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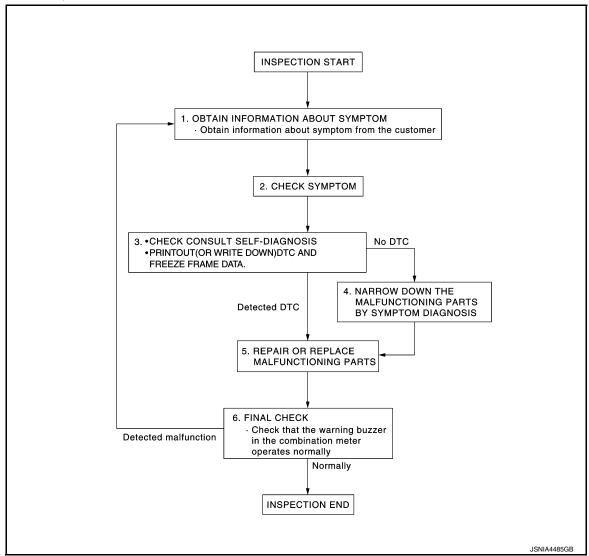
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# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

#### **OVERALL SEQUENCE**



#### **DETAILED FLOW**

# 1. OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

# 2. CHECK SYMPTOM

- · Check the symptom based on the information obtained from the customer.
- · Check that any other malfunctions are present.

>> GO TO 3.

# 3.check consult self-diagnosis results

Connect CONSULT and perform "Self Diagnostic Result". Refer to <u>MWI-117, "DTC Index"</u>.

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#### DIAGNOSIS AND REPAIR WORKFLOW

#### < BASIC INSPECTION >

- 2. When DTC is detected, follow the instructions below:
- Record DTC and Freeze Frame Data.

#### Are self-diagnosis results normal?

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

# 4. NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

# 5. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

NOTE:

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

>> GO TO 6.

#### 6. FINAL CHECK

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

#### Does it operate normally?

YES >> INSPECTION END

NO >> GO TO 1.

# SYSTEM DESCRIPTION

# WARNING CHIME SYSTEM WARNING CHIME SYSTEM

# WARNING CHIME SYSTEM: System Diagram

INFOID:0000000010576919 Parking brake switch Parking brak Combination switch (Lighting switch) Communication line (METER ← AMP. CAN communication line Unified meter and A/C amp. Combination meter Buzzer Door switch signal Front door switch Seat belt buckle switch signal Seat belt buckle switch (driver side)

# WARNING CHIME SYSTEM: System Description

INFOID:0000000010576920

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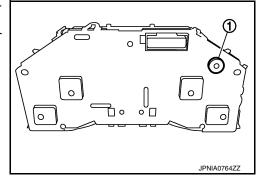
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#### **COMBINATION METER**

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



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

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

#### **BCM**

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

BCM warning function list

Warning functions	Signal name
Light reminder warning chime	Lighting switch position signal     Door switch signal
Seat belt warning chime	Seat belt buckle switch signal

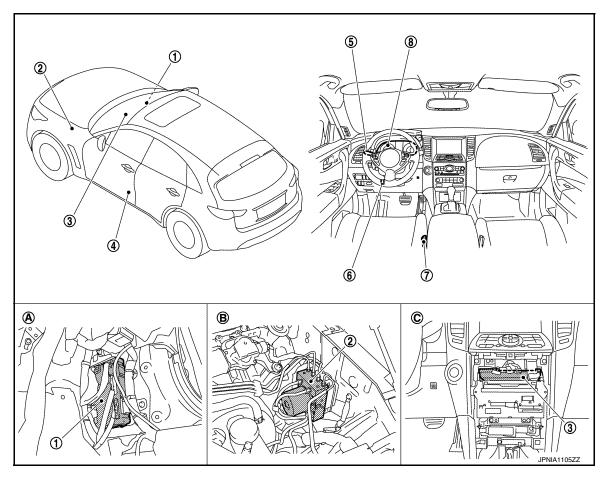
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# WARNING CHIME SYSTEM: Component Parts Location

INFOID:0000000010576921



- 1. BCM
- 4. Front door switch (driver side)
- 7. Seat belt buckle switch (driver side) 8.
- A. Dash side lower (passenger side)
- 2. ABS actuator and electric unit (control unit)
- 5. Combination switch (Lighting switch)
- 8. Combination meter
- B. Hoodledge cover (LH)
- Unified meter and A/C amp.
- 6. Parking brake switch
- C. Behind cluster lid C

# WARNING CHIME SYSTEM : Component Description

INFOID:0000000010576922

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 BCM with CAN communication line.</li> <li>Receives a buzzer output signal from BCM with CAN communication line and transmits it the combination meter by means of communication line.</li> </ul>			
BCM	Transmits signals provided by various units and switches to the unified meter and A/C amp. with CAN communication line.			
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to unified meter and A/C amp. with CAN communication line			
Seat belt buckle switch (driver side)	Transmits the seat belt buckle switch signal to the unified meter and A/C amp.			

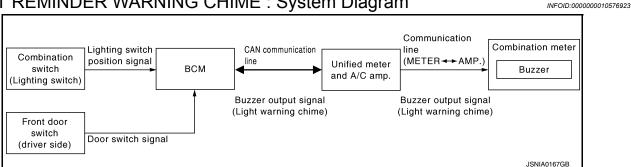
#### WARNING CHIME SYSTEM

#### < SYSTEM DESCRIPTION >

Unit	Description
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the door switch signal to BCM.
Parking brake switch	Transmits the parking brake switch signal to the combination meter.

#### LIGHT REMINDER WARNING CHIME

## LIGHT REMINDER WARNING CHIME: System Diagram



# LIGHT REMINDER WARNING CHIME: System Description

INFOID:0000000010576924

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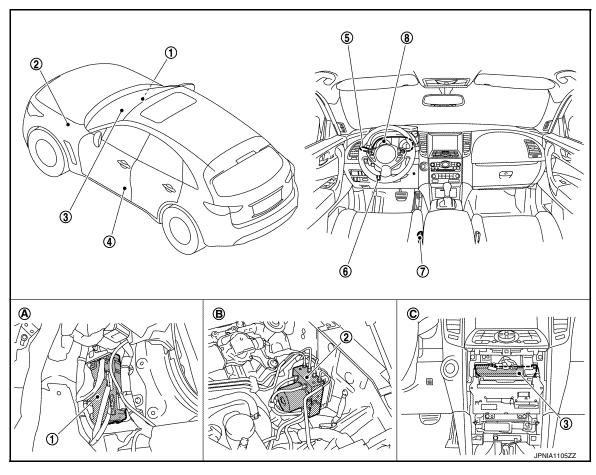
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# LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:0000000010576925



- 1. BCM
- 4. Front door switch (driver side)
- 7. Seat belt buckle switch (driver side) 8.
- A. Dash side lower (passenger side)
- 2. ABS actuator and electric unit (control unit)
- 5. Combination switch (Lighting switch)
- 8. Combination meter
- B. Hoodledge cover (LH)
- Unified meter and A/C amp.
- Parking brake switch
- C. Behind cluster lid C

# LIGHT REMINDER WARNING CHIME : Component Description

INFOID:0000000010576926

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

#### SEAT BELT WARNING CHIME

## **WARNING CHIME SYSTEM**

#### < SYSTEM DESCRIPTION >

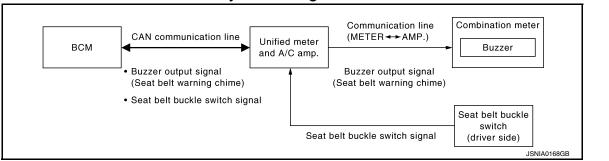
# SEAT BELT WARNING CHIME: System Diagram



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# SEAT BELT WARNING CHIME: System Description

INFOID:0000000010576928

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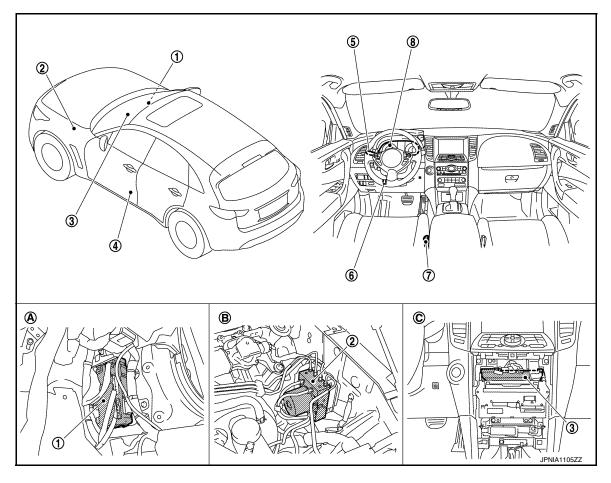
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# SEAT BELT WARNING CHIME: Component Parts Location

INFOID:0000000010576929



- 1. BCM
- 4. Front door switch (driver side)
- 7. Seat belt buckle switch (driver side) 8.
- A. Dash side lower (passenger side)
- 2. ABS actuator and electric unit (control unit)
- 5. Combination switch (Lighting switch)
- 8. Combination meter
- B. Hoodledge cover (LH)
- Unified meter and A/C amp.
- Parking brake switch
- C. Behind cluster lid C

# SEAT BELT WARNING CHIME : Component Description

INFOID:0000000010576930

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>			
ВСМ	Judges the seat belt warning condition from the seat belt buckle switch signal received from the u fied meter and A/C amp. and transmits a buzzer output signal to the unified meter and A/C amp. CAN communication line if necessary.			
Seat belt buckle switch (driver side)	Refer to WCS-24, "Description".			

#### PARKING BRAKE RELEASE WARNING CHIME

#### WARNING CHIME SYSTEM

#### < SYSTEM DESCRIPTION >

ABS actuator and

electric unit

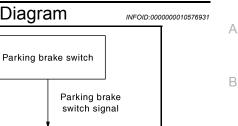
(control unit)

## PARKING BRAKE RELEASE WARNING CHIME: System Diagram

CAN communication

line

Vehicle speed signal





Unified meter

and A/C amp.

Communication line

(METER ↔ AMP.)
Vehicle speed

signal

Combination meter

Buzzer

INFOID:0000000010576932

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#### **DESCRIPTION**

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

#### WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

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

#### WARNING CANCEL CONDITIONS

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

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

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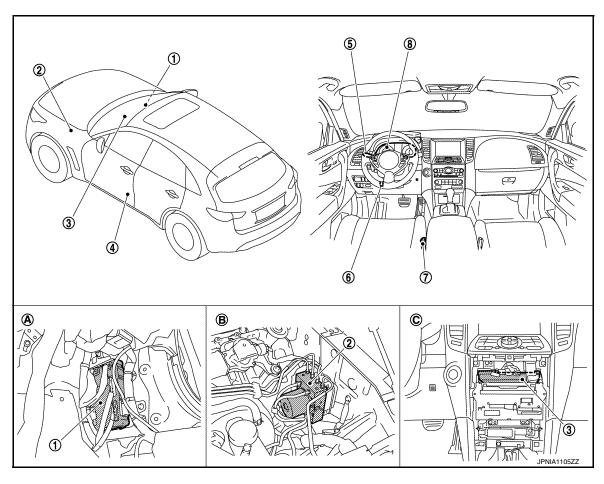
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# PARKING BRAKE RELEASE WARNING CHIME: Component Parts Location

INFOID:0000000010576933



- 1. **BCM**
- Front door switch (driver side)
- Seat belt buckle switch (driver side) 7.
- Dash side lower (passenger side)
- ABS actuator and electric unit (con- 3. trol unit)
- Combination switch (Lighting switch)
- Combination meter 8.
- Hoodledge cover (LH)

- Unified meter and A/C amp.
- Parking brake switch
- C. Behind cluster lid C

# PARKING BRAKE RELEASE WARNING CHIME: Component Description INFOID:000000010576934

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

#### < SYSTEM DESCRIPTION >

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

## CONSULT Function (METER/M&A)

INFOID:0000000011008598

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#### **CONSULT APPLICATION ITEMS**

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

System	Diagnosis mode	Description
	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.
	Ecu Identification	The unified meter and A/C amp. part number is displayed.

#### SELF DIAG RESULT

Refer to MWI-117, "DTC Index".

#### DATA MONITOR

#### NOTE:

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

Display Item List

X: Applicable

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.  NOTE: 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.  NOTE: 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [km/h]		Odometer signal value transmitted to other units with CAN communication line.
TACHO METER [rpm]	х	Value of the engine speed signal received from ECM with CAN communication line.  NOTE: 8191.875 is displayed when the malfunction signal is received.
FUEL METER [L]	Х	Fuel level indicated on combination meter.
W TEMP METER [°C] or [°F]	Х	Value of engine coolant temperature signal received from ECM with CAN communication line.  NOTE:  215 is displayed when the malfunction signal is input.
FUEL CAP W/L [On/Off]		Status of fuel filler cap warning display detected from fuel filler cap warning display signal received from ECM via CAN communication.
ABS W/L [On/Off]		Status of ABS warning lamp judged from ABS warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp judged from VDC OFF indicator lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.
SLIP IND [On/Off]		Status of VDC warning lamp judged from VDC warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.

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## < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
BRAKE W/L [On/Off]		Status of brake warning lamp judged from brake warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line.  NOTE:  Displays "Off" if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON
DOOR W/L [On/Off]		Status of door warning judged from door switch signal received from BCM with CAN communication line.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp judged from high beam request signal received from BCM with CAN communication line.
TURN IND [On/Off]		Status of turn indicator lamp judged from turn indicator signal received from BCM with CAN communication line.
FR FOG IND [On/Off]		Status of front fog indicator lamp judged from front fog light request signal received from BCM with CAN communication line.
RR FOG IND [Off]		This item is displayed, but cannot be monitored.
LIGHT IND [On/Off]		Status of tail lamp indicator lamp judged from position light request signal received from BCM with CAN communication line.
OIL W/L [On/Off]		Status of oil pressure warning lamp judged from oil pressure switch signal received from IPDM E/R with CAN communication line.
MIL [On/Off]		Status of malfunction indicator lamp judged from malfunctioning indicator lamp signal received from ECM with CAN communication line.
GLOW IND [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]		<ul> <li>Status of CRUISE indicator judged from ASCD status signal received from ECN with CAN communication line.</li> <li>Status of CRUISE indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.</li> </ul>
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 ser sor integrated unit with CAN communication line.</li> </ul>
CRUISE W/L [On/Off]		Status of CRUISE warning lamp judged from ICC warning lamp signal received from ICC sensor integrated unit with CAN communication line.
BA W/L [On/Off]		Status of IBA OFF indicator lamp judged from IBA OFF indicator signal received from 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 lamp 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 TPMS malfunction warning lamp signal received from BCM with CAN communication line.
KEY G/Y W/L [On/Off]		Status of key warning lamp (G/Y) judged from key warning signal received from BCM with CAN communication line.
AFS OFF IND [On/Off]		Status of AFS OFF indicator lamp judged from AFS OFF indicator lamp signal received from AFS control unit with CAN communication line.

# < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description	
4WAS/RAS W/L [On/Off]		This item is displayed, but cannot be monitored.	
DDS <sup>*</sup> 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 received from lane camera unit with CAN communication line.	
E-SUS IND [On/Off]		This item is displayed, but cannot be monitored.	
DCA IND [On/Off]		Status of DCA switch indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
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.	
ACC TARGET [On/Off]		Status of vehicle ahead detection indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
ACC DISTANCE [Off, SHOR, MID, LONG]		Status of set distance indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
ACC OWN VHL [On/Off]		Status of own vehicle indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
ACC SET SPEED		Status of set vehicle speed indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
ACC UNIT [On/Off]		Status of display unit judged from meter display signal received from ICC sensor integrated unit with CAN communication line.	
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.	
O/D OFF SW [Off]		This item is displayed, but cannot be monitored.	
AT S MODE SW [On/Off]		Status of snow mode switch.	
AT P MODE SW [Off]		This item is displayed, but cannot be monitored.	
M RANGE SW [On/Off]		Status of manual mode switch.	
NM RANGE SW [On/Off]		Status of non-manual mode switch.	
AT SFT UP SW [On/Off]		Status of A/T shift up switch.	
AT SFT DWN SW [On/Off]		Status of A/T shift down switch.	
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.	
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.	
COMP F/B SIG [On/Off]		A/C compressor activation condition that ECM judges according to the water temperature and the acceleration degree.	
4WD LOCK SW [Off]		This item is displayed, but cannot be monitored.	
PKB SW [On/Off]		Status of parking brake switch.	

## < SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description	
BUCKLE SW [On/Off]		Status of seat belt buckle switch.	
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.	
DISTANCE [km/h]		Value of possible driving distance calculated by unified meter and A/C amp.	
OUTSIDE TEMP [°C] or [°F]		Ambient air temperature value converted from ambient sensor signal received from ambient sensor.  NOTE:  This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.)	
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit with CAN communication line.	
BUZZER [On/Off]	Х	Buzzer status (in the combination meter) is judged with the buzzer output signal received from each unit with CAN communication line and the warning output condition of the combination meter.	

<sup>\*:</sup> DDS (hill descent control)

## **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

# **DIAGNOSIS SYSTEM (BCM)**

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000011008599

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#### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description	
Work Support	Changes the setting for each system function.	
Self Diagnostic Result	Displays the diagnosis results judged by BCM.	
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.	
Data Monitor	The BCM input/output signals are displayed.	
Active Test	The signals used to activate each device are forcibly supplied from BCM.	
Ecu Identification	The BCM part number is displayed.	
Configuration	<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.

×: Applicable item

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

#### NOTE:

#### FREEZE FRAME DATA (FFD)

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

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

## **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odometer	r value) of the moment a particular DTC is detected		
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK" <sup>*</sup> )		
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)		
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"		
	ACC>ON		While turning power supply position from "ACC" to "IGN"		
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)		
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)		
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)		
	ACC>OFF		While turning power supply position from "ACC" to "OFF"		
	OFF>LOCK	Power position status of the moment a particular DTC is detected*	While turning power supply position from "OFF" to "LOCK"*		
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"		
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"		
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode		
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode		
	LOCK		Power supply position is "LOCK"*		
	OFF		Power supply position is "OFF" (Ignition switch OFF)		
	ACC		Power supply position is "ACC" (Ignition switch ACC)		
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)		
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)		
	CRANKING		Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	<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>			

#### NOTE:

- \*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.
- · Closing door
- · Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

#### **BUZZER**

BUZZER: CONSULT Function (BCM - BUZZER)

INFOID:0000000010576937

**CONSULT APPLICATION ITEMS** 

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

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

#### **DATA MONITOR**

#### NOTE:

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

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

## **ACTIVE TEST**

Display item [Unit]	Description
IGN KEY WARN ALM	The key warning chime operation can be checked by operating the relevant function (On/Off).
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).
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

INFOID:0000000011008595

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	6
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.

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

# 3. CHECK GROUND CIRCUIT

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

Combination meter			Continuity
Connector	Terminal	Ground	Continuity
M53	5	Ground	Existed
	15	1	Existed

#### 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:0000000011008596

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.	
Battery	6	

#### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> GO TO 2.

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

## 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between unified meter and A/C amp. harness connector and ground.

	Te	rminals			
	(+)		()	Ignition switch position	Value (Approx.)
Unified meter A/C amp.	Terminal	Signal name	(-)		
	54	Battery power supply		OFF	Battery voltage
M67	41	ACC power supply	Ground	ACC	Battery voltage
	53	Ignition power supply		ON	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 3.

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

# 3. CHECK GROUND CIRCUIT

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

Unified met	er A/C amp.		Continuity
Connector	Terminal	Ground	Continuity
M67	55	Ground	Existed
IVIO7	71		Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

#### BCM (BODY CONTROL MODULE)

## BCM (BODY CONTROL MODULE): Diagnosis Procedure

# 1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Pottony nawar cumply	L
Battery power supply	10

#### Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

# 2.CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- Disconnect BCM connectors.
- Check voltage between BCM harness connector and ground.

