER RELAY CIRC	×	×	×	_	<u>SEC-91</u>	-
B2618: BCM	×	×	×	_	PCS-63	-

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#### < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2619: BCM*	×	×	×	_	<u>SEC-93</u>
B261A: PUSH-BTN IGN SW	—	×	×	_	<u>SEC-94</u>
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	<u>SEC-97</u>
B2621: INSIDE ANTENNA		×		_	DLK-59
B2622: INSIDE ANTENNA		×		—	DLK-61
B2623: INSIDE ANTENNA	—	×		—	DLK-63
B26E1: ENG STATE NO RES	×	×	×	_	<u>SEC-84</u>
B26E9: S/L STATUS*	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-85</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	—	<u>SEC-86</u>
C1704: LOW PRESSURE FL	_	—		×	
C1705: LOW PRESSURE FR	_	—		×	WT-23
C1706: LOW PRESSURE RR	_	—		×	<u>VV1-23</u>
C1707: LOW PRESSURE RL	_	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	
C1709: [NO DATA] FR	_	—	—	×	<u>WT-25</u>
C1710: [NO DATA] RR	_	—	—	×	<u>VV1-25</u>
C1711: [NO DATA] RL	_	—	—	×	
C1716: [PRESSDATA ERR] FL	_	—	—	×	
C1717: [PRESSDATA ERR] FR	—	—	—	×	WT-28
C1718: [PRESSDATA ERR] RR	—	—	—	×	<u>vv1-20</u>
C1719: [PRESSDATA ERR] RL	_	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-30</u>
C1734: CONTROL UNIT		—	—	×	<u>WT-32</u>

\*: For models without steering lock unit, this DTC is not applied.

# THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >	
SYMPTOM DIAGNOSIS	٨
THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND	A
Description	
<ul> <li>The parking brake warning buzzer sounds continuously during vehicle travel though the parking brake is released.</li> <li>The parking brake warning buzzer does not sound at all even though driving the vehicle with the parking brake is applied.</li> </ul>	C
Diagnosis Procedure	D
1. CHECK PARKING BRAKE WARNING LAMP	E
<ol> <li>Start the engine.</li> <li>Check the operation of the brake warning lamp by operating the parking brake.</li> <li>Parking brake is applied : ON</li> </ol>	F
Parking brake is released : OFF Is the inspection result normal? YES >> Replace combination meter. NO >> GO TO 2. 2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT	G
Perform a check for the parking brake switch signal circuit. Refer to <u>MWI-66. "Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair harness or connector. <b>3.</b> CHECK PARKING BRAKE SWITCH UNIT	I
Perform a unit check for the parking brake switch. Refer to <u>MWI-66, "Component Inspection"</u> .	-
<u>Is the inspection result normal?</u> YES >> Replace combination meter. NO >> Replace parking brake switch. Refer to <u>PB-5, "Exploded View"</u> .	K
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#### THE LIGHT REMINDER WARNING DOES NOT SOUND

#### < SYMPTOM DIAGNOSIS >

## THE LIGHT REMINDER WARNING DOES NOT SOUND

#### Description

INFOID:000000006342822

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

**Diagnosis** Procedure

INFOID:000000006342823

1. CHECK COMBINATION SWITCH (LIGHTING SWITCH) OPERATION

Check that the headlamps operate normally by operating the combination switch (lighting switch).

Do they operate normally?

YES >> GO TO 2.

NO >> Refer to <u>EXL-193</u>, "Symptom Table" (xenon type) or <u>EXL-365</u>, "Symptom Table" (halogen type).

**2.**CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

Perform the check for the front door switch (driver side) signal circuit. Refer to <u>DLK-66, "Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

YES >> Replace BCM. Refer to <u>BCS-86, "Removal and Installation"</u>.

NO >> Repair or replace malfunctioning parts.

## THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND < SYMPTOM DIAGNOSIS >

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

SCOND	
Description INFOID:00000006342824	В
<ul> <li>Seat belt warning does not sound even though driver seat belt is not fastened.</li> <li>Seat belt warning sounds even though driver seat belt is fastened.</li> </ul>	
Diagnosis Procedure	С
1.CHECK SEAT BELT WARNING LAMP	_
<ol> <li>Turn ignition switch ON.</li> <li>Check the operation of the seat belt warning lamp in the combination meter.</li> </ol>	D
Seat belt fastened : OFF Seat belt not fastened : ON	Ε
Is the inspection result normal? YES >> GO TO 2. NO >> GO TO 4.	F
2. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL	G
Check the buckle switch input signal with the "Data Monitor". Refer to <u>WCS-24</u> , <u>"Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> Replace unified meter and A/C amp. NO >> GO TO 3.	Н
<b>3.</b> CHECK SEAT BELT BUCKLE SWITCH CIRCUIT	
Perform the check for the seat belt buckle switch circuit. Refer to <u>WCS-24, "Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u> YES >> Replace unified meter and A/C amp.	J
NO >> Repair harness or connector.	
4. CHECK SEAT BELT BUCKLE SWITCH UNIT	K
Perform a unit check for the seat belt buckle switch. Refer to <u>WCS-25, "Component Inspection"</u> . Is the inspection result normal?	
YES >> Replace combination meter. NO >> Replace seat belt buckle. Refer to <u>SB-8, "SEAT BELT BUCKLE : Removal and Installation"</u> .	L
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#### < PRECAUTION >

## PRECAUTION PRECAUTIONS

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

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

#### WARNING:

Always observe the following items for preventing accidental activation.

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

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

#### WARNING:

Always observe the following items for preventing accidental activation.

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