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INFOID:0000000011008597

#### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

	Terminals		
(	+)	(-)	Voltage (Approx.)
В	CM		(Approx.)
Connector	Terminal	Ground	
M118	1	Giodila	Pottoni voltogo
M119	11		Battery voltage

#### Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M119	13		Existed

#### Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

#### **METER BUZZER CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

#### METER BUZZER CIRCUIT Α Description INFOID:0000000010576941 • The buzzer for warning chime system is installed in the combination meter. • The combination meter sounds the alarm buzzer based on the signals transmitted from various units. Component Function Check INFOID:0000000010576942 ${f 1}$ .CHECK OPERATION OF METER BUZZER Select "BUZZER" of "BCM" on CONSULT. D Perform "LIGHT WARN ALM" of "ACTIVE TEST". Does meter buzzer beep? YES >> INSPECTION END Е NO >> GO TO 2. 2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL Select the "Data Monitor" for the "METER/M&A" and check the "BUZZER" monitor value. F **BUZZER** Under the condition of buzzer input : On : Off Except above Is the inspection result normal? YES >> Replace combination meter. >> Replace BCM. Refer to BCS-93, "Removal and Installation". NO Diagnosis Procedure INFOID:0000000010576943 $oldsymbol{1}$ . CHECK POWER SUPPLY OF COMBINATION METER Check power supply of combination meter. Refer to MWI-58, "COMBINATION METER: Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. K NO >> Repair power supply circuit of combination meter. 2.CHECK POWER SUPPLY OF UNIFIED METER AND A/C AMP. Check power supply of unified meter and A/C amp. Refer to MWI-58, "COMBINATION METER: Diagnosis Procedure". 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 INFOID:000000010576944

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

# Component Function Check

INFOID:0000000010576945

# 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

INFOID:0000000010576946

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

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

	Terminals			
(	+)	(-)	Condition	Voltage
Unified meter	and A/C amp.		Condition	(Approx.)
Connector	Terminal	Ground		
M66	9	Giouna	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

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

Unified meter	and A/C amp.	Seat belt buckle s	switch (driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M66	9	B503	61	Existed

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3.CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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

#### SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

Seat belt buckle s	switch (driver side)		Continuity
Connector	Terminal	Ground	Continuity
B503	60		Existed

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Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

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INFOID:0000000010576947

# Component Inspection

# 1.CHECK SEAT BELT BUCKLE SWITCH UNIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the seat belt buckle switch connector.
- 3. Check continuity between terminals.

Connector	Terr	minal	Condition	Continuity
B503	61	60	When seat belt is fastened	Not existed
	01	00	When seat belt is unfastened	Existed

#### Is the inspection result normal?

YES >> INSPECTION END

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

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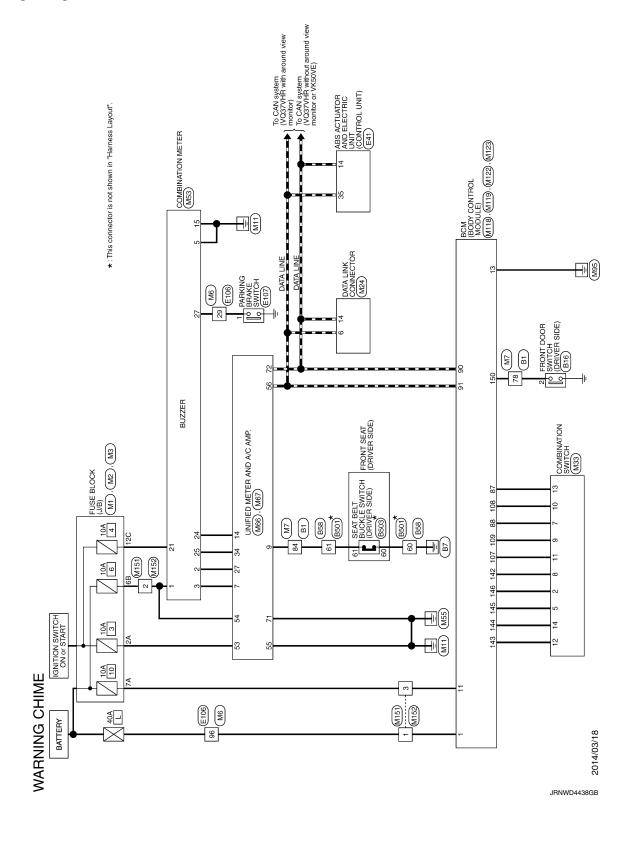
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# WARNING CHIME SYSTEM

Wiring Diagram - WARNING CHIME -

INFOID:0000000010576948



	57 P	Connector No. B16	Connector No. Boul
OWINE	58 L	Connector Name FRONT DOOR SWITCH (DRIVER SIDE)	Connector Name WIRE TO WIRE
TH80FW-CS16-TM4		 Connector Type A03FW	Connector Type NS10MW-CS
	+		•
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	63 64 64 63	S.	H.S.   7   6   1   61   55
	65 W	2	16 15 21 59 60 56
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	+	 Connector No B58	+
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	83 P	2	Connector No. B503
	┝		ı
1	85 R		Connector Name SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
	H	Terminal Color Of	Connector Type A03FW
	╀	No. Wire Signal Name [Specification]	1
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	+	. 85	
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WARNING CHIME	E41	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	Connector Type BAA42FB-AHZ4-LH		ı	(S)   18   18   18   18   18   18   18   1		1		Cincil Nama [Caration]	olginal ivanie [opecification]	GROUND	UBMR	UBVR	GROUND	DS FL	DP RL	UP RK	DP FR	DS FR	VAC			UST	BUS-L	DP FL	DS RL	ZN	DS RR	BLS	VDC OFF SW	CAN-H	BUS-H														
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## **WARNING CHIME SYSTEM**

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	or No. M6	or Name WIRE TO WIRE	Connector Type TH80MW-CS16-TM4			10 KI	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$ (6) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	सद्य प्राप्त प्राप्त व्या	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				_	Wire ognal wante jopeonication		, ,			SB - [With Auto aircon seat]					- 9	. M					٠			SHELD -	88						W - [With ICC]					R - [With ICC]		- IWith ICC			W - [Without ICC]	Y - [With ICC]	SHIELD -	GR			BG -	- M
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L	51	>		C + C - C - C - C - C - C - C - C - C -	11	97	INPUT 1			9
<u></u>	52	- 91	Connector Name	DATA LINA CONNECTOR	12	۵	OUTPUT 1	Connector IN	CONTRECTOR NAME   UNIFIED METER AND ACCAMP.	AME.
L	53 (	SHIELD -	Connector Type BD16FW	BD16FW	13	BR	INPUT 5	Connector Type	rpe TH40FW-NH	
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	65		4 B			-12		9	BG PADDLE SHIFTER UP SIGNAL	JP SIGNAL
	99		5 B	-		ᆀ	24 (27 (27 (27 (27 (27 (27 (27 (27 (27 (27	7	GR COMMUNICATION SIGNAL (AMP>METER)	. (AMP>METER)
	29		9 9					8	L VEHICLE SPEED SIGNAL (2-PULSE)	ML (2-PULSE)
	89	· ·	7 GR					6	SB SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE	GNAL (DRIVER SIDE)
L	69	9	ø		Terminal	erminal Color Of	9	10	Н	SIGNAL
L	20	>	11 SB		ž	Wire	Signal Name [Specification]	11	G NON-MANUAL MODE SIGNAL	DE SIGNAL
L	7	M	12 P		-	88	BATTERY POWER SUPPLY	14	BR COMMUNICATION SIGNAL (LCD->AMP.	AL (LCD->AMP.)
_	72		13 L		2	t	COMMUNICATION SIGNAL (METER->AMP.)	H	T	IGNAL
L	73	· ·	14 G		6	t	COMMINICATION SIGNAL (AMP ->METER)	23	Y AT SNOW SWITCH SIGNAL	HSIGNAI
L	74		Ë		· c	t	GROUND	25	V MANIJAI MODE SHIFT DOWN SIGNAL	DOWN SIGNAL
L	75		1		9	^	ALTERNATOR SIGNAL	26	G PADDLE SHIFTER DOWN SIGNAL	WN SIGNAL
L	9/	PO			7	<u>a</u>	AIR BAG SIGNAL	27	ŏ	(METER->AMP.)
L	11	SS	Connector No.	M33	10	c	SECURITY INDICATOR SIGNAL	28	t	AL (8-PULSE)
L	. 82	99			5		GROUND	8	t	TCH SIGNAL
L	2		Connector Name	COMBINATION SWITCH	9 4	t	METER CONTROL SIMILARION GROUND	33	V COMMINICATION SIGNAL (AMP)	AI (AMP.>I CD)
L	2 6	-	Connector Type	THIGHWINH	2 5	+	ISNITION SIGNAL	38	T	TROI SIGNAI
1	3 5	2 0	odi locali i	٦.		Ť.	COMMUNICATION SIGNAL ACCESSARY	3	1	
1	6 6		€		24	Ť	COMMINICATION SIGNAL (AMP SIGNAL)			
1	3 8		事	7	3 8	t	VEHICLE OF THE STORY OF THE STORY		1407	
	3 3	- 3	Si T	1	70	۲ >	DADIZINO DOSIZI CARTOLI SICINAL	Connector IV	T	
	4 5	90		123 456	/7	+	PARKING BRAKE SWILCH SIGNAL	Connector Name	ame UNIFIED METER AND A/C AMP.	AMP.
	£	M :		77	58	+	BRAKE FLUID LEVEL SWITCH SIGNAL			
	8	\		/ 8 9 10 11 12 13 14	67	†	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	Connector	Connector Type TH3ZFW-NH	
	87	- B			30	9	PASSENGER SEAT BELT WARNING SIGNAL	q		
	88	9			31	_	WASHER LEVEL SWITCH SIGNAL	厚		
	88	BG -	Terminal Color Of	Of Signal Nama (Specification)	34	В	ILLUMINATION CONTROL SIGNAL	Ę	<u>K</u>	
	91	В.	No. Wire		36	97	SELECT SWITCH SIGNAL	į	14 AN AN AN AN AN AN	52 54 55 56
L_	92	BG -	- -	FR WASHER (-)	37	SB	ENTER SWITCH SIGNAL		Т	00 50 50 60
L	93	BR	2 SB	OUTPUT 4	38	_	TRIP A/B RESET SWITCH SIGNAL		2/ 28/ 29/ 10/ 10/ 102   102	7/ 1/ 0/ 89
<u></u>	94	>	3 BG	FR WASHER (+)	39	۵	ILLUMINATION CONTROL SWITCH SIGNAL (-)			
L	96	BG	┝	NÐI	40	┢	ILLUMINATION CONTROL SWITCH SIGNAL (+)			
_	26	. ·	2 F	OUTPUT 3		1		Terminal Color Of		100
_	86		9	GROUND				ON	Wire Signal Name [Specification]	спсатопу
L	66	BG		INPUT 3				41	V ACC POWER S	UPPLY
J	1		8 BG	OUTPUT 5				42	Y FUEL LEVEL SENSOR SIGNAL	OR SIGNAL
			╁	INPUT 2				43	R INTAKE SENSOR SIGNAL	SIGNAL

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ratification for for formation of the fo		)	SB	150 GR DRIVER DOOR SW	151 G REAR WINDOW DEFOGGER RELAY CONT			Connector No. M151	Connector Name WIRE TO WIRE	בסווויסכוס וימווים היווירב וכן אווירב	Connector Type M03FW-LC	¢		Ī	<u> </u>	0	7 6			e e			+	ν Υ		Connector No. M152	Connector Name   WIRE TO WIRE		Connector Type M03MW-LC			- T	6	6 7			Signal Name [Specification]		- c	+	3 R						
ŀ	83 GP KEVIESSENTEV PECEIVED SIGNAL	8	>	90 P CAN-L	91 L CAN-H	92 LG KEY SLOT ILL	93 V ON IND	95 BG ACC RELAY CONT	GR AVT SHIFT SELE	œ	100 G PASSENGER DOOR REQUEST SW	$\dashv$	BG	BR KEYLESS	PO	ď	8	110 G HAZARD SW		-	Connector No. M123	Connector Name BCM (BODY CONTROL MODULE)	_	Connector Type THRUPG-INH			CHECK SHIP SHIP SHIP SHIP SHIP SHIP SHIP SHIP	(2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4			_	No. Wire Signal Name [Specimentation]	112 GR RAIN SENSOR SERIAL LINK	۵	£	۵	SB DR DO	121 BR KEY SLOT SW	NOOVO	2 ;	BG POWER	GR	Ф	Y SENSO	Y (	9 G	142 BG COMBLSW OUTPUT 5
12		Connector Name BCM (BODY CONTROL MODULE)	Connector Type NS16FW-CS				[4] 5] 7 [ 18] 9 TU	11 13 15 17 18 19				a E	No. Wire	4 P INT ROOM LAMP PWR SUPPLY (BAT SAVE)	5 V PASSENGER DOOR UNLOCK OUTPUT	>	>	G	BR REAR DO	~	m :	>- }	≥ 0	18 BG IURN SIGNAL LH (FRUNI)	28		Connector No. M122	Connector Name BCM (BODY CONTROL MODULE)	Т	1			64 GA 18 BR 1 8 BR 1 8 BR 18 B	25 556 556 695 695 107 (20 Jp.)) TO 1804 KW, D.)				Signal Name [Specification]	+	9 1	BR PA	>	LG DRI	>- :	¥ 5	¥5 ;	81 W NATS ANT AMP.
針	44 LG IN-VEHICLE SENSOR SIGNAL A5 D AMBIENT SENSOR SIGNAL	. BG	V GAS SENS	g	54 BG BATTERY POWER SUPPLY	8	٦	57 W BRAKE FLUID LEVEL SWITCH SIGNAL	8	59 GR INTAKE SENSOR GROUND	Н	BR	SB SUN	Я О	BG	_	R EACH DOOR	В	72 P CAN-L		١	Connector No. M118	Connector Name BCM (BODY CONTROL MODULE)	Moseb I	Connector Type Imushb-LC			1 3	721			lal (	Ognal ranna	≥	> ;	3 BG POWER WINDOW POWER SUPPLY (RAP)											

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#### **COMBINATION METER**

< ECU DIAGNOSIS INFORMATION >

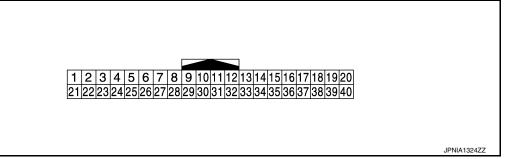
# **ECU DIAGNOSIS INFORMATION**

# **COMBINATION METER**

Reference Value

VALUES ON THE DIAGNOSIS TOOL Refer to MWI-96, "Reference Value".

**TERMINAL LAYOUT** 



#### PHYSICAL VALUES

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
1 (BG)	Ground	Battery power supply	Input	Ignition s	switch OFF	Battery voltage
2 (LG)	Ground	Communication signal (METER→ AMP.)	Output	Ignition s	switch ON	(V) 6 4 2 0 ■ 200 µs JSNIA0027GB
3 (GR)	Ground	Communication signal (AMP.→ METER)	Input	Ignition s	switch ON	(V) 6 4 2 0 ■ 200 µs JSNIA0027GB
5 (B)	Ground	Ground	_	Ignition s	switch ON	0 V
6	Cround	Alternator aignal	Innut	Ignition switch	Charge warning lamp ON	0 V
(W)	Ground	Alternator signal	Input	ON	Charge warning lamp OFF	Battery voltage
7	Craund	Air han aignal	lanut	Ignition switch	Air bag warning lamp ON	4 V
(P)	Ground	Air bag signal	Input	ON	Air bag warning lamp OFF	0 V
10	Cround	Conveity indicator aignal	lanut	Ignition	Security warning lamp ON	0 V
(G)	Ground	Security indicator signal	Input	switch OFF	Security warning lamp OFF	12 V
15 (B)	Ground	Ground	_	Ignition s	switch ON	0 V

## **COMBINATION METER**

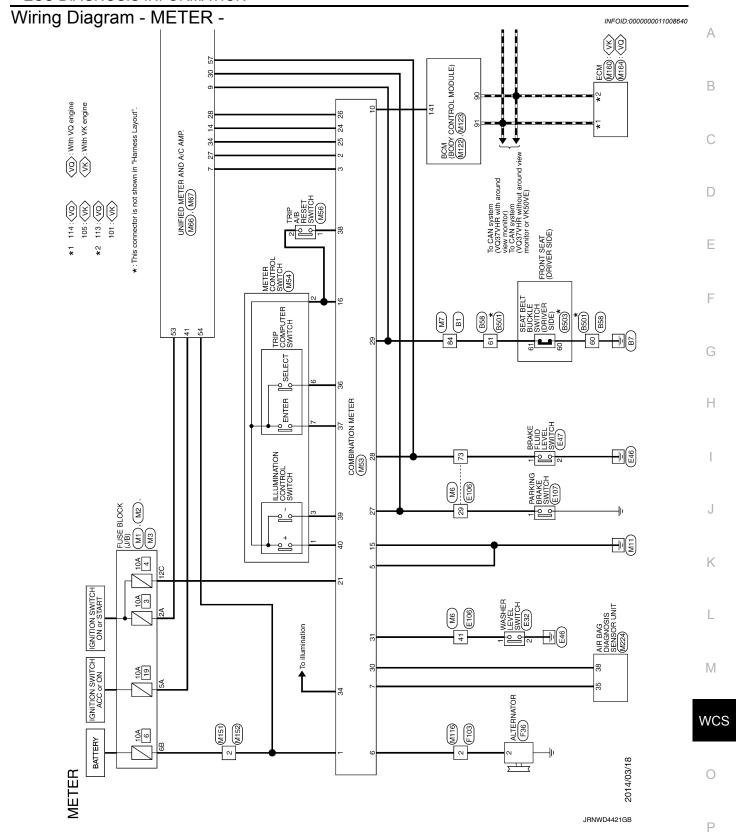
## < ECU DIAGNOSIS INFORMATION >

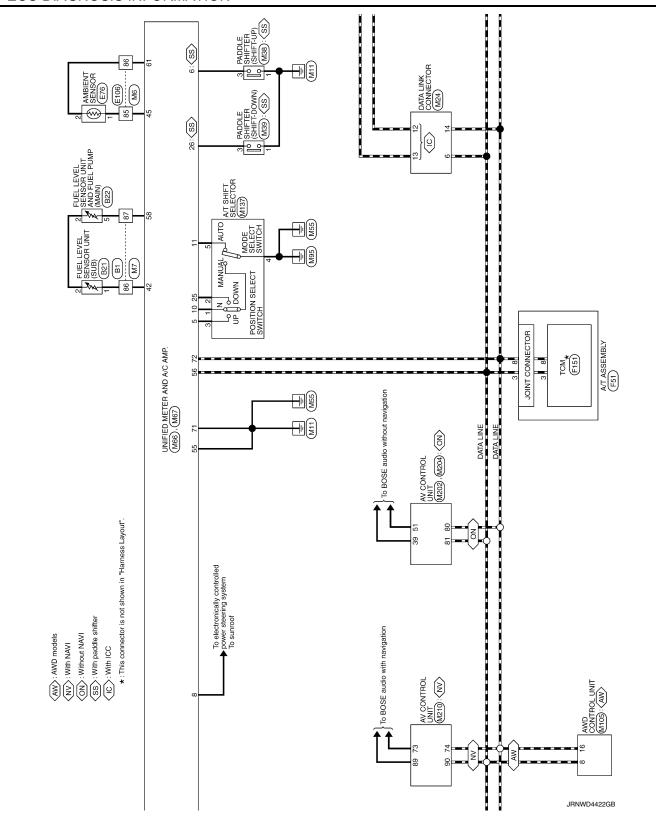
	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
16 (B)	Ground	Meter control switch ground		Ignition	switch ON	0 V
21 (R)	Ground	Ignition signal	Input	Ignition s	switch ON	Battery voltage
24 (BR)	Ground	Communication signal (LCD→ AMP.)	Output	Ignition s	switch ON	(V) 15 10 5 0  ■ 400 µs  JSNIA0028GB
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition s	switch ON	(V) 6 4 2 0 200 µs JSNIA0027GB
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).
					Parking brake ON	0 V
27 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake OFF	(V) 8 4 0 10 ms JSNIA0007GB
28	_	Brake fluid level switch sig-		Ignition	Brake fluid level is normal.	5 V
(W)	Ground	nal	Input	switch ON	The brake fluid level is low- er than the low level	0 V
29	Ground	Seat belt buckle switch sig-	Input	Ignition switch	When driver seat belt is fastened	12 V
(SB)	Ground	nal (driver side)	трис	ON	When driver seat belt is un- fastened	0 V

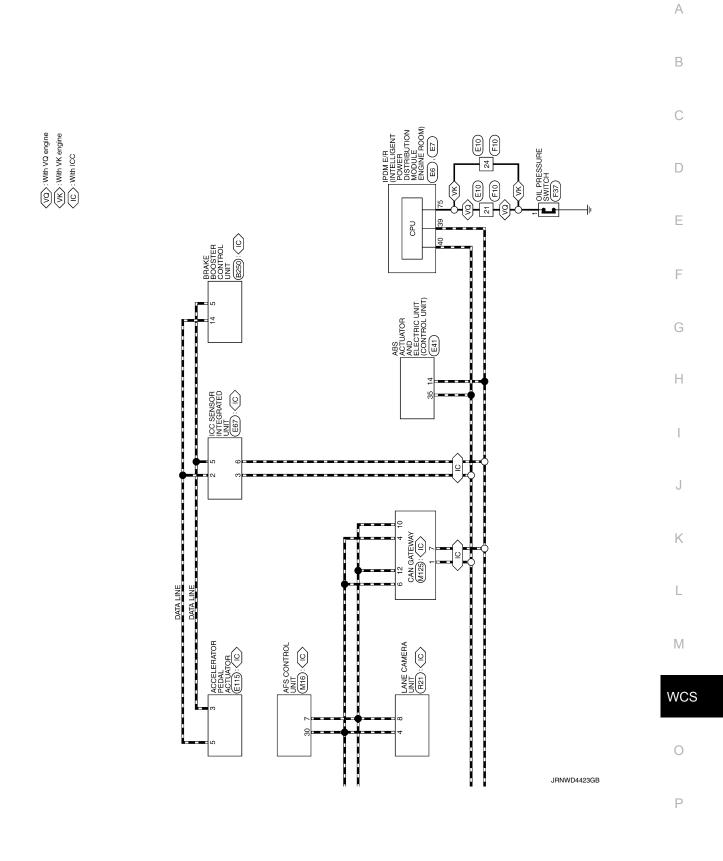
# **COMBINATION METER**

## < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
30	Ground	Passenger seat belt warn-	Input	Ignition switch	When getting in the passenger seat     When passenger seat belt is fastened	12 V
(G)	Ciduid	ing signal	Прис	ON	<ul><li>When getting in the passenger seat</li><li>When passenger seat belt is unfastened</li></ul>	0 V
31	0	Mark and and an italy air and	1	Ignition	Washer level switch ON	0 V
(L)	Ground	Washer level switch signal	Input	switch ON	Washer level switch OFF	5 V
34 (B)	Ground	Illumination control signal	Output	Ignition switch ON	Lighting switch ON, then operate the illumination control switch.	NOTE: When brightness level is midway  (V) 10 0 2 ms  JSNIA0010GB
36 (LG)	16 (B)	Select switch signal	Input	Ignition switch ON	When is pressed Other than the above	0 V 5 V
37 (SB)	16 (B)	Enter switch signal	Input	Ignition switch ON	When is pressed Other than the above	0 V 5 V
38 (L)	16 (B)	Trip A/B reset switch signal	Input	Ignition switch	When trip A/B reset switch is pressed	0 V
(L)	(B)			ON	Other than the above	5 V
39 (P)	16 (B)	Illumination control switch signal (–)	Input	Ignition switch ON	When 📆 switch is pressed	0 V
				ON	Other than the above	5 V
40 (BG)	16 (B)	Illumination control switch signal (+)	Input	Ignition switch	When 🐉 + switch is pressed	0 V
` '	, ,	· · · · · · · · · · · · · · · · · · ·		ON	Other than the above	5 V







METER   Convector Name   Mile Towner   Mil	Connector No.   B21   Connector No.   B58	DE 1	FUEL LEVEL SENSOR ON I (SUB)	Connector Type   E02FGY-RS   Connector Type   NS10FW-CS		Ŕ					Terminal Color Of Signal Name [Specification] No. Wire Signal Name [Specification]	· ·	Н	+	Commenter No. 1000	55	FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN)	7				(1 2 3 4 5) Connector No. B250	Connector Name BRAKE BOOSTER CONTROL UNIT	Connector Type TK24FW	nal Color Of Signal Name [Specification]		- [Wit	Н	2 W 19/0/2/ 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2	G - [With VK engine]	G/Y - [With EVAP and VQ engine] Terminal C	No. Wire	+	5 P ITSCOMM:	- SS		8 R BRAKE PRESSURE SEN PWR
### TO WIRE 55									,									•										•									
WIRE TO WRE THEOFW.CS16-TM  Signal Name		+	Ħ	+	+	Н	+	+	H	Н	+	╀	Н	+	+	t	H	+	+	+	H		+	╁	H	+	H	Н	+	+	Н	+	1				
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- [With VK engine]	- [With VQ engine]	- [Witth VO engine]	- IWith VK engine	- IWith VO engine]	- IWith VK engine			- [vviiii vv erigine]	- [אוווו את פולוווו	- [With VQ engine]	- [With VK engine]					- IWith VK engine	- [With VQ engine]	- [With VQ engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]	,		- [With VK engine]	- [With VQ engine]	- [With VO engine]		- [With VQ engine]	- [With VK engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]	- [vvitn vQ engine]	- [with VR engine]	- [with va engine]		,	- IMith VO engine	- Mith VK ancinal	Family VIV. Children	- IWith VK engine	- [With VQ engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]	
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5 2	= =	- 2	1 2	5	5 5	2 7	;	D #	2	16	16	17	18	19	20	2	21	22	22	23	23	24	54	25	56	27	/2 5	9 80	2 8	30	30	31	31	32	8	22	8 8	ŧ %	98	32	27	o o	8	39	39	40	40	
H	× 40	+	2 >	. હ	╁	. W	+	. 59 0/	+	>	Ь	>	77 B - [With VK engine]	_	M	┨		Connector No. E10	١		Connector Type SAA36MB-RS8-SHZ8		1 2 9 10 11 12	3 13 14 15 16	44	9	7 8 55083788344114243	BOTOTOSS BATTABARATA	Terminal Color Of		1 G - [With VQ engine]	Q.	_ !	SHELD	¥ 0	3 G - [With VK engine]	Na Gillio		ś	2 88	íα	2 (4		8 SHIELD - [With VK engine]	^		10 G - [With VQ engine]	
Terminal Color Of Signal Name [Specification]	$^{+}$	59 LV1	H	┨		Connector No ER	Τ	Connector Name Engine ROOM)	Т	Connector Type TH08FW-NH				5. H	42 41 40 39	A6 A5 AA A3	Ct tt Ct Ot		Terminal Color Of Sizzal Name (Specification)	No. Wire Signal Name [Specification]	39 P	+	4	+	43 SB -	+		1		Connector No. E7	PDM E/R (WTELLIGENT POWER DISTRIBUTION MODULE		Connector Type TH20FW-CS12-M4	Ą	AND I	S   Relation   Relatio	4849 5152				Terminal Color Of	No Wire Signal Name [Specification]	t	49 SB - [With VQ engine]	*	9	52 W -	
G BRAKE PR	m 0	21 GR CHIME SIGNAL	a a	24 BG BRAKE PRESSURE SENGIN	2		-	Coffilector No. Boot	Connector Name WIRE TO WIRE		Connector Type NS10MW-CS				7 6 6	ü	00 00 00 12 01 101			)al	No. Wire Ognari varie [Specification]		+	+	- 9 91	+		Ŧ	+	╀			Connector No. B503	Connector Name SEAT BELT BUCKLE SWITCH (DRIVER SIDE)	TATE OF A STATE OF A S	Connector Type Aust-W		K ANTO	is F		2	ng	65	1				

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Α:	ije]	Connector No.	1	E41	Connector No.	NO.		5	Connector No.	E/6	
41 Y - [With VK engine] 42   G - [With VQ engine]	ine]	Connector Name		ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	Connector Name		BRAKE FLUID LEVEL SWITCH	Conn	Connector Name	AMBIENT SENSOR	
SHELD	inel	Connector Type	Т	BAA42FB-AHZ4-LH	Connector Type	Т	YV02FGY	Š	Connector Type	BS02FB	
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BR	ine]	na	Color Of	Signal Name [Specification]	nal	Color Of	Signal Name [Specification]	Terminal	$\circ$	Sinnal Name (Specification)	
œ	ine]	No.	Wire	diametric lobosition in a line	ž	Wire	digital reality of population	ġ Ž	^	orginal remit [obcompanion]	
49 G - [With VQ engine]	ine]	-	В	GROUND	-	ď	-		O	-	
1	ine]	2	g	UBMR	2	œ		2	۵		
В	ine]	ဇ	۳	UBVR							
50 G - [With VK engine]	ine]	4	В	GROUND				[			
В	ine]	2	<b>&gt;</b>	DS FL	Connector No.	No. E67	7	Conn	Connector No.	E106	
51 SB - [With VQ engine]	ine]	9	BG	DP RL	Complet Name		TIMI GETAGOENI GOSINES COL	000	Complete Momo	DOWN OF BOWN	
52 R -		7	BR	DP RR			SENSON INTEGRALED ONLY	3	orton ivaline		
		6	В	DP FR	Connector Type		RS06FB-PR	Conn	Connector Type	TH80FW-CS16-TM4	
		10	Μ	DS FR	1						
Connector No. E32		12	_	VAC				E	_		
		14	۵.	CAN-L				Ė,	ľ	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Connector Ivame WASHER LEVEL SWILLON		15	SHIELD	AGND	Ź		(1213)	7	Ąį E	C   C   C   C   C   C   C   C   C   C	
Connector Type Z02FBR		19	Ь	UST							
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F		56	Я	DP.FL			)				
[E		27	GR	DS RL							
		28	ŋ	ZN	nal	Color Of	Signal Name [Specification]	Terminal	0	Signal Name (Specification)	
		58	9	DS RR	ġ	Wire		ġ	_		
)		99	SB	BLS	-	œ	IGNITION		+		
		31	œ	VDC OFF SW	2	٦	ITS COMM-H	2	+		
		35	_	CAN-H	က	_	CAN-H	e	SB		
Signal Nama	Charification	45	В	BUS-H	4	ш	GROUND	4	PG	-	
No. Wire	lication				2	Ь	ITS COMM-L	5	>		
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2 B/W -									9		
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		Connector No.	F103 WIRE TO WIRE	Connector No. Connector Name	F151 e TCM
SHELD   With W. engine	Connector Type E01FGY-RS-AR	Connector Type TK36FW-kS10	TK36FW-NS10  EUSEGEGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	Connector Type	SP10FG
G - (With VK ergine) SHELD - (With VK ergine) B - (With VK ergine) W - (With VK ergine) I C - (With VK ergine)	Terminal Color Of Signal Name (Specification) No. Wire 1 Y	Terminal Color Of No. Wire 2 G 3 W	Signal Name [Specification]	Terminal Color Ol No. Wire 1 W 2 B	Signal Name [Specification]  IGNITION POWER SUPPLY  BATTERY POWER SUPPL (MEMORY BADGLUP)
	Connector No. F51 Connector Name Art ASSEMBLY Connector Type RK10FG-DGY	$\frac{1}{1}$	With We argued  With We argued		IGNITION BACK-U
52 R	13   2   1   1   1   1   1   1   1   1   1	10 L 19 O 20 Y 27 L 28 B 29 LG 31 R	· (With VK engine)	Connector No. Connector Name Connector Type	M1 FUSE BLOCK (J/B) NSGREW-M2
H.S.	C   C   C   C   C   C   C   C   C   C			H.S.	3A2A1A 8A 7A6A5A4A
No.   Wire   Signal Name [Specification]   No.   Wire   Signal Name [Specification]   2   G   Signal Name [Specification]   3   V   Signal NA engine   4   P   C [With VQ engine   4   W   C [With VQ engine   5   W   C [With V	8 P STARTER ELAY (With VO engine) 9 GR STARTER RELAY (With VO engine) 10 B GROUND	45 Y A 46 V		Terminal Color Of No. Wire 14 BG 24 G 34 L 44 R 55 V 66 Y 77 R	Or Signal Name [Specification]

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ŀ	+	. M 96	W AND WAS A SECOND OF THE PARTY	>				Connector No. M7	т	Connector Name WIRE TO WIRE		Coppositor Type TH80MM/-0246-TMM	i ype i nooini			 		2 7 1 100 200 200 200 200 200 200 200 200 2	3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	38 35 Sept 2 Sep				. 0	<u>ء</u>	No. Wire	1 G - IMith Auto aircon seatl	The second secon	- -	2 B -	3 W	- В		> (	+	10 W	11 BG	ł		+	14 R	*	ć	SI IIICE	+	18 P	19 G	- S	F		$\dashv$	24 P	H		+	+	28 W	H		+	43 SB -	╀
	33 ∀	+	20 80	ł	+	+	42 W -	43 R	F	+		W W	4	47 L	c	4	_	51	+	51 SB .	52 Y -	H		NO.	+	59 SB -	┝	3 2	> 1	4	63 R			20 3	· ^ 69	S	Г	22		+	74 SB -	>	. >	+	, Y 8/	80 BG -	81 L	L	: >	+	4	B	86 BR	╀	+	+	. 9 68	┞	- 4	+	92 R	00
Ī	Connector No. M6	Connector Name WIRE TO WIRE	Connector Type TH80MW-CS16-TM4		1	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		32 33 33 33 33 33 33 33 33 33 33 33 33 3	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	12 3 to 5187 Mg	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c				Torminal Color Of		No. Wire		+	. B8 .	3 LG - [Without Auto aircon seat]	3 SB . [With Auto airon seat]	3 -	2] ;	$\dashv$		ď	)	M =	+	10 BR	11 B	╀	5 2 3	4		15 SHIFLD	08	ì ·	+			ľ	5	20 W - [WITH ICC]	BR	æ	L		۷ (		24 L - [With ICC]	۵	ł		1	26 SHIELD -	28 GR	$^{+}$	29 V		W
METER	Connector No. M2	Connector Name FUSE BLOCK (J/B)	Connector Type NS10FW-CS	1	₫.		100 av		ç		11				L	Sinnal Name [Snecification]	No. Wire	L		4	4B G -	L	+	4	4	88 R	₽	4			Connector No. M3		Connector Name FUSE BLOCK (J/B)		Connector Type NS12FW-CS	ſ		至			C8 C7	00 00				Terminal Color Of Signal Name (Specification)	No. Wire Ognariani (Specification)	100	╀	+	12C R -	_	⊢	╀	4							

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Commonty Type   THATPANAN   Commonty Type   Comm	METER 45 B 51 V 52 LG		Som	Connector No.	M16 AFS CONTROL UNIT	Cornector No. Cornector Name	<b>9</b> 2	M24 DATA LINK CONNECTOR	Connector No. Connector Name	M39  PADDLE SHIFTER (SHIFT-DOWN)
Color Of   Signal Name   Specification    Wire   Signal Name   Specification    Wire   Wire				ector Type	1	Connector H.S.	Type BI	11 12 13 14   3	Connector Type	
1			Tem	inal Color O Wire		Terminal O	Solor Of Wire	Signal Name [Specification]	Terminal Color No. Win	
V			- 2	$\mathbb{H}$	IGN PSG-R	6 4	ට ම		$^{\rm H}$	
Corrector No.   Corrector No			4 9		PSV-R HSV-R	9	а <u>-</u>			
B			_	Н	CAN-L	7	GR	-	Connector No.	M53
SMR-1(-)   12   P			∞ ο		HSG-R PS-P	8 5	თ წ		Connector Nam	e COMBINATION METER
Samural (+)		_	F	H	SMR-1 (-)	12	۵	-	Connector Type	TH40FW-NH
SS			Ψ	-	SMR-2 (-)	13	_		þ	
SS   AMIDS.R			# 12		SML-1 (+) SML-2 (+)	16	۵ g		厚	
PSV41   Cornector No. M38	$\  \ $		¥	Н	AMDS-R				Š	103 567
SS			75	+	PSV-L					21 24 25 26 27 28 29 39 31 34 36 37 38 39 40
Signature   PADDLE SHFTER (SHFT-UP)   Paddew			Ž Č	+	GROUND	Connector	Т	88		
BG			2 22	+	HS-R	Connector		DDLE SHIFTER (SHIFT-UP)		
CANH			56	H	PS-L	Connector	П	4FW	Terminal Color	
No.   No.			36	+	CAN-H	q.			$\top$	
R   SML-2 (-)   R   SML-2 (-)   R   SML-2 (-)   SML-			õ	+	SMR-1 (+)	季		E	+	t
BG   SML-1 (-)   C   C   C   C   C   C   C   C   C			3	╁	SML-2 (-)	H.S.		\ \ \ \	t	t
BG   AMDS.L		1	38	H	SML-1 (-)			1	L	GROUND
Signal Name (Specification) 16 8 15 8 8 16 17 8 8 17 8 18 18 17 8 18 18 18 18 18 18 18 18 18 18 18 18 1			4	H	AMDS-L			9	H	ALTERNATOR SIGNAL
Signal Name (Specification) 16 B 16 B 17 B 17 B 17 B 17 B 17 B 17 B		-							7 P	
Signal Name (Specification) 15 B 16 B 21 R R 24 P 24 P 25 P R 26 P R 26 P R 26 P R 27 P							ŀ		$\dashv$	SECURITY INDICATOR SIGNAL
We   We   We   We   We   We   We   We						Terminal (	Solor Of	Signal Name [Specification]	+	+
BG 25 P P P P P P P P P P P P P P P P P P						+	wire		+	$^{+}$
22 Y V S S S S S S S S S S S S S S S S S S		1				- 0	n 6		+	$\top$
· α > ≥ 8 8 0 -						)	3		+	+
> > 8 8 0 -									╀	VEHICLE SPEED SIGNAL (8-PULSE)
≥ 88 © -										PARKING BRAKE SWITCH SIGNAL
8 o -		•							$\vdash$	H
-									+	$^{+}$
									+	t

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Connector Name WIRE TO WIRE  Connector Type TK36MW-NS10	। ১ ১ ৬ চ । বা		Color Of Signal Name [Specification]		B - [With VK engine]			B - [With VK engine]	R - [With VQ engine]				8 2		- PI	M M		BG .		0	· .									
Connector Name	優 H.S.		Terminal C No.	3 6	4 ,	4 5	2	٥ ۲	6	0 6	20 13	27	88 8	31	34	g %	37	38	24 44	45	46									
2 - 8 >	Signature   Sign	B 8 -	62 SB SUNLOAD SENSOR GROUND 62 D LOANMONE GROWN	BG	69 L A/C LAN SIGNAL	ı m			Connector No. M105	Connector Name AWD CONTROL UNIT	Connector Type TH16FW-NH	1	<b></b>	1193	0, 1, 0,	01 01 01 11 01 6		Terminal Color Of Signal Name [Specification]	$^{+}$			GR .	8 L CAN-H 9 BG AWD SOL BAT		a 1	13 LG FLUID TEMP (+)		-		
Connector Name UNIFIED METER AND A/C AMP.  Connector Type TH40FW-NH	H.S.	23 25 25 25 25 25 25 25 25 25 25 25 25 25	Terminal Color Of Signal Name (Specification) No. Wire Signal Name (Specification)	+	7 GR COMMUNICATION SIGNAL (AMP.:>METER)	9 SB SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	8	11 G NON-MANUAL MODE SIGNAL 14 BR COMMUNICATION SIGNAL (LCD->AMP.)	٦	23 Y AT SNOW SWITCH SIGNAL	t	o 91	28 R VEHICLE SPEED SIGNAL (8-PULSE)	> >	38 L BLOWER MOTOR CONTROL SIGNAL		Connector No. M67	Connector Name UNIFIED METER AND A/C AMP.	Connector Type TH32FW-NH				41 42 43 44 45 46 47	[7/11/16/16q]		10 -1-0 -1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	No. Wire Signal Name [Specification]	>	> (	43 K INTAKE SENSOR SIGNAL
+++	ILLUMINATION CONTROL SWITCH SIGNAL (+) ILLUMINATION CONTROL SWITCH SIGNAL (+)	Connector Name METER CONTROL SWITCH Connector Type TH12MW-NH		1 2 3 4 5 6	† D			Of Signal Name [Specification]				,				M56	Connector Name TRIP A/B RESET SWITCH	TH04MW-NH		E		1 2			Of Signal Name [Specification]	,				
	39 P 40 BG	Connector Type	E C	HS.			_	Terminal Color Of No. Wire	1 BG	H	ω 4 Τ Ω	Н	9 LG	3		Connector No.	onnector Name	Connector Type	€		Ś				al	No.	2 B			

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Connector No. M151	Connector Name WIRE TO WIRE	Connector Type M03FW-LC	H.S.		Terminal Color Of   Signal Name [Specification]   No.   Wire	- w t	2 ×	1		Connector No. M152	Connector Name WIRE TO WIRE	Connector Type M03MW-LC	ą	厚	S		2 3	3		Terminal Color Of Signal Name [Specification]		Н	3 8											
Connector No. M125	Connector Name CAN GATEWAY	Connector Type TH12FW-NH	H.S. 1 3 4 5 6 6 1 1 3 4 5 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7111101161 171	Terminal Color Of Signal Name [Specification] No. Wire		3 GR BATTERY	1 8	ı	۵.	10 P CANL		12 P CAN-L			Connector No. MT3/	Connector Name A/T SHIFT SELECTOR	Connector Type TH12FW-NH	4		1.S.	၇ † :	[7]8]9]10[11]		lal	No. Wire Organia rante [Specimental)		3 5	4 8 B	5 6	. 58 %	H	H	11 R -
Connector No. M123	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FG-NH			Terminal Color Of Signal Name [Specification] No. Wire	GR RAIN	113 P OPLICAL SENSOR	á a	SB DRD	BR	123 W IGNE/B 124 LG PASSENGER DOOR SW	BG PC	GR	m	Y SENSOF	Υ (	141 G SECURITY INDICATOR OUTPUT	2 a	9	146 SB COMBISW OUTPUT 3	GR	151 G REAR WINDOW DEFOGGER RELAY CONT												
METER Connector No. M122	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FB-NH	1.5 H		Terminal Color Of Signal Name [Specification] No. Wire	PASSENGE	75 BR PASSENGER DOOR ANT+	LG DRIVER	>	# 5	81 W NATS ANT AMP.	P	GR KEYLES	æ	NOO > 4	30 P	97 LG KEYSIOTIII	2 >	BG	96 GR ATSHIFT SELECTOR POWER SUPPLY	G PASSENGER	SB	102 BG BLOWER FAN MOTOR RELAY CONT 103 BR KEYLESS ENTRY RECEIVER POWER SLIPPLY	9	ď	109 Y COMBI SW INPUT 2	110 G HAZARD SW							

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0	Wire AVCOMM (1)			SB AV COMM (H)	T NO		SHELD SHELD	// IJL		+	R VEHICLE SPEED SIGNAL (8-PULSE)	+		G IGNITION SIGNAL		W AUX AIDO ILL				or No. M210	Connector Name AV CONTBOLLINIT		Connector Type TH32FW-NH				65 67 68	78 18 18 18 1 8 1 8 1 8 1 8 1 8 1 8 1 8		30 1-0	No Wire Signal Name [Specification]	V PARKING BRAKE SIGNAL	B COMPOSITE IMAGE SIGNAL GND	Ш	SHIELD MICROPHONE SHIELD		COMM		LG AV COMM (L)			G IGNITION SIGNAL	DG KEVERSE SIGNAL	+	R MICROPHONE SIGNAL	┨			
Terminal	9 8	77	78	62 0	9 2	5	28	8 6	ò	8 8	85	S :	85	32	98	102	10.0	2		Connector No.	Connect		Connect	q	事	H.S.				Ė	2	65	29	89	71	72	73	4	75	9/	79	8 2	6	85	87				
or No. M202	or Name AV CONTROL UNIT	Connector Type TH24FW-NH		<u> </u>	01 11 01 00 00 00	36 37 38 38 40 41 42 43 44 45 46 47	48 49 50 51 52			-	Color Of Signal Name [Specification]	1	SIGNAL	SIGN		DE DOB APEA (XS) SIGNAL	-	1	RGB	W RGB (G:GREEN) SIGNAL		ŏ	SB COMPOSITE IMAGE SIGNAL	Y INVERTER VCC	W NVEKIEK GND		SB SHELD	SHIELD SHIELD		- 1	Т	or Name AV CONTROL UNIT	or Type TH32FW-NH	1			76 77 78 79 80 81 82 86 87 88	0,1											
Connector No.	Connector Name	Connector	4	厚	SH						erminal	2 :	36	37	88	8 6	T	T	43	44	45	46	47	48	64	3 2	52	25			Connector	Connector Name	Connector Type	4	F	N E													
Connector No. M164	Connector Name ECM	Connector Type RH24FGY-RZ8-R-LH-Z		Qy4y	-	00 (0) 00 00 00 00 00 00 00 00 00 00 00 00 0	494 447 442 400	101 101 101 101 101 101			<u>8</u>	wire	R ACCELERATOR PED/	98 P ACCELERATOR PEDAL POSITION SENSOR 2 [Without NAVI]	> 0	99 G SENSOR POWER SUPPLY [WILLINAVI]	100 W SENSOR GROUND	SB ASCD	LG EW	103 G SENSOR POWER SUPPLY [Without NAVI]	L SENSOR POWER SUPPL	BR	104 GR SENSOR GROUND [Without NAVI]	_ ;	106 W FUEL LANK LEMPERALURE SENSOR	3 >	. 0	R ENGINES	$\dashv$	W SBRORGROUNDIWHALEVAP CONTROL SYSTEMPRESSIFE SBRORG	113 P CAN COMMINICATION LINE	GR C	LG EVAP CANIST	۵.	В	В	+	H.	m	128 B ECM GROUND									
M160	ECM	RH24FGY-RZ8-R-LH-Z		128 129 139 138 139 138 139 139	173 110 115 111	00 UV 00 UV 00 00	400 000	111111111111111111111111111111111111111			Signal Name [Specification]		ENGINE SPEED SIGNAL OUTPUT	SENSOR POWER SUPPLY	SENSOR POWER SUPPLY	ASCRICE STEEDING SMITCH	ACCEL EPATOR BEDAL BOSITION SENSOR 1	CAN COMMUNICATION LINE	IGNITON SWITCH	ACCELERATOR PEDAL POSITION SENSOR 2	STOP LAMP SWITCH	SENSOR GROUND	FUEL PUMP CONTROL MODULE (FPCM) CHECK	DATA LINK CONNECTOR	TDANSMISSION DANGE SMITCH	ASCD/ICC BRAKE SWITCH	POWER SUPPLY FOR ECM (BACK-UP)	SENSOR GROUND	FUEL TANK TEMPERATURE SENSOR	POWER SUPPLY FOR ECM	ELIEI DI MP CONTROI MODILI E JERCAN	ECM GROUND					•	•	•										
고 교 교	Connector Name	Connector Type			co.	1					Solor C	wire	× (	ტ .	، اــ	r 8	3 0	: -	-	۵	۵	>	<u>و</u>	GR G	¥ (	. H	~	Μ	^	g,	n a	۵۵ م																	
Connector No.	Connec	Connec	4	厚	SH						lerminal No	9	97	66	90	5 5	102	105	106	108	110	11	112	114	115	117	192	119	120	121	125	128																	

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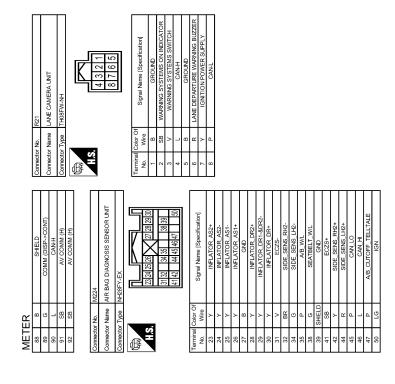
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## Fail-Safe

#### FAIL-SAFE

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

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

### < ECU DIAGNOSIS INFORMATION >

	Function	Specifications
Speedometer		
Tachometer		Poset to zero by suppording communication
Fuel gauge		Reset to zero by suspending communication.
Engine coolant temperatur	e gauge	
Illumination control		When suspending communication, change to nighttime mode.
Information display		The display turns off by suspending communication.
Buzzer		The buzzer turns off by suspending communication.
	ABS warning lamp	
	VDC OFF 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 lamp	Oil pressure warning lamp	
	A/T CHECK warning lamp	
	VDC warning lamp	
	AWD warning lamp	The lamp turns off by suspending communication.
	Low tire pressure warning lamp	
	Key warning lamp	
	AFS OFF indicator lamp	
	Lane departure warning lamp	
	LDP ON indicator lamp	
	Master warning lamp	

DTC Index

Refer to MWI-117, "DTC Index".

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### < ECU DIAGNOSIS INFORMATION >

## UNIFIED METER AND A/C AMP.

Reference Value

#### VALUES ON THE DIAGNOSIS TOOL

#### NOTE:

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

CONSULT MONITOR ITEM

Monitor Item		Condition	Value/Status
SPEED METER [km/h] or [mph]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [km/h] or [mph]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received
ODO OUTPUT [km/h]	Ignition switch ON	_	Equivalent to odometer reading in combination meter
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading NOTE: 8191.875 is displayed when the malfunction signal is received
FUEL METER [L]	Ignition switch ON	_	Values according to fuel level
W TEMP METER [°C] or [°F]	Ignition switch ON	_	Values according to engine coolant temperature  NOTE: 215 is displayed when the malfunction signal is input
FUEL CAP W/L	Ignition switch	Fuel filler cap warning display ON	On
TOLL CAP W/L	ON	Fuel filler cap warning display OFF	Off
ABS W/L	Ignition switch	ABS warning lamp ON	On
ABO WIL	ON	ABS warning lamp OFF	Off
VDC/TCS IND	Ignition switch	VDC OFF indicator lamp ON	On
VDO/103 IND	ON	VDC OFF indicator lamp OFF	Off
SLIP IND	Ignition switch	VDC warning lamp ON	On
OLII IIVD	ON	VDC warning lamp OFF	Off
BRAKE W/L	Ignition switch	Brake warning lamp ON	On
DIVINE WIE	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
TH BEAW IND	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 indicator lamp ON	On
	ON	Front fog indicator lamp OFF	Off
RR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off

### < ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status	^
LIGHT IND	Ignition switch	Tail lamp indicator lamp ON	On	A
LIGHT IND	ON	Tail lamp indicator lamp OFF	Off	_
OIL W/L	Ignition switch	Oil pressure warning lamp ON	On	В
OIL W/L	ON	Oil pressure warning lamp OFF	Off	_
MIL	Ignition switch	Malfunction warning lamp ON	On	_
IVIIL	ON	Malfunction warning lamp OFF	Off	С
GLOW IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	D
C-ENG2 W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	E
CRUISE IND	Ignition switch	CRUISE indicator displayed	On	_
CROISE IND	ON	CRUISE indicator not displayed	Off	-
SET IND	Ignition switch	SET indicator displayed ON	On	F
SET IND	ON	SET indicator not displayed OFF	Off	_
CDIJISE W/J	Ignition switch	CRUISE warning lamp ON	On	G
CRUISE W/L	ON	CRUISE warning lamp OFF	Off	_
D A \A//	Ignition switch	IBA OFF indicator lamp ON	On	=
BA W/L	ŎN	IBA OFF indicator lamp OFF	Off	Н
ATO/T ANAT VA//	Ignition switch	A/T check warning lamp ON	On	_
ATC/T-AMT W/L	ON	A/T check warning lamp OFF	Off	-
ANAID NAIII	Ignition switch	AWD warning lamp ON	On	- I
4WD W/L	ON	AWD warning lamp OFF	Off	_
4WD LOCK IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	J
	Ignition switch	Low-fuel warning displayed	On	K
FUEL W/L	ON	Low-fuel warning not displayed	Off	_
MACHED M//	Ignition switch	Washer warning displayed	On	_
WASHER W/L	ON	Washer warning not displayed	Off	L
AID DDEC W/I	Ignition switch	Low tire pressure lamp ON	On	_
AIR PRES W/L	ON	Low tire pressure lamp OFF	Off	M
VEV 0.07 M/I	Ignition switch	Key warning lamp ON	On	_ 171
KEY G/Y W/L	ON	Key warning lamp OFF	Off	
A EO OEE IND	Ignition switch	AFS OFF indicator lamp ON	On	WCS
AFS OFF IND	ON	AFS OFF indicator lamp OFF	Off	_
4WAS/RAS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	0
DDS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	Р
LANE MAN	Ignition switch	Lane departure warning lamp ON	On	_
LANE W/L	ON	Lane departure warning lamp OFF	Off	_
I DD IND	Ignition switch	LDP ON indicator lamp ON	On	_
LDP IND	ON	LDP ON indicator lamp OFF	Off	_

### < ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status
E-SUS IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
DCA IND	Ignition switch	DCA switch indicator displayed	On
DOA IND	ON	DCA switch indicator not displayed	Off
	Ignition switch ON	Engine start information display	B&P I
	Ignition switch ACC	Engine start information display	B&P N
	Ignition switch LOCK	Key ID warning display	ID NG
	Ignition switch LOCK	Steering lock information display	ROTAT
LCD	Ignition switch LOCK	P position warning display	SFT P
LOD	Ignition switch LOCK	Intelligent Key insert information display	INSRT
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT
	Ignition switch ON	Take away warning display	NO KY
	Ignition switch LOCK	Key warning display	OUTKY
	Ignition switch ON	ACC warning display	LK WN
	Ignition awitch	Vehicle ahead detection indicator displayed	On
ACC TARGET	Ignition switch ON	Vehicle ahead detection indicator not displayed	Off
		When following distance set to "LONG"	Long
ACC DISTANCE	Ignition switch	When following distance set to "MIDDLE"	Middle
ACC DISTANCE	ON	When following distance set to "SHORT"	Short
		Set distance indicator not displayed	Off
ACC OWN VHL	Ignition switch	Own vehicle indicator displayed	On
AGO OVIN VIIL	ON	Own vehicle indicator not displayed	Off
ACC SET SPEED	Ignition switch	Set vehicle speed indicator not displayed	Off
AUU ULI UFEED	ON	Set vehicle speed indicator displayed	Indicates the set vehicle speed
ACC LINIT	Ignition switch	Set vehicle speed indicator unit display ON	On
ACC UNIT	ON	Set vehicle speed indicator unit display OFF	Off

### < ECU DIAGNOSIS INFORMATION >

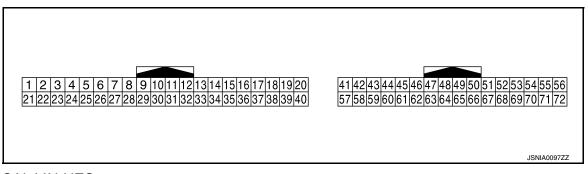
Monitor Item		Condition	Value/Status	
		Shift position indicator P display	Р	-
		Shift position indicator R display	R	=
		Shift position indicator N display	N	=
		Shift position indicator D display	D	=
		Shift position indicator DS display	L	-
OLUET IND	Ignition switch	Shift position indicator M1 display	M1	-
SHIFT IND	ŎN	Shift position indicator M2 display	M2	-
		Shift position indicator M3 display	M3	-
		Shift position indicator M4 display	M4	-
		Shift position indicator M5 display	M5	=
		Shift position indicator M6 display	M6	-
		Shift position indicator M7 display	M7	=
O/D OFF SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	-
AT C MODE OW	Ignition switch	Snow mode switch pressed	On	-
AT S MODE SW	ŎN	Snow mode switch not pressed	Off	=
AT P MODE SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	_
M RANGE SW	Ignition switch	Selector lever manual mode position	On	=
W RANGE SW	ON	Other than the above	Off	=
NIM DANCE CM	Ignition switch	Selector lever manual mode position	Off	=
NM RANGE SW	ON	Other than the above	On	=
AT SFT UP SW	Ignition switch	Selector lever + position	On	-
AT SET UP SW	ON	Other than the above	Off	=
AT SFT DWN SW	Ignition switch	Selector lever – position	On	-
AI SEI DWN SW	ON	Other than the above	Off	-
ST SET LID SW	Ignition switch	Paddle shifter switch up operation	On	-
ST SFT UP SW	ON	Other than the above	Off	-
ST SFT DWN SW	Ignition switch	Paddle shifter switch down operation	On	=
OT OF L DAMIN OAN	ON	Other than the above	Off	=
COMP E/P SIC	Ignition switch	A/C compressor activation condition	On	-
COMP F/B SIG	ON	A/C compressor deactivation condition	Off	
4WD LOCK SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	V
DICE CIVI	Ignition switch	Parking brake switch ON	On	=
PKB SW	ON	Parking brake switch OFF	Off	-
DIJOK E C	Ignition switch	Seat belt not fastened	On	=
BUCKLE SW	ON	Seat belt fastened	Off	-
DDAKE OH C'''	Ignition switch	Brake fluid level switch ON	On	-
BRAKE OIL SW	ON	Brake fluid level switch OFF	Off	=
DISTANCE [km/h]	Ignition switch ON	_	Possible driving distance calculated by unified meter and A/C amp.	-

**WCS-53 Revision: 2015 February** 2015 QX70

#### < ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	_	Equivalent to ambient temperature  NOTE:  This may not match the indicated value on the information display.
FUEL LOW SIG	Ignition switch	Low-fuel warning signal output	On
FUEL LOW SIG	ON	Low-fuel warning signal not output	Off
BUZZER	Ignition switch	Buzzer ON	On
BUZZER	ON	Buzzer OFF	Off

#### **TERMINAL LAYOUT**



#### PHYSICAL VALUES

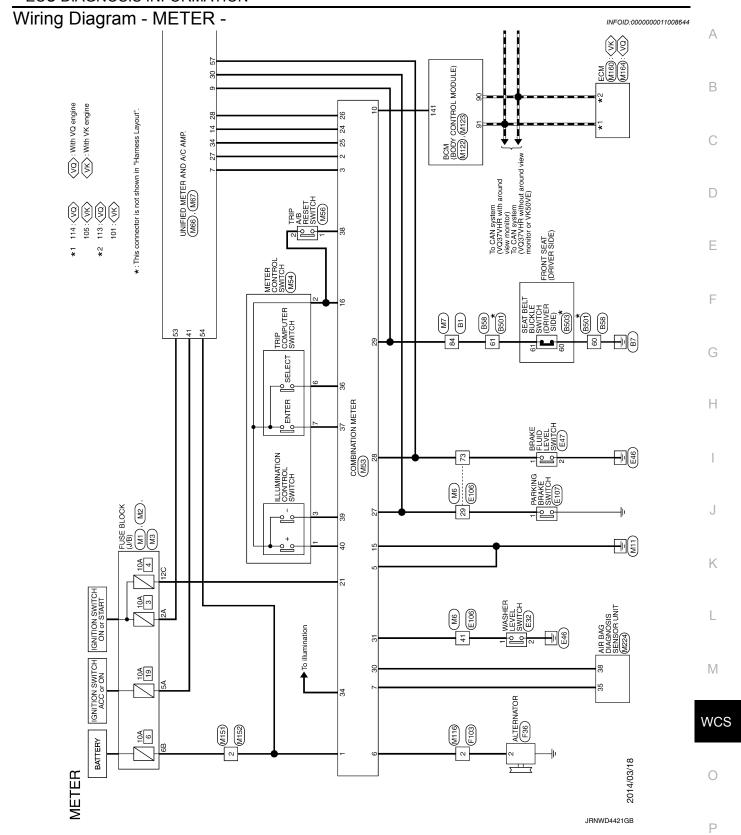
	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
5	01	Manual mode shift up sig-	1	Ignition	Selector lever UP operation	0 V
(L)	Ground	nal	Input	switch ON	Other than the above	12 V
6	0	Daddla skiften og einnel	1	Ignition	Paddle shifter up operation	0 V
(BG)	Ground	Paddle shifter up signal	Input	switch ON	Other than the above	12 V
7 (GR)	Ground	Communication signal (AMP. → METER)	Output	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB
8 (L)	Ground	Vehicle speed signal (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).
9	_	Seat belt buckle switch sig-		Ignition	When seat belt is fastened	12 V
(SB)	Ground	nal (driver side)	Input	switch ON	When seat belt is not fastened	0 V

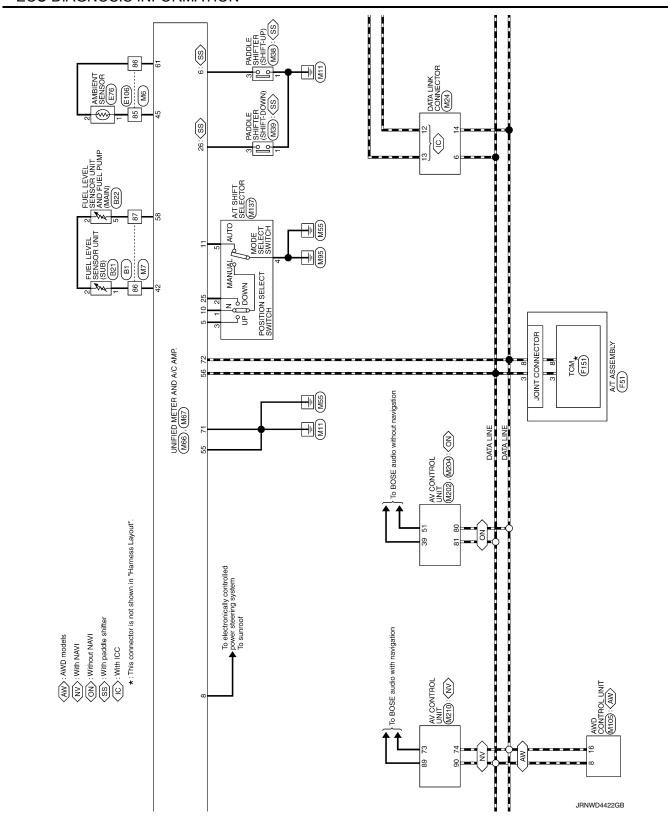
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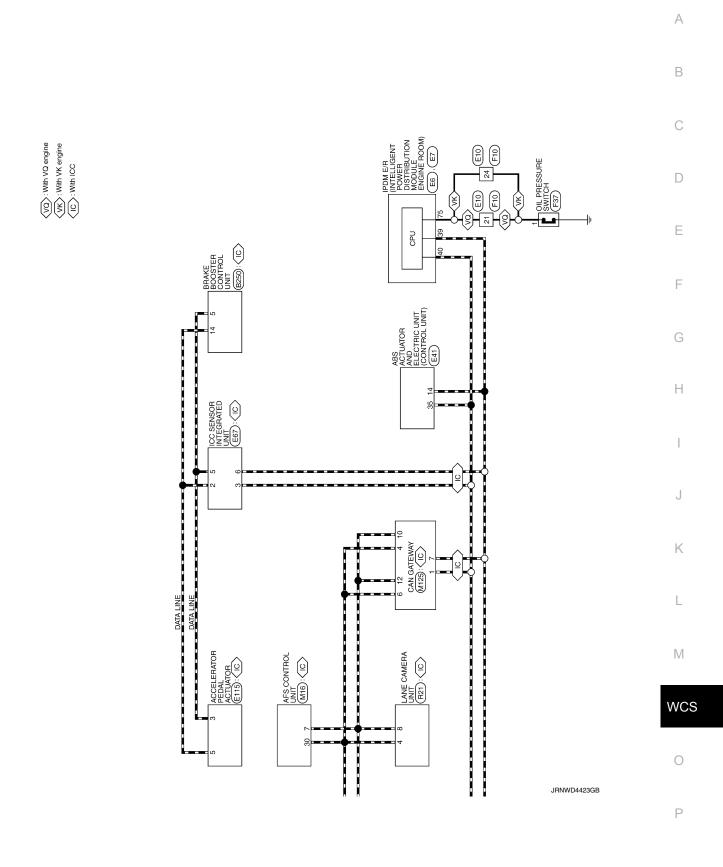
	inal No. e color)	Description			Condition	Value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
10	Ground	Manual mode signal	Input	Ignition switch	Selector lever DS position	0 V	
(W)	Ground	Manual mode signal	Input	ON	Other than the above	12 V	
11	0	Nice received and almost	la a d	Ignition	Selector lever DS position	12 V	
(G)	Ground	Non-manual mode signal	Input	switch ON	Other than the above	0 V	
14 (BR)	Ground	Communication signal (LCD → AMP.)	Input	Ignition switch ON		(V) 15 10 5 0 4400 µs JSNIA0028GB	
25	Ground	Manual mode shift down	Input	Ignition switch	Selector lever down operation	0 V	
(V)		signal	•	ON	Other than the above	12 V	
26	Ground	Paddle shifter down signal	Input	Ignition switch	Paddle shifter down operation	0 V	
(G)			•	ON	Other than the above	12 V	
27 (LG)	Ground	Communication signal (METER → AMP.)	Input	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB	
28		Vehicle speed signal		Ignition	Speedometer operated	NOTE: The maximum voltage varies depending on the specification (destination unit).	
(R)	Ground	(8-pulse)	Output	switch ON	[When vehicle speed is approx. 40 km/h (25 MPH)]	0 20 ms JSNIA0012GB	
					Parking brake ON	0 V	١
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake OFF	(V) 8 4 0 10 ms	

### < ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
34 (Y)	Ground	Communication signal (AMP. → LCD)	Output	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB
41 (V)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage
42 (Y)	Ground	Fuel level sensor signal	Input	Ignition switch ON	_	(V) 5 4 3 2 1 0 E 1/4 1/2 3/4 F SKIB8867E
45 (P)	Ground	Ambient sensor signal	Input	_	_	(V) 4 3 2 1 0 -10 0 10 20 30 40 [°C] (14) (32) (50) (68) (86) (104) [°F]  JSNIA0014GB
53 (G)	Ground	Ignition power supply	Input	Ignition switch ON	_	Battery voltage
54 (BG)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
55 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
56 (L)	Ground	CAN-H	_	_	_	_
57 (W)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal.  The brake fluid level is lower than the low level	5 V 0 V
58 (B)	Ground	Fuel level sensor ground	_	Ignition switch ON	_	0 V
61 (BR)	Ground	Ambient sensor ground	_	Ignition switch ON	_	0 V
71 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
72 (P)	Ground	CAN-L	_	_	_	_







	Connector No. B58	Connector Name WIRE TO WIRE	Connector Type NS10FW-CS	•	F5   F1   F1   F1   F1   F1   F1   F1		01   01   17   60   00   00			Terminal Color Of Signal Name [Specification] No. Wire	· ^ 9	Н	+	+	+	55 G -	2 2	╁	61 SB -		-	Connector No. B250	Connector Name BRAKE BOOSTER CONTROL UNIT	Connector Type TK24FW	-		H.S. [1 2]    5 6   8	10 12 14 15 17		[15] [15] [15] [15] [15] [15] [15] [15]	Terminal Color Of	No. Wire Signal Name [Specification]	1 W BATTERY	2 W BATTERY	6 SB RELEASE SW PWR	R BR4	9	7	14 L ITS COMM-H
	Connector No. B21	Connector Name FUEL LEVEL SENSOR UNIT (SUB)	Connector Type E02FGY-RS						-	Terminal Color Of   Signal Name [Specification]   No.   Wire	1 γ	2 W -			Connector No. B22	Connector Name FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN)	Connector Type F05FGY-RS		T C		113	(C1+1C171)			nal (	No. Wire	- IWi	_		3 B - [Without EVAP and VQ engine]	- Wi	œ	5 B						
ŀ	57 P -	58 SHELD	П	61 P .	H	64 BG -	+	Á	+	69 G	Н	H	4	+	+	76 LG -	78 GB	╁	- T 08	81 P .	+	+	25 48 88 88 88 88 88 88 88 88 88 88 88 88	ŀ	87 B -	88 G	t	Н	93 BR -	V 99	+	┢	- M 66						
-																																							_

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- [With VK engine] - [With VQ engine]	- [With VK engine]	- IWith VQ engine]	- [With VK engine]	[Mith VO oppoint]	DAGE VICE COLUMN	- [with vs engine]		- [With VK engine]	- [With VQ engine]	- IWith VQ engine1	DAGH VAC consises	- [with weigher]						- [With VK engine]	- [With VQ engine]	- [With VQ engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]			- [With VK engine]	- [With VO engine]	[Mith Mc angine]	- Mith VO engine		- IWith VO engine	- Mith W angine	- IWith VK engine]	- IWith VO engine	- IWith VK engine]	- IWith VO engine]	- IMith WK andinal	- [With VO engine]	2				- [with vQ engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]	- [With VQ engine]	- [With VK engine]	- [With VO engine]	- [With VK engine]
≥ ∝	*	: W	8	-	, ,	٤ ٩	2	BG	BR	^	/ν/		۵	*	///		BR	SB	>	9	W	ď	>	9	>-	97	97	Ű	GR	6	<u></u>		-	, M	: 0	8	-	>	. 5	3	: 5	3 0	2 1110	STILLE	OHIELD :	>	٦	SHIELD	Ь	W	œ	SHIELD
2 =	11	12	12	ç	2 5	2 ;	4	15	12	16	9	2	17	18	ç	2	50	21	21	22	22	23	23	24	54	25	56	27	27	ac ac	3 %	000	8	8 %	3 8	33	8	33	8	8	34	5 8	S 8	8 5	3/	37	38	38	39	39	40	40
53 W	. BR	56 BG - [With VK engine]	>			- 3	+	70 BG .	74 G -	75 Y 2	ŀ	1	76 V - [With VQ engine]	6	-		80 W			Connector No. E10	Connector Name   WIRE TO WIRE		Connector Type SAA36MB-RS8-SHZ8			13 14 15 1	5.	17116 1920(2) 1223 1923 38 20 20 20 20 20 20 20 20 20 20 20 20 20	an bother location and an experience of the control and the co	7 8 33,333,333,333,333,333	Seriotopopopopopopopopopopopopopopopopopopo	Terminal Color Of		t			SHELD	T	ś	. #	CHE	0 00	+	9 5	ž		7 G - [With VQ engine]	7 W - [With VK engine]	8 SHIELD - [With VK engine]	8 W - [With VQ engine]	M	+
Terminal Color Of Signal Name [Specification]		60 R/Y	H	1			Connector INO. Etc	Connector Name IPDM EIR (INTELLIGENT POWER DISTRIBUTION MODULE		Connector Type TH08FW-NH		q	<u>k</u>			42 41 40 39		46 45 44 43			nal	No. Wire	39 P -	40 L	41 B -	<b>*</b>	43 SB	H	-	╀	1		Connector No E7	Τ	Connector Name Engine Room)	Connector Type TH20FW-CS12-M4	7	<b>4</b>		Sajsajsajsajsajsajsaj   6470    147517477	E					<u></u>	Wire	48 L	SB	W	g	52 W
BRAKE	00	21 GR CHIME SIGNAL	88	Vaa	2		ſ	Connector No. B501	Dank OF Bank Charles		Occupant Time Not0MM CE	COLLINECTOL LYPE INSTITUTION				7 8 8	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	16 15 21 59 60 56				Jai	No. Wire Ogna name [Specification]	- В	L	15 W -	16 G	┞	55 W	╀	+	60 R/v	t	┨		Connector No B503		Connector Name SEATBELT BUCKLE SWITCH (DRIVER SIDE)	Connector Tyne A03EW	1	<b>₫</b>		K		<u> </u>	000	:[[:	RC	]			

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	Connector No. E76	Connector Name AMBIENT SENSOR	Connector Type RS02FB	į į							E E	0	9	2 P .			Connector No. E106	Connector Name WIRE TO WIRE		Connector Type TH80FW-CS16-TM4				30	812 613 514 877 678 613 578	\$ 12 PRINCIPAL P			Terminal Color Of Signal Name [Specification]	+	- c	t	97	× 5		7 6	> 8	 F	╀	Ļ	╀	+	φ.	T	+	18 P
	Connector No. E47	Connector Name BRAKE FLUID LEVEL SWITCH	Connector Type YV02FGY				<u>I</u> c	(7)	<b>)</b>		<u>a</u>	0	Т.	2 B -			Connector No. E67	Connector Name ICC SENSOR INTEGRATED LINIT	$\neg$	Connector Type RS06FB-PR	¢			(11213)	8 9 7		)		Terminal Color Of Signal Name [Specification]	$^{+}$		-	1 60		۵											
ſ	Connector No. E41	Connector Name ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	Connector Type BAA42FB-AHZ4-LH	1				1			Te Te	No. Wire	1 B GROUND	2 G UBMR	3 R UBVR	4 B GROUND			7 BR DP.RR	9 B DPFR	W	12 L VAC	T	15 SHIELD AGND	А	>	œ	GR	9 9	29 LG D3 KR	S S	-	n (8)													
TER	M	41 Y - [With VK engine]	SHELD	9	$\vdash$	 1	o i	SHELD	<b>a</b>	*	BR	œ	9		В	9			52 R -			Connector No. E32	Connector Name   WASHER LEVEL SWITCH		Connector Type Z02FBR	Ý	医						Terminal Color Of	No. Wire Signal Name [Specification]	1 LG	2 B/W -										

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/ - [With VK engine]
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Connector No.   F151		Connector Name TCM	Connector Type SP10FG	<		13.	0		la	Wire	>	B BATTERY POWER 8	ď	0	0	6 GR IGNITION POWER SUPPLY	L BACK-U	æ	Y STA	10 W/B GROUND		1	Connector No. M1	Connector Name FUSE BLOCK (J/B)	Connector Type NS06FW-M2			[ 	3A	24 77 EA EA AA	8A 14 14 14 14 14 14 14 14 14 14 14 14 14			Ferminal Color Of	lo. Wire Signal Name [Specification]	1A BG .	╁	. G	3A L -	4A R -		V Y V9	
E103						2 1	10 9 8 7 6		Signal Name [Specification]	ON .						- [With VK engine] 6					- [With VK engine]		Conn	Com	Com									Term .	No.	41		ZA	34	44	25	<i>1</i> 9	7A
Connector No		Connector Name WIRE TO WIRE	Connector Type TK36FW-NS10	Ą	THE THE PARTY OF T	2			la	1	+	+	7	+	+	ر د	+	$\dashv$	+	10 GR	+	+	50 ×	7/2	79 FG	╀	F	H	H	╀	38	43 P	44	45 Y	46 V								
Γ	Т		_																										_	_	_	_	_	_	_	_	_	_					
Connector No E37		Connector Name OIL PRESSURE SWITCH	Connector Type E01FGY-RS-AR	đị.	No.	15. H		)	la I	No. Wire			ſ	Connector No. F51	Connector Name A/T ASSEMBLY		Connector Type RK10FG-DGY	q	●		(5 4 3 2 1)	1	9 2 8 6 0		Terminal Color Of	No. Wire Signal Name [Specification]	1 Y IGNITION POWER SUPPLY	2 R RATTERY POWER SLIPPLY MARMORY BACKLIPY	-	>	5 B GROUND	Y	7 R BACK-UP LAMP RELAY		GR STARTER RE	91	2 4	TO B GROUND					
		2 engine] Connector Name					- [With VQ engine]		Terminal Color Of	No. Wire	- [With VK engine]	- [With VQ engine]		Connector No.	Connector Name		_ 			- [With VQ engine]	(5 4 3 2 1)	1	1 8 6 0		Terminal Color Of	No. Wire	>	α				)  - 		۵.	9 GR	91	2 4	10 B	S [With VK engine]	S [With VQ engine]	C [With VK engine]	C [With VQ engine]	
Connector No	- IWith VO engine]	- [With VQ engine] Connector Name			ANT	D [With VK engine]	R - [With VQ engine]		- [With VK engine] Terminal Color Of	-D - [With VQ engine] No. Wire			- [With VQ engine]	- [With VK engine] Connector No.	Connector Name	- [With VK engine]	- [With VQ engine]	- [With VK engine]	- [With VK engine]		R	1	1/8/8/0	Connector No. F36	Color Of	Wire	\ \	α			3 2 ))	)  - 		۵.	9 GR	Signal Name [Specification]	2 4	10 B	O S [With VK engine]	V S [With VQ engine]	P C [With VK engine]	W C [With VQ engine]	

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-	9		ıμ	>			- PA	COTHECTOR NO. INI.	Connector Name   WIRE TO WIRE		Connector Type TH80MW,CS16,TM4	1	•		1 6 122 3 4 2 3 5	2 7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			50 See 10			Terminal Color Of	No Mine Signal Name [Specification]		1 G - [With Auto aircon seat]	>	2 B -	3 W		. >		2 3	+	BG	$\dashv$	13   G	ĸ	×	SHELD	Т		ν	9			>		+		GR		BG	28 W		39	, 6	4	44 W
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	33	34 L	- 00	╀	41 L	W CV	╀	43 X	$\dashv$	45 GR	Ͱ	2 2	4		49 BG	╀	$^{+}$	+	$\dashv$		H	87	t	+	98	$\dashv$		63 R	ŀ	Ļ	200	2 2	T	N BG	$\dashv$	73 W	4 SB	V 76	H	╀	000	+	+	2 W	83 Y	4	1 6	+	86 BR	7 P	╀	+	98 80		91 R	ł	92 R	3 GR
	M6	e WIRE TO WIRE	TH80MW-CS16-TM4				30 346 536 736		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	8	333 340 3383 348				oignal Marine [opecinication]					- [With Auto aircon seat]														-					- [Without ICC]		(SOUTH NOT			- [Without ICC]						- [Without ICC]								
	Connector No.	Connector Name	Connector Type		<b>\</b>		c/i	1						nal Color Or	Wire	ď	, ,	2	2	8	97	9	5 3	*	9	≥	۵	æ	ď	0	0	4 3	× !	SHELD SHELD	æ	٦	۵	C	GR	^	2	ž į	r	_	œ	H	ł	+		Α	: ;	7	S	GR	H	╁	+	_
	Conne	Conne	Conne		Œ	THE T	С							Terminal	-ÖN	-	-   -	2	m	က	4	ď	9	o r	\	∞	0	10	11	5	1 5	2 ;	4 !	<u>و</u> :	16	17	18	5	20	8	č	7	21	22	22	23	3	77	24	25	į	\$2	56	28	58		30	32
[	Connector No. M2	Connector Name FUSE BLOCK (J/B)	Connector Type NS10FW-CS		4		4838 18		98 88 78 68 58					Terminal Color Of	No. Wire ognisi varie opecii cationi	ά.	+	J. Be	┥		- A 89	- 82	+	- L G0	98 BK			Connector No. M3		Connector Name FUSE BLOCK (J/B)	Omnodor Tuno NEGOEIA CO	٦.	ą.	ALT.			70 60 100 doi: 100 do	1				Signal Name [Specification]		10C L -	11C LG -	╀	+	- Ja	_	H	4							

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45	۵		Connector No.	No. M16		Connector No.	lo. M24	4	Connector No.		M39	
51	>		Connector Name		AES CONTROL LINIT	Connector Name		DATA LINK CONNECTOR	Connector Name		PADDI E SHIETER (SHIET-DOWN)	
52	LG						2					
53	SHIEL	01	Connector Type	Type TH4	TH40FW-NH	Connector Type	ype BD	BD16FW	Connector Type A03FW	Fype AC	03FW	
54	BR		4			¢	'		4		•	
22	>		修			修		F	修		K	
99	SHIELD	- ·	Ě			Ě		11 12 13 14 15	\ \ \		<u>-K</u>	
22	۵	-	į	Ė	0 2 2 3	ė		1	Ę		<u>-</u> ]	
28	_			-				345678				
26	SHIELD	- an		_				0 0			٣	
09	٦						_				<u></u>	
61	BR											
62	~		Terminal C	Color Of	0.00	Terminal Color Of	olor Of	7 11 11 11 11 11 11 11 11 11 11 11 11 11	Terminal Color Of	olor Of	0.000	
63	>		Ö	Wire	oignal Marine [opecification]	O	Wire	olgilai Name [opecincation]	O	Wire	olgrial Ivanie [opecincation]	
64	7	•	1	Υ	IGN	3	PI	•	-	В	•	
92	Μ		2	97	PSG-R	4	В		3	9		
99	>		4	<b>×</b>	PSV-R	2	8					
29	97		9	W	HSV-R	9	7					
89	>		7	а	CAN-L	7	GR		Connector No.		M53	
69	Ø		80	m	HSG-R	80	ڻ ن				CLLLING	
20	>		6	GR	PS-R	11	SB		Connector Name	Same ame	COMBINATION METER	
71	≥		1	~	SMR-1 (-)	12	۵		Connector Type	П	TH40FW-NH	
72	Ф		13	В	SMR-2 (-)	13	_			1		
73	3		15	c	SMI-1(+)	14	۵		Œ			
74	P		17	>	SML-2 (+)	16	BG		1			
22	۵		19	SB	AMDS-R				S	Ŀ		
9/	9	-	54	>	PSV-L					3	2 3 5 6 7 10	
77	SB		25	В	GROUND	Connector No.	Jo. M38	8		5	[24 [25 [25 [25 [25 [25 [25 ]25 ] ] ] 24   [26 [25 [25 [25 [25 ]25 ] ] ]	
78	GR	-	27	æ	PSG-L			GI FLIII GO				
62	ď		28	SB	HS-R	COLLINECTOL INSUITE		DOLE SHIFTER (SHIFT-OF)				
80	7	•	59	BG	PS-L	Connector Type		A04FW	Terminal Color Of	olor Of	Construction (Secondination)	
81	۵		30	7	CAN-H	ú			O	Wire	orginal value [opecinication]	
82	٦		32	9	SMR-2 (+)				-	BG	BATTERY POWER SUPPLY	
83	۵		34	W	SMR-1 (+)	ŧ		K	2	97	COMMUNICATION SIGNAL (METER->AMP.)	
84	SB		36	œ	SML-2 (-)	Ź			3	GR	COMMUNICATION SIGNAL (AMP>METER)	
82	3		38	m	SML-1 (-)			7	2	a	GROUND	
98	>		40	BG	AMDS-L				9	×	ALTERNATOR SIGNAL	
87	a								7	۵	AIR BAG SIGNAL	
88	Ø								10	ဖ	SECURITY INDICATOR SIGNAL	
88	BG					Terminal Color Of	olor Of	:	15	æ	GROUND	
91	ď					ġ.	Wire	Signal Name [Specification]	16	H	METER CONTROL SWITCH GROUND	
92	BG					-	_		21	t	IGNITION SIGNAL	
93	HH.					9	88		54	T.	COMMUNICATION SIGNAL (LCD->AMP.)	
94	>					ł			25	T	COMMUNICATION SIGNAL (AMP>LCD)	
96	BG								56	œ	VEHICLE SPEED SIGNAL (8-PULSE)	
46	Μ								27	^	PARKING BRAKE SWITCH SIGNAL	
98	ď	•							28	H	BRAKE FLUID LEVEL SWITCH SIGNAL	
66	BG								59	┪	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	
									30	O.	PASSENGER SEAT BELT WARNING SIGNAL	
									33	_	WASHER LEVEL SWITCH SIGNAL	

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	IN-VEHICLE SENSOR SIGNAL Connector No. M116	AMBIENT SENSOR SIGNAL		GAS SENSOR SIGNAL Connector Type TK36MW-NS10	GNITION POWER SUPPLY	BATTERY POWER SUPPLY		2 3 4 5 11 20 31 41 51 61 71 161 523	BRAKE FLUID LEVEL SWITCH SIGNAL SIGN	FUEL LEVEL SENSOR GROUND	INTAKE SENSOR GROUND		Terminal	DUND No. Wire	ION MODE SIGNAL 2 W -	ECV SIGNAL 3 L .	4 B	EACH DOOR MOTOR POWER SUPPLY 4 R - [With VQ engine]	5 B	CAN-L 5 R - [With VK engine]	а.	_ 0	10 R - [With V. engine]	2 0	20 >	-	- B 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	F	7 8	7 0	$\dashv$	+	+	7		AWD SOL (+)	I	J	IGN	CAN'H	VID SOLE BAT		GROUND GROUND	OID TEMP (+)	SALIENT	CAN-L			
•	9]	45 P	46 BG	47 V GAS SE	NOILINGI 53 G	BG	8	7 99 1	M 25 W	28 B	59 GR INTAKE S	_	61 BR	62 SB	. 63 R	. 65 BG	7 69	70 R	71 B	GNAL 72 P	SIGNAL	_ 	COLLINECTOL IND.	Connector Name AWD CONTROL UNIT	Connector Type TH16FW-NH		E (Septimental Control of Control	₹ ` 	(AMP>LCD)	<u>71-1</u>	9 10 11		Ī	lerminal Color Of	n a		- %			54 55 56		0 0	n <u>-</u>	13 16	- 0	_ 	PLY	SIGNAL	IGNAL
	Connector No. M66	Change China Chinish		Connector Type TH40FW-NH	1			1.9.	23 25 25 25 25 25 25 25 25 25 25 25 25 25	200			멸	No. Wire	5 L MANUAL MODE SHIFT UP SIGNAL	6 BG PADDLE SHIFTER UP SIGNAL	7 GR COMMUNICATION SIGNAL (AMP>METER)	8 L VEHICLE SPEED SIGNAL (2-PULSE)	SB SEAT BEL	Α	o !	14 BK COMMONICATION SIGNAL (LCD->AMP.	\ V	- A	· (t	5	2	>	>	38 L BLOWER MOTOR CONTROL SIGNAL			Connector No. M67	Connector Name UNIFIED METER AND A/C AMP.	Т	Connector Type TH3ZFW-INH	<b>₫</b>	<b>E</b>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4	57 58 59 60 61 62 63 65			Terminal Color Of	No Wire Signal Name [Specification]	D :	> ;	42 Y FUEL LEVEL SENSOR SIGNAL	r
-	ILLUMINATION CO	SELECT SWITCH SIGNAL	ENTER SWITCH SIGNAL	TRIP A/B RESET SWITCH SIGNAL	ILLUMINATION CONTROL SWITCH SIGNAL (-)	ILLUMINATION CONTROL			M54	Connector Name   METER CONTROL SWITCH		Connector Type TH12MW-NH				1 2 3 4 5 6	> +				Of Signal Name [Specification]										M56	Connector Name TRIP A/B RESET SWITCH		I HO4MW-NH			4	- - - -	1 2				Signal Name [Specification]						
빰	34 B	_	Н	38 L	39	F			Connector No.	Connector Nam		Connector Type	q	B	ŧ	Ž					Terminal Color Of	+	- 6	+	+	+	F	╀			Connector No.	Connector Nam		Connector Type	ąĮ	至于	Si Si					Torminal Calor Of	No Wire	+	+	2 B			

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Connector No. M151	Connector Name WIRE TO WIRE	Connector Type M03FW-LC	H.S.	Ferminal Color Of Signal Name [Specification]	+	Н	3 R		Connector No. M152	Connector Name WIRE TO WIRE	Connector Type M03MW-I C			U =		6 6	[6]		Ferminal Color Of	No. Wire Signal Name [Specification]	W >	- L	$\frac{1}{2}$											
Connector No. M125	ne CAN GATEWAY	Connector Type TH12FW-NH	H.S. 1 3 4 5 6 7 9 101112	Terminal Color Of Signal Name [Specification]	╁	3 GR BATTERY	_ 0	GROUND GROUND		9 LG IGNITION	B GROUND	P CAN-L			Connector No. M137	Connector Name A/T SHIFT SELECTOR		Connector type   I HTZF VV-INH			1 2 3 4 5	7 0 0 10 11	S		la	No. Wire	1 W	> - <	8 P P	5 G	7 BG .	╁	ř	11 R
Connector No. M123	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FG-NH		Terminal Color Of Signal Name [Specification]	+	a.	116 BR STOP LAMP SW 1	¥.	BR	123 W IGN F/B	5 P	GR	137 B RECEIVER/SENSOR GND	Y SENSOI	ď	G SECI	142 BG COMBI SW OUTPUT 5	1 C	, _	SB	£ 0	191 G REAK WINDOW DEFOGGER RELAY CONT												
METER Connector No. M122	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FB-NH	1   1   1   1   1   1   1   1   1   1	Terminal Color Of Signal Name [Specification]	+	BR PASSENGE	V DRIVER	78 Y ROOM ANT1-	79 BR ROOM ANT1+		P IGNRFIA	GR KEYLE	BR	V COME	90 P CAN-L		92 LG KEY SLOT ILL	ONIND ON DELAY CONT	GR AT SHIFT	<u>ت</u>	100 G PASSENGER DOOR REQUEST SW	90 0	103 BR KEYLESS ENTRY RECEIVER POWER SUPPLY	97	108 R COMBI SW INPUT 4	Y	110 G HAZARD SW							

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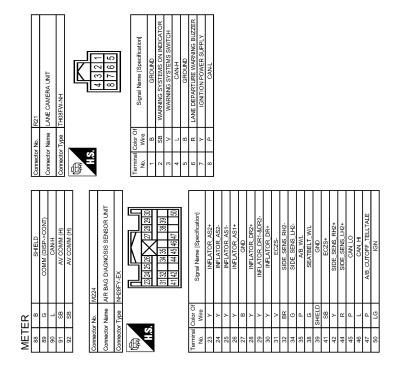
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## Fail-Safe

#### FAIL-SAFE

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

### < ECU DIAGNOSIS INFORMATION >

	Function	Specifications
Speedometer		
Tachometer		Decet to your by avananding assembly piction
Fuel gauge		Reset to zero by suspending communication.
Engine coolant temperatur	re gauge	
Illumination control		When suspending communication, change to nighttime mode
Information display		The display turns off by suspending communication.
Buzzer		The buzzer turns off by suspending communication.
	ABS warning lamp	
	VDC OFF indicator lamp	
	Brake warning lamp	
	CRUISE warning lamp	
	IBA OFF indicator lamp	The lamp turns on by suspending communication.
	AWD warning lamp	
	Low tire pressure warning lamp	
	Master warning lamp	
	Malfunction indicator lamp	
Warning lamp/indicator lamp	AFS OFF indicator lamp	The lamp blinking caused by communication malfunction
	High beam indicator	
	Turn signal indicator lamp	
	Tail lamp indicator lamp	
	VDC warning lamp	
	Oil pressure warning lamp	The lamp turns off by suspending communication.
	A/T CHECK warning lamp	
	Key warning lamp	
	Lane departure warning lamp	
	LDP ON indicator lamp	

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Display contents of CON- SULT	Time	Diagnostic item is detected when	Refer to
CAN COMM CIRCUIT [U1000]	CRNT, 1 - 39	When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-49
CONTROL UNIT (CAN) [U1010]	CRNT, 1 - 39	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	MWI-50
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-51</u>
COMM ERROR 2 [B2202]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-53
VEHICLE SPEED [B2205]	CRNT, 1 - 39	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-55
ENGINE SPEED [B2267]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	<u>MWI-56</u>
WATER TEMP [B2268]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-57

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# **BCM (BODY CONTROL MODULE)**

### < ECU DIAGNOSIS INFORMATION >

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

Reference Value

#### VALUES ON THE DIAGNOSIS TOOL

#### NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
TIX WIF LIXTII	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
I IX WIF LIX LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
I IX WIF LIX IIVI	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIFER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial position
RR WIPER ON	Other than rear wiper switch ON	Off
RR WIFER ON	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
KK WIFEK INT	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
TORN SIGNAL R	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
TORN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAWIF SW	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
HI BEAW SW	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
TILAD LAWIF SW T	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
I ILAU LAWIF 3W Z	Lighting switch 2ND	On
DASSING SW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LICUT SW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

#### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
2 FOC 8W	Front fog lamp switch OFF	Off
R FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOD CW DD	Driver door closed	Off
OOR SW-DR	Driver door opened	On
OOR SW-AS	Passenger door closed	Off
OOR SW-AS	Passenger door opened	On
OOR SW-RR	Rear RH door closed	Off
OOR SW-RR	Rear RH door opened	On
OOR SW-RL	Rear LH door closed	Off
OOK SW-KE	Rear LH door opened	On
OOR SW-BK	Back door closed	Off
	Back door opened	On
DL LOCK SW	Other than power door lock switch LOCK	Off
-DE LOOK OVV	Power door lock switch LOCK	On
DL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
EY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
LI OIL LK-OW	Driver door key cylinder LOCK position	On
EY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
LI OIL OIV-OW	Driver door key cylinder UNLOCK position	On
EY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
AZARD SW	Hazard switch is OFF	Off
AZARD SW	Hazard switch is ON	On
EAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
R CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
R/BD OPEN SW	Back door opener switch OFF	On Off Off Off On Off
	While the back door opener switch is turned ON	On
RNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
EVERSE SW	NOTE: The item is indicated, but not monitored.	Off
KE-LOCK	LOCK button of the Intelligent Key is not pressed	not monitored.  Off On Off On Off Off On Off Off On Off Off
	LOCK button of the Intelligent Key is pressed	On
KE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
TE-DIVILOUR	UNLOCK button of the Intelligent Key is pressed	On
KE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
KE DANIO	PANIC button of the Intelligent Key is not pressed	Off
KE-PANIC	PANIC button of the Intelligent Key is pressed	On
KE DAN ODEN	UNLOCK button of the Intelligent Key is not pressed	Off
KE-P/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On

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Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
OF FIGAL GENOOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
ILQ SW -DIX	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
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
TIEQ OW -DD/TI	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
1 0011 0 11	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
DRAKE SW I	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
DIVARLE SW 2	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/OANCE SW	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
OI I I WIN OW	Selector lever in P or N position	On
S/L -LOCK	NOTE: The item is indicated but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated but not monitored.	Off
LINILIZ CENT DD	Driver door is unlocked	Off
UNLK SEN -DR	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDIWI	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
IGN KLI I -F/D	Ignition switch in ON position	On
DETE OW IDDM	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
OLITIN -IF DIVI	Selector lever in P or N position	On

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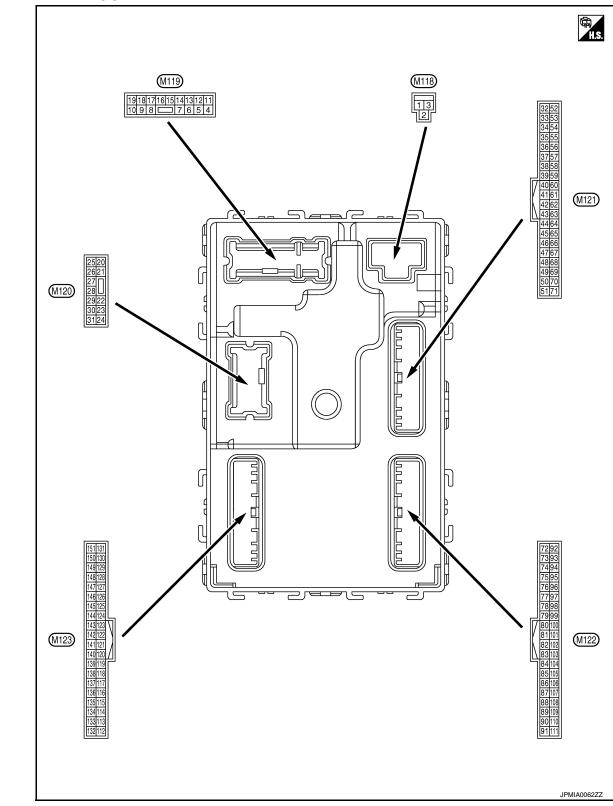
#### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
SELE-MET	Selector lever in P position	On
SET NI MET	Selector lever in any position other than N	Off
SFT N -MET	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: The item is indicated but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (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	Driver side door is open after ignition switch is turned OFF (Selector lever is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
PRIVIT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEN OM OLOT	The Intelligent Key is not inserted into key slot	Off
KEY SW -SLOT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONTINIVIID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
COM INM IDS	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

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Monitor Item	Condition	Value/Status
CONFIDM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
ΓP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
174	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
1173	The ID of third Intelligent Key is registered to BCM	Done
TD 0	The ID of second Intelligent Key is not registered to BCM	Yet
TP 2	The ID of second Intelligent Key is registered to BCM	Done
FD 4	The ID of first Intelligent Key is not registered to BCM	Yet
TP 1	The ID of first Intelligent Key is registered to BCM	Done

#### TERMINAL LAYOUT



PHYSICAL VALUES

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	nal No.	Description				Value	
+ (VVire	color)	Signal name	Input/ Output		Condition	(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	12 V	
3 (BG)	Ground	P/W power supply (IGN)	Output	Ignition switch ON	N .	12 V	
					o battery saver is activated. room lamp power supply)	0 V	
4 (P)	Ground	Interior room lamp power supply	Output	ed.	battery saver is not activatior room lamp power sup-	12 V	
5	One week	Passenger door UN-	0	December	UNLOCK (Actuator is activated)	12 V	
(V)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V	
7	Ground	Ston Jama control	Output	Ston Jamp	ON	0 V	
(Y)	Ground	Step lamp control	Output	Step lamp	OFF	12 V	
8	Cround	All doors, fuel lid	Cutout	Output	utput All doors, fuel lid -	LOCK (Actuator is activated)	12 V
(V)		Output	All doors, luci lid	Other than LOCK (Actuator is not activated)	0 V		
9	One week	Driver door, fuel lid	Outrout	Driver door, fuel	UNLOCK (Actuator is activated)	12 V	
(G)	Ground	UNLOCK	Output	Output	lid	Other than UNLOCK (Actuator is not activated)	0 V
10	Cround	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	12 V	
(BR)	Ground	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	F	Battery voltage	
13 (B)	Ground	Ground	_	Ignition switch ON	N -	0 V	
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	
(1)					ACC or ON	0 V	
					Turn signal switch OFF	0 V	
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s	
						6.5 V	

Terminal No. Description (Wire color)		Condition		Value		
+	-	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
				Other than under	condition	5.0 V
19 (SB)	Ground	Interior room lamp control	Output	(Door is unlock	imp timer is activated. ed. etc) function is activated.	0 V
				3 1	Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s
					Turn signal switch OFF	6.5 V 0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
(P)		'	4.53	r -	ON (Operated)	12 V
34	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(SB)	Giound	na (–)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
35	Ground	Luggage room anten-	the passenger cor ment		When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(V)	Ground Luggage room anten- na (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	
38	Ground	ound 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	(V) 15 10 5 0 JMKIA0062GB
(B)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
39	Cround	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	(V) 15 10 5 0 1 s  JMKIA0062GB
(W)	Ground	(+)			When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s  JMKIA0063GB
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	12 V 0 V

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
52	Ground	Starter relay control	Output	Ignition switch	When selector lever is in P or N position	12 V
(LG)	Cround	Startor relay control	Culput	ON	When selector lever is not in P or N position	0 V
60		Push-button ignition		Push-button ig-	Pressed	0 V
(SB)	Ground	switch (Push switch)	Input	nition switch (Push switch)	Not pressed	12 V
				,	ON (Pressed)	0 V
61 (W)	Ground	Back door opener request switch	Input	Back door request switch	OFF (Not pressed)	(V) 15 10 5 0
						JPMIA0016GB 1.0 V
64	Ground	Intelligent Key warn- ing buzzer (Engine	Output	Intelligent Key warning buzzer	Sounding	0 V
(L)		room)		(Engine room)	Not sounding	12 V
65 (BG)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
					Not in stop position	0 V
66	One week	Dools door outtale	la a d	Daaladaaa siitala	OFF (Door close)	12 V
(LG)	Ground	Back door switch	Input	Back door switch	ON (Door open)	0 V
					Pressed	0 V
67 (P)	Ground	Back door opener switch	Input	Back door open- er switch	Not pressed	(V) 15 10 5 0 JPMIA0594GB 8.5 - 9.0 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	(V) <sub>15</sub> 10 5 0 ***10ms JPMIA0594GB 8.5 - 9.0 V
					ON (Door open)	0 V

Terminal No. Description (Wire color)						Value	
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	(V) <sub>15</sub> 10 5 0 ***10ms JPMIA0594GB 8.5 - 9.0 V	
					ON (Door open)	0 V	
74	Ground	Passenger door antenna (–)	Passenger door an-		When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
74 (SB)	Glound		Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 11 1 s  JMKIA0063GB	
75	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
75 (BR)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	

	inal No.	Description		Condition		Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
76		Driver door antenna		When the driver	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(V) Ground	(-)	Output	door request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 1	
		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
77						JMKIA0062GB
77 (LG) Gro	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0
						JMKIA0063GB
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
78 (Y)	Ground	Room antenna (–) (Instrument panel)	Output	Ignition switch OFF		
(Y) S					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0

	nal No.	Description				Value	
+	color)	Signal name	Input/ Output		Condition	(Approx.)	
79	Ground	Room antenna (+)	ument panel) Output OFF	0.4-4	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)		(instrument panei)		OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s  JMKIA0063GB	
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
82 (P)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V 12 V	
83	Ground	Remote keyless entry receiver communica-	Input/	During waiting		(V) 15 0 5 0 1 ms JMKIA0064GB	
(GR)	Ground	receiver communica- tion	Output	When operating of gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms  JMKIA0065GB	

#### < ECU DIAGNOSIS INFORMATION >

	nal No. e color)	Description Value    Input/ Condition (Appendix Appendix		Value	А		
+	-	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	B C D
87		Combination switch		Combination	Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	E
(BR)		INPUT 5	switch	Rear wiper switch ON (Wiper volume dial 4)	(V) 15 10 5 0 JPMIA0039GB 1.3 V	G H	
					Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 2  Wiper volume dial 6  Wiper volume dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	J

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	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch HI (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper volume dial 4)	(V) 15 10 5 2 ms JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 2  Wiper volume dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
90 (P)	Ground	CAN-L	Input/ Output		_	_
91 (L)	Ground	CAN-H	Input/ Output		_	_

	inal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					OFF	12 V
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB
					ON	0 V
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(*)					ON or ACC	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BG)	Cround	roley control	Jaipat	.gon ownon	ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V
(R)	Oround	tion switch	mpat	00100101 10101	Any position other than P	12 V
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)  OFF (Not pressed)	0 V  (V) 15 10 10 ms  JPMIA0016GB  1.0 V
					ON (Pressed)	0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V
102		Blower fan motor re-	0 : :	La attra a tra	OFF or ACC	0 V
(BG)	Ground	lay control	Output	Ignition switch	ON	12 V
103 (BR)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF		12 V

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper volume dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

#### < ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
					Rear wiper switch INT (Wiper volume dial 4)	(V) 15 10 5 0 2 ms  JPMIA0040GB 1.3 V
					Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 5  Wiper volume dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

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

	inal No. e color)	Description			• ""	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
112 (GR)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON	N	(V) 15 10 5 0 10ms JPMIA0156GB 8.7 V
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(P)	Ground	Optical serisor	трис	ON	When dark outside of the vehicle	Close to 0 V
116 (BR)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2		Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
118	Ground	(Without ICC)	Innut	Stop lamp switch	ON (Brake pedal is depressed)	Battery voltage
(P)	Ground	Stop lamp switch 2	- Input		OFF (Brake pedal is not debrake hold relay OFF	0 V
		(With ICC)			ON (Brake pedal is de- orake hold relay ON	Battery voltage
119 (SB)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (BR)	Ground	Key slot switch	Input	slot	ent Key is inserted into key	12 V 0 V
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(W)	Ciodila	TOTA TOOGSGON	IIIput	- Sulfon Switch	ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) <sub>15</sub> 10 5 0 ++10ms JPMIA0594GB
					ON (Door open)	8.5 - 9.0 V 0 V
					ON (Door open)	0 0

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
132 (BG)	Ground	Power window switch communication	Input/ Output	Ignition switch Of	N	(V) 15 10 5 0 10 ms JPMIA0013GB 10.2 V
				Ignition switch OF	F or ACC	12 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage
137 (B)	Ground	Receiver and sensor ground	Input	Ignition switch Of		0 V
138	Craund	Concernation	Outout	lamitian avvitab	OFF	0 V
(Y)	Ground	Sensor power supply	Output	Ignition switch	ACC or ON	5.0 V
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	12 V
(R)	Ground	position	mpat	00.00.01	Except P and N positions ON	0 V 0 V
141 (G)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking	(V) 15 10 5 0 1 1 s JPMIA0014GB
					OFF	12 V
					All switches OFF	0 V
					Lighting switch 1ST	(V)
				Combination	Lighting switch HI	15
142 (BG)	Ground	Combination switch OUTPUT 5	Output	switch (Wiper volume	Lighting switch 2ND	5
				dial 4)	Turn signal switch RH	2 ms JPMIA0031GB
					All switches OFF (Wiper volume dial 4)	0 V
					Front wiper switch HI (Wiper volume dial 4)	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Rear wiper switch INT (Wiper volume dial 4)  Any of the conditions be-	(V) 15 10 5 0
ν,					low with all switches OFF  Wiper volume dial 1  Wiper volume dial 2  Wiper volume dial 3  Wiper volume dial 6  Wiper volume dial 7	0 JPMIA0032GB 10.7 V

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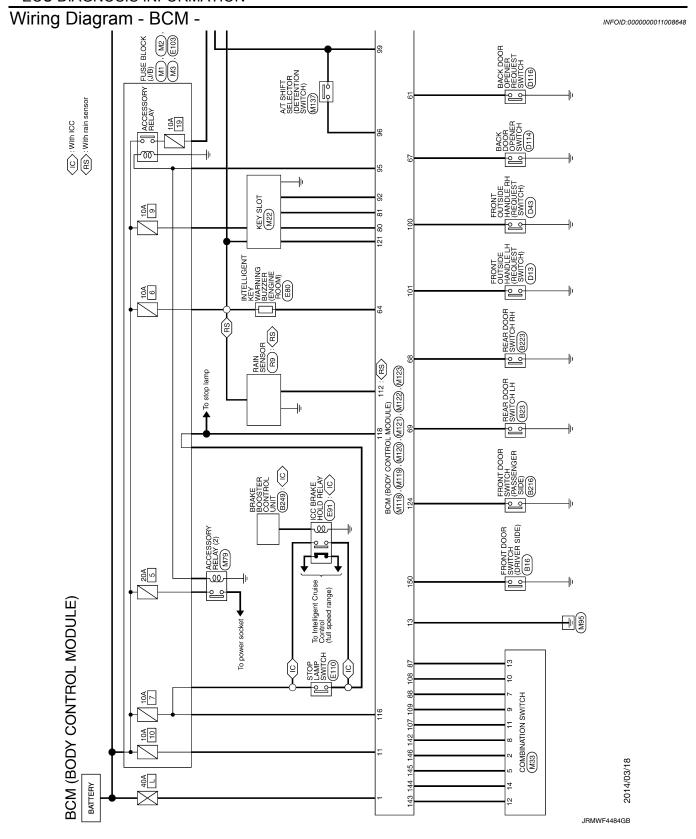
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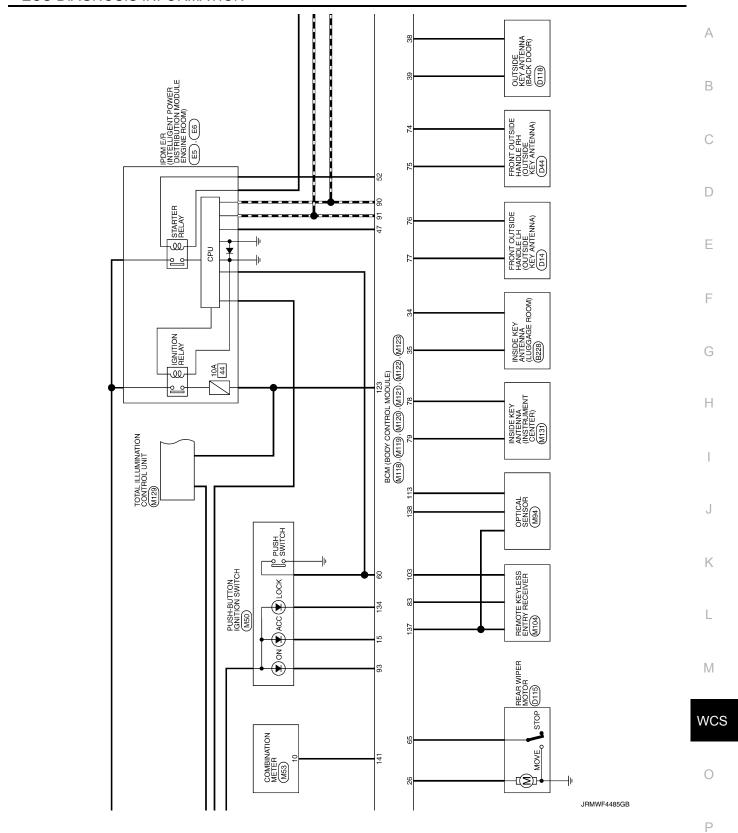
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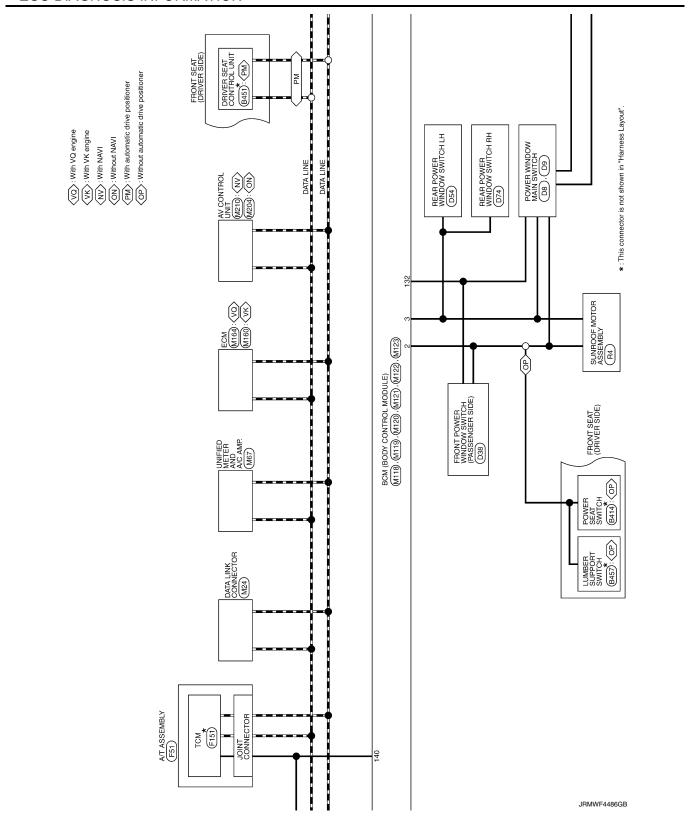
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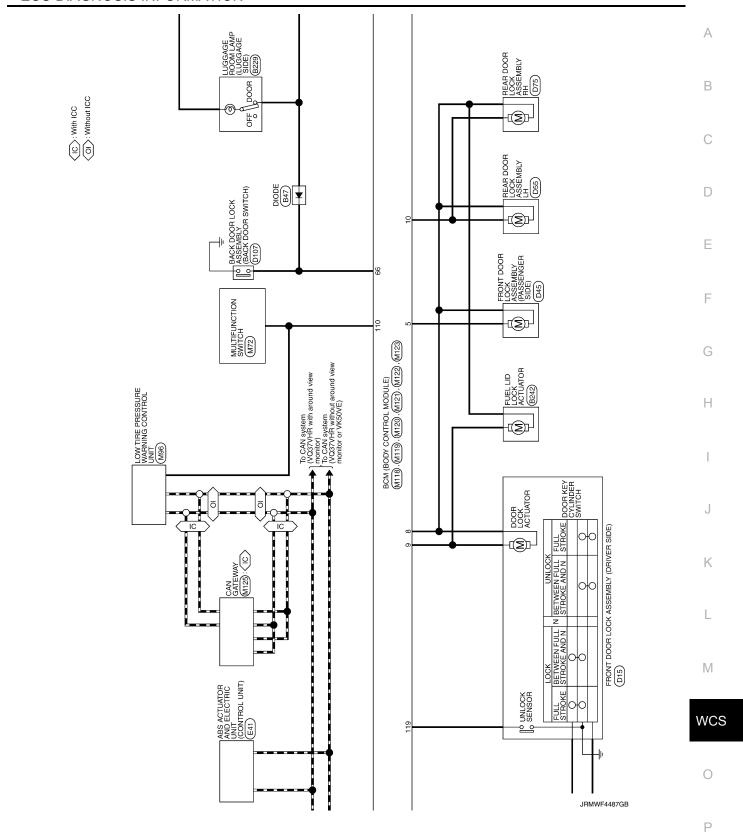
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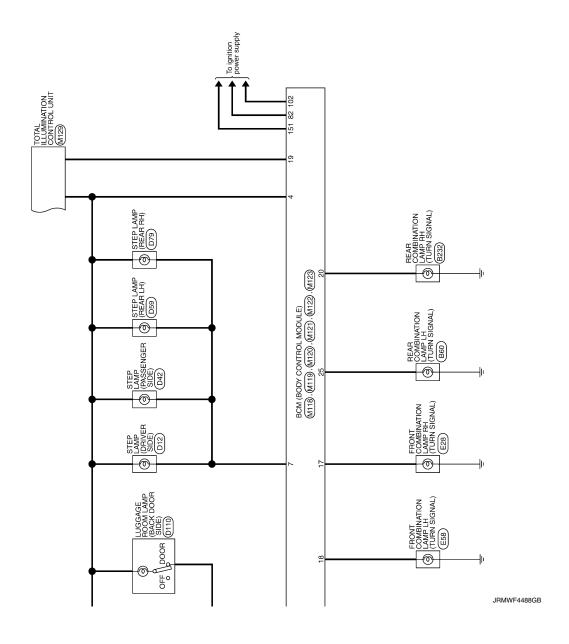
	inal No. e color)	Description	1			Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	0 V
					Front washer switch ON (Wiper volume dial 4)	
144	Ground	Combination switch	Outout	Combination	Rear wiper switch ON (Wiper volume dial 4)	(V) 15 10
(G)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper volume dial 4)	5 0
					Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 5  Wiper volume dial 6	2 ms JPMIA0033GB
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V) 15
145		Combination switch		Combination switch	Front wiper switch LO	10
(L)	Ground	OUTPUT 3	Output	(Wiper volume dial 4)	Lighting switch AUTO	2 ms JPMIA0034GB
					All switches OFF	0 V
					Front fog lamp switch ON	
				Combination	Lighting switch 2ND	(V)
146	Ground	Combination switch	Output	switch	Lighting switch PASS	10
(SB)	Ground	OUTPUT 4	Output	(Wiper volume dial 4)	Turn signal switch LH	0 2 ms JPMIA0035GB
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 JPMIA0594GB 8.5 - 9.0 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











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Correst size in the section of the s	В
Corrector No. B229  Corrector Name Luckacke Room Lake (Luckacke Rob)  Corrector Type Tro3FW  Terminal Color Of Signal Name (Specification)  Corrector Name REAR COMBINATION LAMP RH  Corrector Type Throatmy-NH  Terminal Color Of Signal Name (Specification)  No. Wire  No. Wire  1 P	С
Terminal Color Of No. Wire 1.8.	D
tion]	Е
REAR DOOR SWITCH RH AU3FW  Signal Name (Specification)  Signal Name (Specification)  Signal Name (Specification)	F
REAR D A03FW A03FW RROZEF RROZ	G
Corrector No.  Corrector Name Corrector Terminal Color Of Terminal	Н
Signal Name [Specification]  THOAMW-NH  THOAMW-NH  Signal Name [Specification]	I
Signal Name (Specificatio REAR COMBINATION LAMP LH THOMWANH THOMWANH Signal Name (Specificatio Signal Name (Specificatio Signal Name (Specificatio	J
Terminal Color Off No. Wife P. Connector Name F. Connector Type F.	К
ODDULE)	L
BCM (BODY CONTROL MODULE)  Commector Name FRONT DOOR SWITCH (DRIVER SIDE)  Commector Type Adjarw  Commector Name REAR DOOR SWITCH LH  Commector Name REAR DOOR SWITCH LH  Commector Name REAR DOOR SWITCH LH  Commector Name Signal Name (Specification)  Adjarw  Commector Name Signal Name (Specification)  Commector Name Biode  Commec	M
Connector Name   FRO	WC
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BCM (BODY CONTROL MODULE)			ŀ				
Connector No. B242	Connector No.	B414	+	CAN-L	S	. as	
Connector Name   FUEL LID LOCK ACTUATOR	Connector Name	POWER SEAT SWITCH	_	P RANGE SW	9		
			+	PULSE (SLIDING)	7	BR -	
Connector Type M04FW-LC	Connector Type	NS10FW-CS	Y/B	PULSE (FR LIFTING)	80	٠ .	
4	4		>-	SLIDING SW (FORWARD)	6	W	
			27 R/G REC	RECLINING SW (FORWARD)	10	- 0	
	ŧ	Ī	28 W/B FROM	FRONT LIFTING SW (UPWARD)	1		
S. F.	Ż	48 33	29 P/L REA	REAR LIFTING SW (UPWARD)	13	-	
		0 0 2 2 7	31 GR	SENSOR GND	41	>	
		0 0	H	GND (SIGNAL)	15		
	Terminal Color O		Connector No B457		Connector No	20	
No. Wire Signal Name [Specification]	No. Wire	Signal Name [Specification]	Г				
Т	8		Connector Name LUMBAR 3	LUMBAR SUPPORT SWITCH	Connector Name	Vame POWER WINDOW MAIN SWITCH	- H2H
2 v	H		Connector Type NS04FW-CS	93	Connector Type	lype NS03FW-CS	
	. W		1				
	-		•		4		
Connector No. B249	7		AHT		T.		
0.70	α		H.S.		S		
Connector Name   BRAKE BOOSTER CONTROL UNIT	0	,		50 57 40 00		17	
Connector Tyrus TK24EGY	Ŧ			20 27 40 33			
Collector type Treat of	t						
	+						
	1		Terminal Color Of		Terminal Color Of	L	
H.S.				Signal Name [Specification]	ž	Wire Signal Name [Specification]	ation]
40 40	Connector No	B451	t		t		
			F		0	>	
46 47	Connector Name	DRIVER SEAT CONTROL UNIT	╀		2		
]	Connector Type	TH32FW	+				
		1			Connector No	JD 12	
No. Wire Signal Name [Specification]	Œ						
	至		14 2000000		Connector Name	Vame STEP LAMP (DRIVER SIDE)	
9 8	S.		Τ			, a 1000 CH	
8 0		1 3 9 10 11 12 13 14 16	Connector Name POWER V	POWER WINDOW MAIN SWITCH	Corrector	7	
NOTING C		17 19 21 24 25 26 27 28 29 31 32	i de la companya de l		4		
n !		Ш	Connector Type NS16FW-U	R	至于		
47 LG BRAKE HOLD RLY DRIVE SIGNAL			4		SI T		
			李			1	
	Terminal Color Of	Of Signal Name [Specification]	<u>.</u>	7 3 4 7 1 5 6 7		2 1	
	†		<u> </u>	]			
	+			9 10 11 13 14 15			
	3						
	9 W/G	PULSE (RECLINING)			Terminal Color Of	olor Of Signal Name (Specification)	of income.
	10 P/B	PULSE (RR LIFTING)			ģ	Wire Signal Name Johecine	alloll j
	11 BR	SLIDING SW (BACKWARD)	Terminal Color Of		-	. 51	
	12 SB			Signal Name [Specification]	2	es es	
	13 LG/R	FRONT LIFTING SW (DOWNWARD)	Α				
	H	L	2 LG				
	t	╀	+				
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Corrector No. D44 Corrector Name Record corses evicine ser vices per vices p	Terminal Color Of Signal Name (Specification)  1	
Corrector No. D42  Corrector Name STEP LAMP (PASSENGER SIDE)  Corrector Type TB02EW  LAS.	Terminal Color Of No. Wire Signal Name (Specification)  1 SB	
Connector No. D15 Connector Name FRONT DOOR LOCK ASSEMBLY, DRIVER SDE) Connector Type EDSFGY-RS  THAS.	Terminal Color Of No. Ware   Signal Name (Specification)   No. Ware   Signal Name (Specification)   No. Ware	
BCM (BODY CONTROL MODULE)  Connector Name FRONT CUTSDE INADLE LITREQUEST SWITCH  Connector Type RR02FL-B  Connector Type RR02FL-B  (12)	Terminal Color Of Wire Signal Name (Specification)  10. Wire Cornector No. D14  Connector Name Proxitomet invace in romage key writtown  Connector Type RR022MGY  Terminal Color Of Name Signal Name (Specification)  10. Wire Color Of Name Col	
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Revision: 2015 February WCS-101 2015 QX70

BCM (BODY CONTROL MODULE)			
Connector No. D54	Connector No. D59	Connector No. D75	Connector No. D107
Connector Name REAR POWER WINDOW SWITCH LH	Connector Name STEP LAMP (REAR LH)	Connector Name REAR DOOR LOCK ASSEMBLY RH	Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type NS08FW-CS	Connector Type TB02FW	Connector Type E06FGY-RS	Connector Type NS08FW-CS
	<b>E</b>	<b>逐</b>	<b></b>
23451		<u> </u>	4 5 6 7 8
Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification]
1 W -	1 L	1 6	1 L/W
+	2 0 -	2 L .	2 L/B ·
3 R			1
+			+
	Connector No. D/4	Connector No. D79	M .
	Connector Name REAR POWER WINDOW SWITCH RH	Connector Name STEP LAMP (REAR RH)	
	Connector Type NS08FW-CS	Connector Type TB02FW	
Connector No. D55	á	ą	- 1
Connector Name REAR DOOR LOCK ASSEMBLY LH	医	唐	Connector No. D110
Connector Type E06FGY-RS	H.S.	HS	Connector Name LUGGAGE ROOM LAMP (BACK DOOR SIDE)
ά	2 3 4 5 1	2 1	Connector Type TK03FW
	Terminal Color Of Signal Name [Specification] No.	Terminal Color Of Signal Name [Specification] No. Wire	
	W (		
Terminal Color Of	-	+	
No. Wire signal name [specification]	H		Terminal Color Of Signal Name (Specification)
> 0			Wire
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#### < ECU DIAGNOSIS INFORMATION >

Cornector Name   FRONT COMBINATION LAMP RH	
Corrector No.   E5	
Corrector Name BACK DOOR OPENER REQUEST Corrector Name BACK DOOR OPENER REQUEST Corrector Name   TKOZMER-P  Terminal Color Of   Signal Name   Specification  No. Wire   D118  Corrector Name   D118  Corrector Name   Out Signal Name   Specification   Terminal Color Of   Signal Name   Specification  No. Wire   Signal Name   Specification  No. Wire   Signal Name   Specification  1	
BCM (BODY CONTROL MODULE)  Cornector No. D114  Cornector Type TK02MBR-P  Tenniral Color Of Signal Name [Specification]  Lo. Wive Signal Name [Specification]  Cornector No. D115  Cornector Name REAR WIPER MOTOR  Cornector Name REAR WIPER WIPER WOTOR  Cornector Name REAR WIPER WIP	
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Revision: 2015 February WCS-103 2015 QX70

BCM (BODY CONTROL MODULE)	Ī				
۵	Connector No. E91	Connector No.	E110	Connector No.	F151
	Connector Name ICC BRAKE HOLD RELAY	Connector Name	STOP LAMP SWITCH	Connector Name	TCM
œ					
ă	Connector Type M06FGY-R-US	Connector Type	M04FW-LC	Connector Type	SP10FG
o	ģ	þ		ģ	<
		厚		厚	<b>*</b>
	1 L Z	J.	F	۲	
R VDC OFF SW	6 7 3	į	3 4	115	(12345)
	1		1 2		
BUS-H	4				
Connector No. E58	Terminal Color Of	Terminal Color Of		Terminal Color Of	L
	No. Wire Signal Name [Specification]	No. Wire	Signal Name [Specification]	No. Wire	Signal Name [Specification]
Connector Name FRONI COMBINATION LAWP LH	1 1	-		1	IGNITION POWER SUPPLY
Connector Type RS04FB-PR	2 B .	2 W		2 B	BATTERY POWER SUPPLY (MEMORY BACK-UP)
	3 @	9		ω	CAN-H
]		4 BR		4	K-LINE
Ų	- M 9			2	GROUND
	7 L			6 GR	IGNITION POWER SUPPLY
		Connector No.	F51	H	
\$\frac{1}{2}				8	L
))	Connector No. E103	Connector Name	A/T ASSEMBLY	H	STARTER RELAY
	(d)	Connector Type	RK10FG-DGY	10 W/B	
Terminal Color Of Signal Name [Specification]		4	*		
Wire	Connector Type NS16FW-CS	厚	<b>«</b>		
· ·	Q.	J.		Connector No.	M1
0 0	Meth	S	(5 4 3 2 1	Connector Nam	Connector Name FUSE BLOCK (J/B)
BG .	H.S. 6F 4F 1 3F 2F 1F		10 9 8 7 6	Connector Type	NS06FW-M2
	10F 9F 8F			ą	1
Γ				厚	
Connector No. E80		No. Wire	Signal Name [Specification]	H.S.	3A 🔲 2A 1A
Connector Name INTELLIGENT KEY WARNING BUZZER (ENGINE ROOM)	Terminal Color Of	t	VIGNITION POWER SLIPPLY		77 64 64
Connector Type RK03FBR		. c	BATTERY POWER SUPPLY (MEMORY BACK-UP)		8A 7A 0A 3A 4A
	10F L -	3 r	CAN-H		]
<	1F SB .	>	K-LINE		
<b>*</b>	2F W -	5 B	GROUND	Terminal Color Of	
	3F Y -	<b>≻</b>	IGNITION POWER SUPPLY	No. Wire	Signal Name [Specification]
	4F G .	7 R	BACK-UP LAMP RELAY	1A BG	
	6F BG	∞	CAN-L	2A G	
	┝	9 GR	STARTER RELAY [With VQ engine]	┞	
	- H		STARTER RELAY [With VK engine]	4A R	
Terminal Color Of Signal Manus (Specification)		H	GROUND	H	
Olginal Name				. ∀	
LG +BAT (VOL SMALL)				7A R	
				8A L	

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# < ECU DIAGNOSIS INFORMATION >

7   V	Ten   Signal Name   Specification   Number   Signal Name   Specification   Number   Signal Name   Specification   Number   Signal Name   Specification   Signal Name   Signal	
Corrector No. M33  Corrector Name COMBINATION SWITCH  Corrector Type THIGFW-NH    1 2 3   1 4 5 6   7 8 9 10   11   12   3   14   5   6   7   13   14   13   14   14   15   14   14   15   15   14   15   15	Terminal Coder Off Signal Name (Specification)  1	
Connector No. M/22  Connector Name KEY SLOT  Connector Type TH12PW-NH  H.S. 1 2 3 5 6	Terminal Color Of   Signal Name   Specification	
BCM (BODY CONTROL MODULE)  Connector No. M2  Connector Name FUSE BLOCK (J/B)  Connector Type NSTOFW-CS  (B)	Terminal Color Of Signal Name   Specification   18	
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Revision: 2015 February WCS-105 2015 QX70

25 W FR TUNER (GND)	26         P         FL TUNER (GND)           30         LG         BCM FLASHER	8	Corrector No. M104 Corrector Name REMOTE KEYLESS ENTRY RECEIVER Corrector Type JABWHB	SIS.	12 4			Terminal Color Of   Signal Name [Specification]   No.   Wire		2 GR SIGNAL OUTPUT	á		Connector No. M118	Connector Name   BCM (BODY CONTROL MODULE)				H.S.		7		Terminal Color Of Signal Name (Specification)	t		3 BG POWER WINDOW POWER SUPPLY (RAP)						
Connector No.   M94	Connector Name OPTICAL SENSOR	Connector Type TK03FW	#3.	Terminal Color Of Signal Name [Specification]	1 Y POWER	L m		Connector No. M96	Connector Name LOW TRE PRESSURE WARNING CONTROL UNIT	$\neg$	٦.			12345678910	19 20 21 22 23 24 25 26 30 30			Terminal Color Of Signal Name [Specification] No. Wire	1 P CAN-(L)	2 L CAN+ (H)		6 B FR TUNER (SIG)	. SB	8 R RL TUNER (VCC)	9 GR FR TUNER (VCC)	G FLTU	> 3	A 6	20 BK RL LUNEK (KSSI)	22 V FL TUNER (RSSI)	23 B RR TUNER (GND)
Connector No. M72	Connector Name MULTIFUNCTION SWITCH	Connector Type TH16FW-NH	H.S. 1135 8 9 1416	Terminal Color Of Signal Name [Specification]	1 B GROUND	> &	œ	6 SB AV COMM (H) 8 LG AV COMM (L)	BR	14 SB DISK EJECT SIGNAL	>		Connector No. M79	Connector Name   ACCESSORY RELAY (2)				H.S.	<u></u>	2 <b>X</b> 1		Terminal Color Of Signal Name (Specification)	t	2 B -	3 LG -	5 L .					
BCM (BODY CONTROL MODULE)  Connector No.   M67	Connector Name UNIFIED METER AND A/C AMP.	Connector Type TH32FW-NH	(1.5) (1.12) (1.5)	Terminal Color Of Signal Name [Specification]	41 V ACC POWER SUPPLY	- ac	97	45 P AMBIENT SENSOR SIGNAL 46 BG SUNLOAD SENSOR SIGNAL	>	o 2	55 B GROUND	_	W	8	59 GR INTAKE SENSOR GROUND 60 L IN-VEHICLE SENSOR GROUND	BR AMBIENT SEN	Н	63 R ION MODE SIGNAL 65 BG ECV SIGNAL	_	70 R EACH DOOR MOTOR POWER SUPPLY 71 R GROUND	a a.										

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141 G SECIRITY INDICATOR OF ITPLE	9 6	20 0	144 G	145 L COMBI SW OUTPUT 3	146 SB COMBI SW OUTPUT 4	150 GR DRIVER DOOR SW	G REAR WIN		<u> </u>	Connector No. M125		Corrector name CAN GALEWAT	W Connector Type TH12FW-NH	4	Τ,		1 3 4 5 6	7 10 11 12			nal	No. Wire	7	GR.	7	5 B GROUND	۵ د	6 LG IGNITION	10 P CAN-L	TH B GROUND	12 P CAN-L	Γ											
DATS ANT AMP	NATIONAL MAIN.	IGN RELAY (F/B) CONT	KEYLESS ENTRY RECEIVER SIGNAL	COMBI SW INPUT 5	COMBI SW INPUT 3	CAN-L	CAN-H	KEY SLOT ILL	QNINO	ACC RELAY CONT	A/T SHIFT SELECTOR POWER SUPPLY	SHFT P	PASSENGER DOOR REQUEST SW	DRIVER DOOR REQUEST SW	BLOWER FAN MOTOR RELAY CON	COMBI SWINDIE 4	COMBI SW INPUT 4	COMBI SW INPUT 2	HAZARD SW			M123	BCM (BODY CONTROL MODULE)		TH40FG-NH			/	01 01 01 01 01 01 01 01 01 01 01 01 01 0				Signal Name [Specification]	RAIN SENSOR SERIAL LINK	OPLICAL SENSOR	STOP LAMP SW 1	STOP LAMP SW 2	DR DOOR UNLOCK SENSOR	KEY SLOT SW	IGN F/B	PASSENGER DOOR SW	POWER WINDOW SW COMM	LOCK IND
ag	á ≥	\$ 0.	æ	æ	>	۵	_	9	>	88	æ	œ	ပ	88 8	2 8	6	2 ~	>	g		- 1	-	Connector Name	┰	Connector Type			, <u> </u>				Color Of		GR	۵	BR	а	SB	H	W	o <sub>1</sub>	BG	GR
8	3 2	82 0	83	87	88	96	6	95	93	32	96	66	100	101	102	202	108	109	110			Connector No.	Connect		Connec	Ą.	手	SH				Terminal	ž	112	113	116	118	119	121	123	124	132	134
Connector No M121	т	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FGY-NH				Ź.	10 10 10 10	69 68 67 66 68 64 61 61 60			Terminal Color Of	Wire	SB	35 V LUGGAGE KOOM ANI+	مِ م	: X	. P	SB	61 W TRUNK_REQUEST_SW	1	BG REAR	97	Р	BR	69 R REAR LH DOOR SW		Connector No. M122	Omerand Non BOM (BODY CONTBOL MODILE)		Connector Type TH40FB-NH	4		Notice to the second se	9   30   00   00   00   00   00   00   0	beloe seke seku in te ku ku in ku ku ku			E E	Wire	74 SB PASSENGER DOOR ANT-	75 BR PASSENGER DOOR ANT+	76 V DRIVER DOOR ANT-
BCM (BODY CONTROL MODULE) Connector No M119		Connector Name BCM (BODY CONTROL MODULE)	Connector Type NS16FW-CS				4 5 7 8 9 10	13 15 17 18 10	10			Terminal Color Of Size (Size (	olgilal ivalile [5	P INT ROOM LAMP PWR	5 V PASSENGER DOUR UNLOCK DUIPUI	SIEF LAWIP COLFOI	G DRIVER DOOR FUEL LI	æ	œ	13 B GROUND	Y ACC I	W TURN SIGNAL	BG TURN SIGNAL	19 SB ROOM LAMP TIMER		Commonder No.	MILZO	Connector Name BCM (BODY CONTROL MODULE)	Connector Type NS12FW-CS	4	[]	1.5.	35 26	07 67			lal	Wire	TURN SIGNAL	G TURN SIGNAL	26 P REAR WIPER OUTPUT		

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Connector No. M164	Connector Name ECM	Connector Type RH24FGY-RZ8-R-LH-Z	H.S. C.	Terminal Color Of Signal Name [Specification]	97 R ACCELERATOR PEDAL POSITION SENSOR 1	98 P ACCELERATOR PEDAL POSITION SENSOR 2 [Without NAVI]	90 G SENSOR POWER SUPPLY INVITA NAVI	1	W	+	102 LG EVAP CONTROL SYSTEM PRESSURE SENSOR 103 G SENSOR POWER SUIPPLY (Without NAVI)	_	æ	GR	_	W FUEL	BG SEP	> 0	110 R ENGINE SPEED OUTPUT SIGNAL	^	W seeon	۵	114 L CAN COMMUNICATION LINE	N .	2 a	123 B ECM GROUND	124 B ECM GROUND	GR	BR ASCD	В	128 B ECM GROUND	
Connector No. M160	Connector Name ECM	Connector Type RH24FGY-RZ8-R-LH-Z	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Terminal Color Of Signal Name [Specification]	۳.	99 G SENSOR POWER SUPPLY		SB	R ACC	105 L CAN COMMUNICATION LINE	106 L IGNITON SWITCH		111 V SENSOR GROUND	LG FUEL PL	GR DA	GR	G T	+	118 W SENSOR GROUND	W FUEL TA	GR POWE	В	125 R FUEL PUMP CONTROL MODULE (FPCM)	•								
Connector No. M131	Connector Name NSIDE KEY ANTENNA (NSTRUMENT CENTER)	Connector Type RK02MGY	H.S.	Terminal Color Of Signal Name [Specification]	1 BR	2 Y .		Connector No. M137	Connector Name A/T SHIET SELECTOR		Connector type   IHTZFW-NH			13.	0 7	7 8 9 10 11			No. Wire Signal Name [Specification]	- W	2 V -	3 Г	OD (	+	20 00	- В	10 GR -	11 R -				
BCM (BODY CONTROL MODULE)	TOTAL ILLUMINATION CONTROL UNIT	e TH40FW-NH	1   1   1   1   1   1   1   1   1   1	Of Signal Name [Specification]	. DDL2	TAIL LAMP SIGNAL	BAT SAVER SIGNAL		DOOR	DOOD	MOOD LAMP (FR ARMREST RH)	MAP	PERSON	PERSON		HSPL ILL			BAT POWER SUPPLY		OIT CO		MAP LAMP SW (DOOR)	MAP LAMP		MOOD LAMP (FR ARMREST LH)	3 MOOD LAMP (RR ARMREST LH)			HSPL POWER SUPPLY 1	FOOT LAMP (LH)	PUDDLE LAMP (RH)  PUDDLE LAMP (LH)
BCM (Bo	Connector Name	Connector Type	H.S.	Terminal Color Of No. Wire	3	4 4	> a	H	8	+	10 SE	12 P	13 G	Н	$\dashv$	17 LG	+	19 X	21 Z	$\vdash$	Н	$\dashv$	26 BR	+	+	30 FC	31 BG	33 W	34 R	35 V	36 L	39 B 40 BG

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BCM (E	80	BCM (BODY CONTROL MODULE)						
Connector No.	<u>.</u>	M204	Terminal	Terminal Color Of	Signal Name [Specification]	Connector No.	R9	_
Connector Name	Name	AV CONTROL UNIT	92	wire >	PARKING BRAKE SIGNAL	Connector Name	RAIN SENSOR	
Connector Type		TH32FW-NH	29	В	COMPOSITE IMAGE SIGNAL GND	Connector Type	AAB03FB	
4			89	ď	COMPOSITE IMAGE SIGNAL	4		
修			71	SHIELD	MICROPHONE SHIELD	B		
Ę			72	ŋ	MICROPHONE VCC	Ę		
Ę			73	œ	COMM (CONT->DISP)	ė	֭֭֓֞֞֞֜֞֞֓֓֓֓֞֟֞֓֓֓֓֞֟֞֓֓֓֞֟֞֓֓֓֞֓֞֓֞֓֞֞֞֓֡֓֞֡֓֡֓֞֡֓֡֞֡֓֡	
		30	74	Д	CAN-L		1 1 2 3	
		92/93/94/95/96	75	97	AV COMM (L)			
			9/	97	AV COMM (L)			
			79	۲	ILLUMINATION			
Terminal Color Of	olor O	Manual Specification	80	9	IGNITION SIGNAL	le O	Signal Name Constitution	
No.	Wire		81	BG	REVERSE SIGNAL	No. Wire	orginal realite [openinoation]	
92	FG	AV COMM (L)	82	ď	VEHICLE SPEED SIGNAL (8-PULSE)	1 BR	+B	
_	SB	AV COMM (H)	87	œ	MICROPHONE SIGNAL	2 GR	SIG	
Н	LG	AV COMM (L)	88	В	SHIELD	3 B	GROUND	
79	SB	AV COMM (H)	88	g	COMM (DISP->CONT)			
80	۵	CAN-L	06	٦	CAN-H			
81	_	CAN-H	91	SB	AV COMM (H)			
H	BR	SW GND	95	SB	AV COMM (H)			
98 SH	SHIELD	SHIELD C						
87	_	TEL VOICE SIGNAL (+)						
88	Ь	TEL VOICE SIGNAL (-)	Connector No.		R4			
95	œ	VEHICLE SPEED SIGNAL (8-PULSE)	Sponno	Connector Name	> IdMassa dottom accidinis			
93	>	PARKING BRAKE SIGNAL			SOUND IN OLON ASSEMBLE			
94	BG	REVERSE SIGNAL	Connector Type		YEA10FGY			
92	9	IGNITION SIGNAL	(					
96	SB	DISK EJECT SIGNAL						
102	В	AUX_GND	Ę					
103	Ν	AUX_AUDIO_LH+	2		c L			
104	œ	AUX_AUDIO_RH+			7 8 9 10			
Connector No.	و	M210						
		т	Terminal	Ferminal Color Of				
Connector Name	Name	AV CONTROL UNIT	S	Wire	Signal Name [Specification]			
Connector Type	Type	TH32FW-NH	1	GR	SW-BIT1			
٥			2	Д	SW-BIT0			
le de la constant de			7	BR	+8			
Ę			ω	٦	SPEED SENSOR (2P)			
į		65 67 68 71 72 73 74 75 76	თ	>-	TIMER (+IGN)			
		82 87 88	10	O	GROUND			

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Fail-safe

FAIL-SAFE CONTROL BY DTC

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

#### < ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent  • Starter control relay signal  • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent  Starter relay control signal Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following conditions are fulfilled</li> <li>IGN relay (IPDM E/R) control signal: OFF (Battery voltage)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled  • Power position changes to ACC  • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

#### FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

#### NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF  $\Rightarrow$  ON and front wiper switch is INT position, BCM operates a fail-safe control.

#### 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.
- Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

#### DTC Inspection Priority Chart

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

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

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#### < ECU DIAGNOSIS INFORMATION >

Priority	DTC	
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING	
4	<ul> <li>B2555: STOP LAMP</li> <li>B2555: STOP LAMP</li> <li>B2556: PUSH-BTN IGN SW</li> <li>B2557: VEHICLE SPEED</li> <li>B2560: STARTER CONT RELAY</li> <li>B2601: SHIFT POSITION</li> <li>B2602: SHIFT POSITION</li> <li>B2603: SHIFT POSI STATUS</li> <li>B2604: PNP/CLUTCH SW</li> <li>B2605: PNP/CLUTCH SW</li> <li>B2605: PNP/CLUTCH SW</li> <li>B2608: STARTER RELAY</li> <li>B2608: STARTER RELAY</li> <li>B2607: ENG STATE SIG LOST</li> <li>B2614: BCM</li> <li>B2615: BCM</li> <li>B2616: BCM</li> <li>B2617: BCM</li> <li>B2618: BCM</li> <li>B2618: UEHICLE TYPE</li> <li>B26EA: KEY REGISTRATION</li> <li>U0415: VEHICLE SPEED SIG</li> </ul>	
5	B2621: INSIDE ANTENNA     B2623: INSIDE ANTENNA	
6	B26E7: TPMS CAN COMM	

DTC Index

#### NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-20, "COM-MON ITEM"</u>.

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle Condition	Intelligent Key warn- ing lamp ON	Reference
No DTC is detected. Further testing may be required.	_	_	_	_
U1000: CAN COMM	_	_	_	BCS-39
U1010: CONTROL UNIT(CAN)	_	_	_	BCS-40
U0415: VEHICLE SPEED SIG	_	_	_	BCS-41
B2190: NATS ANTENNA AMP	×	_	_	SEC-47
B2191: DIFFERENCE OF KEY	×	_	_	<u>SEC-50</u>
B2192: ID DISCORD BCM-ECM	×	_	_	<u>SEC-51</u>
B2193: CHAIN OF BCM-ECM	×	_	_	<u>SEC-53</u>
B2195: ANTI SCANNING	×	_	_	<u>SEC-54</u>
B2553: IGNITION RELAY	_	×	_	PCS-53
B2555: STOP LAMP	_	×	_	<u>SEC-55</u>

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CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle Condition	Intelligent Key warn- ing lamp ON	Reference
B2556: PUSH-BTN IGN SW	_	×	×	SEC-57
B2557: VEHICLE SPEED	×	×	×	SEC-59
B2560: STARTER CONT RELAY	×	×	×	SEC-60
B2562: LOW VOLTAGE	_	×	_	BCS-42
B2601: SHIFT POSITION	×	×	×	SEC-61
B2602: SHIFT POSITION	×	×	×	SEC-64
B2603: SHIFT POSI STATUS	×	×	×	SEC-66
B2604: PNP/CLUTCH SW	×	×	×	SEC-69
B2605: PNP/CLUTCH SW	×	×	×	SEC-71
B2608: STARTER RELAY	×	×	×	SEC-73
B260A: IGNITION RELAY	×	×	×	PCS-55
B260F: ENG STATE SIG LOST	×	×	×	SEC-75
B2614: BCM	_	×	×	PCS-57
B2615: BCM	_	×	×	PCS-59
B2616: BCM	_	×	×	PCS-61
B2617: BCM	×	×	×	SEC-77
B2618: BCM	×	×	×	PCS-63
B261A: PUSH-BTN IGN SW	_	×	×	SEC-79
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	<u>SEC-82</u>
B2621: INSIDE ANTENNA	_	×	_	DLK-101
B2623: INSIDE ANTENNA	_	×	_	DLK-103
B26E7: TPMS CAN COMM	_	_	_	BCS-43
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	<u>SEC-76</u>

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

< SYMPTOM DIAGNOSIS >

# SYMPTOM DIAGNOSIS

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

Description INFOID:000000010576962

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

#### Diagnosis Procedure

# 1. CHECK PARKING BRAKE WARNING LAMP

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

Parking brake applied : ON
Parking brake released : OFF

#### Is the inspection result normal?

YES >> Replace the combination meter.

NO >> GO TO 2.

### 2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform a check for the parking brake switch signal circuit. Refer to <u>BRC-99, "Diagnosis Procedure"</u>.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

### 3. CHECK PARKING BRAKE SWITCH UNIT

Perform a unit check for the parking brake switch. Refer to BRC-99, "Component Inspection".

#### Is the inspection result normal?

YES >> Replace the combination meter.

NO >> Replace the parking brake switch. Refer to PB-6, "Exploded View".

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#### THE LIGHT REMINDER WARNING DOES NOT SOUND

#### < SYMPTOM DIAGNOSIS >

#### THE LIGHT REMINDER WARNING DOES NOT SOUND

Description INFOID:000000010576964

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

#### Diagnosis Procedure

INFOID:0000000010576965

1. CHECK COMBINATION SWITCH (LIGHT SWITCH) OPERATION

Check that the tail lamps operate normally by operating the combination switch (light switch).

#### Do they operate normally?

YES >> GO TO 2.

NO >> Refer to EXL-208, "Symptom Table".

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-107</u>, "<u>Diagnosis Procedure</u>".

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-94, "Removal and Installation".

NO >> Repair or replace the malfunctioning parts.

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

< SYMPTOM DIAGNOSIS >

#### THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT Α SOUND Description INFOID:0000000010576966 В Seat belt warning does not sound even though driver seat belt is not fastened. • Seat belt warning sounds even though driver seat belt is fastened. Diagnosis Procedure INFOID:0000000010576967 1. CHECK SEAT BELT WARNING LAMP D Turn ignition switch ON. Check the operation of the seat belt warning lamp in the combination meter. Е Seat belt fastened : OFF Seat belt not fastened : ON Is the inspection result normal? YES >> GO TO 2. NO >> GO TO 4. 2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL Check the buckle "Data Monitor". Refer **WCS-24** switch input signal with the to "Component Function Check". Is the inspection result normal? Н YES >> Replace the unified meter and A/C amp. NO >> GO TO 3. 3.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT Perform the check for the seat belt buckle switch circuit. Refer to WCS-24, "Diagnosis Procedure". Is the inspection result normal? YES >> Replace the unified meter and A/C amp. NO >> Repair harness or connector. f 4.CHECK SEAT BELT BUCKLE SWITCH UNIT K Perform a unit check for the seat belt buckle switch. Refer to WCS-25, "Component Inspection". Is the inspection result normal? YES >> Replace the combination meter. NO >> Replace the seat belt buckle. Refer to SB-8, "SEAT BELT BUCKLE: Removal and Installation". M

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# **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.

### Precautions for Removing Battery Terminal

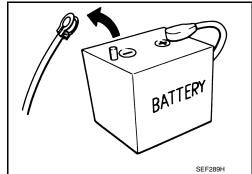
 When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

#### NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

 For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
 NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.



INFOID:0000000011008566

After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
 NOTE:

The removal of 12V battery may cause a DTC detection error.